

# Economic Trends

No. 532 March 1998

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#### Introduction

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 27 February 1998.
- 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.

- 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 T77
  - † 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

Office for National Statistics March 1998

# Articles published in Economic Trends

#### 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

April Methodology series for United Kingdom national accounts.

Deflation of trade in goods statistics.

June Regional Accounts 1995: Part 2.

Competitiveness in manufactures.

August Research and experimental development (R & D) statistics 1995.

The Budget: 2 July 1997.

The economy: developments and prospects.

September Geographical breakdown of the balance of payments current account.

Development of a final expenditure prices index.

Overseas trade in services: publication of monthly estimates.

October 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.

November Quarterly alignment adjustments in the UK National Accounts.

Globalisation: scope, issues and statistics.

The ABI respondents database: a new resource for industrial economics research.

December How should economic statistics respond to information technology?

1998

January Regional Accounts 1996: Part 1.

Geographical breakdown of exports and imports of UK trade in services by component.

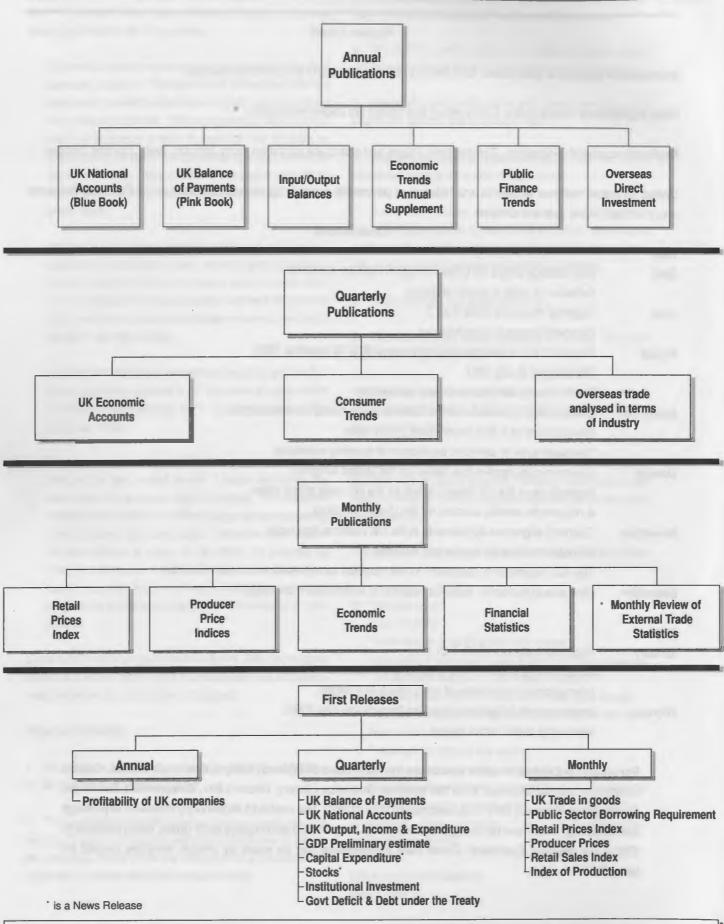
International comparisons of productivity and wages.

February Improvements to business inquiries through the new IDBR.

Measuring public sector output.

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



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

# In brief

#### **Articles**

This month we feature two articles. Jacqui Safford and Duncan MacGregor provide commentary, tables and charts to illustrate changes in employment in the public and private sectors of the United Kingdom from the 1960s to 1997. The Central Government, Local Authorities and Public Corporations sub-sectors of the public sector are defined and details of changes in coverage since the early 1980s provided (page 22).

Jim O'Donoghue and Colin Wilkie explain the development and uses of the Harmonised Indices of Consumer Prices (HICPs) in the European Union and the United Kingdom. Their article also provides the background to the construction of HICPs, details of the harmonisation measures and differences between the UK HICP and the Retail Prices Index (RPI) (page 33).

#### **Gross Domestic Product: Output methodological guide**

GSS Methodology series no. 5, Gross Domestic Product: Output methodological guide. Government Statistical Service, ISBN 185774 250 8, price £20.

A guide to the concepts employed in measuring GDP through the output approach is now available. It sets out, for the first time, a fully comprehensive list of both the indicator and deflator series used in the compilation of the output-based estimates.

Members of the GSS may obtain copies free of charge from the National Statistics library, tel 0171 533 6257. Customers outside the GSS may obtain copies from the National Statistics Sales Office, Zone B1/06, 1 Drummond Gate, London, SW1V 2QQ. Telephone 0171 533 5678 or fax 0171 533 5689.

#### **National Statistics Updates**

We are no longer featuring the list of economic statistics release dates in *Economic Trends*. However this information is included in the National Statistics publication *Updates*, which contains details of all economic and social statistical releases within the Government Statistical Service and the Bank of England for the forthcoming three months. *Updates* can be obtained from the National Statistics Enquiry Service on 0171 533 6363/6364.

#### Recent National Statistics economic publications

The Retail Prices Index Technical Manual. The Stationery Office, ISBN 0 11 621002 8, price £49.50. An explanation on how the Retail Prices Index is produced.

UK Economic Accounts: 1997 quarter 3. The Stationery Office, ISBN 0 11 621016 8, price £25. Consumer Trends: 1997 quarter 3. The Stationery Office, ISBN 0 11 620927 5, price £45. Labour Market Trends, March 1998. The Stationery Office, ISBN 0 11 620992 5, price £7.50. Financial Statistics, February 1998. The Stationery Office, ISBN 0 11 621005 2, price £22.50.

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 - March 1998**

#### By Adrian Richards, Economic Assessment - Office for National Statistics

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#### Overview

Economic growth slowed in the fourth quarter. This was caused by a sharp fall in energy production and a deterioration in the trade balance which has reduced demand for UK manufactures. The fall in energy production reflects the volatile nature of the series. The more important aspect for the long term is the deterioration in the trade balance which could be the first tangible signs of the strength of sterling impacting on the UK trade position. Revisions also show that the balance of trade was lower than originally estimated. Domestic demand appears to be continuing to grow relatively strongly, as shown by retail sale growth in January. Price inflation decelerated on both retail and producer measures. The one main area of concern remains earning growth that remained at the higher November level. Movements in the labour market are difficult to discern as the lower fall in claimant unemployment may have been caused to some extent by the lack of clearing of all the forms by the time the count was taken in early January.

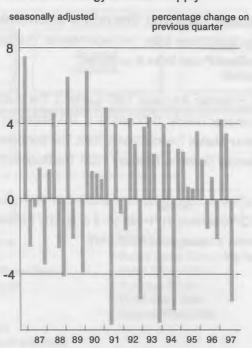
Indicators included	
UK Output, Income and Expenditure - Q4	Money supply, including a Sectoral breakdown - Q4-February
Industrial Production - December	Public sector borrowing requirement - January
Retail sales - January	Producer prices - January
Consumer confidence - February	Retail prices - January
New car registrations - January	Labour market statistics - December-January
UK external trade - December- January	

#### **GDP Activity**

Growth in output fell back sharply in the fourth quarter. This was due to two major factors - a sharp fall in energy output and a sharp deterioration in the trade deficit. The fall in energy output appears to be a temporary brake on growth, whereas the deterioration in the trade balance is in keeping with a more fundamental issue with potential implications for continued growth. Energy production appears to have been reduced as demand was lower due to unseasonably warm temperatures and a switch in production to less efficient energy sources. As chart 1 shows, this is not unusual as electricity, gas and water supply is a volatile series. This is the tenth fall in the 1990s and the fifth of this magnitude or greater.

The deterioration in the trade balance reflects lower demand for exports and an increase in the market share of imports, thereby reducing domestic demand for UK output. The impact of this can be seen on manufacturing output, which declined further in the fourth quarter, and is further reflected in the loss of 17,000

Chart 1
Growth in Energy & Water Supply



manufacturing jobs in December which has resulted in a decline of 28,000 in the last two quarters. These movements are in line with expectations of lower demand for exports and increased import penetration, thereby lowering the demand for UK goods in domestic markets. Revisions to the trade data show that the balance of trade in goods was £861 million less than reported previously.

Other parts of the economy continued to grow at very rapid rates. Services and construction are more insulated from competition from imports and have not been affected by the deterioration in the trade balance. However the tightening of monetary policy would be expected to reduce their growth rates, particularly for construction output, where demand for the projects may be dependent on borrowing. Early estimates for construction show moderate growth after the pause in the third quarter. Service sector growth remains close to its previous seasonal peak and at nearly double the growth rates averaged between 1960-1997 and 1980-1997. This strong growth in services is being driven by particularly strong growth in real estate, renting, business services, post, telecommunications and financial intermediation. Within business services, computing services has been growing at a very rapid rate.

#### **Domestic demand**

Chart 2 shows that domestic demand remained relatively strong in the fourth quarter, although well down on the growth rate in the late 1980s. The main reasons for continued growth was the rebound in consumers' expenditure, after the depressed growth in the third quarter and a further increase in stocks. Stock growth in the fourth quarter has been added to by the alignment adjustment. Investment growth remains relatively subdued continuing the pattern of moderate growth in investment seen throughout the current expansion. This is in stark contrast with 1980s, when investment increased sharply.

Since the fourth quarter, early indications are of continued strong growth in consumption. Retail sales growth rebounded sharply in January after stagnation in December. This was spread across most categories of store. The sharpest growth was in predominantly food stores and non-specialised sales. Overall, household goods remain well up on the three months to January in 1997. This may reflect the spending of windfalls on durable goods and the lack of price rises in this sector over this period. GB new car registration continued to increase in January and was 2% higher than in the previous three months. Consumer confidence remained unchanged between January and February. Attitudes to major purchases remains particularly strong.

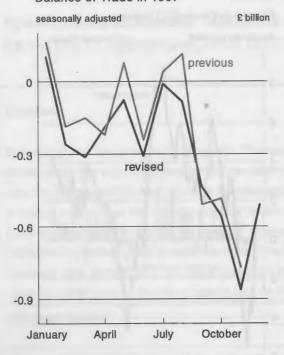
Chart 2
Growth in Domestic Demand



#### **External demand and supply**

Trade provides a complicated story, with revisions and the figure for the fourth quarter showing a balance that was worse than previously reported and deteriorating whereas December and January appear to show a partial improvement from the worst point in November. Despite these recent slight improvements the overall estimate is of a deteriorating trend. Revisions through 1997, which have resulted in a deterioration in the trade balance, are shown in chart 3. The balance of trade improved in December and the balance of trade in goods with Non-EU countries also improved in January. Despite the recent improvement, the overall impact has been a sharp deterioration in the trade deficit since September. Against expectations, changes in the balance of trade have not followed the relative exchange rate changes. Sterling appreciated most sharply against EU currencies, whereas the trade balance has deteriorated most sharply against non-EU countries. This may be due to changes in demand. EU countries' growth rates have accelerated while that of the USA has moderated slightly. This proposition is supported by the deterioration in the balance of trade for North America in the fourth quarter as exports fell and imports leapt.

Chart 3
Balance of Trade in 1997



Underlying the overall value changes, growth in export volumes has held up relatively strongly recently and was almost double that of imports in December. Movements have been erratic as the sharp growth in trade in goods in December was largely reversed in January.

#### Income

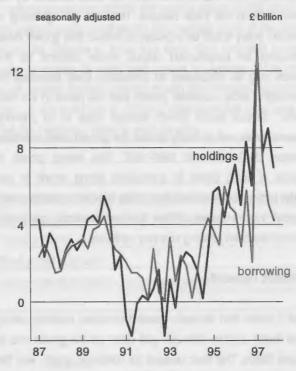
Early indications show that income from employment continued to grow relatively strongly whereas profits fell. Growth in employment income reflects the continued growth in employment and earnings, with high bonus payments resulting in acceleration in earnings growth in the fourth quarter. Companies appear to have borne the financial effects as profits (including the alignment adjustment) were down.

#### **Monetary & Sectoral indicators**

Monetary expansion remained historically high in January 1998. Narrow money, M0, grew by 7.2% in the year to February. Narrow money has consistently expanded by over 5% for 4½ years - the longest period of such growth since the 1970s. Broad money continued to grow by over 10% in the year to January, although the growth rate fell from a high of 11.5% in December. The public sector reduced its demand for funds in the first month of 1998.

The Sectoral breakdown of M4 holdings and lending counterparts shows that M4 holdings fell while M4 borrowing rose. Industrial and commercial companies ran down their holdings and increased borrowing. Other Financial institutions, shown in chart 4, reduced the growth in their holdings while also borrowing at a lower rate. The personal sector showed a rebound in growth of M4 holdings in the fourth quarter while increasing consumer credit growth.

