

# Economic Trends

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# Introduction

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*Economic Trends* brings together all the main economic indicators. It contains three regular sections of tables and charts illustrating trends in the UK economy.

'Economic Update' is a feature giving an overview of the latest economic statistics. The content and presentation will vary from month to month depending on topicality and coverage of the published statistics. The accompanying table on main economic indicators is wider in coverage than the table on selected monthly indicators appearing in previous editions of *Economic Trends*. Data included in this section may not be wholly consistent with other sections which will have gone to press earlier.

Articles on international economic indicators and the final expenditure prices index appear monthly and an article on regional economic indicators appears every January, April, July and October. Occasional articles comment on and analyse economic statistics and introduce new series, new analyses and new methodology.

Quarterly information on the national accounts and the balance of payments appears in *UK Economic Accounts* which is published every January, April, July and October by The Stationery Office.

The main section is based on information available to the ONS on the date printed in note 1 below and shows the movements of the key economic indicators. The indicators appear in tabular form on left hand pages with corresponding charts on facing right hand pages. Colour has been used to aid interpretation in some of the charts, for example by creating a background grid on those charts drawn to a logarithmic scale. Index numbers in some tables and charts are given on a common base year for convenience of comparison.

*Economic Trends* is prepared monthly by the Office for National Statistics in collaboration with the statistics divisions of Government Departments and the Bank of England.

## Notes on the tables

1. All data in the tables and accompanying charts is current, as far as possible, to 26 June 1998.
2. The four letter identification code at the top of each column of data (eg, DJDD) is ONS's own reference to this series of data on our database. Please quote the relevant code if you contact us requiring any further information about the data.

3. Some data, particularly for the latest time period, is provisional and may be subject to revisions in later issues.

4. The statistics relate mainly to the United Kingdom; where figures are for Great Britain only, this is shown on the table.

5. Almost all quarterly data are seasonally adjusted; those not seasonally adjusted are indicated by NSA.

6. Rounding may lead to inconsistencies between the sum of constituent parts and the total in some tables.

7. A line drawn across a column between two consecutive figures indicates that the figures above and below the line have been compiled on different bases and are not strictly comparable. In each case a footnote explains the difference.

8. 'Billion' denotes one thousand million.

9. There is no single correct definition of *money*. The most widely used aggregates are:

**M0**, the narrowest measure, consists of notes and coin in circulation outside the Bank of England and bankers' operational deposits at the Bank.

**M4** comprises notes and coin in circulation with the public, together with all sterling deposits (including *certificates of deposit*) held with UK banks and building societies by the rest of the private sector.

The Bank of England also publish data for liquid assets outside M4.

10. Symbols used:
  - .. not available
  - nil or less than half the final digit shown
  - + alongside a heading indicates a series for which measures of variability are given in the table on page T79
  - † indicates that the data has been revised since the last edition; the period marked is the earliest in the table to have been revised
  - \* average (or total) of five weeks.

If you have any comments or suggestions about *Economic Trends*, please write to Uzair Rizki, ONS, Zone D4/19, 1 Drummond Gate, London, SW1V 2QQ or e-mail [uzair.rizki@ons.gov.uk](mailto:uzair.rizki@ons.gov.uk)

Office for National Statistics  
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# Articles published in *Economic Trends*

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## *Regular Articles*

**International economic indicators.** Commentary, figures and charts are published monthly.

**Final expenditure prices index.** Commentary and figures are published monthly.

**Regional economic indicators.** Commentary, figures and charts are published every January, April, July and October.

**United Kingdom national accounts and balance of payments** quarterly figures are published in *UK Economic Accounts* every January, April, July and October.

## *Other Articles*

### **1997**

<i>August</i>	Research and experimental development (R & D) statistics 1995. The Budget: 2 July 1997. The economy: developments and prospects.
<i>September</i>	Geographical breakdown of the balance of payments current account. Development of a final expenditure prices index. Overseas trade in services: publication of monthly estimates.
<i>October</i>	Environmental input-output tables for the United Kingdom. Implications of the US Boskin report for the UK retail prices index. A household satellite account for the United Kingdom.
<i>November</i>	Quarterly alignment adjustments in the UK National Accounts. Globalisation: scope, issues and statistics. The ABI respondents database: a new resource for industrial economics research.
<i>December</i>	How should economic statistics respond to information technology?

### **1998**

<i>January</i>	Regional Accounts 1996: Part 1. Geographical breakdown of exports and imports of UK trade in services by component. International comparisons of productivity and wages.
<i>February</i>	Improvements to business inquiries through the new IDBR. Measuring public sector output.
<i>March</i>	Employment in the public and private sectors. Harmonised indices of consumer prices.
<i>April</i>	Effects of taxes and benefits on household income 1996-97.
<i>May</i>	The Budget: 17 March 1998. The economy; an overview.
<i>June</i>	Regional Accounts 1996: Part 2. Rebasing the National Accounts.

**For articles published in earlier issues see the list in issue 509 (March 1996) of *Economic Trends*. Copies of articles may be obtained from the National Statistics Library, Room 1.001, Government Buildings, Cardiff Road, Newport, NP9 1XG, telephone 01633 812973. The cost is £5.00 per copy inclusive of postage and handling. A cheque for the appropriate remittance should accompany each order, made payable to 'Office for National Statistics'. Credit card transactions can be made by phone; invoices cannot be issued.**

# United Kingdom Macro-Economic Statistics Publications

## Annual Publications

UK National  
Accounts  
(Blue Book)

UK Balance  
of Payments  
(Pink Book)

Input/Output  
Balances

Economic  
Trends  
Annual  
Supplement

Public  
Finance  
Trends

Overseas  
Direct  
Investment

## Quarterly Publications

UK Economic  
Accounts

Consumer  
Trends

Overseas trade  
analysed in terms  
of industry

## Monthly Publications

Retail  
Prices  
Index

Producer  
Price  
Indices

Economic  
Trends

Financial  
Statistics

Monthly Review of  
External Trade  
Statistics

## First Releases

### Annual

Profitability of UK companies

### Quarterly

- UK Balance of Payments
- UK National Accounts
- UK Output, Income & Expenditure
- GDP Preliminary estimate
- Capital Expenditure\*
- Stocks\*
- Institutional Investment
- Govt Deficit & Debt under the Treaty

### Monthly

- UK Trade in goods
- Public Sector Borrowing Requirement
- Retail Prices Index
- Producer Prices
- Retail Sales Index
- Index of Production

\* is a News Release

**Other publications:** - Retail Prices 1914-1990 - Input/Output Tables - Labour Market Statistics - Family Spending - Sector Classification Guide - Share Ownership - Financial Statistics Explanatory Handbook

### Articles

This month we feature two articles.

Chris Groom, Tom Davies and Stephen Balchin of National Statistics discuss the development of a methodology for measuring illegal activity. Potential data sources are examined which could enable measurement of illegal transactions. Those considered are illegal drugs, prostitution, gambling and the sale of stolen goods, and estimates are presented to show how the inclusion of these activities could affect the national accounts (*page 33*).

Jeff Golland, Nigel Louth and Chris Hill describe the extra information that National Statistics has begun publishing on public sector finances. Further changes that will occur when national accounts move to the European System of Accounts 1995 (ESA95) basis in September this year are also mentioned. The extra information is consistent with the new format for public finances, which highlights public sector balance and net borrowing. The various terms used are defined and an account given of the sources and methods for producing the figures (*page 73*).

### Public Finance Trends

The above National Statistics publication giving a statistical background to public spending and revenues is not being published this year. However, a set of the tables containing data to 1996/97 is being made available separately. The price is £5 and the tables are available from the National Statistics Sales Office, address below.

### Recent National Statistics economic publications

*Consumer Trends: 1998 quarter 1.* The Stationery Office, ISBN 0 11 620929 1, price £45.

*Financial Statistics, June 1998.* The Stationery Office, ISBN 0 11 621009 5, price £22.50.

*Labour Market Trends, July 1998.* The Stationery Office, ISBN 0 11 620996 8, price £7.50.

*Retail Price Indices (Business Monitor MM23), April 1998.* The Stationery Office, ISBN 0 11 537877 4, price £180 p.a.

*Monthly Review of External Trade Statistics (Business Monitor MM24), March 1998.* The Stationery Office, ISBN 0 11 537879 0, price £180 p.a.

*UK Economic Accounts: 1998 quarter 1.* The Stationery Office, ISBN 0 11 621018 4, price £25.

All of these publications are available from the National Statistics Sales Office, Zone B1/06, 1 Drummond Gate, London, SW1V 2QQ. Telephone 0171-533 5678 or fax 0171-533 5689. Subscriptions are available from The Stationery Office Publications Centre, telephone 0171-873 8499.

# ECONOMIC UPDATE - JULY 1998

By Adrian Richards, Economic Assessment - Office for National Statistics

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## Overview

GDP growth slowed further in the first quarter. Lower growth in services combined with falling output in production. Construction was the one industrial sector in which output grew strongly. Domestic demand grew strongly, but its impact on output was offset by fall in demand for exports. Within domestic demand, consumption moderated whereas investment growth was high. The sectoral split show companies doing badly as profits fell, whereas the personal sector has a strong underlying position as earnings growth accelerated. However, much of this did not feed through into disposable income in the first quarter as taxes grew strongly with payments for self-assessment in January. The labour market continued to tighten with increased employment and a further acceleration in average earnings. Monthly indicators show a mixed picture for the second quarter. Whereas production output recovered in April and retail sales grew strongly in May; car registrations fell in April. Growth in monetary indicators have also slowed, whereas claimant unemployment rose slightly in May – the first rise since February 1996

Indicators included:	
Quarterly National Accounts - Q1	UK external trade – April/May
Industrial Production – April	Money supply – May/June
CBI monthly trends – June	Lending to individuals – May
Construction New Orders GB - April	Public sector borrowing requirement – May
Retail sales – May	Producer prices – May
Consumer confidence – June	Retail prices – May
New car registrations – April	Labour market statistics – February to May, Q1

## GDP Activity

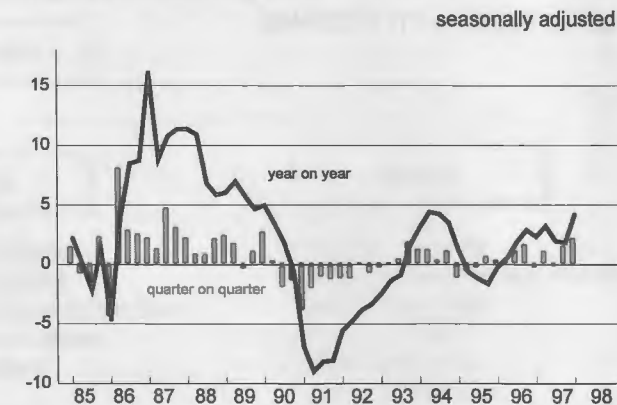
Economic growth slowed further in the first quarter of 1998, following a period of rapid growth between 1996 Q4 and 1997 Q3.

quarterly rise of over two per cent in 1998 Q1 - its highest quarterly growth rate since the first quarter of 1990. The Department for the Environment, Transport and the Regions cautioned users on the reliability of the growth rate, as the buoyancy was not reflected in construction business surveys.

## Output

Growth in output weakened in the first quarter as services growth eased and production output fell further. Growth weakened across all major categories of services including the areas of recent rapid growth - post and telecommunication and real estate, renting and business services. Part of the weakness in production is due to lower demand for energy as unseasonably warm temperatures occurred in 1997 Q4 and 1998 Q1. This combined with lower output of manufactures. Output of manufactures has fallen for non-durable goods and intermediate goods, whereas output of durable goods remained relatively strong and investment goods rebounded from a fall in the fourth quarter. The one area where growth has accelerated is construction – see Chart 1. There was a

Chart 1  
Construction output growth



Since the first quarter, production output has recovered with growth of 0.5% in the three months to April. Electricity, gas and

water supplies rebounded as temperatures returned to normal levels after mild autumn and winters. Energy extraction responded to increased demand, particularly Gas extraction. Manufacturing output has also grown after recent falls and is now slightly up on a year ago. The market sector show output of durable goods continues to grow strongly due to further increases in car output, whereas output of non-durable goods remains subdued. Output of non-durable goods has been little changed since the latter half of 1994. Output of investment and intermediate goods have rebounded, after a fall in the latter half of 1997.

The CBI Monthly Trends Enquiry for June corresponds with the weakness in manufacturing and provides no signs of improved prospects in the near term. Demand deteriorated for the fourth month in succession as the total order book recorded its lowest balance since March 1993. Demand from overseas was little changed between May and June – with the lowest balance since the start of 1983. Stocks of finished goods rose in June but the balance was below that recorded in the same month last year. Manufactures' expectations for the next four months remained subdued in June, suggesting no growth in the coming period.

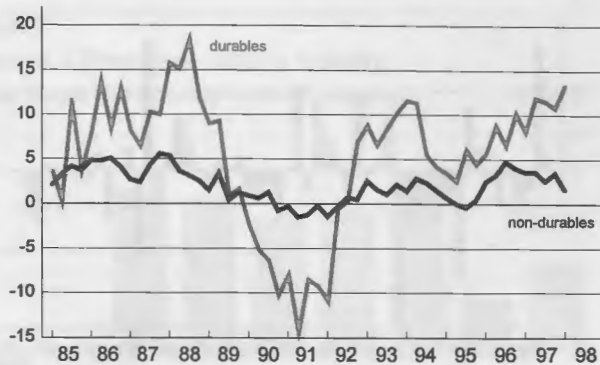
The volume of new construction orders in Great Britain weakened in April, with lower orders for new housing and private industrial work. This offset continued high demand for private commercial work and public sector orders excluding housing and infrastructure, which remained strong.

### Domestic demand

The growth in the volume of domestic expenditure, at constant prices, remained strong in the first quarter of 1998. The balance of demand, however, switched with a weakening in consumers expenditure and acceleration in investment. Part of the acceleration in investment was due to high imports of aircraft that tends to be erratic. As Chart 2 shows, consumption growth weakened as strong growth in durable goods consumption was offset by a fall in consumption of non-durable goods.

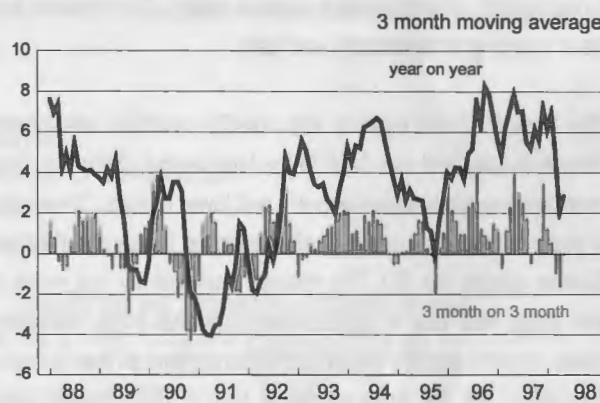
Monthly indicators show mixed signs for consumption in the second quarter. New car registrations fell in April after strong growth recently. However, retail sales growth surged in May, up 1.7% on April. This was mainly due to a surge of spending in textile, clothing and footwear stores, which accounted for 1.3% of the rise - see Chart 3 below. Sales in these stores had been subdued – sales were down in seven out of the twelve

**Chart 2**  
Consumers' expenditure: durables and non-durables  
year on year percentage change



months over the last 12 months. Despite the surge in May, a three month comparison with sales last year shows retail sales growth slowing and spending on clothing etc as relatively low. Consumers also appear to be becoming less confident. After rising in April and May, consumer confidence slipped back in June. Consumers were slightly less confident in their attitudes to major purchases.

**Chart 3**  
Retail sales growth: textiles, clothing and footwear  
3 month moving average

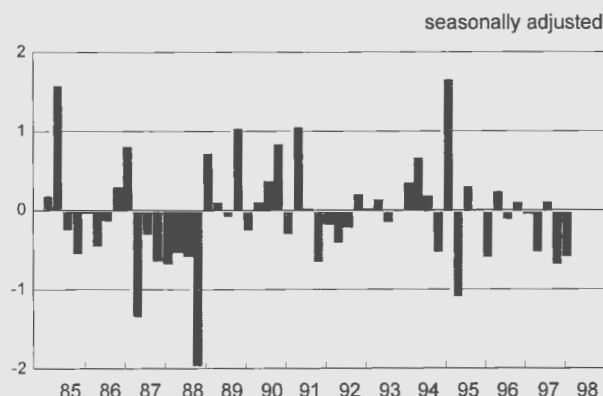


### External demand and supply

As Chart 4 shows net trade reduced GDP growth in the first quarter: exports fell sharply whereas imports fell moderately. The high value of sterling still is not the major determinant of recent trade movements. The majority of net import growth has come from non-EU countries, whereas the appreciation has been particularly large against EU countries. Much of the deterioration against non-EU countries can be explained by erratic items and lower net exports to East Asia. The surprising feature is that the EU balance has remained relatively stable and close to zero.

**Chart 4**

Contribution of net trade to GDP



Since the first quarter, the trade deficit improved with the world up to April, but the trade in goods deficit widened sharply against the Non-EU in May. The improvement in April was due to the improvement against the non-EU and an increase in the surplus on services. The improvement in trade in goods was due to a surplus on erratic items. Excluding erratic items, the deficit deteriorated on March, although it was still less than the deficit in February. Import volumes are down sharply on the previous month, reflecting fewer imports of oil and erratic items. Over a longer period, imports have increased rapidly. The increase has been mainly in manufactures and fuels.

The trade in goods balance with non-EU countries deteriorated sharply in May and was back to the level seen in February. This was due to an increase in imports and lower exports. There was a sharp deterioration against both the United States and Western Europe outside the EU. The volume figures show that much of this surge was due to an increase in erratic items. Excluding these, imports actually fell on April although less so than exports. Compared with the three months to May in 1997, Imports have increased by around 10%.

## Income

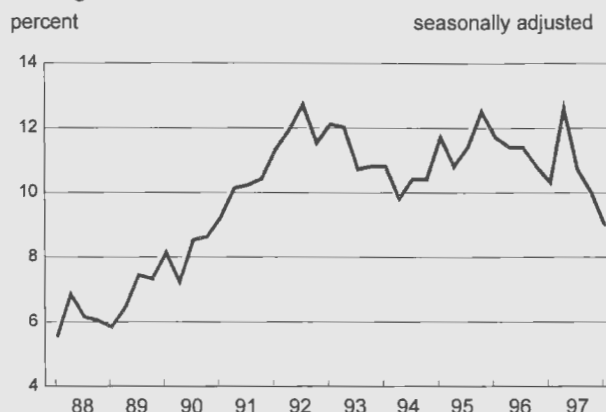
GDP estimates on income show that companies profits have fallen whereas household income grew strongly due to high growth in earnings. As discussed in the labour market section, earnings were boosted by substantial bonus payments. Despite strong growth in average earnings, real personal disposable income fell slightly in the first quarter as taxes on income rose sharply. The combination of large fiscal flows from the personal sector to the exchequer and the strength of consumers' expenditure growth, led to a large fall in the saving ratio - to its lowest level since the fourth quarter of 1990, as shown below.

Profits fell, particularly as the fall in oil prices hit North Sea oil companies.

**Chart 5**

Saving ratio

percent

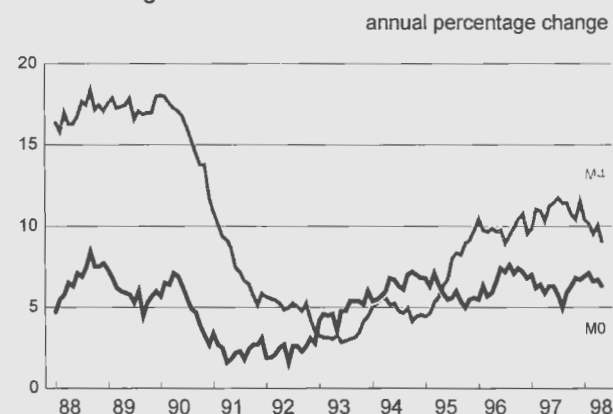


## Monetary & Sectoral indicators

Money supply figures, shown in Chart 6, provide further evidence of a slowdown. Growth in M4 slowed further in the 12 months and is now down to 9.2% from its peak of 11.9% in July 1997. M0 slowed further to 5.4% in the year to June, from its recent peak of 7.1% in February.

**Chart 6**

M0 and M4 growth



Lending to individuals fell back partly in May from the high level in March and April. Lending secured on dwellings fell after heavy borrowing in April. Consumer credit was high again in May following lower borrowing in April, with annual growth in consumer credit remaining above 16%.

The public sector had a surplus on its current budget of £10.9bn in 1998 Q1, giving a net cash requirement (formerly PSBR) of -£5.1 billion i.e. a repayment. Figures for public sector finances

show a net cash requirement of £2.5 billion in May. Tax receipts tend to be low in May, as it is the beginning of the new financial year, and cash receipts by Customs & Excise were lower than this time last year. The cumulative net cash requirement for the first two months of 1997-98 was minus £0.8 billion relative to £3.5 billion in 1997-98.

Prices

Price inflation remained subdued for producer prices but picked up for retail prices as temporary factors increased prices. Producer price inflation remained subdued in May. The price of materials and fuel purchased by the manufacturing industry started to fall in June 1996, and continued to do so in May, although the annual rate of fall slowed to 8.9%. This was due to an increase in the price of crude oil, following agreement in March to cut production, and an increase in the price of imported materials, partly due to the depreciation of the pound between April and May. Output prices continued to rise, but also more slowly - by 0.9% in the year to May. However, when excise duties are excluded, they fell by 0.4% - the rate of fall has been accelerating since January 1997.

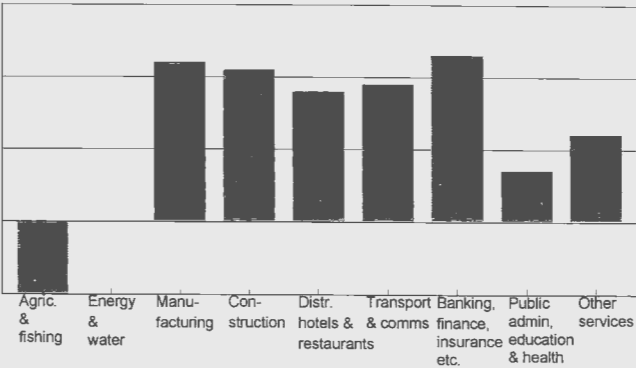
In contrast, consumer price inflation, as measured by the RPI, picked up 0.2 percentage points to 4.2% in the year to May. The main upward pressures were from seasonal food, particularly fresh vegetables, as a result of the extremely wet weather in April; household goods, where prices recovered from mid-season sales; and clothing and footwear, where widespread price rises accompanied the fine weather. Excluding mortgage interest repayments (RPIX), inflation also increased by 0.2 percentage points to 3.2%, whereas the rise was by 0.3 percentage points to 2.5% if indirect taxes are also excluded (RPIY).

Labour Market

Despite the small rise in the claimant count, indicators showed a further tightening in the labour market. Employment continued to grow in the first quarter. Workforce Jobs (based on employer surveys) rose by 116,000 compared with 1997Q4, and 429,000 when compared with 1997 Q1. The majority of the rise was split equally between male full-time and female part-time employment. Two thirds of the new jobs were in services, with strong growth in banking, finance & insurance and distribution, hotels & restaurants, as shown in Chart 7, where all the growth in jobs went to women. The strong growth in male jobs was in the construction industry. Employment in manufacturing continued to increase, in spite of the fall in output. The Labour Force Survey measure - total in employment - shows that the move was mostly

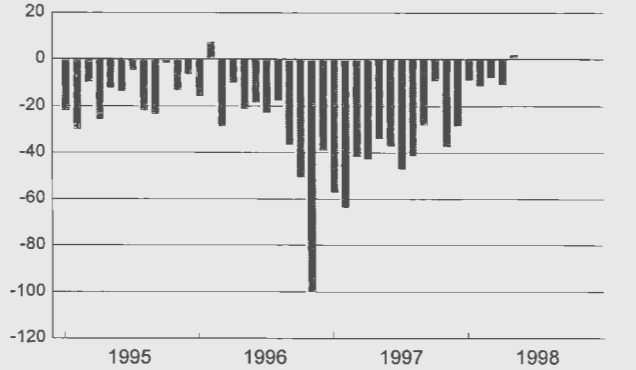
from unemployment to employment in the three months to April, with a small increase in the participation rate.

**Chart 7**  
Change in Employee Jobs by industry  
United Kingdom (thousands) seasonally adjusted 1998 Q1



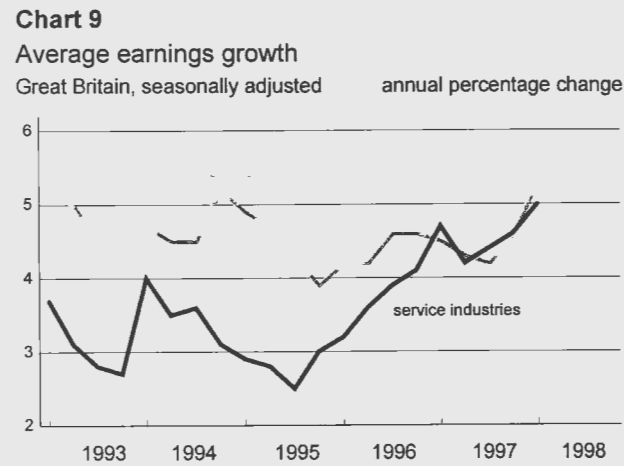
Signals on unemployment were mixed as the claimant count rose in May, as shown in Chart 8, while the ILO measure of unemployment (based on the Labour Force Survey) continued to fall in the three months to April. This is the first rise in claimant count unemployment since February 1996 - however, that was an isolated rise in a period of falls. The rate has remained unchanged at 4.8% for the last four months. ILO unemployment fell to 6.4% - the lowest rate since the start of the series in spring 1984.

**Chart 8**  
Claimant count changes  
thousands month on month change



The tightening labour market has been reflected in the acceleration of earnings growth. Average earnings growth accelerated to 5.2% in the year to March. This is reduced to approximately 4.3% if bonuses are excluded. The gap between private sector and public sector earnings continued to widen with the private sector accelerating to 5.9%, while the public sector remained steady at 2.5%. As Chart 9 shows, the industry

breakdown shows manufacturing with the highest rate of growth of earnings at 5.6%, in spite of the lowest rate of output growth.



# Forecast for the UK Economy

## A comparison of independent forecasts, June 1998

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 1998 and 1999, updated monthly.

	Independent Forecasts for 1998		
	Average	Lowest	Highest
GDP growth (per cent)	2.2	1.1	3.0
Inflation rate (Q4: per cent)			
- RPI	3.1	1.6	4.5
- RPI excl MIPs	2.6	2.0	3.5
Unemployment (Q4,mn)	1.34	1.10	1.84
Current Account (£,bn)	-6.9	-12.9	2.0
PSBR (1998-99,£ ,bn)	-0.5	-7.0	5.0

	Independent Forecasts for 1999		
	Average	Lowest	Highest
GDP growth (per cent)	1.9	0.9	3.1
Inflation rate (Q4: per cent)			
- RPI	2.4	1.4	4.2
- RPI excl MIPs	2.6	1.0	4.4
Unemployment (Q4, mn)	1.42	1.07	1.80
Current Account (£,bn)	-8.3	-24.5	5.0
PSBR (1999-00,£,bn)	-0.7	-12.0	12.0

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 24 variables and is published monthly by HM Treasury, available on annual subscription, price £75. Subscription enquiries should be addressed to Miss C T Coast-Smith, Public Enquiry Unit, HM Treasury, Room 110/2, Parliament Street, London SW1P 3AG (Tel: 0171-270 4558). It is also available at the Treasury's internet site: <http://www.hm-treasury.gov.uk>.

# International Economic Indicators - July 1998

by Sue Holloway, Economic Assessment - Office for National Statistics

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## Overview

The French and German economies continued to grow strongly in the first quarter of 1998, although export growth slowed and import growth accelerated in both countries, reducing the contribution of external demand to GDP growth. Labour market conditions continued to tighten in the US and to deteriorate in Japan.

The following comments focus on the new data releases.

## EU15

Following robust overall growth in 1997, industrial production in the EU15 countries continued to grow strongly in the first quarter of 1998, increasing by 0.8% compared with 1997 Q4 and 4.9% compared with 1997 Q1. Consumer and producer price inflation remained subdued in Q1, at 1.8% and 1% respectively, and unemployment continued to edge downwards to 10.3%.

## Germany

Growth in German GDP picked up in the first quarter of 1998 to 3% compared with 1997 Q1. Domestic demand

contributed 2.5 percentage points, as growth in consumption and investment picked up in the year to Q1. As illustrated in Chart 1, net trade made a much smaller contribution than in previous quarters - export growth slowed while import growth accelerated.

Industrial production surged by 3.2% quarter on quarter in Q1 - the highest growth rate since unification. Retail sales volumes also rose sharply by 2.8%, having fallen in the previous two quarters. The unemployment rate was revised upwards for most of 1996 and 1997, and was 10% of the total workforce in the first quarter.

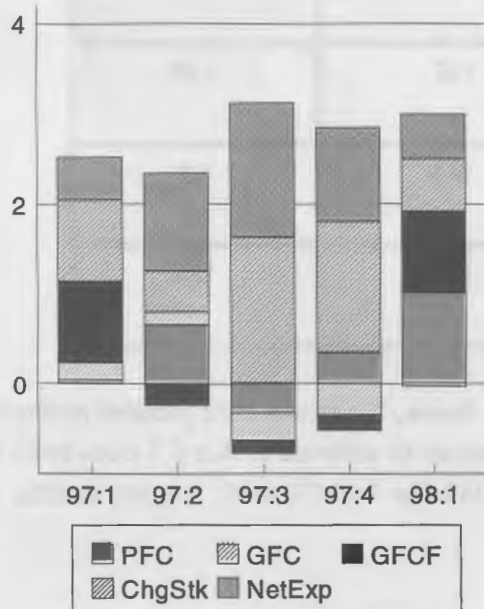
## France

French GDP also grew strongly in 1998 Q1, by 3.4% compared

**Chart 1**

Germany - contribution to GDP growth

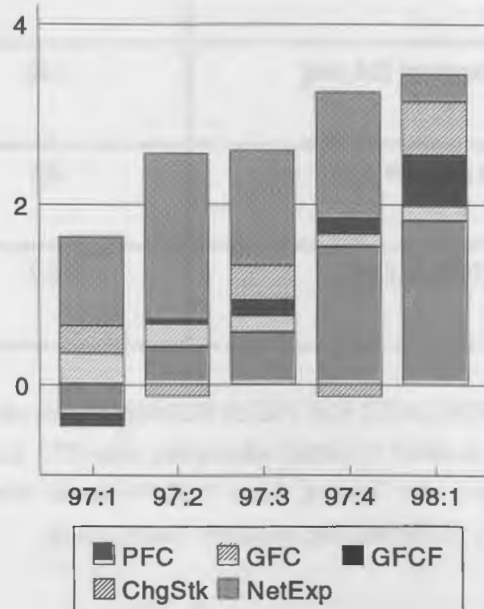
contribution to annual percentage change



**Chart 2**

France - contribution to GDP growth

contribution to annual percentage change



with 1997 Q1. As with Germany, net trade, illustrated in Chart 2, made a much smaller contribution than in previous quarters. Private final consumption grew strongly and accounted for over half of the total contribution of domestic demand.

Quarterly growth of industrial production slowed slightly to 1.2% in Q1, after a recent peak in growth of 2.9% in 1997 Q2. In April, retail sales volumes rebounded, after falling in February and March. Consumer price inflation picked up by another 0.2 percentage points to 1% over the year to April, but producer prices remained at the same level.

Italy

The picture for Italy is little changed from last month. Industrial production in the first quarter of 1998 was unchanged from the level in the previous quarter, showing a further slowdown from the rapid growth in the first half of 1997. The only other new data was for prices - consumer price inflation edged back down to 1.7% in May, while producer price inflation remained unchanged at 0.9% in April.

USA

Retail sales growth of 4.4% in year to Q1 underlies the strong growth in domestic demand in the US in the first quarter of 1998. In April, consumer price inflation picked up 0.2 percentage points to 1.5% but remained relatively low, whereas producer prices continued to fall, although more slowly than in the earlier months of 1998.

Annual growth of average earnings in manufacturing remained stable in April and May at 2.5%. This has slowed since the first quarter, but the monthly changes are usually erratic. Employment growth also slowed to 1.5% in May, while unemployment, illustrated below, reached a new low of 4.3% in April and May.

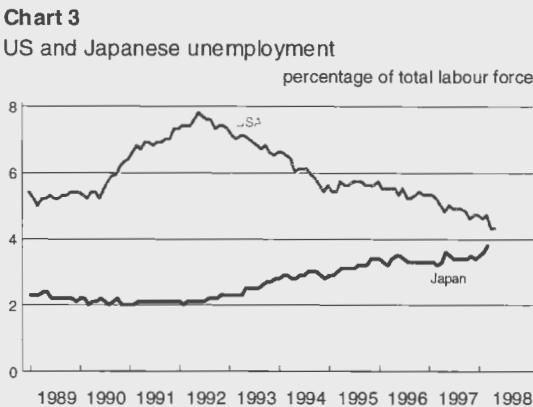
Japan

The latest set of monthly indicators continue to show economic activity declining in Japan. Japanese industrial production was revised upwards for the first quarter of 1998, but was still 1.1% lower than the previous quarter and 3.5% lower than 1997 Q1. Output fell again in April. Retail sales volumes were also revised extensively prior to 1998. March volumes were unchanged on the previous month, but sales fell again in April by 2.1%. The year on year changes are affected by the surge in

spending in March of last year, in anticipation of the rise in sales tax in April 1997.

Consumer price inflation slowed sharply to 0.5% in April, after 12 months of inflation rates closer to 2%. Producer prices fell for the first time in twelve months, by 2% in the year to April. Average earnings in manufacturing also fell in the same month, by 0.4% compared with April 1997.

There was no change in employment in the year to Q1, although monthly growth picked up in March and April. Despite this, unemployment, illustrated below, reached a record 3.8% in March. Underlying conditions for consumption remain subdued with falling earnings and higher unemployment.



Notes

The series presented here are taken from the OECD's Main Economic Indicators and are shown for each of the G7 economies and for the European Union (EU15) countries in aggregate.

Comparisons of indicators over the same period should be treated with caution, as the length and timing of the economic cycles varies across countries.

# 1 European Union 15

Contribution to change in GDP														
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier														
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1990	3.0	1.7	0.4	0.8	-0.1	1.8	1.6	1.9	2.2	5.7	2.5	7.0	1.6	8.1
1991	3.0	2.7	1.0	0.7	-0.3	-	1.0	-0.1	1.6	5.2	2.2	6.8	0.1	8.4
1992	0.9	0.9	0.4	-0.2	-0.1	0.9	1.0	-1.4	0.1	4.4	1.3	5.8	-1.7	9.1
1993	-0.5	-0.1	0.2	-1.3	-0.4	0.4	-0.8	-3.1	-1.4	3.6	1.4	4.7	-2.0	10.8
1994	3.0	1.0	0.2	0.5	0.8	2.5	2.2	5.0	-0.5	3.0	2.2	3.8	-	11.1
1995	2.5	1.1	0.2	0.7	0.2	2.4	2.1	3.8	-0.1	3.2	4.5	3.7	0.6	10.7
1996	1.8	1.2	0.3	0.2	-0.3	1.6	1.3	0.2	0.4	2.5	0.7	3.7	0.5	10.8
1997	2.6	1.3	-	0.5	0.4	3.0	2.6	3.9	3.1	2.0	0.9	3.4	0.4	10.7
1996 Q1	1.6	1.4	0.3	-0.1	0.1	1.3	1.5	-0.1	-0.3	2.8	1.9	4.0	0.6	10.9
Q2	1.5	0.9	0.3	0.2	-	1.0	0.8	-	0.4	2.6	0.6	4.0	0.6	10.9
Q3	1.8	1.2	0.3	0.3	-0.8	1.9	1.0	0.3	-	2.3	-0.1	3.1	0.5	10.8
Q4	2.1	1.3	0.2	0.4	-0.4	2.3	1.7	0.8	1.3	2.3	0.2	3.8	0.4	10.8
1997 Q1	1.9	0.9	0.1	0.5	-0.1	1.9	1.4	2.5	2.3	2.1	0.3	3.8	0.2	10.8
Q2	2.7	1.5	-	0.5	0.6	3.0	2.8	3.4	3.0	1.7	0.7	3.1	0.3	10.8
Q3	2.9	1.2	-	0.5	0.7	3.6	3.1	4.6	3.4	2.0	1.4	3.8	0.4	10.7
Q4	3.0	1.5	-	0.6	0.5	3.3	2.9	5.1	3.7	2.1	1.3	3.0	0.6	10.5
1998 Q1	..	..	..	..	..	..	..	4.9	3.4	1.8	1.0	..	..	10.3
1997 Aug	..	..	..	..	..	..	..	4.5	2.0	2.1	1.6	..	..	10.7
Sep	..	..	..	..	..	..	..	3.5	3.0	2.1	1.3	..	..	10.6
Oct	..	..	..	..	..	..	..	5.5	5.1	2.0	1.3	..	..	10.6
Nov	..	..	..	..	..	..	..	4.5	2.0	2.2	1.3	..	..	10.5
Dec	..	..	..	..	..	..	..	5.2	4.1	2.0	1.2	..	..	10.5
1998 Jan	..	..	..	..	..	..	..	5.2	2.9	1.7	1.1	..	..	10.4
Feb	..	..	..	..	..	..	..	5.0	4.0	1.8	1.0	..	..	10.3
Mar	..	..	..	..	..	..	..	4.6	3.0	1.8	1.0	..	..	10.3
Apr	..	..	..	..	..	..	..	..	..	2.0	0.7	..	..	..
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ				ILIT	
1996 Q1	0.6	0.7	0.1	-0.2	-0.2	0.7	0.5	-0.8	1.3				-0.8	
Q2	0.3	-	0.1	0.4	-0.4	0.2	-0.1	0.7	0.7				0.8	
Q3	0.7	0.4	0.1	0.1	-0.2	0.7	0.5	0.7	-0.4				0.5	
Q4	0.4	0.1	-	-	0.4	0.7	0.8	0.2	-0.3				-0.1	
1997 Q1	0.4	0.4	-	-	0.1	0.3	0.3	1.0	2.3				-1.0	
Q2	1.2	0.5	-	0.3	0.3	1.4	1.3	1.5	1.4				0.9	
Q3	0.8	0.2	-	0.2	-0.1	1.2	0.7	1.9	-				0.6	
Q4	0.5	0.4	-	0.1	0.2	0.4	0.6	0.6	-				0.1	
1998 Q1	..	..	..	..	..	..	..	0.8	1.9				..	
Percentage change on previous month														
								ILKF	ILKP					
1997 Aug								-1.1	-1.9					
Sep								-0.6	-					
Oct								1.4	2.0					
Nov								-0.3	-1.9					
Dec								0.8	-					
1998 Jan								0.1	2.9					
Feb								0.2	-					
Mar								0.5	-1.0					
Apr								..	..					
May								..	..					

GDP = Gross Domestic Product at constant market prices  
PFC = Private Final Consumption at constant market prices  
GFC = Government Final Consumption at constant market prices  
GFCF = Gross Fixed Capital Formation at constant market prices  
ChgStk = Change in Stocks at constant market prices  
Exports = Exports of goods and services  
Imports = Imports of goods and services  
IoP = Industrial Production

Sales = Retail Sales volume  
CPI = Consumer Prices, components and coverage not uniform among countries  
PPI = Producer Prices (manufacturing)  
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries  
Empl = Total Employment not seasonally adjusted  
Unempl = Standardised Unemployment rates: percentage of total labour force  
Source: OECD

# 2 Germany

## Contribution to change in GDP

	GDP <sup>1</sup>	PFC	GFC	GFCF	ChgStk	Exports	Imports <sup>less</sup>	IoP <sup>1</sup>	Sales	CPI <sup>1</sup>	PPI <sup>1</sup>	Earnings <sup>2</sup>	Empl <sup>1,3</sup>	Unempl <sup>4</sup>
<b>Percentage change on a year earlier</b>														
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1990	..	..	..	..	..	..	..	5.3	8.0	2.7	1.4	4.2	2.8	..
1991	..	..	..	..	..	..	..	3.5	5.8	3.7	2.2	6.6	2.0	..
1992	1.8	1.4	0.8	0.6	-0.4	-0.4	0.3	-2.5	-2.3	5.0	1.6	7.1	-1.4	..
1993	-1.2	0.2	-0.1	-1.3	-0.2	-1.2	-1.5	-7.2	-4.2	4.4	0.1	5.4	-1.1	7.9
1994	2.8	0.7	0.4	0.8	0.8	1.9	1.9	3.5	-1.3	2.7	0.8	2.9	-0.4	8.4
1995	1.9	1.1	0.4	0.2	0.4	1.7	1.9	2.1	1.1	1.9	2.1	3.3	0.1	8.2
1996	1.4	0.7	0.5	-0.2	-0.2	1.4	0.8	0.4	-0.2	1.5	0.2	5.2	-0.3	8.9
1997	2.3	0.2	-0.1	0.1	1.1	3.0	1.9	4.0	-0.2	1.7	0.7	..	-1.3	10.0
1996 Q1	0.4	1.1	0.6	-1.5	0.2	1.2	1.2	-1.1	-1.4	1.5	0.8	7.1	-	8.7
Q2	1.1	0.3	0.6	-0.1	-0.1	0.6	0.1	-0.8	-0.3	1.5	0.1	6.7	0.3	8.8
Q3	1.8	0.8	0.7	0.1	-0.8	1.6	0.6	1.3	1.0	1.5	-0.2	4.3	-0.2	8.9
Q4	2.1	0.6	0.1	0.5	-0.1	2.2	1.3	2.5	-0.3	1.4	0.2	2.9	-1.0	9.3
1997 Q1	2.5	-	0.2	0.9	0.9	2.1	1.6	3.6	-	1.7	0.3	0.8	-1.4	9.6
Q2	2.1	0.7	0.1	-0.2	0.5	2.9	1.8	3.4	0.3	1.6	0.7	1.5	-1.6	9.9
Q3	2.3	-0.3	-0.3	-0.1	1.6	3.6	2.1	4.3	-1.3	1.9	1.0	1.6	-1.4	10.1
Q4	2.3	0.4	-0.4	-0.2	1.5	3.3	2.2	4.6	0.3	1.8	0.9	..	-1.0	10.3
1998 Q1	3.0	1.0	-	0.9	0.6	3.2	2.7	6.6	1.7	1.1	0.6	..	..	10.0
1997 Aug	..	..	..	..	..	..	..	2.6	-3.0	2.0	1.2	..	..	10.1
Sep	..	..	..	..	..	..	..	2.1	-1.0	1.9	1.0	..	..	10.2
Oct	..	..	..	..	..	..	..	5.1	2.0	1.8	0.9	..	..	10.3
Nov	..	..	..	..	..	..	..	4.3	-1.0	1.9	1.0	..	..	10.3
Dec	..	..	..	..	..	..	..	4.3	-	1.7	0.8	..	..	10.3
1998 Jan	..	..	..	..	..	..	..	6.4	-2.0	1.2	0.6	..	..	10.1
Feb	..	..	..	..	..	..	..	6.3	-	1.1	0.6	..	..	10.0
Mar	..	..	..	..	..	..	..	7.3	7.3	1.1	0.6	..	..	10.0
Apr	..	..	..	..	..	..	..	6.5	..	1.3	0.4	..	..	..
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Percentage change on previous quarter</b>														
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
1996 Q1	-0.1	0.6	-	-0.9	-0.1	0.6	0.2	0.1	1.0				-1.7	
Q2	1.4	-0.1	0.2	1.3	-0.1	0.1	0.1	1.3	1.7				0.8	
Q3	0.5	0.5	0.2	-	-0.8	0.8	0.3	1.2	-0.7				0.2	
Q4	0.3	-0.4	-0.3	0.1	0.9	0.7	0.7	-0.2	-2.3				-0.3	
1997 Q1	0.3	-	-	-0.5	0.8	0.5	0.5	1.2	1.3				-2.1	
Q2	1.0	0.5	0.2	0.2	-0.5	1.0	0.4	1.2	2.0				0.6	
Q3	0.7	-0.4	-0.3	0.1	0.4	1.4	0.5	2.0	-2.3				0.4	
Q4	0.3	0.3	-0.3	-	0.7	0.4	0.8	0.1	-0.7				0.1	
1998 Q1	1.0	0.6	0.3	0.6	-	0.4	0.9	3.2	2.8				..	
<b>Percentage change on previous month</b>														
								ILKC	ILKM					
1997 Aug								-4.3	-4.0					
Sep								-0.7	2.1					
Oct								2.0	2.0					
Nov								-0.2	-3.0					
Dec								0.3	-2.1					
1998 Jan								2.2	3.2					
Feb								0.5	1.0					
Mar								1.6	4.0					
Apr								-0.5	..					
May								..	..					

GDP = Gross Domestic Product at constant market prices  
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GFC = Government Final Consumption at constant market prices  
GFCF = Gross Fixed Capital Formation at constant market prices  
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Exports = Exports of goods and services  
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Sales = Retail Sales volume  
CPI = Consumer Prices, components and coverage not uniform among countries  
PPI = Producer Prices (manufacturing)  
Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries  
Empl = Total Employment not seasonally adjusted  
Unempl = Standardised Unemployment rates: percentage of total workforce

Source: OECD

- 1 Data available for unified Germany from 1991
- 2 Western Germany (Federal Republic of Germany before unification)
- 3 Excludes members of armed forces
- 4 Data available for unified Germany from January 1993

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI <sup>1</sup>	Earnings	Empl <sup>2</sup>	Unempl
<b>Percentage change on a year earlier</b>														
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1990	2.5	1.6	0.4	0.6	0.2	1.3	1.6	1.5	0.7	3.5	-0.9	4.9	0.8	9.0
1991	0.8	0.8	0.5	-	-0.7	1.0	0.8	-1.2	-0.2	3.2	-1.2	4.7	0.1	9.5
1992	1.2	0.8	0.6	-0.6	-0.6	1.3	0.3	-1.2	0.3	2.4	-1.1	4.0	-0.6	10.4
1993	-1.3	0.1	0.6	-1.4	-1.5	-0.1	-1.0	-3.8	0.2	2.1	-2.1	2.5	-1.3	11.7
1994	2.8	0.8	0.2	0.3	1.7	1.6	1.8	3.9	-0.1	1.7	1.2	1.9	0.1	12.3
1995	2.1	1.0	-	0.5	0.3	1.8	1.4	2.0	-	1.7	5.2	2.4	1.0	11.7
1996	1.6	1.2	0.5	-0.1	-0.7	1.5	0.9	0.2	-0.4	2.1	-2.7	2.4	-	12.4
1997	2.3	0.6	0.2	0.1	0.1	3.7	2.3	3.8	1.1	1.1	-0.5	2.8	0.4	12.4
1996 Q1	1.3	2.1	0.4	-0.3	-0.9	0.8	0.7	-1.0	0.7	2.1	-0.8	2.3	0.4	12.3
Q2	1.0	0.5	0.5	-	-	0.2	0.3	-0.4	-0.8	2.4	-2.7	2.3	0.2	12.3
Q3	1.6	1.1	0.6	-0.1	-1.3	2.1	0.7	0.3	-2.3	1.8	-3.8	2.6	-0.1	12.4
Q4	2.3	1.1	0.5	-	-0.4	3.0	1.8	1.9	1.1	1.7	-3.1	2.6	-0.2	12.5
1997 Q1	1.2	-0.3	0.4	-0.1	0.3	1.9	0.9	0.6	-1.4	1.5	-2.3	3.0	-0.1	12.4
Q2	2.4	0.4	0.3	0.1	-0.1	4.3	2.5	3.5	0.8	0.9	-0.9	2.7	0.3	12.4
Q3	2.6	0.6	0.2	0.2	0.4	4.4	3.1	4.7	1.7	1.3	0.3	2.8	0.5	12.4
Q4	3.1	1.5	0.1	0.2	-0.1	4.1	2.7	6.3	3.0	1.1	0.7	2.8	0.7	12.3
1998 Q1	3.4	1.8	0.2	0.6	0.6	3.9	3.6	7.5	2.3	0.6	0.6	2.6	..	12.1
1997 Aug	..	..	..	..	..	..	..	4.9	-0.9	1.5	0.4	..	..	12.4
Sep	..	..	..	..	..	..	..	4.2	3.5	1.3	0.5	..	..	12.4
Oct	..	..	..	..	..	..	..	6.7	4.4	1.0	0.7	2.8	..	12.4
Nov	..	..	..	..	..	..	..	4.9	-0.5	1.3	0.7	..	..	12.4
Dec	..	..	..	..	..	..	..	7.2	5.3	1.1	0.7	..	..	12.2
1998 Jan	..	..	..	..	..	..	..	6.7	5.7	0.5	0.6	2.6	..	12.1
Feb	..	..	..	..	..	..	..	6.9	2.0	0.7	0.5	..	..	12.1
Mar	..	..	..	..	..	..	..	8.9	-0.8	0.8	0.5	..	..	12.0
Apr	..	..	..	..	..	..	..	..	4.5	1.0	-	..	..	..
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Percentage change on previous quarter</b>														
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1996 Q1	1.3	1.5	0.2	-0.1	-0.8	1.5	0.9	1.4	2.5				-	
Q2	-0.1	-0.6	0.1	0.1	0.5	-0.6	-0.3	-	-1.7				-0.2	
Q3	0.8	0.5	0.1	-	-0.5	1.1	0.5	0.7	0.1				-0.1	
Q4	0.3	-0.4	0.1	-	0.4	0.9	0.7	-0.2	0.2				0.1	
1997 Q1	0.2	0.1	-	-0.2	-0.2	0.4	-	0.1	-				0.1	
Q2	1.2	0.2	-	0.2	0.1	1.9	1.3	2.9	0.5				0.2	
Q3	0.9	0.7	-	0.1	-	1.1	1.1	1.8	1.0				0.1	
Q4	0.8	0.6	-	-	-0.1	0.6	0.3	1.3	1.5				0.3	
1998 Q1	0.6	0.4	-	0.2	0.6	0.2	0.9	1.2	-0.7				..	
<b>Percentage change on previous month</b>														
								ILKD	ILKN					
1997 Aug								-	-0.7					
Sep								-0.6	-0.6					
Oct								2.2	3.6					
Nov								-1.6	-3.5					
Dec								1.8	2.8					
1998 Jan								-0.6	2.7					
Feb								0.8	-4.7					
Mar								1.8	-2.7					
Apr								..	6.4					
May								..	..					

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PPI = Producer Prices (manufacturing)  
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries  
Empl = Total Employment not seasonally adjusted  
Unempl = Standardised Unemployment rates: percentage of total workforce  
Source: OECD

1 Producer prices in intermediate goods  
2 Excludes members of armed forces

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
<b>Percentage change on a year earlier</b>														
	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1990	2.2	1.5	0.2	0.7	0.1	1.2	1.6	-0.5	-2.2	6.0	4.2	7.3	1.4	9.1
1991	1.1	1.6	0.3	0.2	-0.3	-0.1	0.5	-0.9	0.3	6.5	3.3	9.8	1.3	8.8
1992	0.6	0.7	0.2	-0.4	0.1	1.1	1.1	-1.3	1.8	5.3	1.9	5.4	-1.1	9.0
1993	-1.2	-1.5	0.1	-2.5	-0.6	1.7	-1.7	-2.1	-3.0	4.2	3.7	3.7	-4.2	10.3
1994	2.2	0.9	-0.1	0.1	0.6	2.2	1.6	6.3	-5.9	3.9	3.8	3.3	-1.6	11.4
1995	2.9	1.2	-0.2	1.2	-	2.7	1.9	6.1	-5.1	5.4	7.9	3.1	-0.6	11.9
1996	0.7	0.5	-	0.1	-0.3	-0.1	-0.4	-2.9	-2.4	3.8	1.9	1.8	0.4	12.0
1997	1.5	1.4	-0.1	0.1	1.0	1.6	2.5	2.8	6.9	1.8	1.3	3.7	-	12.1
1996 Q1	1.6	0.9	-	0.7	0.7	-0.3	0.4	-	-3.9	5.0	4.8	1.9	0.8	12.0
Q2	0.8	0.4	0.1	0.3	-0.1	-1.1	-1.2	-1.2	-3.4	4.2	1.6	2.1	0.3	12.0
Q3	0.5	0.2	0.1	-0.2	-0.9	0.2	-1.1	-4.6	-4.9	3.5	0.4	1.7	0.3	12.0
Q4	-0.2	0.6	-0.1	-0.5	-1.1	1.0	0.2	-5.5	3.3	2.7	0.8	1.6	0.2	12.0
1997 Q1	-0.9	1.2	-0.1	-0.3	-1.4	-0.8	-0.6	0.1	3.8	2.4	0.9	4.0	-0.1	12.1
Q2	1.9	1.7	-0.2	-	2.0	1.7	3.3	2.4	6.6	1.6	1.2	3.8	0.1	12.1
Q3	2.2	1.7	-0.1	0.3	1.2	3.1	4.0	3.2	9.0	1.5	1.7	3.4	-	12.1
Q4	2.8	1.2	-	0.4	2.1	2.3	3.1	5.3	8.2	1.6	1.5	3.3	-	12.1
1998 Q1	..	..	..	..	..	..	..	3.3	..	1.7	1.1	..	0.6	..
1997 Aug	..	..	..	..	..	..	..	3.4	8.1	1.5	1.6	3.4	..	12.1
Sep	..	..	..	..	..	..	..	2.8	9.3	1.4	1.6	3.4	..	12.1
Oct	..	..	..	..	..	..	..	4.8	8.2	1.6	1.5	3.4	..	12.1
Nov	..	..	..	..	..	..	..	4.7	8.2	1.6	1.6	3.4	..	12.1
Dec	..	..	..	..	..	..	..	6.5	8.2	1.6	1.4	3.2	..	12.0
1998 Jan	..	..	..	..	..	..	..	6.5	..	1.6	1.3	1.6	..	12.0
Feb	..	..	..	..	..	..	..	2.4	..	1.8	1.3	1.7	..	..
Mar	..	..	..	..	..	..	..	1.3	..	1.7	0.9	..	..	..
Apr	..	..	..	..	..	..	..	..	..	1.8	0.9	..	..	..
May	..	..	..	..	..	..	..	..	..	1.7	..	..	..	..
<b>Percentage change on previous quarter</b>														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
1996 Q1	0.7	0.1	-	-0.2	0.1	0.4	-0.2	-3.7	6.6				-1.3	
Q2	-0.9	-0.1	-	-0.1	-1.6	-0.3	-1.1	-0.5	-1.9				1.2	
Q3	0.4	0.1	-	-0.1	0.2	0.4	0.3	-0.3	-0.8				1.2	
Q4	-0.4	0.4	-0.1	-0.1	0.2	0.5	1.3	-1.0	-0.4				-0.8	
1997 Q1	-	0.7	-0.1	-	-0.3	-1.5	-1.1	1.9	7.1				-1.6	
Q2	1.9	0.4	-	0.2	1.8	2.3	2.8	1.8	0.8				1.4	
Q3	0.6	0.1	-	0.1	-0.5	1.7	0.9	0.6	1.4				1.1	
Q4	0.2	-0.2	-	-	1.1	-0.3	0.4	0.9	-1.1				-0.8	
1998 Q1	..	..	..	..	..	..	..	-	..				-1.0	
<b>Percentage change on previous month</b>														
								ILKE	ILKO					
1997 Aug								1.6	1.1					
Sep								-1.5	1.1					
Oct								1.2	-2.1					
Nov								0.4	-					
Dec								-0.1	-					
1998 Jan								0.9	..					
Feb								-1.0	..					
Mar								-0.9	..					
Apr								..	..					
May								..	..					

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PFC = Private Final Consumption at constant market prices  
GFC = Government Final Consumption at constant market prices  
GFCF = Gross Fixed Capital Formation at constant market prices  
ChgStk = Change in Stocks at constant market prices  
Exports = Exports of goods and services  
Imports = Imports of goods and services  
IoP = Industrial Production

Sales = Retail Sales volume  
CPI = Consumer Prices, components and coverage not uniform among countries  
PPI = Producer Prices (manufacturing)  
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries  
Empl = Total Employment not seasonally adjusted  
Unempl = Standardised Unemployment not seasonally adjusted

Source: OECD

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less	IoP	Sales	CPI	PPI	Earnings	Empl <sup>1</sup>	Unempl
<b>Percentage change on a year earlier</b>															
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO	
1990	1.2	1.1	0.4	-0.2	-0.4	0.7	0.4	-0.2	0.6	5.4	4.9	3.2	0.5	5.6	
1991	-0.9	-0.4	0.2	-1.1	-0.2	0.6	-0.1	-2.0	-2.5	4.2	2.1	3.3	-0.9	6.9	
1992	2.7	1.9	-	0.8	0.2	0.6	0.8	3.2	3.2	3.1	1.3	2.4	0.6	7.5	
1993	2.3	2.0	-	0.8	0.2	0.3	1.0	3.6	4.5	3.0	1.3	2.4	1.5	6.9	
1994	3.5	2.2	0.1	1.1	0.6	0.8	1.4	5.3	5.7	2.5	0.6	2.8	3.2	6.1	
1995	2.0	1.7	-	0.7	-0.5	1.2	1.1	5.0	2.6	2.8	2.0	2.7	1.4	5.6	
1996	2.8	1.8	-	1.3	-	1.0	1.2	3.5	3.7	3.0	2.6	3.1	1.5	5.4	
1997	3.8	2.2	0.2	1.2	0.6	1.5	2.0	5.0	4.0	2.3	0.4	3.1	2.2	5.0	
1996 Q1	1.8	1.8	-0.2	0.7	-0.6	1.0	0.8	2.3	3.7	2.8	2.2	2.9	0.6	5.6	
Q2	3.2	1.9	-	1.3	-	1.0	1.0	3.7	4.1	2.8	2.4	3.2	1.3	5.4	
Q3	2.7	1.6	-	1.6	0.3	0.7	1.4	3.4	3.5	3.0	2.8	3.1	1.7	5.3	
Q4	3.3	1.8	0.2	1.5	0.2	1.1	1.6	4.2	3.6	3.1	3.1	3.5	2.1	5.3	
1997 Q1	4.0	2.2	0.2	1.1	0.8	1.4	1.8	5.1	4.4	2.9	2.0	3.4	2.5	5.3	
Q2	3.4	1.7	0.1	1.1	0.8	1.7	2.0	4.3	2.9	2.3	0.4	2.8	2.4	4.9	
Q3	3.9	2.6	0.2	1.3	0.1	1.8	2.1	5.0	4.6	2.2	-0.1	2.5	2.1	4.9	
Q4	3.7	2.4	0.2	1.2	0.6	1.3	2.1	5.8	4.0	1.9	-0.8	3.4	2.0	4.7	
1998 Q1	3.7	2.6	0.1	1.7	0.5	0.9	2.1	4.6	4.4	1.4	-1.7	3.1	1.9	4.7	
1997 Aug	..	..	..	..	..	..	..	5.1	5.1	2.2	-0.2	2.5	2.1	4.9	
Sep	..	..	..	..	..	..	..	5.0	4.1	2.2	-	2.5	1.8	4.9	
Oct	..	..	..	..	..	..	..	5.8	3.4	2.1	-0.4	4.2	1.7	4.8	
Nov	..	..	..	..	..	..	..	5.7	4.2	1.8	-0.7	3.4	2.2	4.6	
Dec	..	..	..	..	..	..	..	5.8	4.4	1.7	-1.3	2.5	2.2	4.7	
1998 Jan	..	..	..	..	..	..	..	5.4	4.3	1.6	-1.8	3.3	2.0	4.7	
Feb	..	..	..	..	..	..	..	4.3	4.2	1.4	-1.5	3.3	2.0	4.6	
Mar	..	..	..	..	..	..	..	4.3	4.8	1.3	-1.9	2.5	1.6	4.7	
Apr	..	..	..	..	..	..	..	3.9	..	1.5	-1.2	2.5	1.6	4.3	
May	..	..	..	..	..	..	..	..	..	..	..	2.5	1.5	4.3	
<b>Percentage change on previous quarter</b>															
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA					ILIU	
1996 Q1	0.4	0.5	-	0.4	-0.2	0.1	0.4	0.4	1.4					-1.2	
Q2	1.5	0.6	0.2	0.6	0.2	0.3	0.5	1.9	1.0					2.0	
Q3	0.3	0.1	-	0.3	0.2	0.1	0.4	0.8	0.4					1.2	
Q4	1.1	0.6	-	0.1	-0.1	0.7	0.2	1.0	0.8					0.1	
1997 Q1	1.2	0.9	-	0.1	0.4	0.3	0.6	1.3	2.2					-0.8	
Q2	0.8	0.2	0.1	0.5	0.2	0.6	0.7	1.1	-0.5					1.9	
Q3	0.8	0.9	0.1	0.5	-0.4	0.1	0.5	1.5	2.0					0.9	
Q4	0.9	0.4	-	-	0.4	0.3	0.2	1.7	0.2					-	
1998 Q1	1.2	1.0	-0.1	0.6	0.4	-0.1	0.7	0.2	2.6					-1.0	
<b>Percentage change on previous month</b>															
								ILKG	ILKQ					ILLA	
1997 Aug								0.6	0.4					-0.4	
Sep								0.2	-0.4					-0.7	
Oct								0.8	-0.1					0.5	
Nov								0.8	0.3					0.3	
Dec								0.3	0.6					-0.2	
1998 Jan								-0.1	1.3					-1.4	
Feb								-0.4	1.1					0.5	
Mar								0.3	0.3					0.5	
Apr								0.1	..					0.5	
May								..	..					0.5	

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IoP = Industrial Production

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Empl = Total Employment not seasonally adjusted  
Unempl = Standardised Unemployment rates: percentage of total workforce  
Source: OECD

1 Excludes members of armed forces

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP <sup>1</sup>	Sales	CPI	PPI	Earnings <sup>2</sup>	Empl	Unempl
<b>Percentage change on a year earlier</b>														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1990	5.1	2.6	0.1	2.7	-0.2	0.7	0.8	4.3	5.3	3.1	1.6	5.1	1.9	2.1
1991	3.8	1.5	0.2	1.1	0.2	0.6	-0.3	1.9	2.1	3.2	1.1	3.5	1.9	2.1
1992	1.0	1.2	0.2	-0.5	-0.5	0.5	-0.1	-5.7	-1.1	1.7	-0.9	1.3	1.1	2.2
1993	0.3	0.7	0.2	-0.6	-0.1	0.2	-	-4.3	-3.2	1.2	-1.7	0.4	0.2	2.5
1994	0.7	1.1	0.2	-0.2	-0.2	0.5	0.8	1.2	0.3	0.8	-1.7	2.2	-	2.9
1995	1.4	1.2	0.3	0.4	0.2	0.6	1.4	3.3	-	-0.1	-0.7	3.0	0.1	3.1
1996	4.1	1.7	0.1	3.0	0.1	0.4	1.3	2.4	0.7	0.1	-1.8	2.6	0.5	3.3
1997	0.9	0.7	-	-1.1	-	1.3	-	3.5	-2.1	1.8	0.7	2.9	1.1	3.4
1996 Q1	5.7	3.0	0.2	3.5	0.3	0.3	1.7	1.6	2.3	-0.4	-1.7	1.7	0.1	3.3
Q2	4.2	1.5	0.1	4.0	0.2	-	1.5	0.4	0.3	0.1	-1.9	1.7	0.3	3.5
Q3	3.1	1.0	0.1	2.7	-	0.4	1.1	3.6	-0.6	0.2	-1.7	4.9	0.7	3.3
Q4	3.4	1.5	0.2	1.8	-0.2	1.0	0.8	3.9	1.0	0.5	-1.6	2.3	0.9	3.3
1997 Q1	2.8	2.7	-	-	-0.4	1.1	0.6	5.2	4.7	0.6	-0.9	5.1	1.6	3.3
Q2	-0.2	-0.2	-0.1	-1.7	-	1.8	-	5.8	-4.4	2.1	1.3	2.6	1.4	3.5
Q3	1.0	0.7	-	-1.2	0.2	1.3	-0.1	4.0	-4.1	2.1	1.3	2.6	0.7	3.4
Q4	-0.2	-0.4	-	-1.6	0.2	1.1	-0.5	-0.7	-5.1	2.1	1.1	1.6	0.7	3.4
1998 Q1	..	..	..	..	..	..	..	-3.5	-9.8	2.0	0.4	-0.2	-	3.6
1997 Aug	..	..	..	..	..	..	..	3.5	-3.1	2.1	1.3	3.1	0.7	3.4
Sep	..	..	..	..	..	..	..	4.4	-5.1	2.4	1.4	1.5	0.4	3.4
Oct	..	..	..	..	..	..	..	1.4	-3.1	2.5	1.3	1.5	0.9	3.4
Nov	..	..	..	..	..	..	..	-2.5	-6.0	2.1	1.1	1.8	0.5	3.5
Dec	..	..	..	..	..	..	..	-0.9	-6.1	1.8	0.9	1.5	0.8	3.4
1998 Jan	..	..	..	..	..	..	..	-2.3	-5.0	1.8	0.9	-0.5	0.6	3.5
Feb	..	..	..	..	..	..	..	-3.7	-8.7	1.9	0.4	0.2	-0.1	3.6
Mar	..	..	..	..	..	..	..	-4.7	-15.3	2.2	0.1	-0.2	-0.3	3.8
Apr	..	..	..	..	..	..	..	-5.7	-1.1	0.5	-2.0	-0.4	-0.7	..
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Percentage change on previous quarter</b>														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDD	ILHH	ILIB				ILIV	
1996 Q1	2.7	1.1	0.1	1.5	0.2	-	0.3	0.5	2.3				-1.6	
Q2	0.1	-0.4	-	0.8	-0.1	-	0.3	-0.6	-2.0				3.1	
Q3	-0.4	0.1	-	-0.7	-0.1	0.3	-	1.8	-0.6				0.5	
Q4	1.1	0.6	0.1	0.2	-0.1	0.6	0.2	2.2	1.3				-1.0	
1997 Q1	2.0	2.3	-0.1	-0.3	-	0.2	0.1	1.8	6.1				-0.9	
Q2	-2.8	-3.2	-0.1	-0.8	0.3	0.7	-0.3	-0.1	-10.5				2.9	
Q3	0.8	1.0	0.1	-0.2	-	-0.2	-0.1	-	-0.3				-0.3	
Q4	-0.2	-0.5	0.1	-0.2	-0.1	0.4	-0.2	-2.3	0.3				-1.0	
1998 Q1	..	..	..	..	..	..	..	-1.1	0.7				-1.5	
<b>Percentage change on previous month</b>														
								ILKH	ILKR				ILLB	
1997 Aug								-1.4	2.2				-0.9	
Sep								1.9	-2.1				0.1	
Oct								-0.9	2.2				0.1	
Nov								-4.3	-1.1				-1.0	
Dec								1.9	-1.1				-0.4	
1998 Jan								2.2	3.2				-0.8	
Feb								-3.5	-2.1				-0.7	
Mar								-2.2	-				0.9	
Apr								-0.9	-2.1				1.0	
May								..	..				..	