Chart 4
Changes in M4 holdings and borrowing of Other Financial Institutions

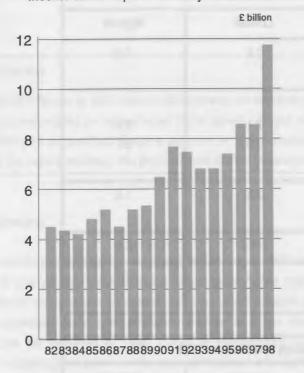


Growth in lending to individuals remained at 7.5% in the year to January. There was a slight decline in lending secured on dwelling relative to December with a slightly lower rate of activity in the housing market. Consumer credit continued to grow at a similar rate to December.

The Public Sector Borrowing Requirement (PSBR) showed a surplus of £10.4 billion in January i.e. a net repayment. Chart 5 shows that January is usually a month of repayments, but the scale of the repayment is much larger than in earlier periods. This additional net income has resulted in a repayment to date of £4.2 billion compared with borrowing of £10.6 billion in the same period of 1996-97. Excluding privatisation proceeds also shows a marked difference as privatisation proceeds were £2.4 billion less than in the first ten months of 1996-97. The changes to the tax system may have resulted in a change in the timing of revenue and also a change in the amount received. Higher income tax receipts were the main cause of greater cash receipts. Households have contributed a larger share of the

higher taxes. Corporation tax receipts were up far less on January 1997 than income tax receipts.

Chart 5
Income tax receipts in January



#### **Prices and wages**

Inflationary pressure appeared to fall in January as the RPI fell across all measures and producer price inflation was non-existent. The one main area of inflationary pressure - average earnings growth - remained at the higher level recorded in November.

Retail price inflation fell across all the main measures between the year to December 1997 and the year to January 1998. The RPI all items fell from 3.6% in December to 3.3 per cent in January. Removing mortgage interest payments (RPIX) also show a decrease - down to the governments target of 2.5%. Part of the fall was due to record breaking sales for clothing, footwear and household goods. This is a temporary factor, but the index was inflated in December by the largest pre-Christmas increase for household goods. The breakdown between goods and services shows that goods inflation has fallen most sharply, opening a wider differential with services inflation which is close to double the rate of goods inflation.

Producer prices remain subdued and if anything showed signs of weakening further in the 12 months to January 1998. Output prices for home sales fell from 1.0% in the 12 months to December to 0.7% in the 12 months to January. This has been

influenced by the continuation in the fall in the price of Petroleum products. That there was an increase at all was due to excise duty. Excluding excise duty, Output prices were unchanged between January 1997 and January 1998. Input prices fell further, down to 9.7%. There were particularly sharp falls in crude oil prices and in the price of home-produced food materials.

Average earnings growth remained the main area of concern for inflationary pressure, although the rate of increase remained stable between November and December at 43/4%. The breakdown of underlying rates per broad sector also remained the same as in the previous month. High bonus payments in December have boosted the rate of increase of earnings, although settlement data also show an increase in the latter half of 1997.

#### Labour Market

Labour market indicators appeared to show a slowdown in activity in the labour market. However a number of administrative issues complicate this conclusion.

The rate of fall of claimant unemployment slowed to 12,300 in January. The lower fall in unemployment was exaggerated by the early count date (8th January). Not all the forms for people leaving the count were processed in the time available. This is shown by the sharp decline in outflows from the count.

The claimant count by duration shows that unemployment amongst the long term unemployed continued to fall rapidly. In the year to January 1998, claimants who have been registered for over a year fell by 292,600 to reduce the numbers so affected to 398,500.

One area where the employment position has deteriorated is manufacturing. Manufacturers reduced their workforce by 9,000 in the quarter and by 28,000 for the half year. This is in keeping with the lack of growth in manufacturing output. Despite the decline in employment, wages and salaries per unit of output has increased. This was caused by higher average earnings growth than a year ago and lower productivity.

# Forecast for the UK Economy

#### A comparison of independent forecasts, February 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.

	Inde	pendent Forecasts for 1998	3
	Average	Lowest	Highest
GDP growth (per cent)	2.3	1.5	3.2
Inflation rate (Q4) - RPI - RPI excl MIPs	3.0 2.7	2.1 2.0	4.3 3.7
Unemployment (Q4,mn)	1.3	0.99	1.5
Current Account (£,bn)	-6.2	-14.6	0.5
PSBR (1998-99,£ ,bn)	3.3	-3.2	10.0

	Inde	ependent Forecasts for 199	9
	Average	Lowest	Highest
GDP growth (per cent)	2.0	1.3	3.4
Inflation rate (Q4) - RPI - RPI excl MIPs	2.5 2.7	1.5 2.0	4.1 4.4
Unemployment (Q4, mn)	1.36	1.01	1.6
Current Account (£,bn)	-7.1	-17.5	6.6
PSBR (1999-00,£,bn)	3.6	-3.0	17.0

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 - 1998**

#### by Sue Holloway, Economic Assessment - Office for National Statistics

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#### Overview

US GDP figures for 1997 showed robust growth, due mainly to growth in private final consumption. Exports also grew strongly, but this was counteracted by even stronger import growth. Output continued to expand in France, Germany, Japan and the US in 1997, although it dropped back sharply in Japan in Q4. Both consumer and producer price inflation continued to be moderate in December in all the major economies, with producer price inflation generally below that of consumer prices.

#### Germany

Industrial production grew very strongly in Germany in 1997 - by 4% year on year - the strongest annual growth since 1990. Growth accelerated in the second half of the year. Production of intermediate goods grew particularly strongly, as it has done since the beginning of 1996. Output of manufacturing and investment goods grew over the year, but remained only slightly above 1991 levels.

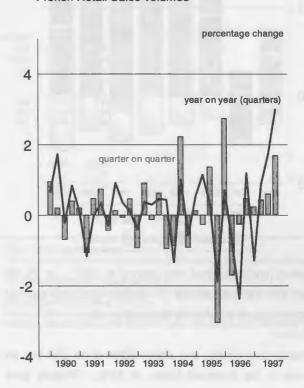
Consumer price inflation was slightly higher in 1997 than in 1996, at 1.8%, and producer price inflation also picked up during the course of the year, giving an annual rate of 0.7%.

#### **France**

Healthy growth in retail sales in France in 1997, illustrated below, was due to strong growth in Q3 and even stronger growth in Q4 - the latter up 1.7% on the previous quarter and 3% on the same quarter of 1996. The total volume of sales for the year was 1.1% higher than in 1996.

Consumer price inflation was moderate at 1.2% year on year, less than the EU average of 2%, and producer prices fell by 0.6% - the result of deflation in Q1 and Q2 combined with modest inflation in Q3 and Q4.

Chart 1
French Retail Sales volumes



#### Italy

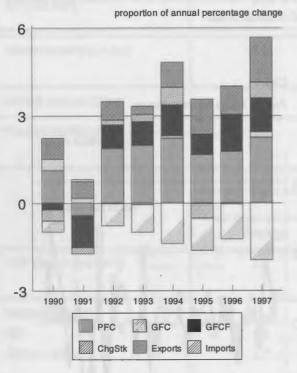
Consumer price inflation moderated over 1997 to give an annual rate of 1.8%. Earnings growth picked up to 3.6% year on year, after decelerating between 1994 and 1996. Growth in earnings was particularly high in 1997 Q1, and decelerated after that. There was no growth in employment over the year, suggesting that the recovery has not yet become well established.

#### USA

In 1997 GDP grew by 3.8% year on year, due largely to strong growth in private final consumption. As the latter accounts for two thirds of total GDP, changes in this component are the most significant. The chart below also illustrates the increasing contribution exports have made to growth over the last few years. In 1997 they accounted for 13% of GDP and grew by more than 12% year on year. However, imports grew by nearly 14% in the same period, and net exports remained negative.

Chart 2

USA - contributions to GDP growth



Industrial production grew very strongly in 1997 - up 5% on 1996, with the manufacture of durables and production of investment goods showing the strongest growth.

Consumer price inflation was slightly higher in the USA than on average in the European Union, at 2.3%. Producer price inflation was the lowest for several years, at 0.4%.

Average earnings in manufacturing increased by 3% in 1997 and employment by 2.2%. The latter picked up after very slow growth in 1995 and 1996. Unemployment remained at its historically low level.

#### Japan

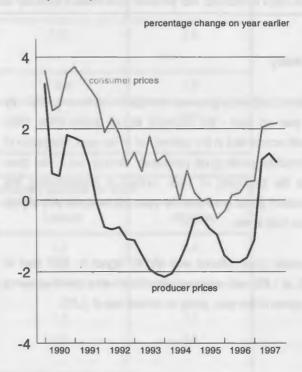
In spite of a sharp drop in industrial production growth in Q4, annual growth in 1997 was 4%. Overall, growth was strongest in

finished investment and intermediate goods, with a resultant annual increase in manufacturing of 4.2%. This appears to have been mainly exported, as retail sales volumes were 2.3% lower than in 1996. The latter reflects the failure of the domestic market to recover after the introduction of a sales tax in April.

Consumer prices inflation was 1.7% over the year - the highest since 1992, but, as the following chart shows, below 1990/91 levels. It has been accelerating steadily since the beginning of 1996. Producer price inflation, also illustrated below, was 0.6% in 1997, after 5 years of deflation.

Chart 3

Japanese price inflation



In the Japanese labour market, annual earnings growth rose to 3% in 1997, but slowed over the four quarters. Employment grew by only 1.1% over the same period.

#### Notes

The series presented here are taken from the OECD's Main Economic Indicators and are shown for Germany, France Italy, the USA and Japan 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.

			Co	ntribution t	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage (	change on a	year earl	ier 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	2.0	2.3	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	1.5	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	-1.3	_	4.5	1.4	5.8	-1.7	9.1
1993	-0.5	-0.1	0.2	-1.4	-0.4	0.4	-0.8	-3.2	-1.3	3.5	1.3	4.7	-2.0	10.8
1994	3.0	1.0	0.2	0.5	8.0	2.5	2.2	5.0	-0.4	3.0	2.2	3.8	-0.2	11.1
1995	2.5	1.1	0.2	0.7	0.2	2.4	2.0	3.7	-0.3	3.2	4.5	3.7	0.5	10.7
1996	1.8	1.2	0.3	0.2	-0.3	1.5	1.2	0.4	0.6	2.5	0.7	3.7	0.2	10.9
1997	**						••			2.0	0.9		••	
1996 Q1	1.6	1.4	0.3	_	0.1	1.2	1.4	-	-	2.8	1.9	4.0	0.2	10.9
Q2	1.5	0.9	0.2	0.3	-0.3	1.1	0.7	_	0.4	2.6	0.6	4.0	0.2	10.9
Q3	1.9	1.2	0.3	0.3	-0.6	1.7	1.0	0.3	0.3	2.3	-0.1	3.1	0.4	10.9
Q4	2.1	1.3	0.2	0.4	-0.3	2.1	1.6	0.9	1.6	2.3	0.2	3.8	0.2	10.8
1997 Q1	1.9	0.9	0.2	0.5	-0.1	1.9	1.4	2.2	2.0	2.1	0.3	3.8	0.3	10.8
Q2	2.8	1.4	0.2	0.4	0.5	3.0	2.6	3.6	2.6	1.7	0.7	3.1	0.4	10.8
Q3	2.9	1.2	0.2	0.4	0.6	3.5	2.9	4.5	3.4	2.0 2.0	1.4 1.3		0.4	10.7
Q4			**	.,	**	••	**	**		2.0	1.3	**	••	
1997 Jul								5.7	5.1	1.9	1.3			10.7
Aug		**					••	4.1 3.6	2.0 3.0	2.1 2.1	1.6 1.3			10.7
Sep		••	••			••		5.4	4.0	2.0	1.3	••		10.7 10.7
Oct Nov		**						4.3	4.0	2.1	1.3			10.7
Dec										2.0	1.3			
Percentage (	change on r	revious o	uarter											
_	ILGL.	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ				ILIT	
1996 Q1	0.6	0.7	0.1	-0.2	-0.1	0.6	0.5	-0.6	1.6				-1.0	
Q2	0.4	- 0.4	- 0.1	0.4 0.1	0.5 0.1	0.3 0.6	-0.1 0.5	0.6 0.7	0.4 0.4				0.8 0.6	
Q3 Q4	0.7 0.5	0.4 0.2	0.1	0.1	0.3	0.6	0.5	0.2	-0.4				-0.2	
Q4	0.5													
1997 Q1	0.4	0.3	_	-0.1	0.1	0.4	0.3	0.8	2.0				-0.9	
Q2	1.2	0.5	0.1	0.3	0.1	1.3	1.2 0.7	1.9 1.6	1.0 0.4				0.9	
Q3 Q4	8.0	0.2	0.1	0.2	-	1.0	0.7	1.0	0.4				0.6	
				••	••		••							
Percentage	change on p	previous r	nonth					ILKF	ILKP					
1997 Jul								2.5	2.0					
Aug								-1.5	-1.9					
Sep								-0.4	_					
Oct								1.7	2.0					
Nov								-0.9						
Dec														

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GFCF = Gross Fixed Capital Formation at constant market prices