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Source: OECD

1 Not adjusted for unequal number of working days in a month  
2 Figures monthly and seasonally adjusted

# 7 World trade in goods<sup>1</sup>

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
<b>Percentage change on a year earlier</b>														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1990	5.9	5.9	5.5	5.5	5.5	5.4	4.5	5.6	1.6	4.5	5.2	2.8	5.7	4.5
1991	3.8	2.5	9.6	5.2	3.5	10.0	4.0	3.5	5.2	4.5	3.2	8.1	4.5	4.2
1992	4.5	3.7	7.7	5.1	4.5	6.7	4.5	3.8	6.1	5.0	4.3	6.7	4.8	4.7
1993	4.2	1.9	13.1	3.3	1.1	9.3	4.2	2.5	8.5	3.7	1.4	9.6	3.8	3.9
1994	11.2	10.2	14.7	12.3	12.8	11.1	10.1	9.2	12.2	10.6	10.7	10.3	11.7	10.3
1995	9.9	9.8	10.2	9.8	9.3	11.2	8.7	8.7	8.8	8.3	7.3	10.7	9.9	8.5
1996	5.6	6.4	3.0	5.6	7.0	2.2	5.0	6.0	2.7	5.1	6.1	2.6	5.6	5.0
1995 Q1	13.0	13.2	12.5	13.2	13.6	12.2	11.6	12.0	10.8	11.1	11.0	11.2	13.1	11.3
Q2	10.4	10.1	11.2	11.0	10.1	13.0	9.2	9.0	9.7	9.5	8.2	12.4	10.7	9.3
Q3	9.2	9.0	9.9	8.9	8.0	11.3	8.0	7.9	8.4	7.7	6.3	10.9	9.1	7.9
Q4	7.1	7.1	6.9	6.2	5.4	8.2	6.0	5.9	6.1	5.0	3.7	8.2	6.6	5.5
1996 Q1	5.4	5.7	4.5	5.7	6.7	3.5	4.5	4.8	3.6	5.0	5.2	4.4	5.6	4.7
Q2	5.2	6.0	2.4	4.4	6.1	0.3	4.3	5.2	2.1	4.0	5.2	1.1	4.8	4.1
Q3	5.8	7.1	1.7	6.6	8.2	2.7	5.3	6.7	2.0	5.7	6.9	2.7	6.2	5.5
Q4	6.5	7.4	3.5	6.1	7.7	2.2	6.0	7.3	3.0	6.1	7.8	2.3	6.3	6.1
1997 Q1	7.5	7.9	6.2	7.8	8.0	7.3	7.0	7.3	6.3	7.1	7.1	7.1	7.6	7.0
Q2	10.8	11.9	7.1	11.0	12.4	7.6	9.9	11.2	6.6	9.5	10.6	6.9	10.9	9.7
<b>Percentage change on previous quarter</b>														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q1	2.9	3.0	2.3	1.5	1.0	2.6	2.3	2.3	2.1	1.0	0.5	2.1	2.2	1.6
Q2	1.3	1.1	2.1	1.7	1.2	3.0	1.0	0.7	1.7	1.8	1.1	3.3	1.6	1.4
Q3	1.2	1.0	1.9	1.1	0.9	1.8	1.3	1.1	1.7	1.1	0.7	1.9	1.2	1.2
Q4	1.5	1.8	0.5	1.7	2.2	0.5	1.3	1.7	0.5	1.1	1.3	0.6	1.6	1.2
1996 Q1	1.3	1.7	-0.1	1.1	2.2	-1.8	0.8	1.2	-0.3	1.0	2.0	-1.5	1.2	0.9
Q2	1.1	1.4	-	0.5	0.7	-0.2	0.8	1.1	0.2	0.8	1.1	-	0.8	0.8
Q3	1.8	2.0	1.2	3.2	2.8	4.3	2.3	2.6	1.6	2.7	2.4	3.6	2.5	2.5
Q4	2.2	2.2	2.3	1.2	1.7	-	2.0	2.2	1.5	1.5	2.1	0.2	1.7	1.8
1997 Q1	2.2	2.1	2.5	2.7	2.5	3.1	1.7	1.2	2.9	1.9	1.4	3.2	2.5	1.8
Q2	4.2	5.2	0.9	3.5	4.8	0.1	3.6	4.8	0.5	3.0	4.3	-0.2	3.8	3.3

<sup>1</sup> Data used in the World and OECD aggregates refer to Germany after unification

Source: OECD

# Regional Economic Indicators

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## Overview

- In the fourth quarter the UK, Wales, Scotland and Northern Ireland all witnessed falling production growth, but only the UK and Wales saw industrial production actually fall. Construction output grew strongly except in Scotland.
- CBI reported falling manufacturing output and orders, only East Midlands, South West and Scotland reported both orders and output holding up. Firm's new export orders fell in all regions bar the South West and only firms in Northern Ireland expect the situation to improve in the near term.
- Changes in the labour market slowed. Employment fell and unemployment increased in some regions although most regions saw improvements.

## The UK Economy

Following the slowdown in quarter four, output growth slowed further in the first quarter of 1998. UK GDP at constant 1990 factor cost increased by 0.5 per cent in the first quarter of 1998 - one percentage point less than the previous period. The labour market tightened in quarter one with an acceleration in earnings growth including large bonus payments. The first quarter showed a further deterioration in the trade balance.

## Production and Construction

Following a decrease in the final quarter of 1997, the UK **Index of Production** fell once more in the first quarter of 1998, although the year on year comparison still saw modest growth of 0.3 per cent. The first quarter's decline in production reflects falling manufacturing output (over 80 per cent of the index), lower utilities output and less oil and gas extraction. This pattern is very similar to that seen in quarter four when the effects of sterling's appreciation and mild temperatures contributed to falling output.

The path of **construction** output growth was different to that of production. The mild winter helped to boost first quarter output as it had done the quarter before. The strength of demand showed through particularly in large increases in *private commercial* and *all other new work*.

The latest production and construction data for Wales, Scotland, and Northern Ireland, shown in Chart 1, relates to the fourth quarter of 1997.

Compared with the previous quarter industrial production in **Wales** fell by 1.2 per cent in quarter four 1997, and by 1 per cent compared with the same quarter a year ago. As in the UK, the manufacturing component of production fell between the third and fourth quarters. Manufacturing in Wales appeared to turn downwards ahead of the UK as a whole: year on year quarterly changes were negative in three of the four quarters in 1997. The weakness in Welsh manufacturing was compensated for by burgeoning construction output. Construction growth of 6.5 per cent in quarter four was sufficient to completely offset the decline in production, and the combined index of production and construction increased by 0.2 per cent.

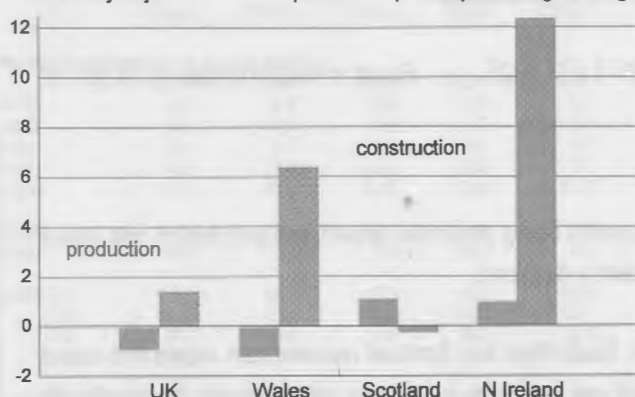
**Scotland's** industrial production growth slowed from 2 per cent in third quarter to 1.1 per cent in the fourth. Year on year growth remained very robust having topped 7 per cent in all but the first quarter of 1997, when it was 6 per cent. In contrast to Wales and the UK, however, Scotland's construction output fell in the fourth quarter - the fifth fall in the last six quarters. Scotland is the only area where construction remains subdued.

In contrast with the rest of the UK, **Northern Ireland** in the fourth quarter had a combination of higher output in both production and construction. While quarterly changes in the construction series appear to be erratic, the year on year changes were also significant.

**Chart 1**

Production and construction - Q4 1997

seasonally adjusted      quarter on quarter percentage change



## Manufacturing

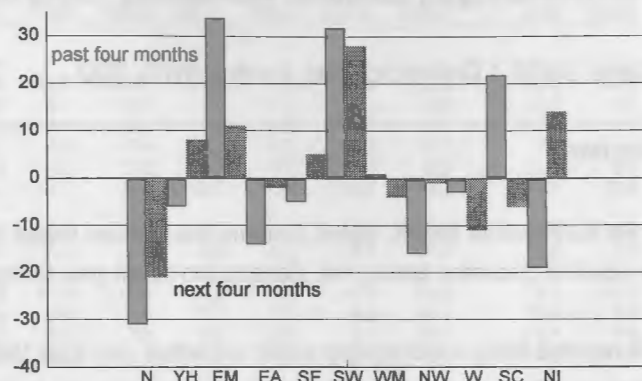
After holding up well between October and January, the UK's **volume of manufacturing output**, as measured by the CBI/ISL Regional Trends Survey, deteriorated in the four months to April 1998. The UK balance was nonetheless still positive; 7 per cent more firms reported higher output in the period than those reporting less. Six of the eleven regions saw their balances worsen during the period and seven recorded negative balances. Chart 2 shows the East Midlands, South West and Scotland were out of line with the UK as they recorded large output balances and all three saw these balances increase. The balance of expectations for the four months following April is small, but positive for the UK, and only five out of eleven regions anticipate higher output. Of these, only the South West and East Midlands expect output growth to continue. Firms in Northern Ireland also anticipate higher output while firms in the North predict output will fall sharply.

The strength of manufacturing demand is reflected in the **volume of new orders** balance. Between January and April, the UK balance deteriorated and the same pattern was repeated in nine of the eleven regions. In April only the South West, South East, Scotland and the East Midlands recorded positive balances and, of these, only the South West and the South East anticipate higher demand in the four months following April. Orders are also expected to increase in Northern Ireland, but their new orders figures seem to be particularly volatile. Overall, manufacturing demand appears have witnessed a turnaround from January, when the outlook balances were generally predicting higher demand; this may be an indication that the pace of the downturn in manufacturing has increased.

**Chart 2**

Manufacturing industry: volume of output - April 1998

balance      standard statistical regions



Predictably, in light of the sustained high exchange value of sterling, the UK's **volume of new export orders** balance became increasingly negative between January and April. Balances deteriorated in all regions bar the South West; which was also the only region to post a positive balance. The problems for exporters are expected to persist in the near term; balances for the four months from April remain negative in all regions except Northern Ireland. Many of these balances are the worst recorded in the nineties.

The data for **capacity** utilization reinforces the story of weakness in the manufacturing sector. The percentage of firms working below capacity increased in the UK as a whole and in nine of the survey regions, only the South West and Northern Ireland reported less spare capacity.

## The Labour Market

Despite the fall in production at the end of 1997 and start of 1998 the UK economy's demand for labour remained firm. While a large part of the demand reflected growth in the service sector and construction - which are less exposed to external factors - it is surprising that manufacturing also continued to recruit more labour. The take-up of workers into manufacturing comes in spite of falling output and weakening output expectations.

The UK **total in employment**, not seasonally adjusted, fell slightly between the Autumn (Sept to Nov) and Winter (Dec to Feb) quarters - the seasonally adjusted figure rose slightly. Year on year comparisons show that UK employment rose by 1.3 per cent and the North East and Merseyside were the only regions to see employment fall. Eastern, the South West and Scotland saw growth of 2 per cent or above.

Compared with the same quarter the year before, the UK **ILO unemployment** rate, not seasonally adjusted, fell from 7.4 per cent to 6.3 per cent. In the same period only Merseyside saw its rate rise, increasing the discrepancy with the rest of the UK.

The most recent snapshot of the regional labour markets is provided by May's claimant count release. The UK figures attracted special attention because the **claimant count** rose for the first time in 2 years, although the rate of claimant unemployment remained unchanged at 4.8 per cent. Between March and May regional claimant rates either fell or remained the same in all regions. The South East remains the region with the lowest rate, 2.7 per cent, and Merseyside retains its position as the region with the highest rate - 9.4 per cent. The gap has remained fairly constant since the rates peaked around the beginning of 1993. In previous economic cycles the gap between the worst and best performing region has tended to narrow during periods of economic expansion and widen again as the cycle turned down. The relative positions of region by unemployment rate, from the highest to the lowest, seems to have been fairly constant in last decade.

### ***The Housing Market***

Price growth in the housing market remained strong in quarter one, although the annual rate of change (9.1 per cent) was below the peak of 10.6 per cent in quarter three. UK prices are now 22 per cent above their level in 1993. The significance of the latest movement is difficult to assess given two factors. The first is that movements between quarters are erratic and the second is that the DETR survey lags behind the most recent movements as it is based on completions.

Over the year prices grew in all regions and double figure growth was recorded in Eastern, South West, South East and West Midlands. The price increases in London, which were a salient feature in 1997, have now fallen to below the national average.

**Permanent dwellings starts** rose in the year to quarter one in the majority of regions. The largest annual rise to quarter one was recorded in the South West - at 11 per cent, the next largest increase was recorded in London. A period of exceptional growth in starts across all regions was recorded towards the end of 1996 and into 1997.

Strong year on year growth in completions was recorded in the East Midlands, the South West and large falls were seen Scotland and Wales, Yorkshire and the Humber, and the North

West. The pattern of completions tends to more varied than the pattern of starts. **Permanent dwellings completions** lag by between four to five quarters behind starts. On this basis we can expect to see an increase in the supply of permanent dwellings later in 1998 as the jump in starts in 1996/97 feeds through.

# 1 Gross domestic product at factor cost: current prices

## Government Office Regions

£ million and percentages

Percentage of the UK <sup>1</sup>														
	United Kingdom <sup>1</sup> (Em)	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	England	Wales	Scotland	Northern Ireland
	DCIX	LRBU	LRBV	DCJD	DCJC	DCJB	LRBW	LRAD	LRBX	DCJA	LRES	DCJG	DCJH	DCJI
1986	319 845	3.9	11.5	8.2	6.8	8.4	9.7	14.7	14.3	7.6	85.0	4.2	8.5	2.2
1992	511 738	3.9	10.8	7.8	6.8	8.5	9.7	14.8	14.6	7.8	84.8	4.2	8.7	2.3
1993	540 138	3.9	10.8	7.7	6.8	8.4	9.6	15.1	14.8	7.8	84.9	4.1	8.7	2.3
1994	570 943	3.8	10.8	7.7	6.8	8.5	9.7	14.8	15.0	7.8	84.8	4.2	8.7	2.3
1995	597 741	3.8	10.7	7.8	6.8	8.5	9.7	14.6	14.9	7.9	84.7	4.2	8.8	2.3
1996	629 841	3.7	10.7	7.7	6.6	8.5	9.8	14.8	15.4	7.8	84.9	4.1	8.6	2.3

1 UK less continental shelf and statistical discrepancy.

Source: Office for National Statistics

# 2 Gross domestic product at factor cost: £ per head

## Government Office Regions

£

	United Kingdom <sup>1</sup>	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	England	Wales	Scotland	Northern Ireland
	DCJJ	LRBY	LRBZ	DCJP	DCJO	DCJN	LRCA	LRAF	LRCB	DCJM	LRET	DCJS	DCJT	DCJU
1986	5 626	4 828	5 370	5 333	5 529	5 140	6 179	6 925	6 112	5 314	5 745	4 817	5 324	4 467
1992	8 822	7 622	8 024	7 999	8 569	8 236	9 623	10 975	9 711	8 460	8 973	7 387	8 724	7 205
1993	9 282	7 963	8 458	8 348	8 978	8 615	10 015	11 749	10 299	8 837	9 448	7 676	9 148	7 620
1994	9 777	8 319	8 950	8 760	9 448	9 116	10 594	12 154	10 966	9 263	9 944	8 161	9 688	7 974
1995	10 199	8 683	9 277	9 300	9 791	9 567	10 974	12 490	11 369	9 792	10 352	8 601	10 224	8 423
1996	10 711	9 026	9 735	9 585	10 096	10 015	11 655	13 210	12 263	10 143	10 897	8 899	10 614	8 700

1 UK less continental shelf and statistical discrepancy.

Source: Office for National Statistics

# 3 Total personal disposable income: £ per head

## Government Office Regions

£

	United Kingdom	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	England	Wales	Scotland	Northern Ireland
	DCSD	LRCC	LRCD	DCSK	DCSJ	DCSI	LRCE	DCSF	LRCF	DCSH	LREU	DCSN	DCSO	DCSP
1986	4 648	4 160	4 350	4 439	4 490	4 276	4 911	5 681	4 848	4 733	4 719	4 044	4 520	4 028
1992	7 509	6 773	7 007	7 012	7 008	7 161	8 000	8 947	7 762	7 410	7 555	6 690	7 747	6 839
1993	7 892	7 038	7 312	7 334	7 417	7 427	8 301	9 699	8 283	7 687	7 959	6 858	8 056	7 208
1994	8 173	7 149	7 532	7 581	7 682	7 701	8 722	10 020	8 714	7 857	8 252	7 168	8 193	7 537
1995	8 624	7 489	7 869	7 991	8 075	8 118	9 202	10 566	9 143	8 470	8 699	7 599	8 701	7 960
1996	9 144	7 887	8 327	8 358	8 370	8 592	9 866	11 466	9 929	8 741	9 256	7 881	9 102	8 181

Source: Office for National Statistics

# 4 Household disposable income: £ per head

## Government Office Regions

£

	United Kingdom	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	England	Wales	Scotland	Northern Ireland
	DEPZ	LRCG	LRCH	DEQB	DEQC	DEQH	LRCI	DEQE	LRCJ	DEQG	LREV	DEQJ	DEQK	DEQL
1986	4 432	4 000	4 133	4 222	4 272	3 994	4 606	5 264	4 738	4 686	4 493	3 923	4 336	3 840
1992	7 523	6 863	7 084	7 085	7 153	7 069	7 968	8 487	7 996	7 676	7 575	6 890	7 672	6 632
1993	7 828	7 101	7 304	7 334	7 468	7 305	8 207	9 053	8 438	7 912	7 897	7 019	7 933	6 881
1994	8 057	7 178	7 477	7 553	7 713	7 570	8 505	9 308	8 805	8 085	8 143	7 266	7 980	7 160
1995	8 471	7 492	7 818	7 913	8 040	7 989	8 987	9 709	9 211	8 636	8 548	7 718	8 458	7 557
1996	8 900	7 861	8 216	8 248	8 319	8 399	9 524	10 358	9 845	8 828	9 001	7 998	8 804	7 793

Source: Office for National Statistics

## 5 Consumers' expenditure: £ per head

Government Office Regions

£

	United Kingdom	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	England	Wales	Scotland	Northern Ireland
	DCVD	LRFC	LRFD	DCVK	DCVJ	DCVI	LRFE	DCVE	LRFF	DCVH	LREW	DCVN	DCVO	DCVP
1986	4 249	..	..	3 757	3 819	3 811	..	5 251	..	4 293	4 333	3 811	3 934	3 536
1992	6 611	..	..	6 124	6 239	5 995	..	7 940	..	6 572	6 718	6 082	6 170	5 748
1993	6 987	..	..	6 623	6 616	6 310	..	8 400	..	6 793	7 098	6 258	6 669	5 957
1994	7 319	6 782	6 940	6 935	7 020	6 875	6 977	8 658	8 501	7 020	7 438	6 377	7 037	6 357
1995	7 613	7 037	7 201	7 162	7 400	7 278	7 390	8 724	8 798	7 334	7 721	6 794	7 272	6 916
1996	8 053	7 512	7 604	7 623	7 844	7 609	7 879	8 960	9 384	7 802	8 153	7 370	7 692	7 409

Source: Office for National Statistics

## 6 Average weekly household disposable income and expenditure<sup>1</sup>

Government Office Regions

£

	United Kingdom	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland <sup>2</sup>
Average weekly disposable household income													
1996/97	325	267	310	300	307	300	346	364	386	329	299	306	266
Average weekly household expenditure													
1996/97	309	265	301	296	293	289	341	338	351	299	293	288	287

1 FES data are shown without adjustment for non-response, outliers or non-sampling errors. They are also subject to sampling error.

2 Northern Ireland data are obtained from an enhanced sample, but the United Kingdom figures are obtained from the main Family Expenditure Survey sample.

Sources: Family Expenditure Survey, Office for National Statistics; Northern Ireland Statistics and Research Agency

## 7 Total average gross weekly pay<sup>1</sup>

Government Office Regions

£

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	DEOG	LRCO	LRCF	LREX	DCQI	DCQH	DCQG	LRCQ	DCPI	LRCR	DCQF	DCQL	DCQM	DCQN
1993 Apr	316.0	286.2	299.5	297.7	287.6	285.5	292.7	312.2	408.8	328.9	298.8	281.5	297.6	282.4
1994 Apr	324.7	294.6	308.7	303.2	297.0	292.6	300.1	322.9	420.6	339.4	306.9	290.5	301.9	286.5
1995 Apr	335.3	299.2	317.4	319.0	306.0	306.4	311.3	331.5	441.5	348.1	313.9	302.0	313.5	300.2
1996 Apr	350.2	314.1	330.5	325.4	316.4	317.9	324.3	345.7	454.3	367.4	326.5	313.1	324.9	306.2
1997 Apr	366.3	327.6	346.6	342.4	330.5	332.9	337.8	362.4	480.1	382.5	342.7	330.1	336.8	319.7

1 Average gross weekly earnings of full-time employees on adult rates whose pay for the survey pay-period was not affected by absence.

Sources: New Earnings Survey, Office for National Statistics; Department of Economic Development, Northern Ireland

## 8 Claimant count rates as a percentage of total workforce

Government Office Regions

Seasonally adjusted

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	BCJE	DPDM	DPDN	DPDO	DPBI	DPBJ	DPBN	DPDP	DPDQ	DPDR	DPBM	DPBP	DPBQ	DPBR
1994	9.3	12.4	8.7	14.9	9.6	8.7	9.9	8.1	10.7	7.3	8.1	9.3	9.3	12.6
1995	8.0	11.3	7.4	13.5	8.6	7.4	8.1	6.6	9.4	5.9	6.8	8.5	7.9	11.2
1996	7.3	10.4	6.7	13.0	7.9	6.7	7.2	5.9	8.6	5.0	6.1	8.0	7.7	10.9
1997	5.5	8.3	5.0	10.7	6.4	5.0	5.4	4.2	6.5	3.4	4.3	6.4	6.4	8.3
1997 Jun	5.6	8.4	5.0	10.7	6.5	5.0	5.5	4.2	6.6	3.5	4.4	6.4	6.5	8.2
Jul	5.4	8.2	4.9	10.5	6.4	4.9	5.3	4.1	6.4	3.3	4.2	6.2	6.2	7.9
Aug	5.3	8.1	4.8	10.4	6.2	4.7	5.2	4.0	6.2	3.2	4.0	6.1	6.1	7.8
Sep	5.2	8.0	4.7	10.2	6.1	4.6	5.1	3.9	6.0	3.1	3.9	6.0	6.0	7.8
Oct	5.1	8.1	4.6	10.0	6.1	4.5	5.1	3.8	6.0	3.1	3.9	5.9	6.0	7.9
Nov	5.0	7.9	4.5	9.8	6.0	4.4	5.0	3.7	5.8	3.0	3.8	5.8	5.8	7.8
Dec	4.9	7.8	4.4	9.7	5.9	4.3	4.9	3.6	5.7	2.9	3.7	5.7	5.7	7.8
1998 Jan	4.9	7.8	4.4	9.7	5.9	4.2	4.9	3.5	5.6	2.8	3.6	5.7	5.7	7.8
Feb	4.8	7.8	4.4	9.5	5.8	4.2	4.8	3.5	5.6	2.8	3.5	5.7	5.7	7.8
Mar	4.8	7.7	4.3	9.4	5.8	4.2	4.8	3.5	5.6	2.8	3.5	5.7	5.7	7.8
Apr	4.8	7.6	4.3	9.4	5.8	4.1	4.8	3.4	5.5	2.7	3.5	5.6	5.7	7.7
May <sup>1</sup>	4.8	7.5	4.3	9.4	5.8	4.1	4.8	3.4	5.5	2.7	3.5	5.6	5.7	7.6

1 Provisional.

Source: Office for National Statistics

# 9 Long-term claimant count as a percentage of total workforce (those out of work for 12 months or more)

Government Office Regions

Percentages

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	DCKS	LRCW	LRCX	LREL	CKY	DCKX	DCKW	LREF	DCRB	LRCY	DCKV	DCLB	DCLC	DCLD
1997 Jul	1.9	3.0	1.4	4.4	2.0	1.6	1.9	1.3	2.6	1.0	1.3	2.0	1.9	4.1
Oct	1.5	2.6	1.1	3.8	1.7	1.2	1.6	1.0	2.2	0.8	1.0	1.6	1.5	3.7
1998 Jan	1.4	2.4	1.0	3.5	1.6	1.0	1.4	0.9	1.9	0.7	0.9	1.5	1.4	3.5
Apr	1.3	2.3	0.9	3.2	1.5	0.9	1.4	0.9	1.8	0.7	0.8	1.4	1.3	3.4

Source: Office for National Statistics

# 10 ILO unemployed as a percentage of the economically active, not seasonally adjusted

Government Office Regions

Percentages

	United Kingdom <sup>1</sup>	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	LRAH	LRCZ	LRDA	LREQ	LRAJ	LRAK	LRAP	LRDB	LRAM	LRDC	LRAO	LRAR	LRAS	LRAT
Spring 1994	9.6	12.5	9.5	13.6	9.9	8.3	10.0	8.2	13.1	7.1	7.5	9.3	10.0	11.7
Summer 1994	9.8	12.3	9.5	15.9	10.4	9.1	9.8	8.3	12.9	7.2	8.1	9.9	9.9	..
Autumn 1994	9.1	12.1	8.4	14.1	9.0	8.1	9.1	7.6	12.1	6.9	7.9	9.8	8.9	..
Winter 1994	8.9	12.3	8.3	13.0	8.8	7.5	8.6	7.6	11.7	7.2	7.7	9.6	8.5	11.4
Spring 1995	8.6	11.4	8.3	11.7	8.7	7.5	9.0	7.5	11.5	6.4	7.8	8.8	8.3	11.0
Summer 1995	8.9	11.7	8.4	13.5	9.1	7.1	8.9	7.8	12.3	6.6	7.3	8.4	9.2	11.2
Autumn 1995	8.6	11.4	7.9	13.7	8.2	6.9	8.7	7.4	11.8	6.4	7.5	8.3	9.1	10.7
Winter 1995	8.3	11.2	7.6	11.6	7.9	7.4	8.5	6.7	11.0	6.5	7.2	8.9	8.9	9.7
Spring 1996	8.2	10.8	7.3	13.3	8.1	7.4	9.2	6.2	11.3	6.0	6.3	8.3	8.7	9.7
Summer 1996	8.3	10.7	7.5	12.4	8.5	7.1	9.0	7.2	11.5	6.1	6.4	8.5	8.6	10.3
Autumn 1996	8.0	9.6	6.9	10.7	8.7	6.8	7.8	6.6	11.4	5.8	6.6	8.2	8.8	9.9
Winter 1996	7.4	9.8	6.7	10.0	8.2	6.1	7.1	6.3	10.1	5.1	6.0	8.5	8.7	9.3
Spring 1997	7.1	9.8	6.3	9.6	8.1	6.3	6.8	5.9	9.1	5.2	5.2	8.4	8.5	7.5
Summer 1997	7.3	9.5	7.4	10.4	7.5	5.7	7.5	6.4	9.6	5.1	5.8	7.6	8.7	8.4
Autumn 1997	6.6	8.5	6.5	10.0	7.1	5.2	6.5	5.2	9.5	4.6	5.0	7.2	7.4	8.8
Winter 1997	6.3	8.7	5.6	10.1	7.0	5.0	6.2	5.3	8.3	4.3	5.0	7.3	7.4	8.3

1 Prior to Winter 1994, data for Northern Ireland were only collected annually, in the Spring quarters. Figures shown for non-Spring quarters prior to Winter 1994 therefore include the Spring estimates for Northern Ireland.

Source: Labour Force Survey, Office for National Statistics

# 11 Total in employment<sup>1</sup>, not seasonally adjusted

Government Office Regions

Thousands

	United Kingdom <sup>2</sup>	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	LRAU	LRDD	LRDE	LRER	LRAW	LRAX	LRBC	LRDF	LRAZ	LRDG	LRBB	LRBE	LRBF	LRBG
Spring 1994	25 697	1 036	2 387	522	2 180	1 858	2 343	2 455	3 013	3 677	2 181	1 177	2 266	604
Summer 1994	25 945	1 045	2 408	536	2 191	1 858	2 378	2 478	3 047	3 707	2 199	1 200	2 293	..
Autumn 1994	25 963	1 042	2 411	530	2 215	1 874	2 358	2 511	3 076	3 675	2 199	1 191	2 277	..
Winter 1994	25 830	1 027	2 391	523	2 202	1 890	2 362	2 484	3 074	3 645	2 174	1 176	2 272	609
Spring 1995	25 973	1 032	2 377	527	2 224	1 896	2 347	2 503	3 076	3 707	2 188	1 189	2 285	623
Summer 1995	26 272	1 052	2 402	532	2 240	1 930	2 373	2 511	3 100	3 765	2 229	1 203	2 307	628
Autumn 1995	26 265	1 058	2 386	523	2 247	1 935	2 385	2 510	3 112	3 772	2 222	1 192	2 282	641
Winter 1995	26 179	1 057	2 383	546	2 239	1 926	2 383	2 485	3 111	3 760	2 209	1 179	2 252	649
Spring 1996	26 219	1 058	2 420	532	2 223	1 926	2 348	2 527	3 110	3 772	2 216	1 195	2 252	641
Summer 1996	26 507	1 080	2 417	546	2 230	1 961	2 388	2 544	3 122	3 799	2 252	1 225	2 289	654
Autumn 1996	26 568	1 083	2 456	551	2 224	1 967	2 398	2 543	3 133	3 825	2 253	1 216	2 262	656
Winter 1996	26 556	1 074	2 442	549	2 210	1 961	2 403	2 524	3 157	3 808	2 281	1 216	2 266	665
Spring 1997	26 682	1 070	2 443	546	2 211	1 966	2 410	2 536	3 217	3 816	2 300	1 216	2 278	673
Summer 1997	26 980	1 081	2 440	556	2 269	1 981	2 434	2 589	3 219	3 851	2 326	1 241	2 304	688
Autumn 1997	27 024	1 079	2 473	550	2 264	1 987	2 459	2 619	3 197	3 873	2 319	1 211	2 305	688
Winter 1997	26 912	1 071	2 462	542	2 243	1 986	2 439	2 593	3 202	3 854	2 326	1 204	2 311	681

1 Includes employees, the self-employed, participants on Government-supported employment and training schemes and unpaid family-workers.

Source: Labour Force Survey, Office for National Statistics

2 Prior to Winter 1994, data for Northern Ireland were only collected annually, in the Spring quarters. Figures shown for non-Spring quarters prior to Winter 1994 therefore include the Spring estimate for Northern Ireland.

# 12 Redundancies

## Government Office Regions

Rates<sup>1</sup>

	Great Britain	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland
	DCXD	LRDH	LRDJ	DCXF	DCXG	DCXL	LRDJ	DCXI	LRDK	DCXK	DCXN	DCXO
Spring 1995	10	.. <sup>2</sup>	.. <sup>2</sup>	10	12	11	.. <sup>2</sup>	10	.. <sup>2</sup>	10	15	9
Summer 1995	10	16	11	9	12	10	8	12	8	8	10	8
Autumn 1995	10	12	10	8	11	10	8	10	11	8	11	10
Winter 1995	10	14	10	10	9	8	12	11	9	9	10	12
Spring 1996	9	.. <sup>3</sup>	11	8	8	11	11	8	8	10	11	11
Summer 1996	9	12	10	10	10	9	10	6	8	9	13	11
Autumn 1996	8	.. <sup>3</sup>	8	11	9	7	6	8	9	8	.. <sup>3</sup>	11
Winter 1996	8	.. <sup>3</sup>	10	7	10	9	10	6	8	6	.. <sup>3</sup>	11
Spring 1997	9	13	11	11	10	9	8	8	9	7	11	9
Summer 1997	8	.. <sup>3</sup>	9	8	9	10	9	7	7	7	.. <sup>3</sup>	9
Autumn 1997	7	.. <sup>3</sup>	9	8	7	7	7	7	6	7	.. <sup>3</sup>	9
Winter 1997	8	12	9	6	10	8	7	8	7	9	.. <sup>3</sup>	11

1 Redundancies per 1,000 employees.

2 Not available.

3 Sample size too small to provide a reliable estimate.

Source: Labour Force Survey, Office for National Statistics

# 13 Employees in employment (all industries)

## Government Office Regions

June 1996 = 100

	United Kingdom	North East	North West (GOR) & Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	YEKA	YEBK	YEKJ	YEKC	YEKD	YEKI	YEKE	YEKF	YEGK	YEKH	YEKK	YEKL	YEKM
1997	102.4	101.4	103.2	99.7	102.3	102.6	102.6	102.4	103.9	104.2	101.1	100.9	102.3
1997 Mar	101.1	99.7	101.7	99.2	100.8	101.6	101.1	101.3	102.2	101.9	100.3	99.5	101.3
Jun	102.1	101.8	103.2	99.0	102.5	102.1	102.3	102.1	103.5	103.5	100.5	100.7	101.9
Sep	102.6	101.5	103.4	99.7	102.8	102.7	102.7	102.4	104.1	105.0	101.6	101.3	102.1
Dec	103.8	102.6	104.4	101.0	103.0	104.1	104.2	103.8	105.9	106.4	101.8	101.9	103.8
1998 Mar	103.4	102.5	103.6	101.1	102.7	103.9	102.8	103.5	105.1	106.1	101.4	101.9	103.0

Source: Office for National Statistics

# 14 Index of industrial production and construction

Seasonally adjusted 1990 = 100

	United Kingdom	Wales	Scotland	Northern Ireland
<b>Index of industrial production</b>				
	DVZI	DEOL	DEOM	DEPY
1991	96.6	97.9	98.6	98.8
1992	97.0	98.0	99.1	99.5
1993	99.1	98.3	102.0	102.4
1994	104.4	101.9	106.8	109.2
1995	106.7	108.4	110.1	113.6
1996	107.9	110.1	115.2	115.3
1997	109.4	109.3	123.8	120.1
1997 Q1	108.7	106.4	119.0	118.1
Q2	109.2	110.7	123.3	119.3
Q3	110.3	110.7	125.8	120.9
Q4	109.3	109.4	127.2	122.1
1998 Q1	109.0	..	..	..
<b>Index of construction</b>				
	DVJO	LRFG	LRFH	LRFI
1991	92.0	94.7	100.5	103.4
1992	87.9	104.8	106.3	103.6
1993	87.2	93.1	110.0	113.1
1994	90.6	108.6	105.4	108.4
1995	90.0	110.4	110.2	92.7
1996	91.2	100.6	109.2	102.8
1997	93.3	107.1	110.7	112.8
1997 Q1	92.4	100.6	112.8	112.0
Q2	93.3	105.2	112.5	112.2
Q3	93.1	107.8	108.9	106.8 <sup>1</sup>
Q4	94.4	114.7	108.6	120.0 <sup>2</sup>
1998 Q1	95.5	..	..	..

1 Revised.

2 Provisional.

Sources: Office for National Statistics; Welsh Office; The Scottish Office; Department of Economic Development, Northern Ireland; Department of the Environment, Northern Ireland

# 15 Manufacturing industry: optimism about business situation

## Standard Statistical Regions

Balance<sup>1</sup>

	United Kingdom	North	Yorks & Humber	East Midlands	East Anglia	South East	South West	West Midlands	North West	Wales	Scotland	Northern Ireland
1997 Jul	DCMO	DCMW	DCMU	DCMT	DCMQ	DCMP	DCMR	DCMS	DCMV	DCMX	DCMY	DCMZ
Oct	-6	14	5	-10	-36	5	-15	-17	-11	-39	16	23
	2	-2	-13	-2	1	10	5	-12	-13	5	10	43
1998 Jan	-11	33	-10	-14	-24	-20	-3	-17	-4	-8	14	-27
Apr	-22	-45	-19	-11	-2	-18	-12	-32	-35	-35	-32	5

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

# 16 Manufacturing industry: volume of output

## Standard Statistical Regions

Balance<sup>1</sup>

	United Kingdom	North	Yorks & Humber	East Midlands	East Anglia	South East	South West	West Midlands	North West	Wales	Scotland	Northern Ireland
<b>Past 4 months</b>												
1997 Jul	DCLQ	DCLY	DCLW	DCLV	DCLS	DCLR	DCLT	DCLU	DCLX	DCLZ	DCMA	DCMB
Oct	7	-6	4	-6	16	-1	-6	2	3	-13	8	15
	13	18	8	14	9	2	17	-2	-7	-8	-6	-36
1998 Jan	13	14	-9	15	8	11	30	6	11	9	18	14
Apr	7	-31	-6	34	-14	-5	32	1	-16	-3	22	-19
<b>Next 4 months</b>												
1998 Apr	DCMC	DCMK	DCMI	DCMH	DCME	DCMD	DCMF	DCMG	DCMJ	DCML	DCMM	DCMN
	3	-21	8	11	-2	5	28	-4	-1	-11	-6	14

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

# 17 Manufacturing industry: volume of new orders

## Standard Statistical Regions

Balance<sup>1</sup>

	United Kingdom	North	Yorks & Humber	East Midlands	East Anglia	South East	South West	West Midlands	North West	Wales	Scotland	Northern Ireland
<b>Past 4 months</b>												
1997 Jul	DCNA	DCNI	DCNG	DCNF	DCNC	DCNB	DCND	DCNE	DCNH	DCNJ	DCNK	DCNL
Oct	10	17	-1	9	12	14	-8	-9	-1	-18	12	17
	6	15	-21	2	10	9	8	-4	-22	5	-6	-43
1998 Jan	6	12	-15	13	15	9	15	1	-10	-5	10	4
Apr	2	-38	-17	1	-38	2	33	-2	-28	-32	17	-49
<b>Next 4 months</b>												
1998 Apr	DCNM	DCNU	DCNS	DCNR	DCNO	DCNN	DCNP	DCNQ	DCNT	DCNV	DCNW	DCNX
	-	-21	-18	-	-7	13	17	-13	-2	-19	-14	23

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

# 18 Manufacturing industry: volume of new export orders

## Standard Statistical Regions

Balance<sup>1</sup>

	United Kingdom	North	Yorks & Humber	East Midlands	East Anglia	South East	South West	West Midlands	North West	Wales	Scotland	Northern Ireland
<b>Past 4 months</b>												
1997 Jul	DCNY	DCOG	DCOE	DCOD	DCOA	DCNZ	DCOB	DCOC	DCOF	DCOH	DCOI	DCOJ
Oct	-20	-14	-19	-10	-38	-6	-21	-18	-17	-30	-6	-5
	-23	2	-36	-19	-52	-10	1	-21	-31	-22	-26	-43
1998 Jan	-21	-31	-21	5	18	-13	-14	-15	-27	-18	9	-36
Apr	-32	-50	-54	-26	-54	-27	28	-40	-44	-45	-14	-41
<b>Next 4 months</b>												
1998 Apr	DCOK	DCOS	DCOQ	DCOP	DCOM	DCOL	DCON	DCOO	DCOR	DCOT	DCOU	DCOV
	-28	-24	-52	-19	-31	-10	-1	-37	-15	-44	-24	31

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

# 19 Manufacturing industry: firms working below capacity

## Standard Statistical Regions

Percentages

	United Kingdom	North	Yorks & Humber	East Midlands	East Anglia	South East	South West	West Midlands	North West	Wales	Scotland	Northern Ireland
1997 Jul	DCOW	DCPE	DCPC	DCPB	DCOY	DCOX	DCOZ	DCPA	DCPD	DCPF	DCPG	DCPH
Oct	54	78	55	61	80	49	59	63	53	49	29	45
	45	64	47	53	69	48	47	51	51	62	49	53
1998 Jan	42	53	47	37	41	44	54	57	45	58	31	49
Apr	54	66	47	45	58	61	40	64	64	59	43	40

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

## 20 Permanent dwellings started Government Office Regions

Numbers

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland <sup>1</sup>	Northern Ireland <sup>2</sup>
	DEOI	LRDP	LRDQ	LRDO	DCRX	DCRW	DCRV	LRDR	DCRR	LRDS	DCRU	BLIA	BLFA	BLGA
1996	183 385	6 560	14 308	3 955	14 315	15 252	14 118	20 731	12 099	25 469	16 781	8 837	21 520	10 098
1997 <sup>3</sup>	..	8 066	15 994	4 399	16 602	15 245	14 346	21 532	14 285	26 390	19 485	9 076	..	11 026
1996 Q4	43 328	1 510	3 524	1 003	3 229	3 566	3 193	4 842	3 392	6 297	4 431	1 948	4 429	2 092
1997 Q1	52 974	2 371	4 052	1 148	4 569	4 151	4 209	5 913	3 107	6 330	4 913	2 291	7 082	2 838
Q2	51 720	1 858	4 636	1 344	4 380	4 040	3 716	5 885	3 685	7 215	5 110	2 720	4 562	3 077
Q3	48 370	2 318	4 025	1 026	3 964	3 771	3 553	5 078	3 294	6 970	4 784	2 227	5 222	2 582
Q4 <sup>3</sup>	..	1 519	3 281	881	3 689	3 283	2 868	4 656	4 199	5 875	4 678	1 838	..	2 529
1998 Q1 <sup>3</sup>	..	2 191	4 165	1 222	4 419	4 262	3 668	5 595	3 387	5 828	5 458	2 329	..	3 003

1 Includes estimates for outstanding returns.

2 Northern Ireland figures are provisional.

3 Quarter 4 1997 and quarter 1 1998 for the English regions are provisional.

Sources: Department of the Environment, Transport and the Regions;  
Welsh Office; The Scottish Office Development Department;  
Department of the Environment, Northern Ireland

## 21 Permanent dwellings completed Government Office Regions

Numbers

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland <sup>1</sup>	Northern Ireland <sup>2</sup>
	DEOI	LRDT	LRDU	LRDP	DCVX	DCVW	DCVV	LRDV	DCVR	LRDW	DCVU	BLII	BLFI	BLGI
1996	187 734	7 000	16 103	4 008	14 636	15 160	14 754	21 582	13 616	25 136	16 501	10 047	20 686	8 556
1997 <sup>3</sup>	..	7 233	15 998	4 320	15 852	14 222	13 531	21 185	12 003	24 879	18 117	8 891	..	..
1996 Q4	49 654	1 877	3 932	1 024	4 009	3 869	4 307	5 957	3 386	6 822	4 984	2 606	4 570	2 311
1997 Q1	43 959	1 659	3 719	909	4 084	3 063	3 140	4 780	2 613	5 762	4 056	2 242	5 209	2 723
Q2	..	1 863	4 032	1 152	3 794	3 830	3 477	5 594	3 089	6 149	4 510	2 136	6 693	..
Q3	..	1 701	3 720	987	3 610	3 628	3 226	5 564	3 101	5 825	4 697	2 012	5 155	..
Q4 <sup>3</sup>	..	2 010	4 527	1 272	4 364	3 701	3 688	5 247	3 200	7 143	4 854	2 501	..	..
1998 Q1 <sup>3</sup>	..	1 825	3 139	835	3 413	3 763	3 121	4 933	2 357	5 751	4 577	1 789	..	..

1 Includes estimates for outstanding returns.

2 Northern Ireland figures are provisional.

3 Quarter 4 1997 and quarter 1 1998 for the English regions are provisional.

Sources: Department of the Environment, Transport and the Regions;  
Welsh Office; The Scottish Office Development Department;  
Department of the Environment, Northern Ireland

## 22 House prices<sup>1</sup> Government Office Regions

1993 = 100

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	LRBH	LRDX	LRDY	LRBN	LRBJ	LRBK	LRBP	LRDZ	LRBM	LRBA	LRBO	LRBR	LRBS	LRBT
1996	106.9	102.0	101.7	104.2	101.6	108.0	106.1	106.6	109.2	110.1	108.4	103.8	105.3	126.0
1997	116.9	109.0	109.4	111.1	107.0	112.7	112.5	119.4	125.5	121.8	117.3	109.8	111.4	140.0
1997 Q1	111.9	105.0	106.3	109.9	105.3	109.2	106.4	110.3	120.9	116.7	110.5	108.7	104.5	141.3
Q2	114.2	107.7	107.9	113.4	104.3	110.5	111.4	118.2	120.5	117.2	115.1	109.0	110.6	133.7
Q3	120.0	109.3	110.0	110.0	110.6	111.5	114.4	123.4	131.4	126.4	119.4	109.7	113.6	142.6
Q4	119.1	112.2	112.8	115.0	107.3	118.3	115.1	121.7	125.9	123.4	120.5	111.6	113.8	141.9
1998 Q1	122.1	113.1	110.5	116.2	109.0	120.1	117.4	125.6	130.0	130.6	123.9	113.0	111.6	144.1

1 These indices adjust for the mix of dwellings (by size and type, whether new or second-hand) and exclude those bought at non-market prices and are based on a sample of mortgage completions by all lenders.

Source: Department of the Environment, Transport and the Regions

## 23 VAT registrations and deregistrations<sup>1</sup>: net change<sup>2</sup> Government Office Regions

Thousands

	United Kingdom	North East	North West (GOR)	Mersey-side	York-shire and the Humber	East Midlands	West Midlands	Eastern	London	South East (GOR)	South West	Wales	Scotland	Northern Ireland
	DCYQ	LRFB	LRFC	LRFB	DCYT	DCYU	DCYY	LRFD	DEON	LRFE	DCYX	DCZA	DCZB	DCZC
1994	-19.9	-0.7	-2.7	-0.3	-2.0	-1.0	-1.6	-2.0	-0.7	-2.3	-2.8	-2.3	-1.2	-0.3
1995	-9.3	-1.0	-2.0	-0.5	-2.1	-0.7	-1.3	-0.5	3.5	-0.6	-2.6	-1.2	-0.8	0.5
1996	11.2	-0.2	..	0.3	-0.2	-0.3	..	1.1	7.4	2.3	0.1	-0.4	0.3	0.8

1 Registrations and deregistrations of VAT-based enterprises. Not wholly comparable with figures for earlier years which counted VAT reporting units.

2 Registrations less deregistrations.

Source: Department of Trade and Industry

# Final Expenditure Prices Index (Experimental) - May 1998

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*Note that further development work, including the adjustment of the Index of Government Prices for productivity change, is ongoing and the FEPI will be available only as an experimental index until this work has been completed.*

## Summary

The Final Expenditure Prices Index (FEPI) for May 1998 shows an annual rate of 2.2 per cent, up from 2.1 per cent in April. The annual rate of the FEPI reflects increases in the annual rates of the Index of Consumer Prices (ICP) and the Index of Investment Prices (IIP) and a fall in the Index of Government Prices.

The FEPI annual percentage change

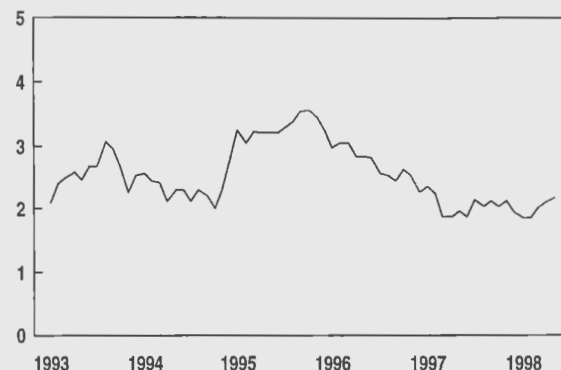


Table A

Final Expenditure Prices Index and components (January 1992=100 and annual percentage change)

		Index of Consumer Prices (ICP)		Index of Investment Prices (IIP)		Index of Government Prices (IGP)		Final Expenditure Prices Index (FEPI)	
		Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change
1997	Dec	118.1	2.2	111.1	0.9	115.6	2.0	116.1	1.9
1998	Jan	117.6	2.0	111.4	0.9	116.2	2.2	116.0	1.8
	Feb	118.3	2.2	111.2	0.5	115.9	1.8	116.3	1.8
	Mar	118.7	2.3	111.7r	1.0r	116.3	2.1	116.7	2.0
	Apr	119.3	2.3	112.1r	1.3r	116.3r	1.9r	117.2	2.1
	May	120.0	2.6	112.6	1.6	116.6	1.7	117.7	2.2

## The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, was 2.6 per cent over the 12 months to May, up from 2.3 per cent in April.

Upward pressure came mainly from prices for:

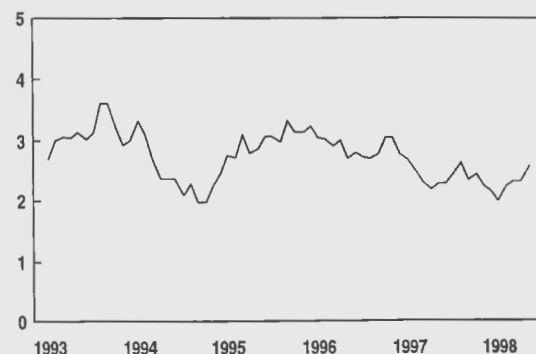
- Food, for which the 12-month rate rose from 1.5 per cent in April to 2.3 per cent in May;
- Clothing and footwear, whose 12-month rate rose from -0.5 per cent to 0.0 per cent;
- Household goods and services, whose 12-month rate rose from 0.9 per cent to 1.5 per cent;
- Transport and communication whose 12-month rate rose from 3.5 per cent to 3.6 per cent.

Some downward pressure came from:

- Tobacco, for which the 12-month rate fell from 9.3 per cent in April to 9.2 per cent in May;

- Fuel, whose 12-month rate fell from -5.1 per cent to -5.2 per cent;
- Other goods and services, whose 12-month rate fell from 4.2 per cent to 4.1 per cent.

The ICP annual percentage change



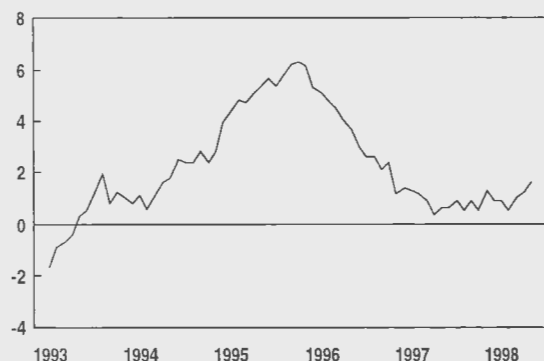
## The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, was 1.6 per cent over the 12 months to May, up from 1.3 per cent in April.

Upward pressure on the 12-month rate came mainly from:

- Plant and Machinery whose 12-month rate rose from -5.6 per cent in April to -4.9 per cent in May. Note, the annual rate has been negative since June 1996, reflecting the impact of Sterling's strength on import prices.
- Vehicles, ships and aircraft, whose 12-month rate rose from 0.3 to 1.4 per cent in May;
- New buildings and works, whose 12-month rate rose from 4.7 per cent to 5.0 per cent;
- New dwellings whose 12-month rate rose from 8.4 per cent to 8.6 per cent.

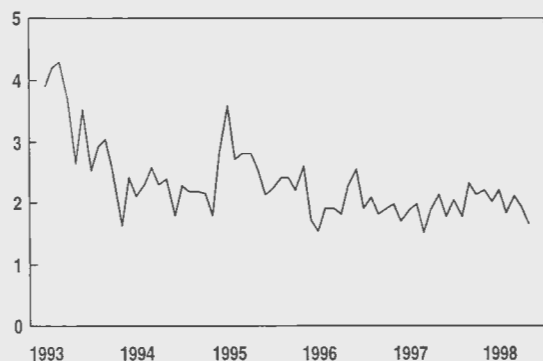
### The IIP annual percentage change



## The Index of Government Prices (IGP)

Inflation affecting Government expenditure, as measured by the IGP, was 1.7 per cent over the 12 months to May, down from 1.9 per cent in April. See note 6.

### The IGP annual percentage change



## Comparison between the FEPI and other inflation measures

Table B

### Measures of Inflation (annual percentage changes)

		FEPI	RPIX	HICP	PPI
1997	Dec	1.9	2.7	1.8	1.0
1998	Jan	1.8	2.5	1.5	0.6
	Feb	1.8	2.6	1.5	0.7
	Mar	2.0	2.6	1.6	1.0
	Apr	2.1	3.0	1.9	1.0
	May	2.2	3.2	2.0	0.9

### NOTES

1. The headline measure of inflation is the Retail Prices Index (RPI). The RPI should be used as the main indicator of inflation affecting average households.

2. The Final Expenditure Prices Index (FEPI) is a measure of the change in the prices paid by UK consumers, business and Government for final purchases of goods and services. Intermediate purchases by business are excluded. The FEPI is made up of three components:

The Index of Consumer Prices (ICP)

The Index of Investment Prices (IIP)

The Index of Government Prices (IGP).

3. The ICP measures inflation affecting all consumers in the UK. The price indicators used in the ICP are taken mainly from the Retail Prices Index (RPI).

4. The IIP is a measure of the change in the prices paid for capital goods by business and by Government. It also covers new construction projects and dwellings built for consumers, business and government. The price indicators used are mainly Producer Price Indices (PPIs), Construction Output Price Indices and an average house price indicator.

5. The IGP measures inflation affecting Government. It covers expenditure by Central and Local Government on pay and on procurement. The price indicators used are mainly Average Earnings Indices (to reflect labour costs), PPIs and RPIs (to reflect the cost of goods consumed by Government).

6. Care should be taken when interpreting monthly movements in the IGP. This index is particularly volatile on a month-to-month basis, so a fall one month is often offset by a rise the next and vice-versa. The data are of greatest value if trends rather than individual monthly movements are observed.

7. An article describing the development and composition of the FEPI is included in *Economic Trends*, No 526, September 1997. Longer runs of the FEPI back to January 1992, are available in computer readable form from the ONS Sales Office (telephone 0171 533 5670) or on paper from David Wall.

# 1 Final Expenditure Prices Index (Experimental)

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP	Final Expenditure Prices Index FEPI	Annual percentage changes			
					ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1996	604	164	232	1000				
1997	605	165	230	1000				
1998	605	169	226	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1996 May	114.4	110.1	112.3	113.0	2.7	3.7	2.3	2.8
Jun	114.6	110.1	112.8	113.2	2.8	3.0	2.5	2.8
Jul	113.9	110.1	112.3	112.7	2.7	2.6	1.9	2.5
Aug	114.5	110.6	112.6	113.2	2.7	2.6	2.1	2.5
Sep	115.2	110.4	112.3	113.5	2.8	2.1	1.8	2.4
Oct	115.2	110.6	112.7	113.6	3.0	2.4	1.9	2.6
Nov	115.3	109.7	113.1	113.6	3.0	1.2	2.0	2.5
Dec	115.6	110.1	113.3	113.9	2.8	1.4	1.7	2.2
1997 Jan	115.3	110.4	113.7	113.9	2.7	1.3	1.9	2.3
Feb	115.7	110.6	113.8	114.2	2.5	1.2	2.0	2.2
Mar	116.0	110.6	113.9	114.4	2.3	0.9	1.5	1.9
Apr	116.6	110.7	114.1	114.8	2.2	0.4	1.9	1.9
May	117.0	110.8	114.7	115.2	2.3	0.6	2.1	1.9
Jun	117.2	110.8	114.8	115.3	2.3	0.6	1.8	1.9
Jul	116.7	111.1	114.6	115.1	2.5	0.9	2.0	2.1
Aug	117.5	111.2	114.6	115.5	2.6	0.5	1.8	2.0
Sep	117.9	111.4	114.9	115.9	2.3	0.9	2.3	2.1
Oct	118.0	111.2	115.1	115.9	2.4	0.5	2.1	2.0
Nov	117.9	111.1	115.6	116.0	2.3	1.3	2.2	2.1
Dec	118.1	111.1	115.6	116.1	2.2	0.9	2.0	1.9
1998 Jan	117.6	111.4	116.2	116.0	2.0	0.9	2.2	1.8
Feb	118.3	111.2	115.9	116.3	2.2	0.5	1.8	1.8
Mar	118.7	111.7r	116.3	116.7	2.3	1.0r	2.1	2.0
Apr	119.3	112.1r	116.3r	117.2	2.3	1.3r	1.9r	2.1
May	120.0	112.6	116.6	117.7	2.6	1.6	1.7	2.2

The symbol r denotes revisions to previous months' data

## 2 FEPI - Index of Consumer Prices (Experimental)

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communication	Recreation, Entertainment and Education	Other Goods and Services	Index of Consumer Prices ICP
January 1992=100											
<b>Weights</b>											
1996	128	70	30	67	85	40	72	190	113	205	1000
1997	126	68	30	67	90	39	71	189	119	201	1000
1998	127	68	29	67	87	39	71	188	118	205	1000
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
1996 May	112.1	117.2	139.6	104.4	121.0	105.6	110.5	114.3	109.3	118.7	114.4
Jun	112.1	117.8	139.8	104.3	121.3	105.8	110.6	114.4	109.3	118.9	114.6
Jul	110.7	118.4	139.6	99.2	121.9	105.9	108.8	114.3	108.9	118.9	113.9
Aug	111.8	118.3	139.8	100.5	122.0	105.7	110.1	115.1	109.2	119.4	114.5
Sep	110.8	118.5	140.1	105.4	122.1	105.8	110.8	116.3	109.6	119.9	115.2
Oct	110.1	118.8	140.2	105.5	122.2	105.6	110.4	116.4	109.8	120.3	115.2
Nov	109.7	118.6	140.0	106.6	122.4	105.0	111.4	116.0	110.1	120.4	115.3
Dec	109.7	118.0	142.8	106.6	122.5	104.8	112.3	116.7	110.1	120.7	115.6
1997 Jan	110.6	118.6	145.6	100.5	123.4	104.2	108.8	117.5	109.9	120.7	115.3
Feb	110.3	119.3	146.2	102.0	123.6	104.3	109.7	118.1	110.1	121.2	115.7
Mar	109.8	119.2	146.6	104.0	123.9	104.4	111.7	118.0	109.9	121.6	116.0
Apr	110.2	119.7	148.3	105.5	125.8	104.2	111.1	118.0	110.3	122.4	116.6
May	110.9	120.4	148.9	106.0	126.0	103.7	111.6	118.1	110.5	123.0	117.0
Jun	111.8	120.6	149.2	105.4	126.2	103.3	111.4	118.5	110.5	123.3	117.2
Jul	111.3	121.1	149.3	100.3	126.2	102.8	109.6	119.4	110.3	123.4	116.7
Aug	112.6	121.3	151.2	102.3	126.4	102.8	110.8	120.0	110.2	124.0	117.5
Sep	112.2	121.4	151.5	106.3	126.6	100.0	111.6	120.4	110.7	124.4	117.9
Oct	112.2	121.7	151.7	106.0	126.8	100.0	111.4	120.3	110.8	124.8	118.0
Nov	111.6	121.1	151.8	107.2	126.9	99.6	112.3	120.0	110.7	124.8	117.9
Dec	111.7	120.6	155.1	106.7	127.0	99.1	113.2	120.0	110.7	125.2	118.1
1998 Jan	111.7	122.1	159.3	99.7	127.3	98.4	109.8	120.6	110.3	125.4	117.6
Feb	111.7	123.1	159.5	102.0	127.4	98.7	111.5	120.8	110.5	126.4	118.3
Mar	111.5	123.5	159.5	104.1	127.6	98.9	113.1	120.8	110.4	126.9	118.7
Apr	111.8	123.6	162.1	105.0	129.9	98.9	112.1	122.1	110.8	127.6	119.3
May	113.5	124.5	162.6	106.0	130.1	98.3	113.3	122.3	111.1	128.1	120.0
<b>Annual Percentage Changes</b>											
	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communication	Recreation Entertainment and Education	Other Goods and Services	Index of Consumer Prices ICP
	CGAP	CGAQ	CGAR	CGAS	CGAT	CGAU	CGAV	CGAW	CGAX	CGAY	CGAZ
1996 May	4.2	2.7	6.6	-1.0	2.8	0.4	2.4	2.3	2.2	3.7	2.7
Jun	4.7	2.8	6.6	-0.9	2.9	0.6	2.7	2.0	2.1	3.8	2.8
Jul	3.9	2.9	6.5	-1.1	3.7	0.6	2.4	2.2	1.8	3.6	2.7
Aug	3.2	2.8	6.6	-1.3	3.4	0.4	2.4	3.0	1.9	3.6	2.7
Sep	2.1	2.7	6.9	-0.5	3.4	0.3	1.8	4.2	1.6	3.5	2.8
Oct	2.6	2.4	7.0	-0.2	3.6	0.2	1.9	5.0	1.8	3.8	3.0
Nov	2.0	2.9	6.9	0.3	3.6	-0.4	1.9	5.2	2.0	3.7	3.0
Dec	1.2	3.3	6.4	0.2	3.7	-0.7	1.7	4.4	1.7	3.5	2.8
1997 Jan	1.5	3.0	6.4	0.2	4.1	-1.3	1.6	4.2	1.6	3.4	2.7
Feb	0.2	2.8	6.4	0.7	4.2	-1.2	0.8	4.5	1.4	3.3	2.5
Mar	-1.2	2.5	6.6	1.3	4.4	-1.2	1.3	4.2	1.0	3.3	2.3
Apr	-0.9	2.5	6.9	1.2	4.1	-1.4	1.3	3.6	0.9	3.4	2.2
May	-1.1	2.7	6.7	1.5	4.1	-1.8	1.0	3.3	1.1	3.6	2.3
Jun	-0.3	2.4	6.7	1.1	4.0	-2.4	0.7	3.6	1.1	3.7	2.3
Jul	0.5	2.3	6.9	1.1	3.5	-2.9	0.7	4.5	1.3	3.8	2.5
Aug	0.7	2.5	8.2	1.8	3.6	-2.7	0.6	4.3	0.9	3.9	2.6
Sep	1.3	2.4	8.1	0.9	3.7	-5.5	0.7	3.5	1.0	3.8	2.3
Oct	1.9	2.4	8.2	0.5	3.8	-5.3	0.9	3.4	0.9	3.7	2.4
Nov	1.7	2.1	8.4	0.6	3.7	-5.1	0.8	3.4	0.5	3.7	2.3
Dec	1.8	2.2	8.6	0.1	3.7	-5.4	0.8	2.8	0.5	3.7	2.2
1998 Jan	1.0	3.0	9.4	-0.8	3.2	-5.6	0.9	2.6	0.4	3.9	2.0
Feb	1.3	3.2	9.1	-	3.1	-5.4	1.6	2.3	0.4	4.3	2.2
Mar	1.5	3.6	8.8	0.1	3.0	-5.3	1.3	2.4	0.5	4.4	2.3
Apr	1.5	3.3	9.3	-0.5	3.3	-5.1	0.9	3.5	0.5	4.2	2.3
May	2.3	3.4	9.2	-	3.3	-5.2	1.5	3.6	0.5	4.1	2.6