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and treatment vary among countries

Empl = Total Employment not seasonally adjusted

Unempl = Standardised Unemployment rates: percentage of total labour force Source: OECD

Percentage change on a year earlier				Cor	ntribution to	o change ir	GDP								
Percentage change on a year earlier		GDP <sup>1</sup>	PFC	GFC	GFCF	ChgStk	Exports		loP <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>
ILFY   HUBW   HUBX   HUBY   HUBZ   HUCA   HUCB   LGS   LIHM   HULL   LIAF   LIAO   LILG   GABE				P	_		·	· ·							
1990	Percentage o				HIIRV	HI IR7	HIICA	HIICB	II GS	шым	HV/I I	II A=	11.40	ILIC	CARD
1991	1000														
1992															
1993															
1994															
1996															8.4
1996	1005	1 0	12	0.4	0.2	0.2	16	1.8	2.0	11	1 9	21	2 2	-n 3	8.2
1997															
1996 Q1															0.0
12						0.5	4.0				4.5				
1997 Q1															
Q4         2.1         0.7         −         0.5         0.1         2.1         1.3         2.6         −0.3         1.4         0.2         2.9         −1.4         9.1           1997 Q1         2.5         0.1         0.3         0.9         0.5         2.4         1.6         3.7         −         1.7         0.3         0.8         −1.5         9.6           Q2         2.1         0.8         0.2         −0.3         0.2         3.2         1.9         3.4         0.3         1.6         0.7         1.5         −1.5         9.6           Q4                 1.5         9.5         9.4           1997 Jull															
1997 Q1															
1997 Jul															
Q3															9.4
1997 Jul															9.6
1997 Jul		2.3	-0.2	0.1	-0.3	1.3	3.6	2.2					1.6	-1.3	9.9
Aug	Q4								4.7		1.8	0.9			
Sep	1997 Jul								8.2				1.6		9.7
Oct             5.1         2.0         1.8         0.9          10.0           Nov               4.3         -1.0         1.9         1.0           10.0           Dec              4.3         -1.0         1.9         1.0           10.0           Dec              4.7          1.7         0.8           10.0           Dec            4.7          1.7         0.8	Aug								2.5	-2.0	2.0	1.2			9.9
Nov	Sep														10.0
Percentage change on previous quarter   ILGI   HUCC   HUCD   HUCE   HUCF   HUCG   HUCH   ILHC   ILHW   ILIQ   HUCC   HUCD   HUCE   HUCF   HUCG   HUCH   ILHC   ILHW   ILIQ   HUCC   HUCD   HUCE   HUCF   HUCG   HUCH   ILHC   ILHW   ILIQ   HUCF   HUCG   HUCH   ILHC   ILHW   HUCF   HUCG   HUCF   HU	Oct												.,		10.0
Percentage change on previous quarter    ILG    HUCC   HUCD   HUCE   HUCF   HUCG   HUCH   ILHC   ILHW     1996 Q1   -0.1   0.4   -   -0.8   0.1   0.4   0.2   0.3   1.0     Q2   1.4   -   0.2   1.3   -0.3   0.2   -0.1   1.2   1.7     Q3   0.5   0.4   0.3   -   -0.7   0.7   0.2   1.3   -0.7     Q4   0.2   -0.2   -0.4   0.1   0.9   0.9   1.0   -0.3   -2.3     1997 Q1   0.3   -0.1   0.3   -0.5   0.6   0.6   0.5   1.4   1.3     Q2   1.0   0.7   0.1   0.1   -0.6   1.0   0.2   1.0   2.0     Q3   0.8   -0.6   0.1   0.1   0.5   1.1   0.4   2.0   -2.3     Q4   0.2   0.6   0.1   0.1   0.5   1.1   0.4   2.0   -2.3     Q4   0.2   0.6   0.1   0.1   0.5   0.6   0.6     Q4   0.2   0.3   0.4   0.4   0.2   0.2     Q4   0.3   0.8   -0.6   0.1   0.1   0.5   0.5   0.5     Q4   0.4   0.7   0.7   0.1   0.5   0.5   0.5     Q5   0.5   0.6   0.5   0.5   0.5     Q6   0.5   0.5   0.5   0.5   0.5     Q7   0.5   0.5   0.5   0.5   0.5     Q8   0.5   0.5   0.5   0.5     Q9   0.5   0.5   0.5   0.5     Q9   0.5   0.5   0.5   0.5     Q1   0.5   0.5   0.5   0.5     Q1   0.5   0.5     Q2   0.5   0.5     Q3   0.5   0.5     Q2   0.5   0.5     Q3   0.5   0.5     Q4   0.5   0.5     Q5   0.5   0.5     Q4   0.5   0.5     Q5   0.5     Q5   0.5   0.5     Q5   0.	Nov									-1.0					10.0
Single   HUCC   HUCD   HUCE   HUCG   HUCH   ILHC   ILHW   ILIQ     1996 Q1	Dec								4.7		1.7	0.8			
1996 Q1	Percentage of	change on	previous	quarter											
Q2 1.4 - 0.2 1.3 -0.3 0.2 -0.1 1.2 1.7 0.6 Q3 0.5 0.4 0.30.7 0.7 0.7 0.2 1.3 -0.7 0.2 0.2 Q4 0.2 -0.2 -0.4 0.1 0.9 0.9 1.0 -0.3 -2.3 -2.3 -0.2 1997 Q1 0.3 -0.1 0.3 -0.5 0.6 0.6 0.6 0.5 1.4 1.3 -2.1 Q2 1.0 0.7 0.1 0.1 -0.6 1.0 0.2 1.0 2.0 0.6 Q3 0.8 -0.6 0.1 0.1 0.5 1.1 0.4 2.0 -2.3 0.4 Q4	_														
Q3															
Q4															
1997 Q1															
Q2	Q4	0.2	-0.2	-0.4	0.1	0.9	0.9	1.0	-0.3	-2.3				-0.2	
Q3															
Q4         0.2        Percentage change on previous month       1997 Jul     ILKC     ILKM       1997 Jul     3.9     -2.0       Aug     -4.4     -2.0       Sep     -0.8     1.0       Oct     2.1     2.0       Nov     -0.1     -3.0		1.0	0.7											0.6	
Cot		0.8	-0.6	0.1	0.1	0.5	1.1	0.4		-2.3				0.4	
ILKC   ILKM   1997 Jul   3.9   -2.0   Aug   -4.4   -2.0   Sep   -0.8   1.0   Oct   2.1   2.0   Nov   -0.1   -3.0	Q4						**		0.2						
1997 Jul     3.9     -2.0       Aug     -4.4     -2.0       Sep     -0.8     1.0       Oct     2.1     2.0       Nov     -0.1     -3.0	Percentage of	change on	previous	month											
Aug       -4.4       -2.0         Sep       -0.8       1.0         Oct       2.1       2.0         Nov       -0.1       -3.0	1007 Jul														
Sep     -0.8     1.0       Oct     2.1     2.0       Nov     -0.1     -3.0															
Oct 2.1 2.0 Nov -0.1 -3.0															
Nov -0.1 -3.0															
	Dec								0.5						

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1 Data available for unified Germany from 19912 Western Germany (Federal Republic of Germany before unification)3 Excludes members of armed forces

4 Data available for unified Germany from January 1993

Sales = Reatail Sales volume

CPI = Consumer Prices, components and coverage not uniform among coun-

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			Co	ntribution t	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI <sup>1</sup>	Earnings	Empl <sup>2</sup>	Unempl
Percentage c				LILIDAA	HUBN	HUBO	HUBP	ILGT	ILHN	LIVAA	11.40	11 4 D		CARC
1990 1991 1992 1993 1994	1LFZ 2.5 0.8 1.2 -1.3 2.8	HUBK 1.6 0.8 0.8 0.1 0.8	0.4 0.5 0.6 0.7 0.2	HUBM 0.6 - -0.6 -1.5 0.3	0.2 -0.7 -0.6 -1.5	1.3 1.0 1.3 –0.1 1.6	1.6 0.8 0.3 -1.0	1.5 -1.2 -1.2 -3.8 3.9	0.7 -0.2 0.3 0.2 -0.2	HXAA 3.5 3.2 2.4 2.1 1.7	ILAG -0.9 -1.2 -1.1 -2.1 1.2	ILAP 4.9 4.7 4.0 2.5 1.9	0.8 0.1 -0.6 -1.3 0.1	9.0 9.5 10.4 11.7 12.3
1995 1996 1997	2.1 1.5	1.0 1.3	0.3	0.5 -0.1 	0.3 -0.5	1.8 1.4 	1.4 0.8 	2.0 0.3 	0.1 -0.3 1.0	1.7 2.1 1.1	5.2 -2.7 -0.5	2.4 2.4 2.8	1.0	11.7 12.4 
1996 Q1 Q2 Q3 Q4	1.2 0.9 1.7 2.3	2.2 0.6 1.1 1.1	0.2 0.3 0.4 0.4	-0.3 -0.2 0.1	-1.2 -0.1 -0.8	0.9 0.3 1.9 2.4	0.6 0.2 0.8 1.6	-0.6 -0.3 0.3 1.9	0.7 -0.8 -2.4 1.1	2.1 2.4 1.8 1.7	-0.8 -2.7 -3.8 -3.1	2.3 2.3 2.6 2.6	0.4 0.1 -0.3 -0.1	12.3 12.4 12.5 12.6
1997 Q1 Q2 Q3 Q4	1.4 2.6 2.6	-0.2 0.4 0.5	0.3 0.3 0.3	0.1 0.2	0.3 - 0.3 	1.7 3.9 3.8	0.7 2.2 2.5 	1.1 3.3 4.3	-1.3 0.9 1.7 3.0	1.5 0.9 1.3 1.1	-2.3 -0.9 0.3 0.6	3.0 2.7 2.8 2.8	-0.1 0.1 0.4 	12.5 12.6 12.6
1997 Jul Aug Sep Oct Nov Dec	  						  	4.6 4.6 3.6 7.5 5.4	2.7 -0.6 3.2 4.6 -0.6 5.0	1.0 1.5 1.3 1.0 1.3	0.1 0.4 0.5 0.6 0.6 0.7	2.8  2.8 	  	12.6 12.6 12.6 12.6 12.5
Percentage of	hange on	previous HUBQ	quarter HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1996 Q1 Q2 Q3 Q4	1.3 -0.1 0.8 0.3	1.4 -0.5 0.5 -0.3	0.1 0.1 0.1 0.1	-0.2 - 0.3 -	-0.6 0.6 -0.2 0.2	1.4 -0.6 1.0 0.6	0.8 -0.4 0.8 0.3	1.3 0.1 0.6 –0.1	2.7 -1.8 -0.2 0.4				-0.2 0.1	
1997 Q1 Q2 Q3 Q4	0.3 1.1 0.9	0.1 0.1 0.6	0.1 0.1 0.1	-0.3 0.1 0.4	-0.3 0.3 0.1	0.7 1.6 0.8	1.0 1.2	0.5 2.3 1.6	0.3 0.4 0.6 1.7				0.2 0.1 	
Percentage of	change on	previous	month					ILKD	ILKN					
1997 Jul Aug Sep Oct Nov Dec								1.9 -1.0 3.5 -1.9	3.9 -0.5 -2.3 6.1 -5.3 3.4					

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Empl = Total Employment not seasonally adjusted

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			Co	ntribution to	o change in	GDP	_							
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage of	change on a	vear ear	lier											
. c.comago	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	[[_]]	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	1.1	-0.2	1.2	0.1	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	0.2	-0.5	-0.1	-0.6	-2.9	-2.0	3.8	1.9	1.8	0.4	12.0
1997										1.8		3.6	-	
1996 Q1	1.4	0.7	-	0.8	0.6	-0.6	_	_	-3.3	5.0	4.8	1.9	0.8	12.0
Q2	0.5	0.3	0.1	0.4	-0.6	-0.9	-1.2	-1.2	-2.2	4.2	1.6	2.1	0.3	12.0
Q3	0.6	0.2	0.1	_	-1.0	0.4	-0.9	-4.6	-5.2	3.5	0.4	1.7	0.3	12.0
Q4	0.2	0.6	0.1	-0.4	-1.2	0.8	-0.2	-5.5	3.3	2.7	8.0	1.6	0.2	12.0
1997 Q1	-0.6	0.9	0.1	-0.3	-1.4	-0.4	-0.4	-0.5	3.4	2.4	0.9	4.0	-0.1	12.2
Q2	2.1	1.2	0.1		2.5	1.6	3.3	2.2	4.6	1.6	1.2	3.8	0.1	12.1
Q3	2.1	1.4	-	0.2	1.6	3.0	4.2	3.0	8.2	1.5	1.7	3.4	-	12.1
Q4							••		••	1.6		3.3	-	••
1997 Jul							**	3.6	8.2	1.6	1.7	3.4		12.1
Aug								2.7	8.2	1.5	1.6	3.4		12.1
Sep								2.7	8.2	1.4	1.6	3.4		12.1
Oct								4.7	8.2	1.6	1.5	3.4		12.2
Nov		**						4.7		1.6	1.6	3.3	••	
Dec		••			**					1.6		3.2	••	
Percentage of					LILIOD	111100	LILIOT		11.1.177				11.10	
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY 7.3				ILIS	
1996 Q1	0.6	0.1	-	-0.1	-2.0	0.2 0.2	-0.4 -1.0	-3.7 -0.5	-1.5				-1.3 1.2	
Q2	-0.9	0.1	0.1 0.1	-0.1	0.4	0.2	0.4	-0.3	-2.3				1.2	
Q3 Q4	0.5	0.1	-	-0.1 -0.1	0.5	-	0.8	-1.0	-2.0				-0.8	
1997 Q1	-0.2	0.5	_	-0.1	-0.2	-1.0	-0.6	1.4	7.4				-1.6	
Q2	1.9	0.3	_	0.2	1.8	2.2	2.6	2.2	-0.3				1.4	
Q3	0.4	0.3	_	0.2	-0.4	1.8	1.4	0.5	1.1				1.1	
Q4													-0.8	
Percentage (	change on	previous	month											
_								ILKE -0.1	ILKO 3.4					
1997 Jul								1.0	3.4					
Aug								-0.9	_					
Sep								1.2	_					
Oct								0.5						
Nov Dec								0.5						
Dec														