The symbol r denotes revisions to previous months' data

### 3 FEPI - Index of Investment Prices (Experimental)

	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100						
<b>Weights</b>						
1996	378	108	266	38	209	1000
1997	390	103	267	33	207	1000
1998	387	103	277	37	196	1000
	CUSG	CUSH	CUSF	CUSI	CUSJ	CUSK
1996 May	115.4	119.1	105.7	135.8	100.5	110.1
Jun	114.7	118.9	106.1	135.5	101.1	110.1
Jul	113.5	119.0	106.5	138.1	102.0	110.1
Aug	114.0	119.6	106.9	139.2	102.7	110.6
Sep	113.1	119.7	107.3	139.3	102.7	110.4
Oct	113.0	119.2	107.7	140.9	102.8	110.6
Nov	110.6	117.6	108.1	140.9	103.0	109.7
Dec	111.0	117.5	108.5	141.0	103.8	110.1
1997 Jan	111.1	118.2	108.8	139.3	104.3	110.4
Feb	111.2	118.7	109.1	141.8	104.4	110.6
Mar	110.1	118.9	109.4	142.2	105.6	110.6
Apr	109.8	118.5	109.5	142.8	106.9	110.7
May	109.4	118.5	109.4	144.8	107.6	110.8
Jun	108.8	118.3	109.4	144.9	108.6	110.8
Jul	108.0	118.1	110.2	150.8	109.8	111.1
Aug	107.2	118.4	111.1	151.9	110.5	111.2
Sep	107.1	118.6	111.5	153.4	110.6	111.4
Oct	106.6	118.4	112.0	152.2	110.4	111.2
Nov	105.9	118.1	112.4	153.1	110.5	111.1
Dec	105.8	118.5	112.8	152.2	110.5	111.1
1998 Jan	105.6	119.1	113.3	151.9	111.1	111.4
Feb	105.0r	118.8r	113.8	153.4	110.5	111.2
Mar	104.5r	118.8r	114.3	154.9	113.1	111.7r
Apr	103.7r	118.8r	114.6	158.2r	115.9r	112.1r
May	104.0	120.1	114.9	159.0	116.9	112.6

#### Annual Percentage Changes

	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
	CGBB	CGBC	CGBA	CGBD	CGBE	CGBF
1996 May	—	3.3	9.5	6.3	2.3	3.7
Jun	-1.2	2.9	8.6	5.1	2.8	3.0
Jul	-2.2	2.8	7.9	6.3	3.6	2.6
Aug	-2.0	2.2	7.1	7.1	4.4	2.6
Sep	-2.9	2.2	6.4	6.9	4.7	2.1
Oct	-2.3	1.8	6.0	8.6	5.0	2.4
Nov	-4.8	0.3	5.6	8.4	5.5	1.2
Dec	-4.5	-0.3	5.1	9.6	6.6	1.4
1997 Jan	-4.8	-0.3	4.9	9.6	7.0	1.3
Feb	-4.4	—	4.7	9.2	6.3	1.2
Mar	-5.1	0.1	4.4	9.0	6.3	0.9
Apr	-5.9	-0.6	4.1	5.2	6.8	0.4
May	-5.2	-0.5	3.5	6.6	7.1	0.6
Jun	-5.1	-0.5	3.1	6.9	7.4	0.6
Jul	-4.8	-0.8	3.5	9.2	7.6	0.9
Aug	-6.0	-1.0	3.9	9.1	7.6	0.5
Sep	-5.3	-0.9	3.9	10.1	7.7	0.9
Oct	-5.7	-0.7	4.0	8.0	7.4	0.5
Nov	-4.2	0.4	4.0	8.7	7.3	1.3
Dec	-4.7	0.9	4.0	7.9	6.5	0.9
1998 Jan	-5.0	0.8	4.1	9.0	6.5	0.9
Feb	-5.6r	0.1r	4.3	8.2	5.8	0.5
Mar	-5.1r	-0.1r	4.5	8.9	7.1	1.0r
Apr	-5.6r	0.3r	4.7	10.8r	8.4r	1.3r
May	-4.9	1.4	5.0	9.8	8.6	1.6

The symbol r denotes revisions to previous months' data

# 4 FEPI - Index of Government Prices (Experimental)

					Annual percentage changes			
	Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP	Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP
January 1992=100								
Weights								
1996	344	597	59	1000				
1997	347	589	64	1000				
1998	342	591	67	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1996 May	114.3	111.0	114.3	112.3	2.5	2.2	3.1	2.3
Jun	114.8	111.5	114.3	112.8	2.7	2.4	3.1	2.5
Jul	114.3	110.9	114.5	112.3	2.0	1.9	1.7	1.9
Aug	114.1	111.5	114.6	112.6	1.8	2.3	1.8	2.1
Sep	114.1	110.9	114.6	112.3	2.1	1.6	1.8	1.8
Oct	114.5	111.5	114.6	112.7	2.1	1.7	1.8	1.9
Nov	115.2	111.6	114.8	113.1	2.4	1.7	2.0	2.0
Dec	114.9	112.3	114.9	113.3	2.0	1.6	2.0	1.7
1997 Jan	115.4	112.6	115.5	113.7	2.4	1.6	1.9	1.9
Feb	115.5	112.7	115.5	113.8	2.4	1.7	1.9	2.0
Mar	116.0	112.6	115.5	113.9	2.7	0.9	1.9	1.5
Apr	115.7	112.9	115.5	114.1	2.6	1.3	1.9	1.9
May	117.0	113.2	116.5	114.7	2.4	2.0	1.9	2.1
Jun	117.6	112.9	116.5	114.8	2.4	1.3	1.9	1.8
Jul	117.0	112.7	118.5	114.6	2.4	1.6	3.5	2.0
Aug	117.2	112.7	118.5	114.6	2.7	1.1	3.4	1.8
Sep	117.2	113.2	118.6	114.9	2.7	2.1	3.5	2.3
Oct	117.5	113.4	118.6	115.1	2.6	1.7	3.5	2.1
Nov	118.4	113.6	118.6	115.6	2.8	1.8	3.3	2.2
Dec	117.8	113.9	118.7	115.6	2.5	1.4	3.3	2.0
1998 Jan	118.3	114.6	119.8	116.2	2.5	1.8	3.7	2.2
Feb	118.2	114.1	119.8	115.9	2.3	1.2	3.7	1.8
Mar	118.9	114.4	119.7	116.3	2.5	1.6	3.6	2.1
Apr	118.5r	114.6r	119.8	116.3r	2.4r	1.5r	3.7	1.9r
May	120.0	114.1	120.6	116.6	2.6	0.8	3.5	1.7

The symbol r denotes revisions to previous months' data

# Developing A Methodology For Measuring Illegal Activity For The UK National Accounts



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The purpose of this research article is to examine, for the purposes of the national accounts, the feasibility of making estimates of economic activity which are illegal. The aim is to examine the data available for making an assessment of the level of illegal economic activity, and to illustrate a methodology for constructing overall estimates of illegal activities in the UK<sup>1</sup>.

### Summary

Under the new European System of Accounts (ESA95), illegal activities must be included within the accounts, to ensure:

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

Illegal actions that fit the characteristics of transactions - notably that there is mutual agreement between the parties - should be treated the same way as legal actions. So the sale of, for example, illegal drugs or stolen goods which are freely bought and sold with the consent of both parties to the transaction should be included in the accounts, whereas theft itself should not be included. 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 economic transactions.

The article looks at the data available for making estimates for the accounts covering four illegal activities: transactions in illegal drugs, illegal activities associated with prostitution, illegal gambling, and stolen goods. Several data sources for illegal drugs are explored and examined. Illustrative estimates are shown of spending and value added on illegal drugs for the year 1996, and how this is split between imports, domestic production at cost price, and distribution margins. Limited data are also available which enable estimates to

be presented for income and value added from prostitution, sale of stolen goods and illegal gambling. The total value added from these illegal activities is estimated for the UK.

Estimates were made for illustrative purposes - they are subject to large errors and **should not be taken as definitive estimates of illegal activity**. Possible reasons for the main errors are explored. As far as possible, evidence is included which shows how the estimates have been constructed, although it is recognised that the actual levels of illegal economic activity may not lie within the range of estimates presented.

Despite the potential scale of illegal activity, the article cautions against overstating its impact upon the overall scale of activity covered by the national accounts.

The article concludes that estimates of illegal activities are not yet sufficiently developed to be incorporated into the national accounts. The article highlights some of the main areas where further work would be useful. For example, the lack of time series is a major obstacle to inclusion of these activities in the national accounts. In addition to time series, further work should investigate:

- to what extent transactions associated with illegal activities are already included within the accounts;
- additional data sources, in order to inform the development of estimates, and to refine the assumptions which are required to construct estimates;
- improved reconciliation of existing data sources.

<sup>1</sup> This research work has been partly funded by Eurostat, the Statistical Office of the European Communities (SOEC).

## Introduction

This article examines, for the first time, potential data sources which could enable measurement of illegal transactions for the UK national accounts. The article concentrates on a limited number of activities - illegal drugs, prostitution, illegal gambling and the sale of stolen goods. As more data on illegal drugs have been obtained than data on the other activities, the article has looked at this area in greater detail. Illustrative estimates are presented to show how the inclusion of illegal activities could affect the national accounts and key economic indicators derived from the accounts (eg. GDP, the saving ratio and the balance of trade).

In conformity with national accounts practice, the activities are valued as market transactions. Social or moral considerations and effects on health are not considered.

The article is set out in the following sections:

Section 1	<b>Reasoning</b>
Section 2	<b>Classifying Illegal Activities Within National Accounts</b>
Section 3	<b>UK Data Sources for Illegal Drugs</b>
Section 4	<b>Balancing and Estimates</b>
Section 5	<b>Effects on UK National Accounts Figures</b>
Section 6	<b>Further Work</b>
Section 7	<b>Conclusions</b>

It should be emphasised that the estimates presented within the report are first estimates of the potential effects of illegal economic activity on national accounts variables. The estimates are necessarily illustrative, since their construction relies on many assumptions, and varying these would lead to a different set of results (as will be shown for transactions in illegal drugs). Available data are used to help map out the processes which are necessary to produce estimates for inclusion within the national accounts.

**These data should not be taken to be definitive government estimates of illegal activity within the UK.**

In order to construct coherent estimates of economic activity arising from trade in illegal drugs, it is necessary to confront data from the supply side of the economic system with data from the use (demand) side. This reconciliation of supply against use information is a process known as 'balancing' the data. This is necessary to present a coherent picture of economic activity from the different data sources. The national accounting framework enables such a reconciliation exercise to be undertaken, and this proves to be a useful tool in identifying

weaknesses in the data on illegal drugs. This process of balancing is described in Section 4 and in detail in the Annex.

## Section 1 - Reasoning

This section outlines the main arguments for including illegal activities within the national accounts, and looks briefly at some of the arguments against their inclusion.

### Why Record Illegal Activity?

#### *International convention SNA93/ESA95*

Although hidden economic activities<sup>2</sup> were always required to be recorded in the national accounts, there has been no specific mention of illegal economic activity. Most statistical offices have not yet made efforts specifically to identify illegal activity due to the difficulty in finding suitable and accurate data for this purpose. However, the United Nations System of National Accounts (SNA93) and European System of Accounts (ESA95, Eurostat, 1996) both explicitly require illegal activities to be recorded on the same basis as legal activities.

The SNA93 clearly states that the legality of a transaction is irrelevant to its treatment within the system of accounts (Section 3.54). 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. The ESA95 reiterates the SNA's position (Section 3.08).

#### *UK and EU position*

In September 1998, the UK ONS will publish data for domestic purposes according to the ESA95, which sets out the methodology for the compilation of the national accounts in a European Council Regulation. The UK will publish its data on the new basis in the "The UK National Accounts, The Blue Book 1998". However, illegal activity data will not be explicitly included in the Blue Book, and no decision has been taken about whether data on illegal activity should be routinely published as part of the UK national accounts in the future. Other member states of the European Union are also investigating how to estimate illegal activities for the national accounts, as required by ESA95, and this work is being co-ordinated by Eurostat, the Statistical Office of the European Commission.

#### *Distortion of national accounts aggregates*

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 are likely to be

<sup>2</sup> hidden economic activities can be defined as legal economic activities within the production boundary of the European System of Accounts (ESA 79) which take the form of tax evasion, or production by clandestine production units.

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. Similarly if the accounts do not record income from illegal activities then the disposable income of consumers will be underestimated. The distortion of these economic indicators may reduce their effectiveness for policy formation and to users of national accounts statistics.

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

The national accounts are a complete, integrated system. 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 of data reliability or accuracy of component series. This only works if the accounts are internally consistent, which means that if one person's income is recorded then their expenditure should also be recorded, even if one is legal and the other is not. 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 (Section 6.31 of the SNA93).

### ***Comparability***

National accounts data are used to analyse the economy over time, and to compare the economies of countries. What is illegal, and what proportion of economic activity is illegal, will differ between countries. To allow a meaningful comparison of economic activity in different countries, national accounts must therefore include all products and services whether legal or illegal. Economic data for countries where a large proportion of the workforce is engaged in illegal activities would be substantially affected by excluding those activities.

Similarly, the legal status of products may have changed over time (e.g. alcohol in the USA). To allow a sensible comparison of the level of economic activity over time all production should be included in the accounts. Otherwise, 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.

### ***Consistency of definitions***

It has always been accepted that hidden activity should be included in the accounts.

Hidden activity is defined as:

- Production that is legal but is deliberately hidden from the authorities (e.g. income earned from working in a restaurant that is not declared to tax authorities);

whereas illegal activity is:

- a transaction which is itself illegal (such as selling heroin).

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.

Several types of transaction which are illegal but not hidden are already recorded in the national accounts. In the UK these will 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***

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

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

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

However, 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, such as do-it-yourself work on property). The fact that a transaction is in the accounts does not mean that it is condoned. It has been mentioned that some illegal transactions are already included in the accounts. Negative externalities of economic activity (ie non-monetary costs and harm associated with production or consumption) are not covered in the accounts, whether legal or illegal. There are also many transactions which the government tries to discourage, but which are treated within the accounts no differently from any other transaction, for example the purchase of cigarettes.

#### ***Availability of data***

It has been argued that illegal activity should be left out of the accounts due to the lack of suitable or 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 are not entirely suitable, they should still be exploited for the indication of economic activity that they give. Ideally, a variety of independent data sources should be used so that the indication given of economic activity can be assessed from different approaches (output, expenditure and income).

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 level.

There are economic indicators where the *level* of activity is important, and an assessment of the level illegal activity may be necessary to establish overall levels of economic activity. Examples are the balance of payments and the saving ratio which could be distorted by the exclusion of illegal activities. However, for estimates to be useful over time, a reliable estimate of the rate of change of illegal activity would be required.

## Section 2 - Classifying Illegal Activities Within National Accounts

This section looks at what data we need in principle, and the main conceptual issues to be addressed when recording illegal activities within the national accounts. The availability of data, their suitability, reliability, and practical problems of their use are discussed in Sections 3 and 4.

In addition to the effect of omitting illegal activity from the accounts, there is a possible problem of misclassification. Some illegal activity may already be recorded in the accounts, but incorrectly classified. It is not clear, and this article does not investigate, what illegal transactions may already be covered in the accounts. Nevertheless, this partial recording and misclassification is likely to cause discrepancies. For example, sales of stolen goods may be recorded as the output of a legitimate business in order to make the proceeds appear to be generated by legitimate means. If estimates of illegal activities were explicitly identified for the accounts, the issue of whether such activity was already included would need to be considered, otherwise there would be a risk of 'double counting' economic activity.

Intermediate consumption is the purchase of goods and services used in production (e.g. rent, energy, equipment costs). There is a general problem in identifying the intermediate consumption in illegal production, although the sums involved may be small. 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 some purchases of illegal goods and services could already be included in the accounts (e.g. prostitution paid for out of business expenses).

### Types of illegal activities

The national accounts treatment of four types of illegal activity will now be discussed:

- i. Sales/importation of illegal drugs;
- ii. Illegal activities associated with prostitution;
- iii. Illegal gambling;
- iv. Sales of stolen goods.

There are several other illegal activities which have not been investigated as part of this research, and are not considered further in this article (although in principle they should be included within the national accounts). These include:

- v. The sale of illegal copies of software, music and videos;
- vi. Bribery, which was not thought to be significant in the UK and, as transfers, would have no impact on GDP;
- vii. Smuggling of legal goods. Smuggling of legal goods such as alcohol and tobacco shares more characteristics with hidden activity where some trade in a commodity is not reported in order to evade tax or duty; rather than illegal activity where the whole activity is absent from the accounts;
- viii. Fraud, which can have various effects on the accounts depending upon the nature of the fraud. It is hard to quantify the effects of fraud in national accounts terms, and it is unclear whether the overall effect is significant. There is, however, the potential for misreporting due to fraud to affect data collected on other activities.

### Illegal drugs

Under SNA93 the sale of illegal drugs should be treated in the same way as the sale of legal goods. They are imported or produced within the UK, sold through a chain of dealers (each adding their own margin), and eventually sold to a final consumer. At present the national accounts do not explicitly include data covering transactions in illegal drugs.

To make an estimate of value added arising from trade in illegal drugs, 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. Output from domestic production, including stockbuilding (if any);
- iv. Intermediate consumption of drugs (if any) used in domestic production;
- v. Value of final consumption by households;
- vi. Distribution margins.

These variables are related by:

$$\begin{aligned}
 \text{Final consumption} = & \text{distribution margins} \\
 & \text{plus output from domestic production} \\
 & \text{plus imports} \\
 & \text{less exports} \\
 & \text{less purchases of illegal drugs as} \\
 & \text{intermediate consumption of} \\
 & \text{domestic producers}
 \end{aligned}$$

Throughout this article it is assumed that there are no significant exports, and that no domestic producers buy any illegal drugs as part of that intermediate consumption. Also, intermediate consumption in the distribution process, although possible, is assumed to be zero.

The value added to the UK economy from illegal drugs will be:

- distribution margins, which will (almost all) be additional income from self-employment (ie mixed income of households) generated by the household sector;
- domestic production less the 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.

The treatment of the intermediate consumption involved in producing and distributing illegal drugs will depend upon how it is recorded within the accounts at present. It is very unlikely that intermediate consumption will be omitted from the accounts altogether. There are therefore two possibilities:

- i. *Intermediate consumption is already correctly recorded as intermediate consumption.* In this case value added will be the distribution margins and the output from domestic production.

- ii. *Intermediate consumption is misrecorded as final consumption.* In this case the value added will be the distribution margins and the output from domestic production less the intermediate consumption reclassified from final consumption.

It is unclear who makes money from the sales of illegal drugs and whether they are in the household or overseas sector. For example the sale of illegal drugs in the UK by organised crime based overseas will result in trade margins which add to UK GDP. However, the profit may leave the country which will cause a fall in UK GNP - thus there will be a smaller overall increase in GNP. Some of this net property income may already be recorded in the accounts within banking statistics. It may be that most value added from drugs transactions arises from distribution of illegal drugs in the UK. If so, the question is then whether the proceeds from sales (distribution margins) are remitted to households or overseas.

### ***Illegal activities associated with prostitution***

Prostitution itself is not illegal within the UK. However, most of the activities associated with prostitution, including soliciting and 'living off the proceeds of immoral earnings' are illegal. Because of this, prostitutes are not usually registered as businesses, and so prostitution is generally absent from the accounts - it is certainly not explicitly included. However, it is possible that some transactions involving prostitution services will already be included (described below).

To make an estimate of value added arising from prostitution, there are two main variables we need:

- i. Gross income from prostitution; and
- ii. Intermediate consumption involved in producing prostitution services, e.g. rent.

Value added from prostitution would be equal to:

$$\begin{aligned}
 & \text{Gross income from prostitution} \\
 & \text{less intermediate consumption}
 \end{aligned}$$

Value added from prostitution would generally be income from self-employment (mixed income) in the household sector. It would be preferable to have an independent measure of gross income from prostitution by households. Potentially, consumers' expenditure on prostitution would give us this independent measure. However, it seems unlikely that good quality data could be collected from those who use prostitutes.

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

- How much, if any, prostitution services are already within the accounts and classified as, for example massage services;
- The intermediate consumption of prostitution services. Some of this intermediate consumption may be included within the accounts as final expenditure (e.g. rent, utility costs);
- How much prostitution is included in businesses' intermediate consumption, misclassified as meals, accommodation or other business expenses.

Imports and exports of prostitution services, occurring when UK residents visit overseas prostitutes, and when overseas residents visit UK prostitutes, should in principle be picked up by the International Passenger Survey (although not as expenditure on prostitution). If so, the expenditure would already be recorded within the national accounts.

### **Illegal gambling**

Illegal gambling occurs when bets are taken outside licensed 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 - whether legal or illegal - are considered to be transfer payments. Any value added would be generated by bringing together people who wish to bet on opposing sides.

Value added from illegal gambling would either be income from self-employment in the household sector or operating surplus in the non-financial corporations sector. It would also add to consumers' expenditure. There are general problems of measuring consumers' expenditure on gambling irrespective of whether the gambling is legal or illegal.

### **Sales of stolen goods**

Theft itself should not be recorded in the accounts as it is not a transaction (ie it does not involve consent between the two parties). However, any subsequent value added generated from selling stolen goods on ('fencing') should be included.

Three types of transaction can be identified:

- i. *The thief sells the stolen item directly to a final consumer.* In national accounts terms, this is equivalent to selling second hand goods, and 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 the item 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 firm's output in order to derive the value added of the firm. 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, will 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. An increase in household consumption would result, 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.

There is a problem of estimating how much value added from selling stolen goods is already included in the accounts. It is possible that stolen goods are sold through legitimate channels and so value added from their sale is picked up by normal national accounts sources. In addition, some expenditure on stolen goods is probably picked up by the Family Expenditure Survey (FES). However, as the Retail Sales Inquiry is the main source for consumption expenditure on consumer durables, FES data may not be relevant for many stolen goods.

## **Section 3 - UK Data Sources For Illegal Drugs**

This section describes possible sources of data which could be used to construct estimates of value added from illegal activities and specifically from illegal drugs transactions. The reliability and availability of data sources is discussed, and a methodological framework for producing estimates is illustrated using available data. Possible weaknesses in these estimates are described. The focus is on the methodology and the available data sources used to construct the overall estimates, rather than on the estimates themselves. Estimates for prostitution services, sale of stolen goods, and illegal gambling are covered in Section 4.

## Types of information available

UK national accounts convention dictates that we attempt to measure illegal transactions from all three of the income, output and expenditure sides. However, illegal economic activity is, by its nature, very difficult to measure. For instance, those involved in illegal drugs transactions have particular reason to hide their involvement, and so actively take measures to avoid detection. Therefore data collected through conventional measurement approaches such as surveys or exploitation of administrative data sources will be subject to particular concerns about their suitability, coverage and reliability. These are discussed as the information available is assessed.

Data sources for developing a picture of illegal economic activity can generally be broken down into:

- *Administrative data*, such as seizures of drugs by the authorities;
- *Survey data* - which can be further divided into:
  - i. national surveys; and
  - ii. targeted surveys, aimed at a specific population, such as recreational drug users;
- *Academic studies*.

In addition to government and academic sources, there are also charities and help agencies which collect potentially useful information for national accounts purposes. To supplement this variety of sources, informed judgements and assumptions will have to be made, some based on research evidence, and some based on opinions formed from anecdotal evidence.

*Administrative data* do not provide a direct measurement of the variables required for estimating illegal transactions. They reflect only the part of illegal activities which the authorities come into contact with - some fraction of the total activity. Assumptions therefore need to be made about the fraction of the total activity which 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.

*Surveys* face the problem of obtaining truthful answers from respondents. Respondents may be reluctant to divulge what they perceive as incriminating information; on the other hand, some respondents may exaggerate the extent of their involvement in 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:

- *Large scale national surveys*: The British Crime Survey (Home Office, 1997) is a large survey representative of the general population in England and Wales. As such, it will find few people within its sample who are involved in significant illegal activity. Household surveys may underestimate the prevalence of drug misuse, because of their coverage (hence missing the homeless or those living in institutions).
- *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. Targeted surveys should not generally be used to determine the prevalence of an activity for the country as a whole. However, in this article, it has been necessary to make some assumptions about the prevalence and scale of activity from the results of such surveys.

*Academic studies* provide evidence to inform assumptions, and to assess whether some of the assumptions which have been made are reasonable. They can also provide some data in order to construct estimates; for example, seizure rates for illegal drugs entering the country. Although these studies may have limitations they are often the only source of data available to inform estimates of illegal transactions.

## The methodological framework for estimates of illegal drugs transactions

This section sets out the framework needed to record transactions involving illegal drugs in the national accounts. It then looks at the main data sources available for estimating these transactions, and considers their suitability for this purpose. In Section 4, illustrative estimates for the main national accounts aggregates are constructed, which necessitates reconciling the data on illegal drugs within a coherent overall system describing the different economic transactions (a process known as balancing).

In order to calculate value added, a national accounts identity has been used as the basic framework. The identity should broadly

hold for the purposes of constructing an overall picture of illegal drugs transactions (the treatment of intermediate consumption was discussed briefly in Section 2). We are interested in data in terms of 'physical quantities' as well as in terms of 'values' as this is of assistance when we come to reconciling the estimates from the supply and demand (use) side. Furthermore, data on physical quantities will be shown to form the basis of the value estimates.

*In physical quantities: equation (1)*

Consumption + Exports = Domestic Production + Imports

*In values: equation (2)*

Consumption + Exports = Domestic Production + Imports +  
Margin (P) + Margin (I)

for each drug type, and

Consumption	=	Street Price x Quantity of Consumption
Domestic production	=	Cost x Quantity of Domestic Production
Imports	=	Import Price x Quantity of Imports
Exports	=	Export Price x Quantity of Exports
Margin (I)	=	Distribution Margin on Imports
Margin (P)	=	Distribution Margin on Domestic Production

No evidence has been found of significant exports of drugs from the UK; therefore, for the purposes of this article it has been assumed that exports of illegal drugs from the UK is zero. Assuming Exports = 0, then

*In physical quantities: equation (1')*

Consumption = Domestic Production + Imports

*In values: equation (2')*

Consumption = Domestic Production + Imports +  
Margins (P + I)

The identity in equation (2') can be arranged to show that total output (the sum of domestic production at cost and distribution margins) is equal to the street value of drugs consumption less imports (earnings due to overseas residents). To derive value added we have to make an adjustment to deduct intermediate consumption for domestic production and distribution from this output. In accordance with national accounts convention we will attempt to obtain independent estimates (using a variety of data sources) for the variables specified, and then attempt to reconcile them with each other to present a coherent identity, as required by equation (2').

### **Data sources for illegal drugs**

The data sources available on illegal drugs allow compilation of mostly independent estimates to be made on the demand and supply sides. In the absence of data, assumptions have been necessary to derive the variables required. These assumptions, and suitability of data generally, have been highlighted as appropriate.

On the demand side data are derived covering:

- the number of users;
- estimates of average consumption expenditure.

On the supply side data are developed covering:

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

Two variables are used in constructing both estimates:

- street prices;
- import and street purities.

These variables are now considered.

### *Street prices*

Street prices of drugs in the UK are available from two sources:

- *Release* - a national drugs help agency. Prices are obtained from information provided by drug users through Release's national helpline and survey questionnaires (Release, 1997). Drug users may have reason to understate their knowledge of the market.
- *The Police*. Police prices are obtained from prosecution records (HM Customs & Excise, 1996). 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. **Tables 1a** and **1b** show how street prices have been derived for drugs (in £ per kg). An average of Police and Release prices

Table 1 : Street prices and import prices of illegal drugs

Table 1a : Street and distributor prices, 1996

	Street price (Police) £ per gram	Distributor price £ per kg
Cocaine	65.00	28 000 - 50 000
Heroin	70.00	18 000 - 26 000
LSD	3.50	N/A
Ecstasy	12.50	N/A
Amphetamines	11.00	1 000 - 15 000
Cannabis (Herbal & Plants)	3.75	1 500 - 3 500
Cannabis (Resin)	3.39	1 600 - 3 500

Table 1b : Comparison of Police and Release street prices for 1996, and import prices.

	Police £ per kg p1	Release £ per kg p2	Price ratio p2/p1 p3	Import price £ per kg p4	Street price (Average) £ per kg (p1+p2)/2 p5	Import/Average p4/p5 p6
Cocaine	65,000	57,500	0.88	19,600	61,250	0.32
Heroin	70,000	65,000	0.93	12,600	67,500	0.19
LSD <sup>1</sup>	3,500	2,000	0.57	550	2,750	0.20
Ecstasy <sup>1</sup>	12,500	10,000	0.80	2,270	11,250	0.20
Amphetamines	11,000	8,500	0.77	500	9,750	0.05
Cannabis (Herbal & Plants)	3,750	3,170	0.85	750	3,460	0.22
Cannabis (Resin)	3,390	3,440	1.01	800	3,415	0.23
average 0.83						average 0.20

Notes:

1. LSD and Ecstasy are price per 1,000 doses (tablets).

Release prices in Table 1b are the midpoint of the range given by Release, the national drugs and legal advice service.

Column p3 shows that Release prices are, on average, 17% lower than Police prices for all drugs.

Import prices in Table 1b are taken as a fraction of the lower end of the distributor price range in Table 1a (70% for Cocaine and Heroin, and 50% for Amphetamine and Cannabis - based on discussion with NCIS which suggests that kilo prices are closer to the import price for Cocaine and Heroin than for the other drugs). Distributor prices for LSD and Ecstasy were not available so a fraction of the street price was used instead (20% - based on the average of the ratios in column p6).

Column p6 shows that approximated import prices are usually about 20% of street prices, which suggests that 80% of the total street value goes to domestic residents.

Sources :

Tables 1a and 1b : Street Wise; A Journal on Drug Prices and Purities; HM Customs & Excise, 1996.

Table 1b : Average Drug Prices 1996/7; Release, 1997.

are used to determine actual street prices for the year 1996. From one year to the next, changes in the supply and demand for individual drugs would affect their price.

Import prices

Table 1b includes an estimate of import prices (along with street prices in £ per kg). Import prices should be measured at cif (ie including cost insurance and freight) value, that is the value of the imports as they arrive in the UK. It is the distribution of illegal drugs after this point which generates UK value added.

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 overseas 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 (HM Customs & Excise, 1996). This measures the price at which illegal drugs are traded in kilogram quantities, and represents prices at a point in the distribution chain somewhere between the import and the street. 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 UK.

**Table 2 : Street value of drugs consumption for the year 1996**

Please refer to notes on the facing page for explanations and references.

**Table 2a : Estimating consumption of drugs using Department of Health data**

Main Drug of misuse	Number of users entering treatment services by main drug type (GB)	Estimated total number of problem users q1*3.5*UK factor	Annual spending per problem user (on all drugs) (£)	Equivalent weekly expenditure (£) p1/52	Total annual spending by problem users (£ m) q2*p1
	q1	q2	p1	p2	exp
Cocaine	1,909	6,900	20,000	385	138
Heroin	31,109	112,000	10,000	192	1120
Methadone	9,085	32,700	10,400	200	340
Amphetamines	5,454	19,600	10,400	200	204
Other drugs	11,591	41,700	10,400	200	434
<b>Total</b>	<b>59,148</b>	<b>212,900</b>	<b>Total (£ million, rounded)</b>		<b>2200</b>

**Table 2b : Estimating consumption of drugs using British Crime Survey data****Table 2b(i) : Estimating consumption of "regular recreational drug users"**

Drug of misuse	% of 16-59 year olds said they had taken drug in last month	Number of regular users	Assumed average expenditure per "regular user" per year (£)	Total annual spending; regular (£ m) r1* av exp1
	1	r1	av exp 1	exp1
LSD	0.5	173,000	360	62
Ecstasy	0.6	208,000	600	125
Cannabis	5.0	1,734,000	600	1040
Amphetamines	1.0	347,000	600	208
Cocaine	0.5	173,000	780	135
<b>Total (£ million, rounded)</b>				<b>1600</b>

**Table 2b(ii) : Estimating consumption of "occasional recreational drug users"**

Drug of misuse	% of 16-59 year olds who said they had taken drug in last year (but not last month)	Number of occasional users	Assumed average expenditure per "occasional user" per year (£) av exp 1/6	Total annual spending; occasional (£ m) o1* av exp2
	2	o1	av exp 2	exp2
LSD	0.5	173,000	60	10
Ecstasy	0.4	139,000	100	14
Cannabis	4.0	1,387,000	100	139
Amphetamines	2.0	694,000	100	69
Cocaine	0.5	173,000	130	22
<b>Total (£ million, rounded)</b>				<b>250</b>

**Street value of drugs consumption (£ million) =****4100**

The distributor prices, however are not as reliable as the street prices, and the point at which the distributor prices are measured varies for different drug types since some are more bulky than others. Comparing street and import prices implies that the distribution margin on imported drugs is about 80 per cent of the total street value of imports (see the section on Distribution margins).

#### *Value and quantity of consumption*

The value of consumption can be calculated using the formula:

$$\text{Value Consumption} = \frac{\text{Number of users} \times \text{average street price}}{\text{average quantity used}}$$

for each drug type

To estimate the number of users, two main sources of data have been used. In order to use these data, a number of assumptions are made, and these are listed at the end of **Table 2**. The two main sources used are:

- *The British Crime Survey (BCS)* is a survey covering England and Wales which asks respondents whether

various 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 some caution since heavy drug users are probably more likely to be non-respondents, or to provide inaccurate data.

- *The Department of Health collects information from the Regional Drug Misuse Databases* on people presenting to services for problem drug misuse for the first time, or for the first time for six months or more. The data do not identify all problem drug misusers; for example, they do not include problem drug users who are continuing in treatment (who presented in an earlier period) and many problem drug misusers are not in contact with services. Nevertheless, as far as we are aware it is the best available source from which to estimate the total number of problem drug misusers. An alternative source would have been the Home Office Addicts Index. However, this index was closed in 1997 (Corkery, 1997).

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#### **Notes and Assumptions Used In Table 2**

**q1:** Uses two sets of six monthly figures on people entering treatment in Great Britain for the first time in that period. By using data relating to two six month periods, to get annual figures there may be some double counting. Conversely the figures exclude problem drug users who are continuing in treatment having presented in an earlier period. Undercounting is likely to be more important than the possible double counting.

**q2:** Department of Health data cover Great Britain only. Figures have been scaled up to UK using population data. This assumes prevalence in Northern Ireland is similar to the rest of the UK. To estimate the total population of problem users, Department of Health data are scaled up by the factor 3.5. This factor is an assumption drawn from Sutton and Maynard (1992) which suggests the ratio of 3.5:1 for total to known heroin users only. Department of Health data do not represent all known problem users. No allowance has been made for problem users known to services but not reported to the Department of Health. Therefore the application of this ratio is not ideal. Use of this factor implies that our estimate of the number of problem users fits into the range of 85,000 to 215,000 suggested in Edmunds et al (1998).

**p1:** Annual expenditure on all drugs by cocaine and heroin problem users is taken from Parker and Bottomley (1996), which uses data from a small scale survey of local crack and heroin addicts in the Northwest. In the absence of average expenditure data on cocaine, expenditure on crack cocaine has been used as a proxy.

**p2:** Information on problem users of methadone, amphetamines and other drugs is taken from Edmunds et al (1998) which suggests a realistic average spend across the country of £200 per week. Expenditure on methadone may be overstated as methadone can be dispensed legally on prescription.

**exp:** Annual expenditure data are on all drugs, but are allocated to the main drug of misuse.

**1:** "Regular recreational users" are assumed to be those people who had used the drug in the last month. The data are taken from the 1996 British Crime Survey, interpreted with the assistance of Home Office officials.

**r1:** British Crime Survey data cover 16 to 59 year olds in England and Wales only. Estimates for UK population of "regular recreational users" are calculated using BCS responses and 16 to 59 year old population data for the UK. This assumes that prevalence in Scotland and Northern Ireland is similar to that in England and Wales. Components cannot be summed to give totals as respondents may use more than one drug.

**av exp 1:** These are assumptions for the purpose of this article, derived from using price data (from Table 1b) and making assumptions about the quantity used.

**2:** "Occasional recreational users" are assumed to be those people who had used the drug in the last year but not the last month. The data are taken from the 1996 British Crime Survey, interpreted with assistance from Home Office officials.

**o1:** British Crime Survey data cover 16 to 59 year olds in England and Wales only. Estimates for UK population of "occasional recreational users" are calculated using BCS responses and 16 to 59 year old population data for the UK. This assumes that prevalence in Scotland and Northern Ireland is similar to that in England and Wales. Components cannot be summed to give totals as respondents may use more than one drug.

**av exp 2:** These are assumptions made for the purpose of this article. Average expenditure by occasional users is assumed to be to be 1/6th of the average expenditure for regular users.

#### **Sources :**

Table 2a : Department of Health: Statistical Bulletin, 1996 and 1997

Table 2a : What Is The Size And Nature Of The Drug Problem In The UK, Sutton and Maynard, 1992

Table 2a : Crack Cocaine and Drugs-Crime Careers; Parker and Bottomley, 1996

Table 2a : Arrest Referral: Emerging lessons from research; Edmunds et al, 1998

Table 2b : Drug misuse declared: results of the 1996 British Crime Survey, 1997, Home Office.

Drug users have been split into two groups, for which data from the Department of Health and the BCS will be used. These groups are not necessarily distinct, and some overlap between them is likely. No adjustment has been made to account for this potential double counting.

- The Department of Health data are used to estimate the number of *problem drug misusers* using heroin, methadone, cocaine and amphetamines; and
- the BCS data account for *recreational users* who are generally users of LSD, ecstasy, cannabis, cocaine and amphetamines.

Amphetamines and cocaine have been included in both groups - it is assumed that there are two groups of users: problem users and recreational users.

Data on the quantity of drugs used are not generally available. An alternative method is to use average expenditure per user instead of the quantity used, although suitable data are also hard to find, and many assumptions need to be made. Very limited information on average expenditure per problem user is available, mostly from small local studies (*Parker and Bottomley, 1996, and Edmunds et al, 1998*). Using this information, an estimate of the value of consumption can be obtained, although it is important to recognise that expenditure per user will vary between different types of drug users. The data used in **Table 2a** record problem drug misusers by the main drug they use (but they could be users of other drugs) whereas expenditure data covers expenditure on all drugs (not just main drug). Some drugs (e.g. heroin) are used most commonly as the main drug, whereas other drugs (e.g. cocaine) are most commonly used as a subsidiary drug. Consequently, misclassification of expenditure by drug type is likely.

**Tables 2a and 2b** show how data for consumption of drugs have been derived for the UK, and the notes set out the assumptions used in these calculations.

#### *Import and street purities*

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

Average drug purities are presented in **Table 3**. HM Customs publish purities of drugs at street and import level (HM Customs & Excise, 1996). These purities take values from 0 (completely impure) to 1 (pure) which have been converted to percentages.

#### *Value and quantity of imports*

The value of imports is estimated using seizures data from Customs. Using the import prices described in **Table 1b** an estimate of the import value of seizures can then be made. These data are presented in **Table 3**. The Table presents six drugs which account for about 99 per cent of seized imports. Customs' seizures of other drugs (including 'crack' cocaine) were negligible, and so these drugs were not included within the import calculations.

The published seizures of Customs are an accurate measure of amounts seized. However, to estimate the total amount of drugs which evade Customs and reach the domestic market we need to consider the proportion of total drugs seized by Customs - ie. the Customs seizure rate. As the total amount of drugs in the economy is not known we do not know the exact proportion of drugs seized by Customs. Research evidence suggests that seizure rates are likely to be in the range 5-15 per cent, depending on the drug (Sutton and Maynard, 1994). Consequently, four seizure rates have been considered: 5 per cent, 10 per cent, 15 per cent and 20 per cent. Using four seizure rates gives us a range of estimates for the supply of illegal drugs in the economy.

To calculate the value of total imports of illegal drugs the following equation is used:

Market Value of Imports =

$$\text{Street Value of Customs' Seizures} \times \left( \frac{100}{\text{Seizure Rate}} \right) - 1$$

The total value of seizures is scaled up accordingly for the four different seizure rates and the implied street values are shown in **Table 3**.

Analysing relative movements of street and import prices could indicate any changes in the effectiveness of seizures. However, the lack of reliability in the estimates of import prices and the absence of a time series for them means that such an exercise has not been undertaken for the purposes of this article. The confiscation rate may also vary between different drugs. For instance, drugs such as heroin and cocaine may be targeted more than others, or cannabis due to its relative bulkiness may be easier to detect. This

Table 3 : Value of imported drugs for 1996

		Seizures (kg) Customs & Excise q1	Import price (£ per kg) p1	Street price (£ per kg) p2	Street Purity ap	Import Purity ip	Import Value (£m) q1*p1 v(i)	Street Value (£m) q1*p2*ip/ap v(s)
Class A	Cocaine	1,157.0	19,600	61,250	0.427	0.7	22.7	116.2
	Heroin	741.0	12,600	67,500	0.435	0.49	9.3	56.3
	LSD <sup>1</sup>	118.4	550	2,750	1.000	1.0	0.1	0.3
	Ecstasy <sup>1</sup>	4,851.1	2,270	11,250	1.000	1.0	11.0	54.6
Class B	Amphetamines	840.8	500	9,750	0.093	0.21	0.4	18.5
	Cannabis (Herbal)	30,535.9	750	3,460	1.000	1.0	22.9	105.7
	Cannabis (Plants) <sup>2</sup>	47.2	750	3,460	1.000	1.0	0.0	0.2
	Cannabis (Resin)	46,137.4	800	3,415	1.000	1.0	36.9	157.6
Value of seizures (£ million)							103	509
Implied values of imports for 5% seizure rate (x 19)				=				9679
Implied values of imports for 10% seizure rate (x 9)				=				4585
Implied values of imports for 15% seizure rate (x 5.66)				=				2887
Implied values of imports for 20% seizure rate (x 4)				=				2038

- Notes:
- 1. For LSD and Ecstasy, quantities are in 000s of doses, prices are in £ per 000 doses
  - 2. Cannabis Plant seizures have been converted to grams on the assumption of 1 plant = 100 grams (see also Table 4).
  - The value of seizures is calculated using the formula (as used by HM Customs & Excise);  
Street Value of Seizures = Quantity seized x (Import purity/Street purity) x price  
where import purities are set equal to 1, and street purity varies between the drugs as they are diluted before reaching the final consumer.
  - Total value of imports is worked out using the equation:  
Total Value of Imports = Value of Seizures x ((100/Seizure Rate) - 1)
  - Individual components may not sum to totals due to rounding

Sources :  
Statistics of drug seizures and offenders dealt with, United Kingdom, 1996 (Supplementary tables) : Home Office  
Analysis Of Drug Seizures (1995); National Co-ordination Unit  
Table 1b :Average Drug Prices 1996/7; Release

likely variability in the Customs' seizure rates according to the drug type and characteristics could be applied to different drugs. However, this is also beyond the scope of this article.

An estimate of the street value of seizures and of total imports is also calculated (Table 3 column v(s)) using street prices and street purities. The formula for estimating street value from import quantities is shown in the notes to Table 3. This estimate of the street value will be used later on to obtain a measure of the distribution margin on imports.

For LSD, discussion with the UK National Criminal Intelligence Service (NCIS) suggests that LSD is wholly imported (and that there is no domestic production). LSD is derived from crystals which is a simple and almost costless process, but the crystals themselves are extremely difficult to produce and are likely only to be imported. The crystals are very easy to smuggle and can produce a large number of doses. Hence, Customs may be picking up a smaller proportion of LSD imports than first expected. The very low supply implied by even the five per cent seizure rate would suggest that

only very small quantities of LSD are available in the UK. The implications of this for overall estimates of LSD value added are considered further when the data are reconciled during balancing.

*Cost, value and quantity of domestic production*  
Table 4 shows estimates derived of the quantity, cost value and street value of domestically produced illegal drugs, based upon available data.

Published data on *costs of production* are not available, although NCIS has provided some anecdotal evidence. This suggests that costs are around five per cent of street prices, and this assumption has been used in the calculations. The costs of producing cannabis, amphetamines and ecstasy (in Table 4) have therefore been set at five per cent of the average of Police and Release street prices shown in Table 1b.

Illustrative estimates of the *quantity of domestic production* can be calculated using published information on drugs seizures of the Police and Customs (Corkery, 1996), their respective assumed

**Table 4 : Estimating the quantity, cost value, and street value of domestic production**

**Estimate of the value of domestic production of illegal drugs**

Please refer to notes for explanations and references in the left column.

**Cannabis Plants**

1	Police seizures		115647	plants			
2	Customs seizures		472	plants (so imports negligible)			
3	Cost of production	£	170	per kg			
4	Street price	£	3,460	per kg			
5	Police seizure rate	%	0.5		1	1.5	2
6	assume		1 plant = 100 grams				
7	<b>Quantity produced</b>	kg	2,301,000		1,145,000	759,000	567,000
11	<b>Cost value:</b>	£m	390		190	130	100
12	<b>Street value:</b>	£m	7,960		3,960	2,630	1,960

**Amphetamines**

2	Customs seizures		840.8	kg			
3	Cost of production	£	490	per kg			
4	Street price	£	9,750	per kg			
	Customs seizure rate	%	5		10	15	20
8	% imported	%	80				
9	Average street purity		9.3	%			
10	<b>Quantity produced</b>	kg	3,990		1,890	1,190	840
11	<b>Cost value:</b>	£m	2.0		0.9	0.6	0.4
12	<b>Street value:</b>	£m	418		198	125	88

**Ecstasy**

2	Customs seizures		4,851,140	doses			
3	Cost of production	£	0.56	per dose			
4	Street price	£	11,250	per 000 doses			
	Customs seizure rate	%	5		10	15	20
8	% imported	%	80				
10	<b>Quantity produced</b> (000 doses)		23,043		10,915	6,872	4,851
11	<b>Cost value:</b>	£m	13.0		6.1	3.9	2.7
12	<b>Street value:</b>	£m	259		123	77	55

**Notes:**

- Home Office published data: Statistics of drug seizures and offenders dealt with, United Kingdom, 1996 Supplementary tables.
- Customs' seizures from same publication (also from Table 3).
- Cost of production assumed to be 5% of street price.
- As in Table 1b and Table 3. Also using assumption that 1 plant = 100 grams.
- Police seizure rate assumed to be approximately one tenth of Customs (as suggested by King, 1995).
- Based on discussion with NCIS and anecdotal evidence.
- Quantity of domestic production (cannabis plants) calculated using the following formula:  
Quantity produced = police seizures (kg) X ((100/Police Seizure Rate)-1)
- % imported taken from discussion with NCIS.
- Average street purity taken from Table 3.
- Quantity produced (ecstasy and amphetamines) calculated using following formula:  
Quantity produced = Quantity imported X (% domestically produced/ % imported)
- Cost value = Cost of production X Quantity Produced.
- Street value = Street price X Quantity Produced.

seizure rates, and an estimate of the proportion of domestic production to imports (discussed below). Anecdotal evidence from NCIS informs us that there is no domestic production of heroin, cocaine, LSD, or cannabis resin, and all quantities of these are imported. Estimates have therefore been developed for ecstasy, amphetamines, and cannabis plants.

The quantities of *ecstasy* and *amphetamines* that are domestically produced can be calculated using the following formula:

Quantity Domestically Produced =

$$\text{Quantity Imported} \times \frac{\% \text{ Domestically Produced}}{\% \text{ Imported}}$$

The quantity imported is derived from **Table 3**, (column q1). Discussion with NCIS suggests that around 20 per cent of amphetamines and ecstasy are domestically produced, and this has been used as an unvaried assumption. The formula is then used to calculate the four different quantities of domestic production arising from the four assumed Customs seizure rates. These data are shown in **Table 4**.

For *cannabis plants*, anecdotal evidence suggests that a large proportion of supply available in the UK is domestically produced. Cannabis resin is considered wholly imported but significant home production of herbal cannabis may be taking place along with some varieties such as ‘skunk’. The assertion that almost all cannabis plants are produced domestically with only a very small amount of imports is supported by the fact that Customs’ seizures (at borders) are negligible compared to Police seizures (within the UK). Hence, data on Police seizures are used to estimate total quantity domestically produced using the formula:

Quantity Domestically Produced =

$$\text{Quantity Seized} \times \left( \frac{100}{\text{Police Seizure Rate}} \right) - 1$$

If we assume that the Police seizure rate is one tenth of Customs’ (as implied in King, 1995), using four different Customs’ seizure rates then gives us four different Police seizure rates, and four illustrative estimates of the domestic production of cannabis (shown in **Table 4**).

### Distribution margins

The international 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 per cent of the street value of available drugs. The distribution margin is thus estimated at 70 per cent of the street value of imported and domestically produced drugs. This percentage is assumed and has not been varied. However, as four different seizure rates have been assumed, this percentage implies four different quantities of imports and domestic production, and this in turn produces four different levels of margins. This is taken for each drug type and shown in **Table 5a** in the Annex, which includes the distribution margins for each of the seizure rates in four separate tables. This method gives an independent measure of the distribution margins, as opposed to deriving them using the difference between street and import prices from **Table 1b**. (Note, for instance, how the sum of the distribution margin on imports and the import value in **Table 5a** differ from the street value of total imports in **Table 3**).

### Stocks

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 data indicating stocks has been found for the UK, and therefore an allowance of zero has been made for the purposes of this article. (An assumption of negligible stocks is probably reasonable, given the danger involved in holding large amounts of illegal drugs for any length of time).

### Own account production

Just as the national accounts should record goods produced for own use, such as food grown in allotments, so illegal 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 UK is cannabis. No firm data has been found on the number of people growing cannabis for their own use rather than for sale.

Own use illegal 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. This report assumes that production for own use is negligible, and estimates of zero have been assumed.

## Section 4 Balancing and Estimates

### Production of coherent estimates of value added arising from illegal drugs transactions

This section considers first some reliability issues for the data exploited on illegal drugs, and then goes on to reconcile the estimates in a national accounts framework (balancing). It also considers the data available to make estimates for prostitution, selling stolen goods (fencing) and illegal gambling. Overall illustrative estimates of value added and consumption expenditure on these activities are then presented.

#### *Reliability of the data*

Generally, we know little of the reliability of the data on the *output* (supply) side. Possible errors in the data include:

- The value of imports is dependent on the proportion of drugs seized by Customs. In reality there are likely to be different seizure rates for different drugs over time;
- 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);
- Domestic production is based mainly on seizures data; it is very sensitive to changes in seizures.

The value of *consumption (demand)* may be underestimated for various reasons, which include:

- The difficulty of assessing the total number of users;
- 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;
- Assumptions made about average expenditure on illegal drugs may be too low.

Many of these reasons for possible underestimation are similar to the reasons often given for under-recording of expenditure on alcohol or tobacco in the Family Expenditure Survey. One problem with FES data is thought to be differential non-response, that is heavy drinkers are most likely to be non-respondents, either not available or not willing to answer surveys. The same is likely to apply to data about consumption of drugs.

#### **Balancing illegal drugs transactions**

Using the principle that illegal drugs are available, they are consumed, and money is spent on them, we can construct an overall coherent picture of supply and demand, using a technique called 'balancing'. A fuller description of balancing is given in the Annex to this article.

Initial estimates made of the value of illegal drugs transactions will, almost inevitably, not be consistent due to the many possible errors in the data sources. Looking at the data presented in the Annex, it appears that demand (consumption) is in general underestimated while supply (imports plus production) and distribution margins are in general overestimated.

The initial estimates developed in Section 3 do not therefore present a coherent picture of economic activity arising from transactions in illegal drugs. For this to happen, consumption must equal supply (imports plus domestic production) plus distribution margins. In order to satisfy this identity, the balancing process is applied to reconcile the estimates made. Balancing adjustments have to be made to the different data depending upon the relative strengths and weaknesses highlighted during the balancing process. The process can also be employed to ensure that physical quantities as well as values balance. As the four different seizure rates produce four different initial estimates of the value of drugs, then four different balancing processes are required. This is a complex process which involves making adjustments to the various components for each drug type.

**Tables 5 and 6** in the Annex follow the balancing processes for the respective seizure rates. To reconcile the consumption and supply side data, the process goes through the following stages:

- Adjustments are made from comparing the initial quantity figures for consumption and supply;
- The value estimates on the consumption and supply side are then looked at, and adjustments to the estimates are made on the relative strengths and weaknesses of the data;
- A final judgement on the data is made to produce a single estimate for the supply and consumption levels of illegal drugs, for each seizure rate, to satisfy the national accounts identities.

#### *Estimate of market size*

**Table 7a** shows the final estimates (i.e. after balancing) for the value of illegal drugs for each seizure rate:

**Table 7a Illustrative estimates of illegal drugs transactions for assumed seizure rates**

£ billion (rounded)	Assumed Seizure Rate			
	5%	10%	15%	20%
Drugs Consumption	9.9	6.8	5.6	4.3
Imports	1.3	0.8	0.6	0.5
Domestic Production (at cost)	0.3	0.2	0.2	0.2
Distribution Margins	8.3	5.8	4.8	3.7
Output	8.6	6.0	5.0	3.9
As a % of 1996 GDP	1.2	0.8	0.7	0.5

As would be expected, an increase in the proportion of drug imports seized by Customs leads to a decrease in the consumption, imports, domestic production and distribution margins of drugs. If seizure rates are assumed to be in the range of 5 per cent to 20 per cent, then the model produces an output estimate of illegal drugs in the range of £3.9 bn - £8.6 bn.

Before these estimates can be used to assess the potential value added for national accounts, some assumption must be made of the value of intermediate consumption used as a proportion of domestic production. It is assumed that 20 per cent of domestic production is already in the national accounts as intermediate consumption (e.g. energy and rent. Possible ways of treating intermediate consumption were outlined in Section 2). Thus the value added from domestic production of illegal drugs absent from the accounts is shown in **Table 7b**.

**Table 7b Illustrative estimates of value added from illegal drugs transactions for assumed seizure rates**

£ billion	Assumed Seizure Rate			
	5%	10%	15%	20%
Value Added	8.5	6.0	5.0	3.9
As a % of 1996 GDP	1.1	0.8	0.7	0.5

Therefore, with the assumptions made about the range of Customs' seizure rates, the value added (the amount that GDP would increase by if illegal drugs transactions were included in the national accounts) is between £3.9 and £8.5 billion, which is some 0.5 - 1.1 per cent of GDP.

#### **Estimates for other illegal activities**

To complete the estimates for illegal activities discussed in Section 2, we now turn to prostitution, selling stolen goods (fencing), and illegal gambling. Data suitability, availability and estimates for value added will be considered briefly.

#### ***Illegal activities associated with prostitution***

##### *Framework*

The following variables are of interest in measuring the value of economic activity from prostitution:

$$\begin{aligned} \text{Income} &= \text{Number of prostitutes} \times \text{Average earnings} \\ \text{Expenditure} &= \text{Number of customers} \times \text{Frequency of use} \times \text{amount spent on average} \end{aligned}$$

The value of intermediate consumption involved in prostitution should be deducted from both income and expenditure to give value added from prostitution.

##### *Data sources*

Potential data sources on prostitution include:

- *Prostitutes' associations* for the number of prostitutes and average earnings. No data could be found from this source for the UK.
- *Law enforcement data* give the number of prostitutes prosecuted for prostitution offences. This would then need to be suitably scaled up and adjusted for any double counting, to estimate the total number of active prostitutes. Data on the re-arrest rate of prostitutes are not available.

**Table 8** Illustrative estimates of value added from prostitution for London and the UK

Type of Prostitution	Annual Revenue <sup>1</sup> (£m)	Possible Intermediate Use	Value Added (London)) (£m)	Scale Up London GDP to UK GDP 95 <sup>2</sup>	Value Added (UK) (£m)
Street	9.5	rent/equipment	9.5	6	57
Private Premises	40	rent/equipment/ maids/printing/ advertising	40	6	240
Massage/ Sauna	93	equipment/ fees to owner	93	6	558
Escort Agency	37	rent/equipment/ fees to owner	37	6	222
Hostess Clubs & Bars	15	rent/equipment	15	6	90
<b>Total</b>			<b>194.5</b>		<b>1167</b>
% of UK 1995 GDP					0.2

**Notes:**

1. Revenue from prostitution taken from Prostitution In London - An Audit (Matthews, 1997)
2. Scale up factor = UK GDP (1995)/ Greater London GDP (1995) (Office for National Statistics 1998)

One important data source found on prostitution activity within the UK was a specific study about prostitution in London (Matthews, 1997). This was the most suitable source found that included the kind of information which might be useful for constructing a picture of economic transactions associated with prostitution (and hence data for the accounts). This study uses the results of a survey to give an overview of prostitution activity in the capital, including details about value and frequency of transactions. The survey draws on as many data sources as possible to build up a picture of street and off-street trade in prostitution.

*Estimate of market size*

The London study uses the results of the survey to present "ball park" figures on the annual income from prostitution activities. Revenue from prostitution is calculated using estimates of the number of active prostitutes and their average earnings per year. The survey covers only the London area and so, for the purposes of this article, the data have been scaled up by regional GDP figures for London compared to those for the UK, to give an indication of the revenue from prostitution in the UK.

*Weaknesses Of Data*

The report does not claim to provide definitive figures for revenue from prostitution in London. The clandestine nature of prostitution could imply underestimation of the number of prostitutes. On the

other hand, double counting could occur from prostitutes operating in more than one type of prostitution, although the report considers this unlikely. The report presents only approximations, and therefore can only be used to give an indication of the scale of such activity for the UK as a whole. However, as far as we are aware, this study is the most comprehensive of its kind and it includes data which are useful for constructing national accounts estimates.

The value of intermediate consumption by prostitutes should be deducted from revenue figures to give value added. Possible types of intermediate consumption are presented in **Table 8** but no data were found to quantify these. Hence, no estimate for intermediate consumption of prostitution is made, and revenue from prostitution is assumed equal to value added. (It is nonetheless likely that most intermediate consumption for prostitution will already be included in the accounts).

The survey on prostitution is for London only. **Table 8** shows how the application of a scaling factor which compares regional GDP of London to that of the UK suggests prostitution could contribute an additional £1.2bn, or 0.2 per cent to the level of UK GDP. However, it could be argued that prostitution activity is concentrated in London and other urban areas, so this calculation could overstate value added from prostitution for the UK as a whole.

**Selling stolen goods (fencing)**

One study was found which gives a range of estimates of the profit fences make by selling on stolen property. The study uses the British Crime Survey's figures on the value of stolen goods that are sold on (Sutton, 1998).

*Estimate of market size*

It is assumed that thieves sell stolen property on to the fence at 33 per cent of the retail value. In turn it is assumed that the fence sells the property on for 50 per cent of the retail value, and hence the fence's profit is 17 per cent of the retail value of the stolen property.

Estimates for 1995 are as follows (Sutton, 1998):

- Thieves receive between £0.9 billion and £1.68 billion (i.e. 33 per cent of retail value) from selling stolen goods.
- Fences make a net profit of between £450m and £870 m (i.e. 17 per cent of retail value) from selling stolen goods.

If the midpoint of the range is taken for illustrative purposes, this would suggest value added from fencing of around £0.7bn for the UK.

**Illegal Gambling**

No data on the size of illegal gambling in the UK were found. The Home Office, The Gaming Board and OFLOT (the Lottery Watchdog) were contacted but this did not reveal any sources of information on illegal gambling. The Gaming Board did indicate that the main form of such gambling is in the form of illegal gaming machines, but the prevalence of this type of illegal gambling activity was not known. However, from the limited anecdotal evidence obtained, widespread illegal gambling does not seem to exist in the UK.

*Estimate of market size*

In the absence of any specific data for the UK, an indication of the scale of illegal gambling can be gleaned from considering available data for another European Union country. An estimate of illegal gambling in the Netherlands gives value added as approximately 600 million guilders (van der Werf and van de Ven, 1996). If value added per capita were the same in the UK then a very rough estimate of value added would be £0.8 billion. This figure is only suggested as a result of the paucity of data on this activity in the UK. However, it should be emphasised that this is based on a calculation for another country, and could differ widely from the UK due to different cultures.

**Summary of Results**

The data exploited for the purposes of this article suggest that the activities which have been considered could generate *value added* to the UK economy of approximately the size shown in **Table 9**. It should, however, be recognised that these are illustrative estimates developed from the data sources described, and the actual levels of illegal economic activity may not lie within these ranges.

**Table 9** Illustrative estimates of value added and consumers' expenditure for illegal activities

	Value Added (£bn)	% of 1996 GDP
Drugs <sup>1</sup>	3.9 - 8.5	0.5 - 1.1
Prostitution	1.2	0.2
Selling Stolen Goods	0.7	0.1
Illegal Gambling	0.8	0.1
Total <sup>3</sup>	6.5 - 11.1	0.9 - 1.5

	Consumers' Expenditure (£bn)	% of 1996 CE
Drugs <sup>2</sup>	4.3 - 9.9	0.9 - 2.1
Prostitution	1.2	0.2
Selling Stolen Goods	0.7	0.1
Illegal Gambling	0.8	0.2
Total <sup>3</sup>	6.9 - 12.5	1.5 - 2.6

Notes:  
1. See Table 7b.  
2. See Table 7a.  
3. The individual components may not sum up to the totals due to rounding.

These data suggest that the largest illegal economic activity generating value added is the sale of illegal drugs. This is the area where the largest number of data sources were found to inform the estimation of value added. Differences between value added and expenditure arise because of the inclusion of the consumption of imports and intermediate consumption under expenditure on illegal drugs. Imports and intermediate consumption do not contribute to value added.

**Section 5 - Effects on UK National Accounts Figures**

This part of the article will discuss the potential effects of including illegal activity in key indicators and the implications for economic analysis. **Tables 10 and 11** show the summary sector accounts (Table B from the UK National Accounts, Blue Book). Two versions are given both before and after the inclusion of estimates of illegal activity developed in this article. **Tables 10 and 11** only show the values generated by assuming a ten per cent Customs seizure rate for illegal drugs coming into the UK, to give an illustration of the effect which inclusion of illegal activities would have on the accounts.