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<sup>1</sup> Excludes members of armed forces

1997 Jul

Aug Sep

Nov

Dec

Sales = Retail Sales volume

ILKG

0.8

0.6

0.2

0.7

0.9

0.5

CPI = Consumer Prices, components and coverage not uniform among coun-

ILLA

0.7

-0.4

-0.7

0.5

0.3

-0.2

PPI = Producer Prices (manufacturing)

Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries

Empl = Total Employment not seasonally adjusted

**ILKQ** 

1.2

0.4

-0.4

-0.1

Unempl = Standardised Unemployment rates: percentage of total workforce
Source: OECD

			Contribution to change in GDP											
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP <sup>1</sup>	Sales	CPI	PPi	Earnings <sup>2</sup>	Empl	Unempl
Percentage cl	hange on	a vear ear	lier											
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1990	5.2	2.6	0.1	2.7	-0.2	0.7	0.8	4.3	4.9	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	2.3	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	-1.0	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	-3.0	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	0.2	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	0.2	-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	2.7	1.0	0.1	-1.7	2.6	0.5	3.3
1997					••	••		4.0	-2.2	1.8	0.6	3.0	1.1	3.4
1996 Q1	5.7	3.0	0.2	3.5	0.3	0.3	1.7	1.6	2.0	-0.4	-1.6	1.7	0.1	3.3
Q2	4.2	1.5	0.1	4.0	0.2	_	1.5	0.9	1.0	0.1	-1.7	1.6	0.3	3.5
Q3	3.1	1.0	0.1	2.7	_	0.4	1.1	4.2	-0.4	0.2	-1.7	4.9	0.7	3.3
Q4	3.4	1.5	0.2	1.8	-0.2	1.0	8.0	4.4	1.3	0.5	-1.6	2.3	0.9	3.3
1997 Q1	2.8	2.7	_	_	-0.4	1.1	0.6	6.0	5.3	0.6	-1.1	5.2	1.6	3.3
Q2	-0.2	-0.2	-0.1	-1.7	_	1.8	_	6.5	-5.1	2.1	1.1	2.7	1.4	3.5
Q3	1.0	0.6	_	-1.1	0.2	1.4	_	4.1	-3.7	2.1	1.3	2.5	0.7	3.4
Q4						••		-0.4	-5.7	2.1	1.1	1.7	0.7	3.4
1997 Jul								4.8	-4.1	1.9	1.3	3.3	0.9	3.4
Aug		**						3.4	-2.0	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					••			2.0	-4.0	2.5	1.3	1.6	0.9	3.4
Nov Dec		••	••		••			-2.1 -1.2	-6.9 -6.0	2.1 1.8	1.1 0.9	1.8 1.7	0.5 0.8	3.5 3.4
Dec		••						-1.2	-0.0	1.0	0.3	1.7	0.0	0.4
Percentage cl	hange on ILGN	previous ( HUDA	quarter HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1996 Q1	2.7	1.1	0.1	1.5	0.2	-	0.3	0.7	2.0				-1.6	
Q2	0.1	-0.4	-	0.8	-0.1	_	0.3	-0.4	-1.7				3.1	
Q3	-0.4	0.1	_	-0.7	-0.1	0.3	_	1.8	-0.7				0.5	
Q4	1.1	0.6	0.1	0.2	-0.1	0.6	0.2	2.2	1.7				-1.0	
1997 Q1	2.0	2.3	-0.1	-0.3	_	0.2	0.1	2.3	6.0				-0.9	
Q2	-2.8	-3.2	-0.1	-0.8	0.3	0.7	-0.3	_	-11.3				2.9	
Q3	0.8	0.9	0.1	-0.1	_	-0.2	-0.1	-0.4	0.7				-0.3	
Q4								-2.2	-0.4				-1.0	
Percentage c	hange on	previous	month											
1997 Jul								ILKH 1.3	ILKR -				ILLB -0.5	
Aug								-2.8	2.1				-0.5 -0.9	
Sep								2.6	-2.1				0.1	
Oct								-0.1	1.1				0.1	
Nov								-4.8	-1.1				-1.0	
Dec								0.9	_				-0.4	

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

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

	Expor	of manufacti	ıres	Impor	t of manufact	ures	Ex	port of go	ods	lm	port of go	ods	Total tr	ade
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufact- ures	goods
Percentage of	hange on a	year earlier												
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	!LJG	ILJH	ILJI	الباا	ILJK	البال	ILJM
1989	8.5	8.2	9.9	8.6	8.8	8.2	7.0	7.3	6.3	7.0	7.4	6.0	8.6	7.0
1990	4.9	5.1	4.0	6.0	5.6	7.1	4.2	5.1	1.8	5.0	5.2	4.4	5.5	4.6
1991	3.5	2.4	8.0	4.9	3.6	8.8	3.7	3.2	5.1	4.3	3.3	7.3	4.2	4.0
1992	3.8	3.3	5.7	4.7	4.5	5.2	4.2	3.6	5.8	4.5	4.2	5.5	4.2	4.4
1993	3.9	1.7	12.1	3.0	1.1	8.1	4.1	2.3	9.0	3.4	1.6	8.7	3.4	3.8
1994	11.5	10.2	15.9	12.3	12.1	12.8	9.9	9.1	11.6	10.7	10.2	11.9	11.9	10.3
1995	10.0	9.4	12.2	11.2	9.6	15.2	8.8	8.3	10.0	9.3	7.6	13.7	10.6	9.0
1996	5.7	6.8	2.3	5.2	6.6	1.7	5.0	6.2	2.3	4.5	5.6	2.1	5.4	4.8
1996 Q1	5.5	5.9	4.6	5.8	6.6	3.6	4.6	5.0	3.8	4.7	5.1	3.8	5.7	4.7
Q2	5.2	6.2	2.2	4.1	5.7	0.3	4.3	5.3	1.9	3.5	4.6	0.8	4.7	3.9
Q3	6.1	7.5	1.7	5.7	7.3	1.8	5.6	7.1	2.1	5.0	6.1	2.3	5.9	5.3
Q4	6.0	7.5	1.0	5.1	6.7	1.1	5.6	7.3	1.4	5.0	6.4	1.5	5.5	5.3
1997 Q1	7.6	8.1	5.8											
Percentage of	hange on p	revious quai	rter											
ŭ	ĪLJN	ILJÓ	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q1	2.7	· 2.6	3.2	2.0	1.2	4.2	2.4	2.2	2.9	1.8	1.0	3.7	2.4	2.1
Q2	1.4	1.1	2.6	2.0	1.4	3.4	1.1	0.7	2.1	1.8	1.3	3.2	1.7	1.5
Q3	1.4	1.2	1.8	1.6	1.2	2.5	1.2	1.1	1.5	1.3	1.0	2.2	1.5	1.3
Q4	1.4	1.7	8.0	1.6	2.0	0.7	1.3	1.5	0.6	0.9	1.0	8.0	1.5	1.1
1996 Q1	1.2	1.8	-0.6	0.5	1.9	-2.9	1.0	1.6	-0.4	0.6	1.8	-2.4	0.9	0.8
Q2	1.1	1.4	0.2	0.4	0.5	0.1	0.7	1.0	0.2	0.6	0.8	0.2	0.7	0.7
Q3	2.2	2.5	1.4	3.1	2.8	4.0	2.5	2.9	1.7	2.7	2.4	3.7	2.7	2.6
Q4	1.3	1.7	_	1.1	1.5	-	1.3	1.7	-	0.9	1.3	_	1.2	1.1
1997 Q1	2.7	2.3	4.1									.,		

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

# Final Expenditure Prices Index (Experimental) - January 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 January 1998 shows an annual rate of 1.8 per cent, the same as it was in December 1997. The annual rate of the FEPI reflects decreases in the annual rates of the Index of Consumer Prices (ICP) and the Index of Investment Prices (IIP) and a rise in the Index of Government Prices (IGP).

#### The FEPI annual percentage change



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

		Consu	ndex of Imer Prices (ICP)		ndex of ment Prices (IIP)	Governm	ex of nent Prices GP)	Final Expenditure Prices Index (FEPI)		
		Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	
1997	Aug	117.5	2.6	111.2	0.5	115.2	2.3	115.6	2.1	
	Sep	117.9	2.3	111.2	0.7	114.9	2.3	115.8	2.0	
	Oct	118.0	2.4	111.0	0.4	115.1	2.1	115.9	2.0	
	Nov	117.9	2.3	110.9	1.1	115.6	2.2	115.9	2.0	
	Dec	118.1	2.2	110.8	0.6	115.6	2.0	116.0	1.8	
1998	Jan	117.6	2.0	110.9	0.5	116.2	2.2	115.9	1.8	

#### The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, was 2.0 per cent over the 12 months to January 1998, down from 2.2 per cent in December 1997. This is the lowest it has been since October 1994.

Downward pressure came mainly from prices for:

- Food, for which the 12-month rate fell from 1.8 per cent in December 1997 to 1.0 per cent in January 1998;
- Clothing and footwear, whose the 12-month rate fell from 0.1 per cent to -0.8;
- Housing, whose 12-month rate fell from 3.7 per cent to 3.2 per cent;
- Transport and communication, whose 12-month rate fell from 2.8 per cent to 2.6 per cent;
- Recreation, entertainment and education, whose
   12-month rate fell from 0.5 per cent to 0.4 per cent.

Upward pressure came mainly from prices for:

- Alcoholic drink, for which the 12-month rate rose from 2.2 per cent in December 1997 to 3.0 per cent in January 1998;
- Tobacco, whose 12-month rate rose from 8.6 per cent to 9.4 per cent.

#### The ICP annual percentage change



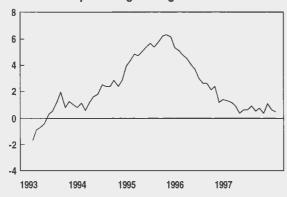
#### The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, was 0.5 per cent over the 12 months to January 1998, down from 0.6 per cent in December 1997. (Please see note 9 regarding recent revisions to the IIP)

Downward pressure on the 12-month rate came mainly from new dwellings whose 12-month rate fell from 6.0 per cent in December 1997 to 4.9 per cent in January 1998.

Slight upward pressure on the 12-month rate came from plant and machinery whose 12-month rate rose from -5.1 per cent to -4.9 per cent. Note, the annual rate has been negative since June 1996, reflecting the impact of Sterling's strength on import prices.

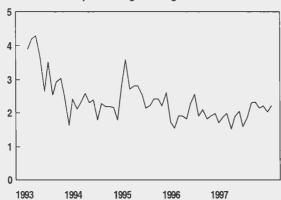
#### The IIP annual percentage change



#### The Index of Government Prices (IGP)

Inflation affecting Government expenditure, as measured by the IGP, was 2.2 per cent over the 12 months to January 1998, up from 2.0 per cent in December 1997. See note 7.

#### 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	Aug Sep Oct Nov Dec	2.1 2.0 2.0 2.0 1.8	2.8 2.7 2.8 2.8 2.7	2.0 1.8 2.0 1.9 1.8	1.4 1.2 1.1 0.9 1.0
1998	Jan	1.8	2.5	1.5	0.7

#### **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. The FEPI and its components may be revised for up to six months after they are first published.
- 7. 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 viceversa. The data are of greatest value if trends rather than individual monthly movements are observed.
- 8. 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.
- 9. Revisions to the Import Adjustment Factor (IAF) have led to revisions to the plant & machinery and vehicles components of the IIP. Estimates of the IAF for 1997, initially based on 1996 trade weights, have now been re-calculated using 1997 trade weights. Such revisions are usual at this time every year.