**Table 10 1996 Sector Accounts Before Inclusion Of Illegal Activities**

Sector Accounts, 1996 Summary analysis by sector									£ million
	Personal sector	Industrial & commercial companies	Banks & building societies	Other financial institutions	Public corporations	Central government	Local authorities	Overseas sector	TOTAL
<b>CURRENT TRANSACTIONS</b>									
<b>Factor incomes:</b>									
Income from employment	400,354	-	-	-	-	-	-	-	400,354
Income from self-employment	69,898	-	-	-	-	-	-	-	69,898
Gross trading profits, etc	-	118,939	-17,530	-	3,959	362	319	-	106,049
Rent	48,287	9,253	919	-	697	185	4,509	-	63,850
Imputed charge for capital consumption less stock appreciation	680 218	- -1,178	-	-	- -13	1,525 -	2,128 -	-	4,333 -973
<b>Inter-sector transfers:</b>									
Dividends and interest:									
receipts	81,293	44,041	168,311	-	835	10,544	674	86,419	-
payments	-39,433	-80,685	-140,131	-	-2,759	-28,513	-4,525	-96,071	-
Taxes on income	-67,051	-21,165	-6,241	-	-228	94,685	-	-	-
Social security contributions	-46,270	-	-	-	-	46,270	-	-	-
Social security benefits	80,021	-	-	-	-	-81,015	-	994	-
Council tax	-9,906	-	-	-	-	-	9,906	-	-
Other current grants by government:									
receipts	18,590	-	-	-	-	4,390	58,572	8,329	-
payments	-	-	-	-	-	-72,329	-13,162	-4,390	-
Other current transfers:									
receipts	4,080	-	-	-	-	632	-	2,258	-
payments	-2,866	-1,456	-88	-	-	-	-	-2,560	-
Royalties and licence fees etc	-	-1,063	-	-	-	1,063	-	-	-
<b>Factor cost adjustment:</b>									
Taxes on expenditure	-	-	-	-	-	108,313	171	-	108,484
Subsidies	-	-	-	-	-	-8,343	-757	-	-9,100
<b>Expenditure:</b>									
Consumption	-473,509	-	-	-	-	-101,140	-54,592	-	-629,241
Exports of goods and services	-	-	-	-	-	-	-	-217,147	-217,147
Imports of goods and services	-	-	-	-	-	-	-	222,603	222,603
<b>Balance = Saving</b>	64,386	66,686	5,240	-	2,491	-23,371	3,243	435	119,110
<b>CAPITAL TRANSACTIONS</b>									
Gross domestic fixed capital formation	-32,723	-60,521	-6,490	-	-4,569	-4,199	-6,121	-	-114,623
Value of physical increase in stocks and work in progress	-259	-2,700	-	-	187	-145	-	-	-2,917
Taxes on capital	-2,608	-307	-36	-	-	2,951	-	-	-
Other capital transfers:									
receipts	3,644	582	-	-	3,849	-	4,863	-	12,938
payments	-	-193	-	-	-484	-11,447	-814	-	-12,938
<b>Balance = Financial surplus or deficit</b>	32,440	3,547	-1,286	-	1,474	-36,211	1,171	435	1,570
<b>FINANCIAL TRANSACTIONS</b>									
Notes and coins	809	40	-619	-	-8	-245	-	23	-
Sterling treasury bills and government securities	-1,724	-351	-6,675	19,200	747	-18,208	-2	7,013	-
National savings and tax instruments	6,832	-402	-69	-	-14	-6,347	-	-	-
Issue Department's transactions in commercial bills	-	710	-	402	-	-1,683	-	571	-
Other government domestic transactions	-511	3	1,582	162	793	-3,373	1,344	-	-
Government overseas transactions	-	-	1,242	5	-	-454	-	-793	-
Local authority debt	186	-56	-634	70	-563	507	477	13	-
Public corporations' debt	-146	-	-118	147	2,582	-2,453	2	-14	-
Deposits with banks:									
Sterling	13,810	8,487	-43,788	22,646	-633	2,792	-318	-2,996	-
Foreign currency	1,192	5,402	-115,806	25,781	-9	151	-14	83,303	-
Deposits with building societies:									
Sterling	11,095	130	-14,126	2,514	-	-	-	387	-
Foreign currency	-7	-17	1,090	-115	-	-	-	-951	-
Bank lending (excluding public sector)	-7,793	-15,644	134,320	-46,985	-	-	-	-63,898	-
Other lending	-22,626	-2,373	22,970	1,398	-24	961	-61	-245	-
Trade and retail credit	-4,781	-1,469	-	7,817	57	-	-	-1,624	-
UK and overseas securities and unit trust units	-4,446	6,461	25,228	24,264	-2,230	-5,954	33	-43,356	-
Other domestic instruments	43,223	-14,232	-589	-44,272	1	496	-1	15,374	-
Other overseas instruments	32	10,537	1,447	-12,577	79	607	-	-125	-
Accruals adjustments	5,218	2,365	779	-11,000	-16	-2,298	-168	5,120	-
<b>Total financial transactions</b>	40,363	-409	6,234	-10,543	762	-35,501	1,292	-2,198	-
<b>BALANCING ITEM</b>	-7,923	3,956	3,023	-	712	-710	-121	2,633	1,570

**Table 11 1996 Sector Accounts After Inclusion of Illegal Activities -Assuming 10% Seizure Rate)**

Sector Accounts, 1996 Summary analysis by sector									£ million
	Personal sector	Industrial & commercial companies	Banks & building societies	Other financial institutions	Public corporations	Central government	Local authorities	Overseas sector	TOTAL
<b>CURRENT TRANSACTIONS</b>									
<b>Factor incomes:</b>									
Income from employment	400,354	-	-	-	-	-	-	-	400,354
Income from self-employment	69,898	-	-	-	-	-	-	-	69,898
Income from illegal activities	8,700	-	-	-	-	-	-	-	8,700
Gross trading profits, etc	-	118,939	-17,530	-	3,959	362	319	-	106,049
Rent	48,287	9,253	919	-	697	185	4,509	-	63,850
Imputed charge for capital consumption	680	-	-	-	-	1,525	2,128	-	4,333
less stock appreciation	218	-1,178	-	-	-13	-	-	-	-973
<b>Inter-sector transfers:</b>									
Dividends and interest:									
receipts	81,293	44,041	168,311	-	835	10,544	674	86,419	-
payments	-39,433	-80,685	-140,131	-	-2,759	-28,513	-4,525	-96,071	-
Taxes on income	-67,051	-21,165	-6,241	-	-228	94,685	-	-	-
Social security contributions	-46,270	-	-	-	-	46,270	-	-	-
Social security benefits	80,021	-	-	-	-	-81,015	-	994	-
Council tax	-9,906	-	-	-	-	-	9,906	-	-
Other current grants by government:									
receipts	18,590	-	-	-	-	4,390	58,572	8,329	-
payments	-	-	-	-	-	-72,329	-13,162	-4,390	-
Other current transfers:									
receipts	4,080	-	-	-	-	632	-	2,258	-
payments	-2,866	-1,456	-88	-	-	-	-	-2,560	-
Royalties and licence fees etc	-	-1,063	-	-	-	1,063	-	-	-
<b>Factor cost adjustment:</b>									
Taxes on expenditure	-	-	-	-	-	108,313	171	-	108,484
Subsidies	-	-	-	-	-	-8,343	-757	-	-9,100
<b>Expenditure:</b>									
Consumption	-473,509	-	-	-	-	-101,140	-54,592	-	-629,241
Consumption (Illegal activities)	-9,500	-	-	-	-	-	-	-	-9,500
Exports of goods and services	-	-	-	-	-	-	-	-217,147	-217,147
Imports of goods and services	-	-	-	-	-	-	-	222,603	222,603
Illegal (drugs) imports	-	-	-	-	-	-	-	800	800
<b>Balance = Saving</b>	63,586	66,686	5,240	-	2,491	-23,371	3,243	1,235	119,110
<b>CAPITAL TRANSACTIONS</b>									
Gross domestic fixed capital formation	-32,723	-60,521	-6,490	-	-4,569	-4,199	-6,121	-	-114,623
Value of physical increase in stocks and work in progress	-259	-2,700	-	-	187	-145	-	-	-2,917
Taxes on capital	-2,608	-307	-36	-	-	2,951	-	-	-
Other capital transfers:									
receipts	3,644	582	-	-	3,849	-	4,863	-	12,938
payments	-	-193	-	-	-484	-11,447	-814	-	-12,938
<b>Balance = Financial surplus or deficit</b>	31,640	3,547	-1,286	-	1,474	-36,211	1,171	1,235	1,570
<b>FINANCIAL TRANSACTIONS</b>									
Notes and coins	809	40	-619	0	-8	-245	-	23	-
Sterling treasury bills and government securities	-1,724	-351	-6,675	19,200	747	-18,208	-2	7,013	-
National savings and tax instruments	6,832	-402	-69	-	-14	-6,347	-	-	-
Issue Department's transactions in commercial bills	-	710	-	402	-	-1,683	-	571	-
Other government domestic transactions	-511	3	1,582	162	793	-3,373	1,344	-	-
Government overseas transactions	-	-	1,242	5	-	-454	-	-793	-
Local authority debt	186	-56	-634	70	-563	507	477	13	-
Public corporations' debt	-140	-	-118	147	2,582	-2,453	2	-14	-
Deposits with banks:									
Sterling	13,810	8,487	-43,788	22,646	-633	2,792	-318	-2,996	-
Foreign currency	1,192	5,402	-115,806	25,781	-9	151	-14	83,303	-
Deposits with building societies:									
Sterling	11,095	130	-14,126	2,514	-	-	-	387	-
Foreign currency	-7	-17	1,090	-115	-	-	-	-951	-
Bank lending -excluding public sector)	-7,793	-15,644	134,320	-46,985	-	-	-	-63,898	-
Other lending	-22,626	-2,373	22,970	1,398	-24	961	-61	-245	-
Trade and retail credit	-4,781	-1,469	-	7,817	57	-	-	-1,624	-
UK and overseas securities and unit trust units	-4,446	6,461	25,228	24,264	-2,230	-5,954	33	-43,356	-
Other domestic instruments	43,223	-14,232	-589	-44,272	1	496	-1	15,374	-
Other overseas instruments	32	10,537	1,447	-12,577	79	607	-	-125	-
Accruals adjustments	5,218	2,365	779	-11,000	-16	-2,298	-168	5,120	-
<b>Total financial transactions</b>	40,363	-409	6,234	-10,543	762	-35,501	1,292	-2,198	-
<b>BALANCING ITEM</b>	-8,723	3,956	3,023	-	712	-710	-121	3,433	1,570

## The main changes

With the assumptions described, the effects on the accounts from the introduction of illegal activities are as follows (**Tables 10 and 11**):

- income from illegal activities (value added calculated in Section 4) is included under income from self employment;
- consumers' expenditure on illegal activities is included under personal sector consumption (consumers' expenditure calculated in Section 4); and
- imports of illegal drugs are included under imports of goods in the overseas sector.

These changes feed through to other parts of the accounts. The effect of these changes will be considered on several important variables: GDP, the balance of trade and the saving ratio. Changes in the balancing items are also discussed.

### Effects on the interpretation of the data

The inclusion of illegal activities will change certain economic aggregates and it is possible that the interpretation of the figures will also change. A time series of data would be needed in order to estimate the rate of growth of illegal activity. It is quite possible that growth in illegal activities has differed from growth in the rest of the economy. However, the level of illegal activity is probably not large enough to have a significant impact on growth figures and is unlikely to change the timing of events such as turning points.

Most illegal transactions are carried out by the household sector. As the transactions are in the main purchases by the household sector from producers within the household sector, increases in earnings should balance increases in consumption. There is therefore little to suggest a change to the household saving ratio or the balancing item. This is an area where more details are needed to investigate the effect of the inclusion of illegal activity. The data presented here affect the saving ratio as additional consumption is greater than additional income. There are two reasons for this: (i) some consumption expenditure is on imports and does not contribute to income; and (ii) some of the revenue from illegal drugs transactions is spent on the intermediate costs of producing drugs, and these may already be in the accounts. This component is deducted from revenue to derive additional income.

## Gross Domestic Product

The estimates imply that the inclusion of illegal activity would increase the level of GDP in the range £6.5 - £11.1 billion (current prices). However, for most purposes the rate of change in GDP is of more interest than the actual level. The estimate of *consumption* made in Section 4 used data for which, at present, time series are not available, so estimates of the rate of growth of illegal activity cannot be constructed.

Although a growth in drugs seizures has occurred over time, implying a rapid growth in imports of drugs, the analysis of the economy based on GDP should not be substantially altered. This is because:

- The time series of Customs' seizure statistics may change due to the effectiveness of Customs rather than the actual quantity of drugs imported.
- Although the quantity of drugs imported into the country might appear to be increasing from seizures themselves, the actual implied additional impact on the level of GDP from even a very low seizure rate is around one per cent of GDP. Therefore, the change in the growth rate of GDP would be minimal.

There is some inconclusive evidence that drugs activity is mildly counter-cyclical. Theft, and so income from selling stolen goods, may also be counter-cyclical. This has some intuitive justification, as we may expect people to be more likely to turn to illicit forms of income during a recession, when the relative rewards may be greater, and the relative risks smaller (relative as people may have less to lose during a recession). The inclusion of illegal activities within the accounts may therefore marginally dampen the cyclicity of GDP. However, this effect is small enough that it would be unlikely to affect any interpretation of the data.

### Trade balance

In **Table 11** the estimate of the balance of trade worsens by the value of imported drugs. There are no exports to consider. This implies deterioration in the estimate of the UK trade position. It may affect assessments of how we would expect the value of sterling and UK interest rates to change.

### Saving ratio

One of the most important aggregates affected is the personal sector saving ratio. Expenditure in the personal sector increases whereas income in the personal sector increases by a smaller amount due to a proportion of earnings going abroad (on imports). Hence the drop in personal saving implies a fall in the saving ratio.

### **Balancing items**

The balancing items for each sector are the difference between the financial surplus or deficit and total financial transactions. In principle these should be zero; their size gives some indication of the size of errors in the accounts. Values for illegal activities have only been found for the current account (rather than the financial account where monetary transactions on illegal activities may already be recorded). **Tables 10 and 11** show the balancing item effects, assuming a ten per cent Customs seizure rate. The personal sector balancing item is made worse (more negative), and the overseas (or Rest of the World) sector is also made worse (more positive). This result does not necessarily indicate that the data derived for illegal drugs are wrong: However, it is very difficult to draw conclusions about impacts on the balancing items without information on the financial flows resulting from illegal activities.

### **Section 6 - Further Work**

The data sources set out in Sections 3 and 4 produce estimates which would need substantial refining before they could be included within the national accounts. Furthermore, there is a major problem in obtaining time series, which would be needed in order to include illegal activities within the accounts.

The illustrative estimates presented have been derived from the data found during the course of this study. Additional research may well be available which could be used to inform the development of estimates for the national accounts, but which has not been exploited for the purposes of this article. This section highlights some of the main areas where further work would be useful.

Numerous assumptions needed to be made to build up the picture of the impact of drug transactions on the UK national accounts:

- One of the most important assumptions is that Customs seize the same proportion of each drug. This is clearly a major generalisation. Allowing for different seizure rates for different drugs would enable changes in Customs' detection techniques to be reflected between drugs and over time, and this would be an obvious extension of this work. It is important that more robust data on seizure rates are developed if the supply estimates are to be improved.
- Data on the consumption side required many assumptions; for instance, the ratio of total problem

users to those on the Department of Health database. The ratio used (Sutton and Maynard, 1992) is a ratio of total problem users to those known to services. Department of Health data are different from those known to services so a more suitable ratio should be investigated.

- Despite the good quality information from the British Crime Survey about prevalence of drug use, the lack of suitable information about expenditure on illegal drugs and frequency of their use makes the construction of consumption expenditure estimates difficult.
- The assumptions underlying the value of domestic production, and the amount of intermediate consumption involved, could be investigated further. It is likely that, at present, value added is misclassified between domestic production and distribution margins.

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; whether it is relevant, and to what extent it is already included in the accounts;
- whether the income from illegal production is channelled through legitimate businesses, and whether any of that income goes overseas.

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 from research reports and academic studies. Existing national accounts tools can also contribute by developing detailed supply and use balances and analyses for each illegal activity from available data.

Several other 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 by exploiting the available data sources.

## Section 7 - Conclusions

A number of data sources have been outlined and exploited within this article to produce illustrative estimates for the national accounts. By far the greatest availability of data sources is for illegal drugs, which from this study appears to be the most important activity in terms of relative value. At present these data sources have the major drawback that time series are not generally available (although time series are becoming available for some of the data sources, such as the British Crime Survey). This is an important obstacle to the inclusion of data within the accounts, and the data sources and estimates would need to be substantially refined for national accounts purposes before their inclusion. ***The estimates are not yet sufficiently developed to be incorporated into the accounts.*** Further examination of the suitability of the data sources, additional research on the key variables (e.g. expenditure on drugs), and improving the estimates of activities most likely to have major impacts on the accounts, would all be worthwhile.

Despite the potential scale of illegal 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 nor output sides of the accounts. Illegal activity is thus unlikely to explain the discrepancies within the accounts. Even if in practice the inclusion of these data within the accounts would not radically affect the main economic indicators, it is important to recognise that illegal activity has 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 (as required by the SNA93 and ESA95 national accounts manuals). The emphasis for measuring transactions for the national accounts should be to focus on the level of GDP.

There is considerable policy interest in an estimate of the size of the market for illegal drugs. As long as drug supply and possession remain illegal, measuring the size of the drug economy will always be difficult. Because of the need for many assumptions, it is important to be able to explain how the assumptions have been used when compiling estimates of the level of illegal economic activities. However, this need for justification should not prevent the analysis of illegal activity for the national accounts. Indeed, the need for coherent data for use outside the national accounts may help to build support for the reconciliation of different data sources.

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**Contents of Annex**

**Description of balancing process and steps taken**

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- Table 5(5%): Value balances assuming 5% seizure rate
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- Table 5(20%): Value balances assuming 20% seizure rate
- Table 6(5%): Quantity balances assuming 5% seizure rate
- Table 6(10%): Quantity balances assuming 10% seizure rate
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- Table 6(20%): Quantity balances assuming 20% seizure rate

Tables 5 and 6 show the values and quantities through the balancing process and the implications of balancing.

Figure 1: Schematic summary of balancing process

Figures in Tables may not add to totals due to rounding.

**Table 12      Pre-balancing estimates of illegal drugs transactions (£ billion)**

Seizure rate	5%	10%	15%	20%	Source Table
Value of consumption <b>i</b>	4.1	4.1	4.1	4.1	Table 2
Value of imports <b>ii</b>	2.0	1.0	0.7	0.5	Tables 3 and 4
Value of domestic production <b>iii</b>	0.5	0.2	0.2	0.2	Table 4
Distribution margin on imports <b>iv</b>	6.9	3.4	2.2	1.6	Tables 3 and 4
Distribution margin on production <b>v</b>	6.5	3.5	2.5	2.0	Table 4
Residual (Consumption - Supply) <b>(i-ii-iii-iv-v)</b>	(11.9)	(4.0)	(1.4)	(0.1)	

**Annex : Balancing**

This annex details the steps taken in order to arrive at a coherent estimate of value added from illegal drugs activity. The initial estimates of consumption are not equal to the initial estimates of supply. The balancing process illustrates how the initial estimates are reconciled to produce balanced estimates of consumption and supply.

Initial estimates of the illegal drugs transactions for 1996 (as detailed in Table 5(5%)a, T5(10%)a, T5(15%)a and T5(20%)a) are shown in Table 12. For all the seizure rates, the overall supply of drugs exceeds overall consumption. For the individual drugs, the general case for all the seizure rates was:

Supply > Consumption, for cocaine, ecstasy and cannabis  
Consumption > Supply, for LSD, heroin and amphetamines.

The balancing process assesses the value and quantity figures for consumption and supply and makes the necessary adjustments to produce a coherent estimate for each drug.

The following equation should hold for the street value of illegal drugs (see Section 3):

Consumption - Imports - Domestic Production -  
Margins on Imports - Margins on Domestic Production = 0  
for each drug type  
(see equation (2'), Section 3)

The equation in physical quantities is:

Consumption - Imports - Domestic Production = 0  
for each drug type  
(see equation (1'), Section 3)

**Balancing Stages**

This quantity equation allows us to make a check and to identify where there are weaknesses in the calculations. In *balancing stages one and two*, this equation will be used to *balance the quantities* for each drug type as far as possible and the consequences for the values at each stage will be shown.

*Balancing stage three* will continue with this process, applying adjustments to each component in the *value equations*. *Balancing stage four* makes final adjustments to the *value equations*, so that all the residuals are zero.

Figure 1 is provided at the end of this annex as a summary of the balancing process. It shows the relationships between the tables within the balancing process and indicates how each step of balancing leads from one table to another. Details of the balancing process as discussed below can be followed using this diagram.

**Quantity Estimates**

According to the above valuations of consumption, imports and production (also shown in Table 5a), the corresponding quantities for each drug type are presented in Table 6a. The quantity figures for imports and domestic production are taken from Tables 3 and 4. However no quantity estimates are used in the initial calculation of the value of consumption, as expenditure (value) figures from Table 2 are used.

These values have been converted using the formula,

$$\text{Quantity} = \left( \frac{\text{street value}}{\text{street price}} \right) \times \left( \frac{\text{street purity}}{\text{import purity}} \right)$$

where the purities adjustments are used to obtain estimated quantities at import purity rather than at street purity. Import purity quantities are used to be consistent with Customs' seizure data which is at import purity.

Balancing The Four Different Seizure Rates

The assumption of four different seizure rates produces four different initial estimates of the value of the supply of drugs. **Table 5(5%)** and **T6(5%)** detail the balancing process for the 5 per cent seizure rate; and **Tables 5(10%)** and **T6(10%)**; **T5(15%)** and **T6(15%)**; **T5(20%)** and **T6(20%)** detail the balancing processes for the other seizure rates.

As different seizure rates produce different initial estimates, a different balancing process is applied to the estimates from each of the seizure rates. Each balancing process is worked out independently. For example, in the 5 per cent balancing process only the estimates produced by the 5 per cent seizure rate are considered, and not the estimates produced by other seizure rates.

Each balancing process follows the same framework of four stages.

Methadone and 'other drugs'

Consumption data only are available for methadone and other drugs, and so the balancing process does not apply. Methadone is a unique case as it is the one drug that can be dispensed legally on prescription. We are only interested in the illegal transactions of methadone which is the margins paid to dealers. To complete **Table 5**, the value of consumers' expenditure is allocated to margins on domestic production.

For 'other drugs', the value of imports is assumed to be equal to the value of domestic production. Margins are taken as 70 per cent of street value (see Section 3) and the consumption values are allocated accordingly.

Balancing Process For 5% Seizure Rate (Table 5(5%) and 6(5%))

Balancing stage one

The initial quantity residuals in **Table 5(5%)a** show that supply (imports + production) exceed demand (consumption) by a large margin for cocaine, ecstasy and cannabis. The residual quantities of heroin and amphetamines are sufficiently low to keep unchanged.

For LSD, demand far exceeds supply even for the lowest (5 per cent) seizure rate. Hence, the supply figures of LSD are taken to be unreliable for *all seizure rates* and *only the consumption data are used*. To be consistent with the other drugs, margins on imports

are set at 70 per cent of the consumption value and imports at 30 per cent. From discussion with NCIS we know that there is little or no domestic production of LSD.

Changes to quantities are reflected in **Table 6(5%)b** and the corresponding values are calculated and shown in **T5(5%)b**. The changes made are as follows:

Consumption

- Estimated consumption of ecstasy and cannabis in recreational use is too low (column q2 in **Table 2b**), particularly given a 5 per cent seizure rate. Ecstasy and cannabis are generally considered to be popular amongst students and teenagers many of whom may not be picked up by the BCS as it is a household survey and it excludes under 16s from its sample. Expenditure by regular/ occasional recreational users (**Table 2**) may also be an underestimation. Hence, consumption of ecstasy is increased by a factor 5, and consumption of cannabis by a factor 5.
- Consumption of cocaine seems understated given the 5 per cent supply side figures. This could be an underestimation of users or of expenditure. Hence, consumption is increased by a factor 3.

The quantities are converted back using price data, and are presented in **T5(5%)b**.

Balancing stage two

Supply

Cannabis is a bulky drug that is likely to be easier to detect than other drugs. A 5 per cent seizure rate seems unlikely so imports are reduced by a factor 0.5. Domestic production of cannabis is reduced so the ratio of domestic production to imports is 1.5:1.

The seizures of ecstasy were exceptionally high for 1996, and again a seizure rate of 5 per cent is unlikely. Hence imports are decreased by factor 0.75. Cocaine imports are also reduced by a factor 0.6.

The new levels of quantities are shown in **T6(5%)c** and the corresponding values in **T5(5%)c**. In balancing stage three changes are made to value estimates rather than quantity estimates.

### Balancing stage three

The following adjustments are made to the values in T5(5%)c and the changes shown in T5(5%)d:

- The margins on imports apply to the level of imports before balancing. Balancing stage two decreased imports of cannabis by a factor 0.5, cocaine by 0.6 and ecstasy by 0.75. Margins on imports of these drugs are reduced by the same percentage to reflect that the margins now apply to a reduced level of imports. Similarly margins on domestic production of cannabis are reduced to reflect the change made in balancing stage two.

A ratio of estimated import price to average street price is shown in Table 1b, column p6. This suggests that:

- i The distribution margin on cocaine imports should be lower than the other drugs so it is reduced by factor a 0.9
- ii The distribution margin on heroin imports should be relatively higher so it is increased by a factor 1.1

The new level of values after stage three are shown in T5(5%)d.

### Balancing stage four

As a final illustration, the values are made to sum to zero by changing either the consumption, supply or distribution margins according to which components are considered to be less reliable than others. The final version is presented in **Table 5(5%)e**.

### Balancing Process For 10% Seizure Rate (Table 5(10%) and 6(10%))

#### Balancing stage one

The initial quantity residual for the 10 per cent seizure rate is shown in **Table 5(10%)a**. The residuals for cocaine, ecstasy and cannabis are improved on the 5 per cent seizure rate whilst those for heroin and amphetamines have worsened.

Changes to quantities are reflected in T6(10%)b and the corresponding values are calculated and shown in T5(10%)b. The changes made are as follows:

#### Consumption

- Estimated consumption of ecstasy and cannabis in recreational use is too low (column q2 in Table 2b) with the 5 per cent seizure rate. Ecstasy and cannabis are generally considered to be popular amongst students

and teenagers many of whom may not be picked up by the BCS as it is a household survey and it excludes under 16s from its sample. Expenditure by regular/occasional recreational users (Table 2) may also be an underestimation. Hence, consumption of both ecstasy and cannabis is increased by a factor 3.

- Consumption of cocaine seems understated given the 5 per cent supply side figures. This could be an underestimation of users or of expenditure. Hence, consumption is increased by a factor 2.5.

#### Imports

- For amphetamines and heroin, the 10 per cent seizure rate produces supply side levels that seem low given the consumption data. Heroin imports are increased by a factor 2 and amphetamines by a factor 1.5.

The quantities are converted back using price data, and are presented in T5(10%)b.

### Balancing stage two

#### Supply

- As in the 5 per cent balancing process imports of cannabis are reduced by a factor 0.5. Domestic production of cannabis is reduced so the ratio of domestic production to imports is 2.5:1.
- The seizures of ecstasy were exceptionally high for 1996, and again a seizure rate of 10 per cent is unlikely. Hence imports are decreased by factor 0.75.

#### Consumption

- Consumption quantities for amphetamines are reduced by factor 0.8 to bring consumption down towards the levels of supply.

The new levels of quantities are shown in T6(10%)c and the corresponding values in T5(10%)c.

### Balancing stage three

In stage three adjustments are made to the value estimates rather than the quantity estimates. The following adjustments are made to the values in T5(10%)c and the changes shown in T5(10%)d:

- The margins on imports apply to the level of imports before balancing. Balancing stage two decreased imports of cannabis by a factor 0.5 and ecstasy by 0.75.

Margins on imports of these drugs are reduced by the same percentage to reflect that the margins now apply to a reduced level of imports. Margins on imports of amphetamines and heroin are increased to reflect the changes in imports in stage one. Similarly margins on domestic production of cannabis are reduced to reflect the change made in balancing stage two.

- A ratio of estimated import price to average street price is shown in Table 1b, column p6. This suggests that:
  - i The distribution margin on cocaine imports should be lower than the other drugs so it is reduced by a factor 0.9
  - ii The distribution margin on amphetamines imports and domestic production (we do not have specific evidence to assume different margins on imports and production) should be relatively higher so it is increased by a factor 1.25.

The new level of values after stage three are shown in T5(10%)d.

#### **Balancing stage four**

As with the other balancing processes the values are made to sum to zero with the final version presented in **Table 5(10%)e**.

#### **Balancing Process For 15% Seizure Rate (Table 5(15%) and 6(15%))**

##### **Balancing stage one**

The initial quantity residual for the 15 per cent seizure rate is shown in **Table 5(15%)a**. The residuals for cocaine, ecstasy and cannabis are improved on the 10 per cent seizure rate whilst those for heroin and amphetamines have worsened.

Changes to quantities are reflected in T6(15%)b and the corresponding values are calculated and shown in T5(15%)b. The changes made are as follows:

##### *Consumption*

For the same reasons as for the other balancing processes consumption of both ecstasy and cannabis is increased by a factor 2.5, and cocaine by a factor 1.75.

- The change in seizure rate from 10 per cent to 15 per cent reduced the supply of heroin (imports + domestic production) by a factor 0.63. A reduction in the supply of a drug would imply a reduction in the use of a drug, so consumption of heroin is scaled down by the same factor.

##### *Imports*

- For amphetamines and heroin, the 15 per cent seizure rate produces supply side levels that seem low given the consumption data. Heroin imports are increased by a factor 2 and amphetamines by a factor 2.25.

The quantities are converted back using price data, and are presented in T5(15%)b.

#### **Balancing stage two**

##### *Supply*

- As in the other balancing processes, imports of cannabis are reduced by a factor 0.5.

##### *Consumption*

- Consumption quantities for amphetamine are reduced by factor a 0.7 to bring consumption down towards the levels of supply.

The new levels of quantities are shown in T6(15%)c and the corresponding values in T5(15%)c.

#### **Balancing stage three**

In stage three adjustments are made to the value estimates rather than the quantity estimates. The following adjustments are made to the values in T5(15%)c and the changes shown in T5(15%)d:

- The margins on imports apply to the level of imports before balancing. Balancing stage one increased imports of heroin by factor 2, amphetamines by 2.25 and decreased imports of cannabis by 0.5. Margins on imports of these drugs are increased by the same percentage to reflect that the margins now apply to a reduced level of imports.
- A ratio of estimated import price to average street price is shown in Table 1b, column p6. This suggests that:
  - i The distribution margin on cocaine imports should be lower than the other drugs so it is reduced by factor 0.9
  - ii The distribution margin on amphetamines imports and domestic production (we do not have specific evidence to assume different margins on imports and production) should be relatively higher so it is increased by a factor 1.25. The distribution margin on heroin imports should be relatively higher so it is increased by a factor 1.1

The new level of values after stage three are shown in T5(15%)d.

### **Balancing stage four**

As with the other balancing processes the values are made to sum to zero with the final version presented in **Table 5(15%)e**.

### **Balancing Process For 20% Seizure Rate (Table 5(20%) and 6(20%))**

#### **Balancing stage one**

The initial quantity residual for the 20 per cent seizure rate is shown in **Table 5(20%)a**. The residuals for cocaine, ecstasy and cannabis are improved on the 15 per cent seizure rate whilst those for heroin and amphetamine have worsened.

Changes to quantities are reflected in T6(20%)b and the corresponding values are calculated and shown in T5(20%)b. The changes made are as follows:

#### *Consumption*

For the same reasons as for the other balancing processes consumption of ecstasy is increased by a factor 2 and for cannabis by a factor 1.75, and for cocaine by a factor 1.5.

#### *Imports*

- For amphetamines and heroin, the 20 per cent seizure rate produces supply side levels that seem low given the consumption data. Heroin imports are increased by a factor 2 and amphetamines by a factor 3.
- The quantities are converted back using price data, and are presented in T5(20%)b.

### **Balancing stage two**

#### *Supply*

- As in the other balancing processes, imports of cannabis are reduced by a factor 0.5.

#### *Consumption*

- The change in seizure rate from 10% to 20% reduced the supply of heroin (imports + domestic production) by a factor 0.45. A reduction in supply implies a reduction in use, so consumption of heroin is scaled down by the same factor.
- Consumption quantities for amphetamines are reduced by factor 0.6 to bring consumption down towards the levels of supply.

The new levels of quantities are shown in T6(20%)c and the corresponding values in T5(20%)c.

### **Balancing stage three**

- In stage three, adjustments are made to the value estimates rather than the quantity estimates. The following adjustments are made to the values in T5(20%)c and the changes shown in T5(20%)d:
- The margins on imports apply to the level of imports before balancing. Balancing stage one increased imports of heroin by a factor 2, amphetamines by 3 and decreased imports of cannabis by 0.5. Margins on imports of these drugs are increased by the same percentage to reflect that the margins now apply to a reduced level of imports.

- A ratio of estimated import price to average street price is shown in Table 1b, column p6. This suggests that:

The distribution margin on amphetamines imports and domestic production (we do not have specific evidence to assume different margins on imports and production) should be relatively higher so it is increased by a factor 1.25. The distribution margin on heroin imports should be relatively higher so it is increased by a factor 1.1

The new level of values after stage three are shown in T5(20%)d.

### **Balancing stage four**

As with the other balancing processes the values are made to sum to zero with the final version presented in **Table 5(15%)e**.

### **Summary**

The quantity equations are of limited interest in themselves for national accounts purposes but have been used in the balancing process.

The balancing process brings together the data on the demand and supply sides to produce a coherent estimate for the value of illegal drugs. The final estimates produced by the four different seizure rates (5%, 10%, 15% and 20%) are shown in Tables 5(5%)e, 5(10%)e, 5(15%)e and 5(20%)e.

The final estimates of consumption, imports, domestic production and margins are presented in Section 4. From these figures, estimates of value added are made.

**Table 5(5%) : Value balances (£ million) for 5% seizure rate**

**T5(5%) (a) Values assuming 5% seizure rate**

	Consumption <sup>1</sup>	Import <sup>2</sup>	D.Production <sup>3</sup>	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	295	431	0	1,545	0	1,976	-1,681
Heroin	1,120	177	0	749	0	927	193
Ecstasy	139	209	13	726	181	1,130	-991
Amphetamines	481	8	2	246	293	549	-68
Cannabis	1,179	1,137	390	3,503	5,572	10,602	-9,423
LSD	73	1.2	0	4.3	0	5.6	67
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,061	2,029	470	6,926	6,538	15,963	-11,901

**T5(5%) (b) Values after balancing stage one**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	886	431	0	1,545	0	1,976	-1,090
Heroin	1,120	177	0	749	0	927	193
Ecstasy	694	209	13	726	181	1,130	-436
Amphetamines	481	8	2	246	293	549	-68
Cannabis	5,896	1,137	390	3,503	5,572	10,602	-4,707
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	9,923	2,049	470	6,972	6,538	16,030	-6,106

**T5(5%) (c) Values after balancing stage two**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	886	259	0	1,545	0	1,804	-917
Heroin	1,120	177	0	749	0	927	193
Ecstasy	694	157	13	726	181	1,077	-384
Amphetamines	481	8	2	246	293	549	-68
Cannabis	5,896	569	186	3,503	5,572	9,829	-3,934
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	9,923	1,256	266	6,972	6,538	15,032	-5,109

**T5(5%) (d) Values after balancing stage three**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	886	259	0	834	0	1,093	-207
Heroin	1,120	177	0	824	0	1,002	118
Ecstasy	694	157	13	544	181	896	-202
Amphetamines	481	8	2	246	293	549	-68
Cannabis	5,896	569	186	1,751	2,647	5,153	742
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	9,923	1,256	266	4,403	3,614	9,539	384

**T5(5%) (e) Values after balancing stage four**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	1,093	259	0	834	0	1,093	0
Heroin	1,120	237	0	883	0	1,120	0
Ecstasy	795	157	13	494	131	795	0
Amphetamines	549	8	2	246	293	549	0
Cannabis	5,524	569	186	1,937	2,833	5,524	0
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	9,927	1,315	266	4,597	3,749	9,927	0

1. For street prices refer to Table 1b column p5, and for average purities see Table 3.

2. For import prices refer to Table 3.

3. Domestic Production is the estimated total value of drugs produced within the UK. Refer to Table 4 for these cost estimates.