#### Final Expenditure Prices Index (Experimental)

	Index of	Index of Investment	Index of Government	Final Expenditure	,	Annual percent	age changes	
	Consumer Prices ICP	Prices IIP	Prices IGP	Prices Index FEPI	ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1996 1997	604 605	164 165	232 230	1000 1000				
-	CUSE	CUSK	CUSO	CUSP				
1996 Jan	112.3	109.0	111.6	111.3	3.0	5.1	1.5	3.0
Feb	112.9	109.3	111.6	111.7	3.0	4.8	1.9	3.0
Mar	113.4	109.6	112.2	112.3	2.9	4.5	1.9	3.0
Apr	114.1	110.3	112.0	112.7	3.0	4.1	1.8	2.8
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	114.6	115.1	2.3	0.6	2.0	1.9
Jun	117.2	110.8	114.6	115.3	2.3	0.6	1.6	1.9
Jul	116.7	111.1	114.4	115.0	2.5	0.9	1.9	2.0
Aug	117.5	111.2	115.2	115.6	2.6	0.5	2.3	2.1
Sep	117.9	111.2	114.9	115.8	2.3	0.7	2.3	2.0
Oct	118.0	111.0	115.1	115.9	2.4	0.4	2.1	2.0
Nov	117.9	110.9	115.6	115.9	2.3	1.1	2.2	2.0
Dec	118.1	110.8	115.6	116.0	2.2	0.6	2.0	1.8
1998 Jan	117.6	110.9	116.2	115.9	2.0	0.5	2.2	1.8

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communi- cation	Recreation, Entertain- ment and Education	Other Goods and Services	Index of Consumer Prices ICP
January 1992	=100										
Weights											
1996	128	70	30	67	85	40	72	190	113	205	1000
1997	126	68	30	67	90	39	71	189	119	201	1000
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
1996 Jan	109.0	115.2	136.8	100.3	118.5	105.6	107.1	112.8	108.2	116.7	112.3
Feb	110.1	116.0	137.4	101.3	118.6	105.6	108.8	113.0	108.6	117.3	112.9
Mar	111.1	116.3	137.5	102.7	118.7	105.7	110.3	113.2	108.8	117.7	113.4
Apr	111.2	116.8	138.7	104.2	120.8	105.7	109.7	113.9	109.3	118.4	114.1
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

					Ann	ual Percer	tage Changes				
	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communi- cation	Recreation Entertain- ment and Education	Other Goods and Services	Index of Consumer Prices ICP
1996 Jan	4.1	2.8	7.0	-0.7	3.8	0.5	2.8	2.6	2.0	4.1	3.0
Feb	4.6	2.7	6.5	-1.0	3.7	0.4	2.9	2.4	2.2	4.3	3.0
Mar	4.9	2.6	6.5	-1.0	3.6	0.4	3.2	2.0	2.3	4.1	2.9
Apr	5.0	2.9	6.4	-1.0	2.7	0.2	2.7	2.2	2.4	4.0	3.0
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

	New Buildings and Works	Plant and Machinery	Vehicles, etc	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100			· · · · · · · · · · · · · · · · · · ·			
Weights						
1996	266	378	108	38	209	1000
1997	267	390	103	33	207	1000
	CUSF	CUSG	CUSH	CUSI	CUSJ	CUSK
1996 Jan	103.7	116.7	118.5	127.1	97.5	109.0
Feb	104.2	116.3	118.7	129.8	98.2	109.3
Mar	104.8	116.0	118.8	130.5	99.3	109.6
Apr	105.2	116.7	119.2	135.7	100.1	110.3
May	105.7	115.4	119.1	135.8	100.5	110.1
Jun	106.1	114.7	118.9	135.5	101.1	110.1
Jul	106.5	113.5	119.0	138.1	102.0	110.1
Aug	106.9	114.0	119.6	139.2	102.7	110.6
Sep	107.3	113.1	119.7	139.3	102.7	110.4
Oct	107.7	113.0	119.2	140.9	102.8	110.6
Nov	108.1	110.6	117.6	140.9	103.0	109.7
Dec	108.5	111.0	117.5	141.0	103.8	110.1
1997 Jan	108.8	111.1	118.2	139.3	104.3	110.4
Feb	109.1	111.2	118.7	141.8	104.4	110.6
Mar	109.4	110.1	118.9	142.2	105.6	110.6
Apr	109.5	109.8	118.5	142.8	106.9	110.7
May	109.4	109.4	118.5	144.8	107.6	110.8
Jun	109.4	108.8	118.3	144.9	108.6	110.8
Jul	110.2	108.0	118.1	150.8	109.8	111.1
Aug	111.1	107.2	118.4	151.9	110.5	111.2
Sep	111.5	106.8	118.4	153.4	110.6	111.2
Oct	111.9	106.2	118.3	152.2	110.4	111.0
Nov	112.2	105.6	118.0	153.1	110.5	110.9
Dec	112.6	105.3	118.6	152.0	110.0	110.8
1998 Jan	112.9	105.7	119.3	149.9	109.4	110.9

1330 0411	112.5	100.7	110.0		100, 1	110.0
			Annual Pe	ercentage Changes		
	New Buildings and Works	Plant and Machinery	Vehicles, etc	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices
1996 Jan	12.2	2.6	4.3	1.6	0.7	5.1
Feb	11.8	1.5	4.0	3.7	1.9	4.8
Mar	11.4	1.0	4.2	4.9	1.7	4.5
Apr	10.3	0.9	3.8	<i>5.5</i>	1.5	4.1
May	9.5	0.0	3.3	<i>6.3</i>	2.3	3.7
Jun	8.6	-1.2	2.9	5.1	2.8	3.0
Jul	7.9	-2.2	2.8	6.3	3.6	2.6
Aug	7.1	-2.0	2.2	7.1	4.4	2.6
Sep	6.4	-2.9	2.2	6.9	4.7	2.1
Oct	6.0	-2.3	1.8	8.6	5.0	2.4
Nov	5.6	-4.8	0.3	8.4	5.5	1.2
Dec	5.1	-4.5	-0.3	9.6	6.6	1.4
1997 Jan	4.9	-4.8	-0.3	9.6	7.0	1.3
Feb	4.7	-4.4	0.0	9.2	6.3	1.2
Mar	4.4	-5.1	0.1	9.0	6.3	0.9
Apr	4.1	-5.9	-0.6	5.2	6.8	0.4
May	3.5	-5.2	-0.5	6.6	7.1	0.6
Jun	3.1	-5.1	-0.5	6.9	7.4	0.6
Jul	3.5	-4.8	-0.8	9.2	7.6	0.9
Aug	3.9	-6.0	-1.0	9.1	7.6	0.5
Sep	3.9	-5.6	-1.1	10.1	7.7	0.7
Oct	3.9	-6.0	-0.8	8.0	7.4	0.4
Nov	3.8	-4.5	0.3	8.7	7.3	1.1
Dec	3.8	-5.1	0.9	7.8	6.0	0.6
1998 Jan	3.8	-4.9	0.9	7.6	4.9	0.5



						Annual percent	tage 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				
	CUSL	CUSM	CUSN	CUSO				
1996 Jan	112.7	110.8	113.4	111.6	1.7	1.4	3.0	1.5
Feb	112.8	110.8	113.3	111.6	1.8	2.0	2.9	1.9
Mar	113.0	111.6	113.3	112.2	1.2	2.3	2.9	1.9
Арг	112.8	111.4	113.3	112.0	1.7	1.8	2.9	1.8
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	116.5	113.2	116.5	114.6	1.9	2.0	1.9	2.0
Jun	117.0	112.9	116.5	114.6	1.9	1.3	1.9	1.6
Jul	116.5	112.7	118.5	114.4	1.9	1.6	3.5	1.9
Aug	118.8	112.7	118.5	115.2	4.1	1.1	3.4	2.3
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	113.5	118.6	115.6	2.8	1.7	3.3	2.2
Dec	117.7	113.9	118.7	115.6	2.4	1.4	3.3	2.0
1998 Jan	118.3	114.6	119.2	116.2	2.5	1.8	3.2	2.2

# **Employment in the Public and Private Sectors**



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#### Introduction

This article presents data (updated to June 1997) on employment in the public and private sectors. A similar article that presented data to June 1996 was published in the March 1997 edition of *Economic Trends*. Table A in the present article shows the relative overall size of the two sectors and gives a more detailed analysis of employment in the public sector. Table B compares UK workforce in employment over ten years. Table C gives sector information by industry group (based on the *Standard Industrial Classification* (SIC) 1992). Table D gives information by public sector major category - and also includes data on full-time equivalents as well as by headcount.

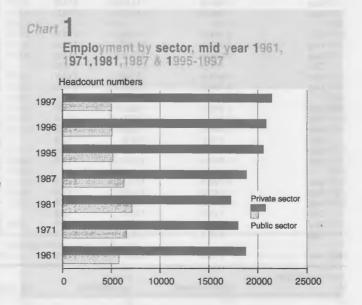


TABLE A

Analysis of UK workforce in employment by sector: headcount, midyear 1961, 1971, 1981, 1987 & 1995-97

							TI	nousands
		1961	1971	1981	1987	1995	1996	1997
Total workforce in employment	CGYL	24,685	24,669	24,498	25,266	25,835	26,031	26,526
Private sector	CGXV	18,826	18,042	17,313	18,907	20,602	20,905	21,469
Work-related gov't training programmes	CGYO	**			311	225	181	167
Public sector	FHCE	5,859	6,627	7,185	6,359	5,233	5,126	5,057
Public corporations	DYBH	2,200	2,009	1,867	985	1,524	1,510	1,521
National Health Service Trusts	CGXN					1,085	1,102	1,121
Other	FHCC	2,200	2,009	1,867	985	439	408	400
General government	FHCA	3,659	4,618	5,318	5,374	3,709	3,616	3,536
Central government	FHBT	1,790	1,966	2,419	2,312	1,058	989	941
HM Forces	CGYN	474	368	334	319	230	221	210
National Health Service	FHBR	575	785	1,207	1,212	97	84	78
Other	FHBS	741	813	878	781	731	684	653
Local authorities	DYBG	1,869	2,652	2,899	3,062	2,651	2,627	2,595
Education	CGYS	785	1,297	1,454	1,486	1,188	1,191	1,187
Social services	FHBU	170	276	350	398	412	406	400
Police	FHBX	108	152	186	191	207	207	207
Construction	FHBW	103	124	143	128	83	79	65
Other	FHBY	703	803	766	763	761	744	736
Community Programme	CUKE				96			

<sup>&</sup>lt;sup>2</sup> Figures include Agency nurses temporarily employed in the NHS.

#### Analysis by Sector (Table A and Chart 1)

The total workforce in employment increased by 495 thousand between 1996 and 1997.

In 1997, 80.9% (21.5 million) of the workforce in employment was in the private sector (this included 3.3 million (12.5%) self-employed). This is 564 thousand higher than the previous year. In 1997, there were 5.1 million employees in the public sector. This shows a decrease of 69 thousand (1.3%) on the previous year and compares with decreases of 59 thousand in 1995 and 107 thousand in 1996.

Table B UK employment: midyear 1997 General government fell by 80 thousand (2.2%) between 1996 and 1997. This included decreases of: 48 thousand (4.9%) in central government; and 32 thousand (1.2%) in local authority employment. This year saw an increase of 19 thousand (1.7%) in National Health Service (NHS) Trusts between 1996 and 1997, with a similar increase of 17 thousand between 1995 and 1996.

Since 1987, employment by public corporations excluding NHS Trusts, has fallen by around 585 thousand (54.4%) to 400 thousand in 1997. General government has fallen by 1.8 million (34.2%) over the same period. There was a decrease in local authority employment of 467 thousand (15.3%), particularly in education services.

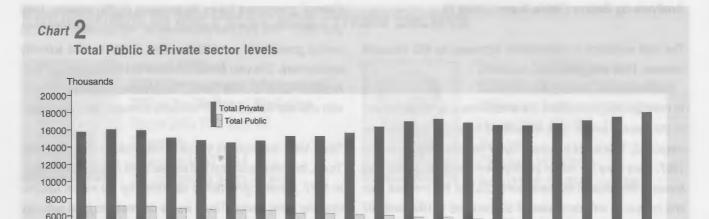
Thousands

	Total		Maie			Female	
	number employed	Total	Full-time	Part-time	Total	Full-time	Part-time
Workforce in employment	25,266	14,471			10,795		
Self-employed	3,052	2,294			758	,,	
HM Forces	319	302			16		
Work-related government							
supported training program	nmes 311	177			134		
Employees in employment	21,584	11,698			9,886	**	
Education	1,747	548			1,199		
Medical Health & service provided to the public Public administration, na	2,315	537			1,778		
defence & compulsory social security Production, transport &	1,492	825			668		
utilities	7,605	5,676			1,930		
Other	8,424	4,113			4,312		

#### UK employment: midyear 1997

Thousands

	Total		Male			Female	
	number employed	Total	Full-time	Part-time	Total	Full-time	Part-time
Workforce in employment	26,526	14,258			12,269		
Self-employed	3,329	2,468			861		
HM Forces	210	195			15		
Work-related government							
supported training progran	nmes 167	103			65		
Employees in employment	22,820	11,491	10,139	1,352	11,329	6,023	5,306
Education	1,876	542	412	129	1,334	617	717
Medical Health & services	s						
provided to the public	2,758	593	448	145	2,165	1,061	1,104
Public administration, nat defence & compulsory	tional						
social security	1,363	693	647	45	670	473	197
Production, transport	,						
& utilities	6,547	4,888	4,742	146	1,659	1,326	334
Other	10,276	4,776	3,890	886	5,500	2,546	2,954



#### Analysis of the UK workforce in employment (Table B)

Since 1987 total workforce in employment has increased by 1.3 million (5.0%); self-employed increased by 277 thousand (9.1%); HM Forces and Work-related government supported training totals have decreased by 109 thousand (34.2%) and 144 thousand (46.3%) respectively. Within employees in employment Production, Transport & Utilities fell by 1.1 million (13.9%), whereas Medical Health & Services provided to the general public increased by 443 thousand (19.1%).

#### Analysis by Industry Group (Table C and Chart 2)

Chart 2 shows the distribution of public sector employment by industry group. This is expanded further in table C which shows the split between the public and private sector for certain industries. Public sector is defined here as including central government (including HM Forces), local authorities and public corporations.

The education group has retained a fairly constant share of public sector employment: in 1997, 24.5% of public employees worked in this industry, compared with 24.6% in 1987. However, the public element within the education sector dropped substantially from 85.1% to 63.3% of total education employment between 1987 and 1997.

In 1997, 33% of all public sector employees worked in medical, health and other services provided to the general public, compared with 26.7% in 1987. The public sector share of total employment in these industries dropped from 69.6% to 58.0% in 1997.

In 1997, employment in public administration and national defence was 28.1% of total public sector employment; compared with 24.7% per cent in 1987. Total numbers have fallen by 129 thousand over the same period.

In 1997, total employment in industries covering production, transport and utilities decreased by 1.1 million (13.9%) to 6.5 million. Within this, the proportion of public sector employees fell from 18.4% to 8.1%, largely because of privatisations.

#### Availability of other data

Other employment data published by the ONS can be found in Labour Market Trends, ONS United Kingdom National Accounts('Blue Book'), the Monthly Digest and Annual Abstract of Statistics. Data underlying the figures for general government are produced quarterly and are available on request.

TABLE C
UK employment by sector and industry group 1978-1997: headcount, midyear

Thousands

SIC 19	92										Em	ployees in Employ	yment							
			W	Vork-related			Education		ser	dical Healtl vices provi general pu	ded to	Public administr national defence compulsory soci security	e & ial	Production, tra & utilities	ansport		Other			
ir	Vorkforce n imployment	Self- Employed	SHM tr	overnment - upported raining programmes	Employees in Employment	Total	Private	Public	Total	Private	Public	Public Total	Total	Private	Public	Total	Private	Public	Total Private Sector	Total Public Sector
	001/1	001/44	001/11	001/0	01-99	80	00//5	001/0	85 & 91	00/41	00144	75	10 - 45 60 - 64	00)01	65	- 05, 50 - 55 - 74, 90 & 92		0070	0070	0075
	CGYL	CGYM	CGYN	CGYO	CGYP	CGYQ	CGYR	CGYS	CGYT	CGYU	CGYV	CGYW	CGYX	CGYY	CGYZ	CGZA	CGZB	CGZC	CGZD	CGZE
1978	25,130	2,023	318		22,789	1,593	81	1,512	1,771	316	1,455	1,646	10,185	7,921	2,265	7,594	7,427	167	15,745	7,045
1979	25,506	2,020	314		23,173	1,630	91	1,539	1,831	334	1,497	1,642	10,209	7,942	2,267	7,861	7,670	191	16,037	7,136
1980	25,459	2,145	323		22,991	1,612	111	1,501	1,892	370	1,522	1,596	9,921	7,697	2,224	7,970	7,748	222	15,926	7,065
1981	24,498	2,271	334		21,892	1,586	132	1,454	1,938	380	1,558	1,559	9,054	7,013	2,041	7,756	7,516	240	15,041	6,852
1982	24,059	2,321	324		21,414	1,579	145	1,434	1,972	392	1,580	1,525	8,582	6,654	1,928	7,755	7,524	231	14,715	6,698
1983	23,775	2,371	322	16	21,067	1,587	153	1,434	2,001	363	1,638	1,523	8,179	6,352	1,827	7,777	7,568	209	14,436	6,631
1984 1985	24,426 24,712	2,687	326 326	175	21,238	1,612 1,639	182	1,430	2,055	462	1,593	1,507	8,030	6,297	1,733	8,034	7,723	311 311	14,664 15,181	6,574 6,243
1985	24,712	2,787 2,804	320	176 226	21,423 21,387	1,686	210 234	1,429 1,452	2,149 2,222	549 620	1,600 1,602	1,479 1,473	7,933 7,703	6,509 6,343	1,424 1,360	8,224 8,303	7,913 7,978	325	15,181	6,243
1987	25,266	3,052	319	311	21,584	1,747	261	1,486	2,222	703	1,612	1,473	7,703	6,491	1,114	8,424	8,088	336	15,175	6,040
1988	26,151	3,235	316	343	22,258	1.810	306	1,504	2,461	828	1,633	1,477	7,698	6.659	1,039	8,812	8,466	346	16,259	5,999
1989	26,957	3,526	308	462	22,661	1,853	411	1.442	2,447	810	1,637	1,401	7,746	6,794	952	9,213	8.869	344	16,884	5,776
1990	27,219	3,573	303	423	22,920	1,880	449	1,431	2,462	824	1,638	1,442	7,649	6,740	909	9,488	9.159	329	17,172	5,749
1991	26,343	3,422	297	353	22,270	1,868	452	1,416	2,519	883	1,636	1,462	7,104	6,370	734	9,317	9,014	303	16,719	5,551
1992	25,776	3,230	290	325	21,931	1,846	456	1,390	2,606	965	1,641	1,464	6,732	6,046	686	9,284	8,973	311	16,440	5,492
1993	25,384	3,189	271	311	21,613	1,829	628	1,201	2,644	1,041	1,603	1,460	6,386	5,746	640	9,294	8,992	302	16,407	5,206
1994	25,551	3,298	250	302	21,700	1,853	677	1,176	2,662	1,077	1,585	1,441	6,363	5,778	585	9,381	9,126	255	16,658	5,042
1995	25,835	3,351	230	225	22,028	1,864	676	1,188	2,700	1,106	1,594	1,404	6,404	5,959	445	9,655	9,283	372	17,024	5,003
1996	26,031	3,283	221	181	22,345	1,864	673	1,191	2,741	1,149	1,592	1,392	6,399	6,018	381	9,949	9,600	349	17,440	4,905
1997	26,526	3,329	210	167	22,820	1,876	689	1,187	2,758	1,159	1,599	1,363	6,547	6,152	395	10,276	9,973	303	17,973	4,847

Table D UK public sector employment 1961-1997 by major categories:headcount and full time equivalents, midyear

**Thousands** 

						Ge	neral govern											
			Central g	government			L	ocal authorit	ies			_	Pu	iblic corpora	ations			
Headcount	HM Forces CGYN	National Health Service FHBR	Other central govern- ment FHBS	Total central govern- ment FHBT	Education FHBU	Social sevices FHBV	Con- struction FHBW	Police (incl. civilians) FHBX	Other local author- ities FHBY	Local authorities community programme CUKE	Total local author- ities DYBG	Total general gover- ment FHCA	Nation- alised industries FHCB	NHS Trusts CGXN	Other public corporations	Total public corpora- tions DYBH	Total public sector FHCE	of which Civi Service CGXU
1961 1971 1972 1973 1974 1975 1976 1977 1978 1980 1981 1982 1983 1984 1985 1988 1989 1990 1991 1992 1993 1994 1995 1996	474 368 336 320 319 332 335 323 318 314 323 326 326 326 326 327 290 271 250 230 221 210 \( \)	575 785 821 848 911 1,042 1,092 1,099 1,120 1,152 1,174 1,207 1,227 1,223 1,223 1,215 1,212 1,228 1,226 1,221 1,098 917 543 177 97 84 78	741 813 813 815 884 932 926 932 926 878 849 835 810 811 778 781 776 776 776 773 801 792 758 731 684 653	1,790 1,966 1,970 1,983 2,114 2,297 2,363 2,354 2,364 2,364 2,387 2,393 2,419 2,400 2,384 2,359 2,360 2,337 2,312 2,322 2,315 2,300 2,78 2,008 1,606 1,185 1,058 989 941	785 1,297 1,365 1,436 1,453 1,508 1,521 1,506 1,512 1,539 1,501 1,454 1,434 1,433 1,430 1,429 1,452 1,486 1,504 1,442 1,431 1,416 1,390 1,201 1,176 1,188 1,191 1,187	170 276 295 315 272 309 319 322 334 344 346 350 352 360 368 376 387 405 411 417 414 410 398 408 408 406 400	103 124 128 130 135 164 165 155 156 152 143 132 130 126 125 125 119 114 106 97 90 90 87 83 79 65	108 152 159 162 160 171 175 172 170 181 186 187 187 187 188 191 194 195 202 204 207 207 207	703 803 824 848 762 765 776 766 761 768 773 774 770 770 770 770 770 771 806 809 797 783 764 771 806 809 797	27 58 67 88 96 89	1,869 2,652 2,771 2,891 2,782 2,917 2,956 2,921 2,932 2,997 2,956 2,899 2,865 2,905 2,942 2,958 3,010 3,081 2,938 2,967 2,947 2,898 2,679 2,645 2,627 2,595	3,659 4,618 4,741 4,874 4,896 5,214 5,319 5,275 5,296 5,384 5,349 5,318 5,265 5,289 5,301 5,318 5,247 5,403 5,253 5,267 5,125 4,906 4,285 3,830 3,709 3,616 3,536	2,152 1,856 1,769 1,731 1,777 1,816 1,752 1,866 1,844 1,849 1,816 1,657 1,465 1,410 1,131 1,058 864 791 719 675 497 457 437 382 363 323 316	124 314 662 1,000 1,085 1,102 1,121	48 153 160 159 208 249 228 223 217 216 222 210 202 198 189 120 121 121 112 110 105 93 80 76 85 84	2,200 2,009 1,929 1,890 1,985 2,035 1,980 2,089 2,061 2,065 2,038 1,867 1,756 1,663 1,599 1,251 1,187 985 912 831 785 723 876 1,192 1,462 1,524 1,510 1,521	5,859 6,627 6,670 6,764 6,881 7,249 7,367 7,357 7,449 7,387 7,185 7,021 6,952 6,900 6,569 6,315 6,084 6,359 6,315 6,052 5,477 5,292 5,233 5,126 5,057	672 714 703 706 707 707 717 763 711 699 677 654 636 608 611 598 577 555 577 555 577 553 571 493
Full-time equivalents 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1989 1990 1991 1992 1993 1994 1995 1996 1997	CGYN 327 318 314 323 334 324 322 326 326 326 329 316 308 303 297 290 271 250 230 221 210	CGXY 947 957 977 1,001 1,038 1,047 1,046 1,032 1,028 1,016 1,013 1,013 1,013 1,013 1,015 69 424 158 69 70 65	CGXZ 866 885 897 872 853 853 827 812 787 756 756 751 763 765 766 783 770 733 710 655 626	CGYA 2,140 2,160 2,188 2,196 2,225 2,198 2,145 2,142 2,114 2,093 2,080 2,084 2,076 1,967 1,967 1,141 1,009 946 991	CULZ 1,099 1,105 1,110 1,087 1,058 1,041 1,034 1,027 1,021 1,029 1,043 1,046 992 990 982 970 840 818 806 817 813	CUMB 222 228 235 235 240 241 246 251 256 263 271 277 283 288 287 288 287 288 287 288 288	CGYB 152 150 146 136 131 130 126 125 125 129 114 105 97 90 86 82 78	CUMD 168 165 172 176 180 182 182 184 186 189 191 194 197 201 201 201 202 202	CGYC 683 675 701 699 692 681 686 689 675 677 674 681 692 720 706 695 685 678 632	23 45 52 76 72 67	CGYE 2,324 2,325 2,368 2,343 2,306 2,274 2,301 2,325 2,352 2,377 2,378 2,266 2,278 2,291 2,258 2,105 2,078 2,062 2,017 1,989	CGYF 4,464 4,485 4,556 4,531 4,472 4,481 4,465 4,467 4,466 4,470 4,458 4,350 4,354 4,258 4,081 3,572 3,219 3,071 2,963 2,890	CGYG 1,835 1,843 1,818 1,785 1,656 1,538 1,444 1,390 1,118 1,043 850 775 703 659 482 442 423 367 349 309 309	102 256 540 794 876 884 903	CGYH 223 217 216 222 206 198 197 188 118 127 119 110 108 100 103 91 78 74 83 82	CGYI 2,058 2,060 2,034 2,007 1,862 1,736 1,641 1,578 1,236 1,170 969 894 813 767 684 801 1,054 1,239 1,299 1,276 1,287	CGYJ 6,522 6,545 6,590 6,546 6,393 6,122 6,043 5,703 5,636 5,439 5,352 5,163 5,121 4,942 4,882 4,626 4,458 4,370 4,239 4,177	CGYM 748 748 739 727 703 687 662 644 662 599 600 587 586 577 566 575 534 492 472

<sup>1</sup> The Appendix gives details of the definitions and coverage of sectors and success of the statistics and the many changes in them between 1981 and 1994 (except in the case of the Civil Service which is documented back to 1969).