Table 5(10%) : Value balances (£ million) for 10% seizure rate

**T5(10%) (a) Values assuming 10% seizure rate**

	Consumption <sup>1</sup>	Import <sup>2</sup>	D.Production <sup>3</sup>	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	295	204	0	732	0	936	-641
Heroin	1,120	84	0	355	0	439	681
Ecstasy	139	99	6.1	344	86	535	-396
Amphetamines	481	4	0.9	117	139	260	221
Cannabis	1,179	539	190	1,659	2,772	5,160	-3,981
LSD	73	0.6	0	2.1	0	2.6	70
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,061	995	262.1	3,360	3,489	8,106	-4,045

**T5(10%) (b) Values after balancing stage one**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	739	204	0	732	0	936	-197
Heroin	1,120	168	0	355	0	523	597
Ecstasy	416	99	6.1	344	86	535	-119
Amphetamines	481	6	0.9	117	139	262	220
Cannabis	3,537	539	190	1,659	2,772	5,160	-1,623
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	7,133	1,102	262	3,409	3,489	8,262	-1,122

**T5(10%) (c) Values after balancing stage two**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	739	204	0	732	0	936	-197
Heroin	1,120	168	0	355	0	523	597
Ecstasy	416	74	6.1	344	86	510	-94
Amphetamines	385	6	0.9	117	139	262	123
Cannabis	3,537	269	147	1,659	2,772	4,847	-1,310
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	7,044	808	219	3,409	3,489	7,925	-881

**T5(10%) (d) Values after balancing stage three**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	739	204	0	659	0	863	-124
Heroin	1,120	168	0	781	0	949	171
Ecstasy	416	74	6.1	258	86	424	-8
Amphetamines	385	6	0.9	219	173	399	-13
Cannabis	3,537	269	147	830	2,090	3,335	202
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	7,044	808	219	2,948	2,841	6,816	227

**T5(10%) (e) Values after balancing stage four**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	801	173	0	628	0	801	0
Heroin	949	168	0	781	0	949	0
Ecstasy	420	74	6.1	256	84	420	0
Amphetamines	392	6	0.9	215	170	392	0
Cannabis	3,436	269	147	880	2,140	3,436	0
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	6,844	777	219	2,962	2,886	6,844	0

1. For street prices refer to Table 1b column p5, and for average purities see Table 3.

2. For import prices refer to Table 3.

3. Domestic Production is the estimated total value of drugs produced within the UK. Refer to Table 4 for these cost estimates.

**Table 5(15%) : Value balances (£ million) for 15% seizure rate**

**T5(15%) (a) Values assuming 15% seizure rate**

	Consumption <sup>1</sup>	Import <sup>2</sup>	D.Production <sup>3</sup>	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	295	129	0	461	0	589	-294
Heroin	1,120	53	0	223	0	276	844
Ecstasy	139	62	3.9	216	54	337	-198
Amphetamines	481	2	0.6	73	87	164	318
Cannabis	1,179	339	130	1,045	1,841	3,355	-2,176
LSD	73	0.4	0	1.3	0	1.7	71
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,061	651	200	2,172	2,474	5,497	-1,436

**T5(15%) (b) Values after balancing stage one**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	517	129	0	461	0	589	-72
Heroin	705	106	0	223	0	329	376
Ecstasy	347	62	3.9	216	54	337	10
Amphetamines	481	5	0.6	73	87	167	315
Cannabis	2,948	339	130	1,045	1,841	3,355	-407
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	5,845	728	200	2,222	2,474	5,623	221

**T5(15%) (c) Values after balancing stage two**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	517	129	0	461	0	589	-72
Heroin	705	106	0	223	0	329	376
Ecstasy	347	62	3.9	216	54	337	10
Amphetamines	337	5	0.6	73	87	167	170
Cannabis	2,948	170	129	1,045	1,841	3,184	-237
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	5,700	558	199	2,222	2,474	5,453	247

**T5(15%) (d) Values after balancing stage three**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	517	129	0	415	0	543	-26
Heroin	705	106	0	492	0	597	108
Ecstasy	347	62	3.9	216	54	337	10
Amphetamines	337	5	0.6	207	109	322	15
Cannabis	2,948	170	129	522	1,841	2,662	286
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	5,700	558	199	2,054	2,496	5,308	393

**T5(15%) (e) Values after balancing stage four**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	543	129	0	415	0	543	0
Heroin	705	160	0	546	0	705	0
Ecstasy	342	62	3.9	219	57	342	0
Amphetamines	322	5	0.6	207	109	322	0
Cannabis	2,805	170	129	594	1,912	2,805	0
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	5,563	612	199	2,182	2,570	5,563	0

1. For street prices refer to Table 1b column p5, and for average see Table 3.

2. For import prices refer to Table 3.

3. Domestic Production is the estimated total value of drugs produced within the UK. Refer to Table 4 for these cost estimates.

**Table 5(20%) : Value balances (£ million) for 20% seizure rate**

**T5(20%) (a) Values from initial calculations**

	Consumption <sup>1</sup>	Import <sup>2</sup>	D.Production <sup>3</sup>	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	295	91	0	325	0	416	-121
Heroin	1,120	37	0	158	0	195	925
Ecstasy	139	44	2.7	153	38	238	-99
Amphetamines	481	2	0.4	52	62	116	366
Cannabis	1,179	239	100	737	1,372	2,449	-1,270
LSD	73	0.3	0	0.9	0	1.2	71
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,061	478	168	1,578	1,964	4,188	-127

**T5(20%) (b) Values after balancing stage one**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	443	91	0	325	0	416	27
Heroin	498	75	0	158	0	232	265
Ecstasy	277	44	2.7	153	38	238	40
Amphetamines	481	5	0.4	52	62	119	363
Cannabis	2,063	239	100	737	1,372	2,449	-385
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,610	541	168	1,628	1,964	4,300	309

**T5(20%) (c) Values after balancing stage two**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	443	91	0	325	0	416	27
Heroin	498	75	0	158	0	232	265
Ecstasy	277	44	2.7	153	38	238	40
Amphetamines	289	5	0.4	52	62	119	170
Cannabis	2,063	120	100	737	1,372	2,329	-266
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,417	421	168.2	1,628	1,964	4,181	236

**T5(20%) (d) Values after balancing stage three**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	443	91	0	325	0	416	27
Heroin	498	75	0	347	0	422	76
Ecstasy	277	44	2.7	153	38	238	40
Amphetamines	289	5	0.4	194	77	277	12
Cannabis	2,063	120	100	369	1,372	1,960	103
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,417	421	168	1,591	1,979	4,159	258

**T5(20%) (e) Values after balancing stage four**

	Consumption	Import	D.Production	Distribution (I)	Distribution (P)	Total Supply	Residual
Cocaine	443	104	0	339	0	443	0
Heroin	498	113	0	385	0	498	0
Ecstasy	258	44	2.7	163	48	258	0
Amphetamines	277	5	0.4	194	77	277	0
Cannabis	2,012	120	100	394	1,398	2,012	0
LSD	73	22	0	51	0	73	0
Methadone	340	0	0	0	340	340	0
Other drugs	434	65	65	152	152	434	0
	4,334	473	168	1,678	2,015	4,334	0

1. For street prices refer to Table 1b column p5, and for average purities see Table 3.

2. For import prices refer to Table 3.

3. Domestic Production is the estimated total value of drugs produced within the UK. Refer to Table 4 for these cost estimates.

**Table 6(5%) : Quantity balances (000 kg) for 5% seizure rate**

**6(5%) (a) Quantities from initial calculations**

	Consumption	Import	D.Production	Residual
	C	I	P	C - I - P
Cocaine	2.9	22.0	0.0	(19.0)
Heroin	14.7	14.1	0.0	0.7
Ecstasy	12.3	92.2	23.0	(102.9)
Amphetamines	21.9	16.0	4.0	1.9
Cannabis	340.8	1,457.7	2,301.0	(3,417.9)
LSD	26.4	2.2	-	24.2
Methadone	+	..	..	
Other drugs	+	..	..	

**Notes:**

- Domestic Production is the estimated total amount of drugs produced within the UK.
- Supply side data for LSD are unreliable, so after stage one only consumption data used.
- Supply and price data are not available for 'methadone' or 'other drugs' so balancing process cannot be applied to these.
- Consumption and imports of cannabis includes all varieties while production is only of cannabis plants.
- All quantities are in 000kg except ecstasy which is in millions of doses.

**6(5%) (b) Quantities after balancing stage one**

	Consumption	Import	D.Production	Residual
Cocaine	8.8	22.0	0.0	(13.2)
Heroin	14.7	14.1	0.0	0.7
Ecstasy	61.6	92.2	23.0	(53.6)
Amphetamines	21.9	16.0	4.0	1.9
Cannabis	1,703.9	1,457.7	2,301.0	(2,054.8)

**6(5%) (c) Quantities after balancing stage two**

	Consumption	Import	D.Production	Residual
Cocaine	8.8	13.2	0.0	(4.4)
Heroin	14.7	14.1	0.0	0.7
Ecstasy	61.6	69.1	23.0	(30.5)
Amphetamines	21.9	16.0	4.0	1.9
Cannabis	1,703.9	728.8	1,093.3	(118.2)

**Table 6(10%) : Quantity balances (000 kg) for 10% seizure rate**

**6(10%) (a) Quantities from initial calculations**

	Consumption	Import	D.Production	Residual
	C	I	P	C - I - P
Cocaine	2.9	10.4	0.0	(7.5)
Heroin	14.7	6.7	0.0	8.1
Ecstasy	12.3	43.7	10.9	(42.2)
Amphetamines	21.9	7.6	1.9	12.4
Cannabis	340.8	690.5	1,145.0	(1,494.7)
LSD	26.4	1.1	-	25.4
Methadone	+	..	..	
Other drugs	+	..	..	

**Notes:**

- Domestic Production is the estimated total amount of drugs produced within the UK.
- Supply side data for LSD are unreliable, so after stage one only consumption data used.
- Supply and price data are not available for 'methadone' or 'other drugs' so balancing process cannot be applied to these.
- Consumption and imports of cannabis includes all varieties while production is only of cannabis plants.
- All quantities are in 000kg except ecstasy which is in millions of doses.

**6(10%) (b) Quantities after balancing stage one**

	Consumption	Import	D.Production	Residual
Cocaine	7.4	10.4	0.0	(3.1)
Heroin	14.7	13.3	0.0	1.4
Ecstasy	37.0	43.7	10.9	(17.6)
Amphetamines	21.9	11.4	1.9	8.6
Cannabis	1,022.3	690.5	1,145.0	(813.1)

**6(10%) (c) Quantities after balancing stage two**

	Consumption	Import	D.Production	Residual
Cocaine	7.4	10.4	0.0	(3.1)
Heroin	14.7	13.3	0.0	1.4
Ecstasy	37.0	32.7	10.9	(6.7)
Amphetamines	17.5	11.4	1.9	4.3
Cannabis	1,022.3	345.2	863.1	(186.0)

**Table 6(15%) : Quantity balances (000 kg) for 15% seizure rate**

**6(15%) (a) Quantities from initial calculations**

	Consumption C	Import I	D.Production P	Residual C - I - P
Cocaine	2.9	6.6	0.0	(3.6)
Heroin	14.7	4.2	0.0	10.5
Ecstasy	12.3	27.5	6.9	(22.0)
Amphetamines	21.9	4.8	1.2	15.9
Cannabis	340.8	434.7	759.0	(853.0)
LSD	26.4	0.7	-	25.8
Methadone	+	..	..	
Other drugs	+	..	..	

**Notes:**

- Domestic Production is the estimated total amount of drugs produced within the UK.
- Supply side data for LSD are unreliable, so after stage one only consumption data used.
- Supply and price data are not available for 'methadone' or 'other drugs' so balancing process cannot be applied to these.
- Consumption and imports of cannabis includes all varieties while production is only of cannabis plants.
- All quantities are in 000kg except ecstasy which is in millions of doses.

**6(15%) (b) Quantities after balancing stage one**

	Consumption	Import	D.Production	Residual
Cocaine	5.1	6.6	0.0	(1.4)
Heroin	9.3	8.4	0.0	0.9
Ecstasy	30.8	27.5	6.9	(3.5)
Amphetamines	21.9	10.7	1.2	10.0
Cannabis	852.0	434.7	759.0	(341.8)

**6(15%) (c) Quantities after balancing stage two**

	Consumption	Import	D.Production	Residual
Cocaine	5.1	6.6	0.0	(1.4)
Heroin	9.3	8.4	0.0	0.9
Ecstasy	30.8	27.5	6.9	(3.5)
Amphetamines	15.3	10.7	1.2	3.4
Cannabis	852.0	217.4	759.0	(124.4)

**Table 6(20%): Quantity balances (000 kg) for 20% seizure rate**

**6(20%) (a) Quantities from initial calculations**

	Consumption C	Import I	D.Production P	Residual C - I - P
Cocaine	2.9	4.6	0.0	(1.7)
Heroin	14.7	3.0	0.0	11.8
Ecstasy	12.3	19.4	4.9	(11.9)
Amphetamines	21.9	3.4	0.8	17.7
Cannabis	340.8	306.9	567.0	(533.1)
LSD	26.4	0.5	-	25.9
Methadone	+	..	..	
Other drugs	+	..	..	

**Notes:**

- Domestic Production is the estimated total amount of drugs produced within the UK.
- Supply side data for LSD are unreliable, so after stage one only consumption data used.
- Supply and price data are not available for 'methadone' or 'other drugs' so balancing process cannot be applied to these.
- Consumption and imports of cannabis includes all varieties while production is only of cannabis plants.
- All quantities are in 000kg except ecstasy which is in millions of doses.

**6(20%) (b) Quantities after balancing stage one**

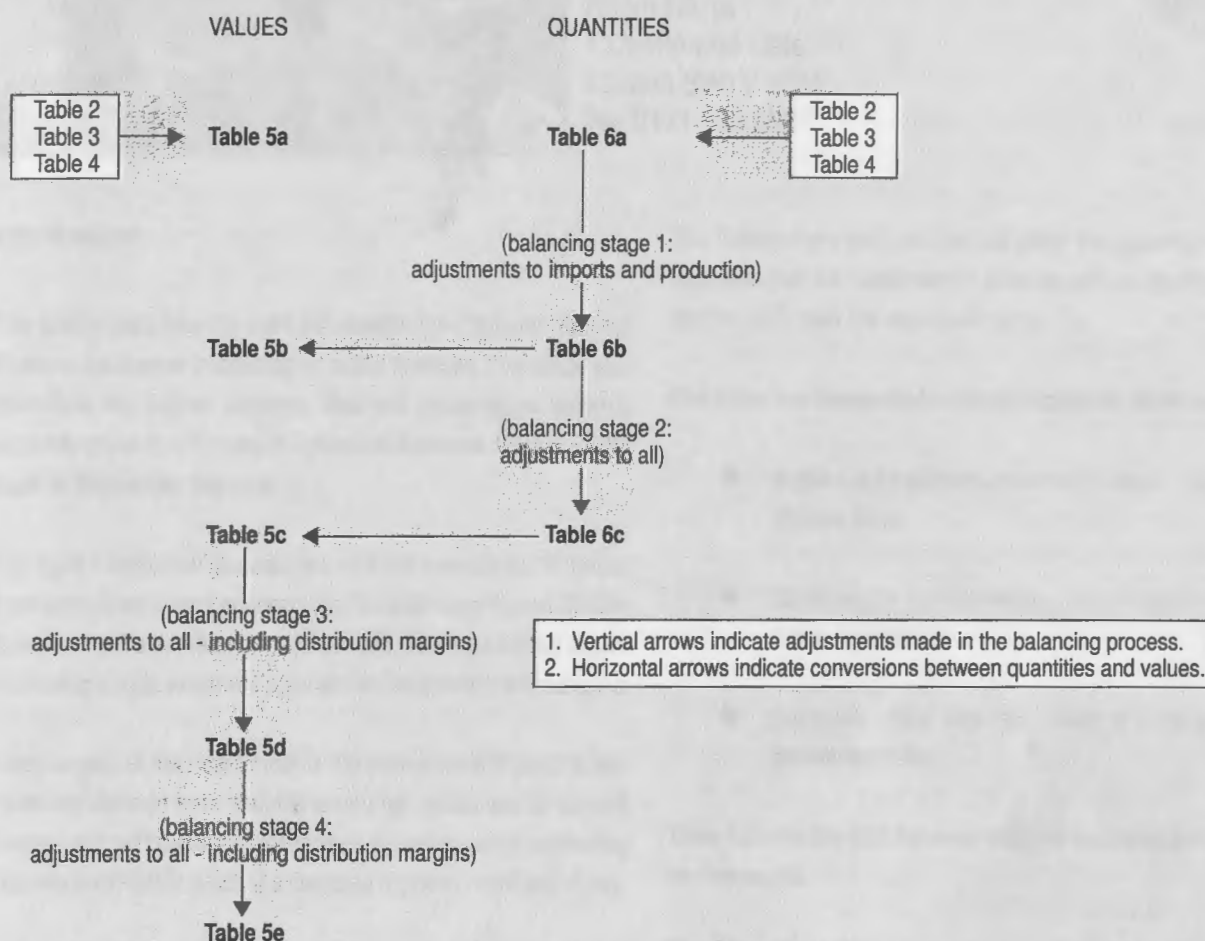
	Consumption	Import	D.Production	Residual
Cocaine	4.4	4.6	0.0	(0.2)
Heroin	6.5	5.9	0.0	0.6
Ecstasy	24.7	19.4	4.9	0.4
Amphetamines	21.9	10.1	0.8	10.9
Cannabis	596.4	306.9	567.0	(277.5)

**6(20%) (c) Quantities after balancing stage two**

	Consumption	Import	D.Production	Residual
Cocaine	4.4	4.6	0.0	(0.2)
Heroin	6.5	5.9	0.0	0.6
Ecstasy	24.7	19.4	4.9	0.4
Amphetamines	13.1	10.1	0.8	2.2
Cannabis	596.4	153.4	567.0	(124.1)

**Figure 1**

**Schematic diagram summarizing the tables involved in the balancing process**



The initial estimates of values and quantities are compiled in Tables 7a and 8a.

Balancing stage one: Adjustments were made to the quantities in Table 8a. The revised quantities are presented in Table 8b and the corresponding implications for the value estimated are reflected in Table 7b.

Balancing stage two: Adjustments were made to the quantities in Table 8b. The revised quantities are presented in Table 8b and the corresponding implications for the value estimated are reflected in Table 7c.

Balancing stage three: Adjustments were made to the quantities in Table 7c. The revised values are presented in Table 7d.

Balancing stage three: Adjustments were made to the quantities in Table 7d. The revised and final version of the value estimates are presented in Table 7d.

References to Table 5a relate to all tables 5(5%)a, 5(10%)a, 5(15%)a and 5(20%)a. Similarly, references to Table 6a relate to all tables 6(5%)a, 6(10%)a, 6(15%)a and 6(20%)a.

# New Format For Public Finances



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## Introduction

This article describes the extra information the Office for National Statistics has begun publishing on public finances. The article also describes the further changes that will occur when national accounts move to a European System of Accounts 1995 (ESA95) basis in September this year.

The extra information is consistent with the new format for public finances outlined in the Economic and Fiscal Strategy Report (EFSR) presented to Parliament on 11 June 1998. The new format allows monitoring and assessment against the Government's fiscal rules.

A key aspect of the new format is the prominence it gives to two measures derived from national accounts - public sector current balance and net borrowing - rather than the public sector borrowing requirement (PSBR) which is a measure of government cash flows.

The PSBR has been renamed as the public sector net cash requirement to avoid confusion with public sector net borrowing which is on an accruals basis.

## The Economic and Fiscal Strategy Report

The EFSR presented a new format for public finances which corresponded more closely to the Government's two fiscal rules, and emphasised the importance of distinguishing between current and capital spending. These two fiscal rules are:

- the *golden rule*: over the economic cycle, the Government will borrow only to invest and not to fund current spending;
- the *sustainable investment rule*: net public sector debt as a proportion of GDP will be held over the economic cycle at a stable and prudent level.

The Government believes that, all other things being equal, it is desirable that net public sector debt be reduced to below 40 per cent of GDP over the economic cycle.

The three key measures for monitoring public finances are:

- public sector surplus on current budget - used to judge Golden Rule;
- public sector net borrowing - the principal measure of the budget deficit;
- net public sector debt ratio - used to judge sustainable investment rule.

Table A shows the links between national accounts and the EFSR key measures.

## The New First Releases

One of ONS's key objectives is to make information available against which government policies can be monitored and judged. ONS has begun publishing two new First Releases - *Public Sector Finances* which is monthly, and *Public Sector Accounts* which is quarterly. They make information available in the new format to help monitor fiscal policy effectively.

On 16 June 1998 ONS published the PSBR First Release under the new name *Public Sector Finances*. It showed the PSBR under its new name *public sector net cash requirement*.

On 16 July ONS will expand *Public Sector Finances* to include public sector net borrowing as well as all the information previously shown on the net cash requirement. This style is expected to continue until other monthly statistics are developed - such as for the current balance.

TABLE A part 1

Existing UK national accounts	Treasury's new format for public finances
Current receipts	
- current expenditure	
<b>= current surplus</b>	
+ capital gains tax (CGT)	
+ other taxes on capital	
- depreciation	
	<b>= surplus on current budget</b>
+ capital grants received	*
- capital grants paid	*
- gross fixed capital expenditure	*
+ depreciation	*
+ fixed asset sales	*
- increase in stocks	*
<b>= financial surplus/deficit</b>	<b>= - net borrowing</b>
- accruals adjustments	
- net lending	
- net acquisition of shares	
- transactions in notionally funded pensions	
- third party deposits in public accounts	
- other financial transactions <sup>1</sup>	
<b>= - PSBR</b>	<b>= - net cash requirement</b>

\* the components of "net investment" in Treasury's format.

1. Includes the balancing item, trade credit, and some public corporation transactions.

TABLE A Part 2

UK national accounts under ESA95	Treasury's new format for public finances post ESA95
Current receipts <sup>2</sup> (includes CGT)	
- current expenditure <sup>2</sup> (includes transactions in notionally funded pensions)	
- depreciation	
<b>= net saving</b>	
+ other taxes on capital	<b>= surplus on current budget</b>
+ capital grants received	*
- capital grants paid	*
<b>= change in net worth due to saving and capital transfers</b>	
- gross fixed capital expenditure	*
+ depreciation	*
+ fixed asset sales	*
- increase in stocks	*
<b>= net lending(+)/borrowing(-)</b>	<b>= - net borrowing</b>
- accruals adjustments	
- net lending	
- net acquisition of shares	
- other financial transactions <sup>1</sup>	
<b>= - net cash requirement</b>	<b>= - net cash requirement</b>

Note that under ESA95 there will be changes from different ways of measuring some components for example capital expenditure and accrued interest.

\* the components of "net investment" in Treasury's format.

1. Includes the balancing item, trade credit, and some public corporation transactions.

2. Current receipts and expenditure under ESA95 include capital gains tax and transactions in notionally funded pension schemes.

On 23 June the new quarterly First Release *Public Sector Accounts* was published. It gave detailed quarterly information on the public sector derived from the quarterly national accounts published the same day. It also presented quarterly data for the public sector surplus on current budget, and net investment, on EFSR definitions.

*Public Sector Accounts* will be published again in September and December to coincide with the publication of national accounts. In 1999 the quarterly cycle will be brought forward one month. The first *Public Sector Accounts* under the new timetable will be published on 26th February 1999 to coincide with the UK's report on general government deficit and debt to the European Commission under the Maastricht Treaty.

## Definitions

### Public sector

The public sector includes central government, local government, and public corporations. Public corporations include, for example, nationalised industries and national health service trusts. A list of bodies classified to the public sector can be found in *Sector Classification Guide for the National Accounts* - available from the ONS book shop and The Stationery Office. A new version based on ESA95 will be published in September.

### Current balance

This is from national accounts. It is the surplus of the public sector's receipts over current expenditure on an accruals basis.

Receipts include: current taxes, national insurance and pension contributions, interest and dividends, rent, and trading surpluses.

Current expenditure includes spending on staff; goods and services; subsidies; pensions and social security benefits, and other current grants.

The public sector surplus on current budget in the EFSR is equivalent to the current balance in existing national accounts, less depreciation, plus all capital tax receipts.

When national accounts move onto ESA95 in September, the surplus on current budget in the EFSR will be equivalent to net saving plus capital tax receipts. The adjustment is because under ESA95 capital taxes include inheritance tax and other taxes on capital transfers (but not capital gains tax which is treated as a current receipt). In the EFSR, the surplus on current budget treats all taxes as current.

In ESA95 capital consumption is counted as an expenditure in calculating net saving. It is deducted in the *acquisition of non-financial assets account*. This is the same approach as in the EFSR, except that in the EFSR capital consumption is called depreciation.

The current deficit is sometimes quoted: it is the current surplus with sign reversed.

### Net borrowing

Public sector net borrowing is a national accounts concept. It is the difference between the accrued income and expenditure of the public sector, and is equivalent to the public sector financial surplus/deficit in existing UK national accounts. In ESA95 it is called net lending/borrowing: a positive figure indicates lending, a negative figure is borrowing.

In the EFSR new format, net borrowing is the current deficit (surplus on current budget with sign reversed) plus expenditure on fixed capital formation net of depreciation and fixed asset sales; plus expenditure on capital grants less any received. The EFSR refers to the sum of these capital items as "net investment". Note that net investment includes expenditure on investment grants to other sectors of the economy as well as expenditure on public sector fixed assets.

For the period between the introduction of the new format for public finances (11 June 1998) and the introduction of ESA95 (24 September 1998) the terminology could be a little confusing in that, within national accounts, presentations of the public sector will use "net borrowing" whereas other sectors will continue with "financial deficit". After the introduction of ESA95 the new term "net borrowing" will be used throughout, and it will be equal to net borrowing in the EFSR new format.

Negative net borrowing is called net lending.

## Net cash requirement

The public sector net cash requirement (previously called the PSBR) is a measure of the public sector's cash flow unique to the UK. It is the difference between the cash expenditure and cash income of the public sector. As well as current and capital spending, cash expenditure also includes net expenditure on financial assets acquired for policy reasons - such as lending to other sectors of the economy to help support the activities of those sectors - rather than acquired for liquidity management reasons. The financial assets acquired for policy reasons are known as determinants of the net cash requirement. Transactions in other financial assets and in financial liabilities are known as financing items since they help supply the cash required.

The net cash requirement is reduced by privatisation proceeds; net borrowing is not affected.

## Net Debt in new format

The net debt of the public sector is the total of public sector financial liabilities, minus liquid financial assets, that count as financing items in the net cash requirement. Liquid financial assets include holdings of cash, bank and building society deposits, short term commercial bonds, and the official reserves which include gold, foreign currencies and overseas government bonds.

This measure of net debt is at nominal prices rather than market prices. In particular it uses the prices at which government redeems gilts at maturity rather than their current market price. It is different from the net financial wealth of the public sector shown in national accounts. That measure is at market prices and includes a wider range of assets and liabilities - such as accruals adjustments.

Public sector net debt differs from general government gross debt reported under the Maastricht Treaty. The latter excludes public corporations and does not net-off liquid financial assets.

To a large extent net debt is the stock equivalent of the net cash requirement. The differences between the net cash requirement and changes in net debt are mainly from the difference between the issue price and nominal price of gilts; the uplift to index linked gilts; changes in the classification of public bodies; and changes in foreign currency exchange rates.

## Producing the Figures

The figures are compiled using existing methods for the monthly net cash requirement and quarterly national accounts. A new method was developed for calculating monthly net borrowing since these figures had not been produced before.

The monthly net cash requirement is calculated from monthly data on:

- central government cash flows recorded by Treasury;
- public sector bank and building society deposits and borrowing collected by BoE;
- the financial transactions of local authorities from DETR;
- some public corporations' financial transactions collected by ONS.

Monthly net borrowing is estimated by producing figures for each of the components that reconcile the difference between net borrowing and the net cash requirement. These are shown in table B.

For some of these components monthly data are available: such as central government transactions in notionally funded pension schemes and third party deposits in public accounts. For others, there are monthly data that provide an accurate approximation: such as central government transactions in company securities (estimated from privatisation proceeds) and lending to the private sector (estimated from data on student loans and launch aid loans to the aerospace industry). The public sector balancing item is estimated to be zero.

The most difficult component to estimate is that for accruals adjustments. These represent the differences between accrued and cash measures of the various flows which are accrued in national accounts. For example, most excise duties accrue when goods are sold but the cash does not appear in government bank accounts until the following month.

For calculating monthly net borrowing, accruals adjustments are estimated separately using a variety of methods that depend mainly on how the accrued figures are produced. The majority of the accrued figures are only available quarterly and so are not ready in time for the monthly net borrowing calculation, whereas cash figures are available. For most of these cases, the technique

is to estimate the accrued figure for the latest period by taking the accrued figure for the same period in the previous year and updating it by a moving average annual percentage change in the cash.

The monthly net borrowing figures, and reconciliation components, will be revised quarterly to bring them into line with the actual quarterly national accounts data.

Development Work

Precise figures for some of the components in the calculation of public sector net borrowing are not available in time for the monthly First Release and so have to be estimated. This means that the monthly net borrowing figures will be subject to larger revisions than those for the net cash requirement. ONS is working on methods to improve the initial estimates.

Development work will be undertaken to produce monthly measures of the current balance. Subject to feasibility, publication would begin in Autumn 1999.

Methods to produce figures for the net debt of the public sector more quickly and frequently will be examined.

A separate project is underway to improve the ONS estimates of non-financial balance sheets; this will improve estimates of the net financial wealth of the public sector.

The Introduction of ESA95

The new format for public finances will be consistent with the European System of Accounts 1995 (ESA95). ESA95 provides a robust set of definitions of government expenditure, income, and financial transactions to ensure public finances are presented fairly and consistently. It also makes international comparisons of public finances possible - such as the statistics needed for monitoring the European Union's excessive deficit procedure.

On 24 September ONS will publish national accounts for the first time according to the rules of ESA95. The treatment of some transactions in ESA95 is different to that in existing national accounts. The main changes affecting the public sector balances are:

- a) Some expenditure on computer software and on military assets with a civilian use will be treated as capital expenditure. At present it is current expenditure.

- b) The current account will include a charge for the depreciation of capital infrastructure such as roads and bridges. At present this is excluded from the capital consumption figures.
- c) Interest on gilts will be recorded as it accrues rather than when it is paid, and the difference between the issue price and redemption price of gilts will be recorded as interest spread over the life of the gilt.
- d) Transactions in government notional funded pension schemes will be recorded as current income and expenditure. At present these unfunded pension schemes, such as for teachers and NHS staff, are treated as if they were funded (in the sense of there being a stock of financial assets to pay the pensions) and the difference between contributions and pensions paid is treated as a financial transaction.
- e) Debt write-offs are treated as capital transfers and loan repayments, instead of just being a balance sheet change.
- f) Certain third party deposits in public accounts (at the Office of HM Paymaster General and the National Investment and Loans Office) that are government liabilities will be treated as financing the net cash requirement rather than determining it.
- g) Receipts of capital gains tax will be treated as current receipts rather than as capital receipts.

TABLE B: Reconciliation of net cash requirement and net borrowing.

The table shows the financial transactions that are estimated to derive monthly net borrowing from the monthly net cash requirement.

Net Cash Requirement

- net<sup>1</sup> acquisition of company securities
- net<sup>2</sup> lending to private sector and abroad
- transactions in unfunded pension schemes<sup>3</sup>
- accruals adjustments
- miscellaneous financial transactions<sup>4</sup>

= Net Borrowing

1. net of sales (privatisations)  
2. net of repayments  
3. the surplus of pensions paid over pension contributions  
4. includes third party deposits in public accounts, the national accounts balancing item, trade credit, and some other minor financial transactions.