<sup>2</sup> Details of transfers of public corporations to the private sector, including the numbers of employees

Polytechnics were transferred to the private sector in April 1969.
 Community Programme employees were transferred to the Employment Training Scheme during the third quarter of 1988.

<sup>5</sup> FE colleges and 6th-form school employees were transferred to the private sector from April 1993.

#### Appendix: Definition of the Sectors

The United Kingdom national accounts divide the economy into institutional sectors so as to display the relationships between the different parts of the economy and the different forms of economic activity in a way which aggregate statistics cannot do. The sectors bring together those institutional units which are likely to play similar roles in economic activity and which may be expected to react in a broadly similar fashion to various market, fiscal and monetary forces.

The sectors used in this article are the same as in the national accounts. Full definitions of the sectors are given in *Sector Classification for the National Accounts* (a), and in *United Kingdom National Accounts: Sources and Methods* (b). They are explained more briefly below.

Some of the estimates for the latest year are provisional and are subject to minor changes as final information becomes available. The figures for NHS Trusts and grant-funded education establishments may be subject to more substantial revision because they are estimated from a variety of sources. The final figures will be based on a single consistent source of data.

#### **General Government**

#### **Central Government**

The central government sector can be regarded as embracing all bodies for whose activities a Minister of the Crown, or other responsible persons, is accountable to Parliament. Besides the various departments of the government of the United Kingdom and the Northern Ireland government (including HM Forces), it also includes a number of publicly constituted bodies, which, while not government bodies in the ordinary sense are financially dependant upon and effectively controlled in major matters by the government. Examples of the bodies administering public policy but without the substantial degree of financial independence which characterise the public corporations include:

- Regional and District Health Authorities of the National Health Service.
- National Research Councils.
- Royal Commissions.
- National Museums and Art Galleries.

Also included are certain productive or trading enterprises financed directly from the accounts of the central government, such as the Forestry Commission. Consistent data for years since 1961 appears in the *Economic Trends Annual Supplement*.

#### Civil Service

The Civil Service comprises the Home Civil Service and the Diplomatic Service (but not the Northern Ireland Civil Service) as well as those employed in the executive agencies. Apart from some public corporations (e.g. Royal Mint) the Civil Service is included in "Other Central Government" along with the Northern Ireland Civil Service and a number of smaller bodies including Research Councils, the British Council and the British Library. Further analysis of Civil Service manpower figures at 1st April 1997 can be found in the publication *Civil Service Statistics* 1997(c).

#### Local authorities

This sector consist of all local government authorities which both have power to raise funds by means of rates, levies and council tax etc. and which are obliged to make annual returns of income and expenditure under successive local government acts. It includes all levels of administrative authorities (including parish councils) and also local authorities with special functions. It includes magistrates courts, the probation service in England and Wales and police forces and their civilian staffs. It embraces all functions of such authorities (including, for example, their education services and construction departments) and includes trading activities of local authorities, such as housing, theatres etc. Municipal bus companies (from 1986) and airport companies (from 1987) are regarded as public corporations. Grant-maintained schools are regarded as part of the private sector (from 1989). Polytechnics and HE colleges were transferred from local authority control from April 1989 as were FE and 6th-form colleges from April 1993. These are all now regarded as part of the private sector (non-profit making bodies).

#### **Public Corporations**

Public Corporations are public trading bodies which have substantial degrees of financial independence from central government. They are publicly controlled to the extent that the Sovereign, Parliament or a Minister appoints, directly or indirectly, the whole or the majority of the board of management. They are free, however, to change their affairs without detailed control by Parliament; in particular they have power to borrow, within limits laid by Parliament, and to maintain their own reserves. Some public corporations are currently designated as "nationalised industries" and are noted as such in the list below. Subsidiaries of public corporations are part of this sector if their accounts are consolidated with those of the parent corporation.

Some central government bodies like the Royal Mint are included in this sector and not under central government. From 1st April 1991 NHS Trust hospitals are also included in this sector.

#### **Public Sector**

This is defined as the sum of general government and the public corporations.

**Private Sector** 

This covers employment in the corporate sector other than public corporations and in the personal sector (including unincorporated businesses and private non-profit making bodies serving persons). Bodies serving industry, supported by the government but not wholly dependent on government funds nor subject to detailed financial control, are treated as part of the company sector. Unincorporated businesses are those of sole traders and partnerships of individuals. All self-employed (whether or not they have any employees) including general practitioners are included in this sector as are private non- profit-making bodies. These include universities; polytechnics and higher education colleges in England (from 1st April 1989); grant-maintained schools from 1st September 1989, and from 1st April 1993, FE and 6th-form colleges.

#### **CLASSIFICATION BY INDUSTRY**

Industries are classified according to the *Standard Industrial Classification of Economic Activities* 1992.

#### **SOURCES OF THE STATISTICS**

The figures for total workforce in employment and work related government training programmes, together with the industrial analyses of employees in employment and the self-employed are aggregated from those compiled by the Earnings and Employment Division (EED) of the Office for National Statistics and the Department of Economic Development, Northern Ireland.

Estimates of employment in central government are obtained from a number of sources. HM Forces and National Health Services figures are obtained from the EED within the Office for National Statistics. Other Central government consists largely of those employed in the Civil Service. These numbers are obtained from the Personnel Statistics Branch of the Cabinet Office. The remainder of central government employees are derived from the Cabinet Office *Public Bodies* publication.

Public corporations data are derived from the ONS's *Inter-Departmental Business Register* (IDBR) and other regular surveys carried out by Business Statistics Group.

Local Authorities data is supplied by the Local Government Management Board through the Joint Staffing Watch surveys. Police data are obtained from the Home Office and Education figures are supplied by the EED within the Office for National Statistics.

#### **FULL-TIME EQUIVALENT EMPLOYMENT**

To provide a more refined measure of manpower inputs, many of the institutions in the public sector count their part-time workers in terms of full -time equivalents. This analysis appears in table D. Measuring full-time equivalents is a somewhat imprecise process, with each institution having its own convention for making the calculation. The most detailed calculations are made for the Civil Service and National Health Service, where a full-time equivalent is recorded for each individual. This is based on the employee's contracted hours and the standard hours for the grade. For example, if an individual contracts to work for 36 hours a week when the Standard full-time equivalent is 40 hours, the individual's full-time equivalent is 0.9. This system, however, does not take account of overtime or short time worked in particular periods, and no employee should have a full-time equivalent of more than 1. Consequently, a change in the length of the standard working week affects the number of full-time equivalents of part-time staff if the number of part-time hours is unchanged. Full-time equivalent figures for the National Health Service for years before 1983 relate to 30 September each year; since 1983, they are largely based on 30 June data.

The full-time equivalents for local authorities are derived by applying factors to the numbers of part-time workers in three groups based on average hours worked in each group nationally. The groups and factors for England and Wales are:

#### Non-manual Employees

Further education 0.11
Other 0.53
Manual workers 0.41

In other parts of the public sector, part-timers have been taken as half-units.

#### MAJOR SECTOR CHANGES; 1983 TO 1997

#### **Definitions, Coverage and Consistency of Statistics**

#### **Central Government**

 The Victoria & Albert and Science Museums were accorded trustee status on 1 April 1984, reducing civil service numbers by some 1,100.

- The Directorate of Historic Monuments and Ancient Buildings was transferred from the Department of the Environment to a new commission outside the civil service manpower count on 1 April 1984, involving around 1,100 employees.
- On 2 January 1985, Royal Ordnance Factories became a Companies Act company, reducing civil service numbers by approximately 19,000.
- United Kingdom Atomic Energy Authority was reclassified as a public corporation from 1 April 1986.
- The Devonport and Rosyth dockyards were contracted out on 6 April 1987, reducing civil service manpower by around 16,500.
- National Rivers Authority, set up on 10 July 1989, increased central government employment at mid 1990 by 6,600.
- 3,300 staff in the Department of Health Special Hospitals were excluded from early 1990.
- National Health Service Trusts were classified to the public corporation sector as from their establishment on 1 April 1991
- The Projects Division of Property Services Agency (Services) was sold to Tarmac in December 1992 and about 3,400 staff are excluded from that date.
- On 1 April 1993 commercial management was introduced at the Ministry of Defence Atomic Weapons Research Establishment (AWRE), about 6,300 staff excluded from that date.
- The sale of Building Management businesses of PSA during 1993-94 resulted in 2,370 staff being transferred to the private sector.
- During July 1994 some 1,000 Inland Revenue IT staff were transferred to EDS, a private sector company
- On 1 April 1995 the Meat Hygiene Service Executive was formed with about 800 staff transferring from Local Authorities.
- During January 1996 a further 800 Inland Revenue IT staff were transferred to EDS, a private sector company.

- On 1 April 1996 about 900 Regional Health Authority staff were transferred to the Department of Health.
- In the second quarter of 1996 the Environment Agency was set up when parts of Department of the Environment, Local Authorities and the National Rivers Authority were merged into one body to concentrate on the protection of the environment.
- On 30 September, 1996 HM Stationery Office was sold to National Publishing Group transferring 2,600 staff.
- On 19 March 1997 about 600 staff of the Building Research Establishment, an executive agency of the Department of the Environment, transferred to the private sector.
- On 1 April 1997 about 1,200 staff of ADAS, an executive agency of the Ministry of Agriculture, Fisheries and Food, transferred to the private sector.
- On 1 April 1997 about 600 staff of Paymaster, an executive agency of HM Treasury were transferred to EDS, a private sector company.
- On 24 April 1997 about 1,400 staff of the Ministry of Defence Support Services Division transferred to Cinven, a private sector company.

#### **Local Authorities**

Polytechnics and higher education institutions in England were transferred from the local authority sector in April 1989, reducing the numbers by 60,000 (3,900 FTE).

Schools opting-out of local authority control (ie grant maintained schools) are classified to the private sector (non-profit making bodies). Opting-out began in September 1989. There were approximately 10,000 and 23,000 teachers (on a full-time equivalent basis) at mid-1992 and mid-1993 respectively, in grant maintained schools.

Both further education (FE) and 6th form college funding transferred from local authority control on 1 April 1993. This involved approximately 119,000 academic and non-academic staff (on a full-time equivalent basis) being transferred to the private sector at mid-1993.

#### **Public Corporations**

# A. The public corporations in existence at 1 January 1997 are listed below.

Name of corporation	Commencing or vesting date		
Audit Commission	April 1983		
British Broadcasting Corporation	1927		
British Coal Corporation	1 January 1947		
British Nuclear Fuels plc	April 1992		
British Railways Board	January 1963		
British Waterways Board	January 1963		
The Buying Agency <sup>3</sup>	January 1996		
Caledonian MacBrayne Ltd <sup>2</sup>	April 1990		
Central Office of Information <sup>3</sup>	April 1996		
Channel 4 Television Company Ltd <sup>2</sup>	December 1980		
Civil Aviation Authority	April 1972		
Commission for the New Towns <sup>2</sup>	1961		
Commonwealth Development Corporation	February 1948		
Companies House <sup>3</sup>	April 1996		
Covent Garden Market Authority	October 1961		
Crown Agents and Crown Agents	00.020. 1007		
Holding and Realisation Board	January 1980		
Deeds of Assumption	March 1996		
Defence Evaluation Research Agency <sup>3</sup>	April 1996		
Development Board for Rural Wales	April 1977		
East of Scotland Water Authority	April 1996		
English Partnerships <sup>1</sup>	April 1986		
Fire Service College <sup>3</sup>	April 1996		
Forest Enterprise Agency <sup>3</sup>	April 1996		
Highlands and Islands Airports <sup>2</sup>	April 1995		
Highlands and Islands Enterprise <sup>1</sup>	November 1965		
HM Land Registry <sup>1</sup>	April 1996		
Horserace Totalisator Board <sup>3</sup>	April 1996		
Housing Acton Trusts	from July 1991		
Hydrographic Office <sup>3</sup>	April 1996		
Kingston Communications	December 1987		
Langanside Corporation	April 1989		
Land Authority for Wales	April 1976		
Local Authority Airports	from April 1987		
Local Authority Bus Companies	October 1986		
London Regional Transport <sup>1</sup>	January 1970		
Magnox Electric <sup>2</sup>	April 1996		
Medicines Central Agency <sup>3</sup>	April 1996		
Meteorological Office <sup>3</sup>	April 1996		
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National Health Service Trusts	From April 1991
Northern Ireland Housing Executive	May 1971
Northern Ireland Transport	,
Holding Company	April 1968
North of Scotland Water Authority	April 1996
Oil and Pipelines Agency	December 1985
Passenger Transport Executives	October 1969 and
· ·	various later dates
Patent Office <sup>3</sup>	April 1996
Post Office	April 1961
Railsale	November 1995
Registers of Scotland 3	April 1996
Remploy <sup>3</sup>	April 1996
Royal Mint	April 1975
Scottish Enterprise 1	December 1975
Scottish Homes <sup>1</sup>	1937
Sianel Pedwar Cymru (S4C)	January 1981
Trust Ports Northern Ireland	April 1974
United Kingdom Atomic Energy Authority	April 1986
United Kingdom Nirex Ltd	July 1982
Urban Development Corporations	From March 1981 -
	June 1988
Vehicle Inspectorate <sup>3</sup>	April 1996
Welsh Development Agency	January 1976
West of Scotland Water Authority	April 1996

#### Footnotes:

- (1) Name changed. British Coal Corporation was formerly the National Coal Board; London Regional Transport was formerly London Transport Executive; Highlands and Islands Enterprise was formerly Highlands and Islands Development Board; Scottish Enterprise was formerly Scottish Development Agency; English Partnerships was formerly known as the Urban Regeneration Agency; Scottish Homes was formerly Scottish Special Housing Association and Housing Corporation (Scotland).
- (2) Caledonian MacBrayne Ltd was part of the Scottish Transport Group; Channel Four Television Company Ltd was part of the Independent Television Commission; Highlands and Island Airports were part of the Civil Aviation Authority; Magnox Electric plc took over part of the functions of Nuclear Electric plc; Commission for the New Towns took over activities from New Town Development Corporations.
- (3) Reclassified from Central government sector in 1996.

B. Publicly owned institutions not classified to the public sector for statistical purposes		Scottish Transport Group subsidiary	from August 1990	
		bus companies	to October 1991	
Institution Classified to			Regional Electricity Companies and National Grid Company	December 1990
Institution	——————————————————————————————————————		National Power plc and PowerGen plc	March 1991
Bank of England	financial institu	ıtions	Scottish Hydroelectric plc and Scottish	Water 1001
Banking Department		power plc	June 1991	
Danning Department			British Technology Group	April 1992
British Nuclear Fuels Ltd 4	industrial and	commerical	Northern Ireland Electricity Service	June 1993
	companies		Angel Train Contracts Ltd	January 1996
Girobank ⁵	financial institu	utions	Eversholt Leasing Ltd	January 1996
			Porterbrook Leasing Ltd	January 1996
International Military	industrial and	commercial	Trainload	1996q1
Services <sup>6</sup> companies		Castleton Long Welded Rail &		
			Track Works	1996q1
Footnotes:			Central Track Renewals	1996q1
			Central Infrastructure Maintenance Unit	1996q1
(4) Until April 1992			College of Railway Technology	1996q1
(5) Until 1990			Great Western Holdings Ltd.	1996q1
(6) Ceased trading July 1991		Interlogic Control Engineering Ltd.	1996q1	
			Scottish Track Renewals Ltd.	1996q1
C. Corporations reclass	ified to the pri	vate sector since	Scottish Infracstructure Maintenance Unit	1996q1
end 1983.			South West Trains Ltd.	1996q1
			Western Infrastructure Maintenance Unit	1996q1
Name of corporation			The Engineering Link Ltd.	1996q1
			Fastline Rail Services Ltd.	1996q1
			Interfleet Technology Ltd.	1996q1
Enterprise Oil Ltd		June 1984	British Energy plc	1996q2
British Shipbuilders (warship	o yards)		British Rail Projects Ltd.	1996q2
and other companies		from July 1984	Connex SouthCentral Ltd.	1996q2
British Telecom		November 1984	European Passenger Service	1996q2

Name of corporation		The Engineering Link Ltd.	1996q1
		Fastline Rail Services Ltd.	1996q1
		Interfleet Technology Ltd.	1996q1
Enterprise Oil Ltd	June 1984	British Energy plc	1996q2
British Shipbuilders (warship yards)		British Rail Projects Ltd.	1996q2
and other companies	from July 1984	Connex SouthCentral Ltd.	1996q2
British Telecom	November 1984	European Passenger Service	1996q2
Trust Ports in Great Britain	from end-March	Freightliner	1996q2
	1985	Gatwick Express	April 1996
British Gas plc	December 1986	InterCity East Coast	April 1996
British Airways plc	February 1987	Network Train Engineering Services Ltd.	1996q2
Royal Ordnance plc	April 1987	Southern Track Renewals	1996q2
BAA plc	July 1987	Midland Main Line Ltd.	1996q2
National Bus Company subsidiaries	by April 1988	Eastern Infrastructure Maintenance Unit	1996q2
Local Authority bus companies	on various dates	Northern Infrastructure Maintenance Unit	1996q2
	from October 1988	South East Infrastructure Maintenance Unit	1996q2
British Steel	December 1988	South West Infrastructure Maintenance	
General Practice Finance Corporation	March 1989	Unit	April 1996
Regional Water Authority in England,		European Passenger Services	May 1996
Welsh Water Authority and Water		Railtrack plc	May 1996
Authorities Association	December 1989	Union Railways	May 1996
Girobank plc	July 1990	London, Tilbury and Southend Railway Ltd.	May 1996
Local Authority Airports	various dates from	Thames Trains Ltd.	October 1996
	June 1990	Cardiff Valleys Ltd.	October 1996

The Chiltern Railway Company Ltd.	1996q3
Great Yarmouth Transport	1996q3
South Eastern Ltd.	October 1996
Trentham Leisure	September 1996
Eastern Track Renewal Company Ltd.	1996q3
	•
Western Track Renewals	1996q3
Atomic Energy Authority Technology	1996q3
The Stationary Office Ltd. (formerly HMSO)	1996q3
Northern Track Renewal Company Ltd.	1996q3
Hyndburn Transport	1996q4
British Coal Enterprise	1996q4
Birmingham Airport Limited	1997q1
London Call Centre Ltd.	1997q1
Northern Call Centre Company Ltd.	1997q1
Scottish Call Centre Company Ltd.	1997q1
British Rail International Ltd.	1997q1
Railtest Ltd.	February 1997
Burnley & Pendle Transport	February 1997
North West Regional Railways Ltd.	March 1997
North London Railways Ltd.	March 1997
Regional Railways North East Ltd.	March 1997
Thameslink Rail Ltd.	March 1997
Central Trains Ltd.	March 1997
Railpart (UK) Ltd.	1997q1
Railfreight Distribution	March 1997
Crown Agents Foundation/Crown	
Agents Services Ltd	1997q1
Crown Agents Financial services Ltd	1997q1
Crown Agents Asset Management Ltd	1997q1
Crown Agents International Ltd.	1997q1
Greenshields, Cowie & Co Ltd.	1997q1
Resource (Science & Technology	100741
Expertise) Ltd.	1997q1
DeCTA (previously The Developing	155741
Countries Trade Agency)	1997q1
British Arabian Technical Co-operation Ltd.	1997q1
Four Millbank Holdings Ltd.	1997q1
Four Millbank Nominees Ltd.	1997q1
The Knight Line Ltd.	1997q1
Trade Supervision Ltd.	1997q1
Greenshield Shipping Services Ltd.	1997q1
Pheonix Travel (Greenshields Ltd.)	1997q1
Great Peter Nominees Ltd.	1997q1
Paymaster	1997q2
InterCity West Coast Ltd.	1997q1
ScotRail Railways Ltd.	1997q2
Docklands Light Railways	1997q2

# D. Corporations dissolved

- National Film Finance Corporation abolished in December 1985, and replaced in the private sector by the British Screen Finance Consortium.
- National Oil Corporation, in March 1986, being replaced by the Oil and Pipelines Agency.
- National Dock Labour Board in July 1989.
- Electricity Council in March 1990, being replaced in the private sector by the Electricity Association.
- Crown Suppliers in March 1991.
- Pilotage Commission in April 1991.
- Six Local Authority Bus Companies from April 1989 to November 1994.

# E. Other changes

The Housing Corporation was reclassified in the 1987 *Blue Book* as a central government trading body and the data were revised back to 1974. The Independent Television Commission (other than Channel Four) was reclassified to the central government sector from October 1991. The Urban Regeneration Agency was established from November 1993, and incorporated the former English Industrial Estates Corporation from April 1994, trading as English Partnership. Letchworth Garden City Corporation became Letchworth Garden City Heritage Foundation, a private charity from October 1995.

Parts of British Coal and British Railways Board have been sold since 1994. British Energy assumed most of the activities of Nuclear Electric plc and Scottish Nuclear plc in April 1996. AEA Technology, part of UKAEA, was sold in September 1996. East Kilbride and Glenrothes New Town Development Corporations were wound-up in December 1995. Cumbernauld, Irvine and Livingstone New Town Development Corporations were wound-up in December 1996.

For statistical purposes with in the National Accounts, the income and expenditure transactions of the the Bank of England Banking Department have been reclassified from the 1993 *Blue Book* to the financial sector. Data have been revised back to 1984. This also applies to Girobank, until its privatisation in July 1990.

From the 1993 *Blue Book* the fossil fuel level on electricity distribution is now separately identified as a capital grant within the public corporation accounts. Until this *Blue Book* income generated was included in gross trading surplus.

# **Availability of Quarterly Data**

Quarterly data underlying the figures for general government are available on request from: Jacqui Safford or Duncan MacGregor, Employment Briefing Branch B, Office for National Statistics, Room 249, East Lane House, East Lane, Runcorn, WA7 2DN. Telephone: 01928 79 2560 or 2565.

# References

- "Sector Classification for the National Accounts No 9" published by HMSO Books (March 1994) (PC 13a/1), Publications Centre, PO Box 276, London SW8 5DT. Price £13.00. A 1995 supplement is also available.
- 2. "United Kingdom National Accounts: Sources and Methods" (HMSO 1985, price £24.95 net).
- "Civil Service Statistics 1997" published by Cabinet Office on 29 January 1998 on the Internet (http;//www.open.gov.uk/co/ cseg/pmcsd/css97,cover97.htm), hard copies are available from Personnel Statistics Branch, Cabinet Office, Horse Guards Road, London SW1P 3AL (free publication).

# **Harmonised Indices of Consumer Prices**



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# **Summary**

Harmonised indices of consumer prices (HICPs) are constructed in each Member State of the European Union for the purpose of international comparisons of consumer price inflation. They will also be used as part of the assessment of progress against the convergence criteria when eligibility of Member States to join the European Economic and Monetary Union is decided. HICPs have been under development by Eurostat, the European Commission's statistical arm, in conjunction with Member States, for over four years. HICP figures for each Member State have been published monthly by Eurostat since March 1997. The ONS publishes the UK HICP figures separately, in advance of this, in its own First Release. This article comprises four parts which explain the development and uses of HICP in the EU and the United Kingdom:

- a) background to the construction of HICPs and their uses
- b) development of HICPs
- c) details of the harmonisation measures
- d) differences between the UK HICP and the retail prices index (RPI)

The last part summarises the methodological differences between the two measures and their respective inflation rates. It also explains why, in the UK context, the RPI remains the best indicator of consumer price inflation.

# Background

# Maastricht Treaty and convergence criteria

The Maastricht Treaty¹ sets out the arrangements and the timetable for achieving Economic and Monetary Union (EMU). Participating countries are required to have a high degree of economic convergence as measured by the four criteria set out in Article 109j of the Treaty: price stability, sustainability of the government financial position (government debt and deficit), exchange rate fluctuations and levels of interest rates.

The price stability criterion states that a country must have a sustainable price performance and an average rate of inflation over a period of one year that does not exceed by more than one and a half percentage points that of, at most, the three best performing Member States. The Article also states that price stability should be measured by means of consumer price indices produced on a comparable basis, taking into account differences in national definitions. HICPs have been developed for this purpose.

Existing consumer price indices (CPIs), such as the RPI in the United Kingdom, cannot be used for EMU purposes because of differences in their coverage and the ways in which they are constructed. For instance, the treatment of health and education varies greatly between countries; there is also no consistency of practice in the formula used to aggregate prices at the most basic level. It has long been considered that such differences may lead to different results in the measured rate of inflation.

### **Uses of the HICP**

The HICPs are being developed expressly for international comparisons of inflation within the European Union. In the short term, they will be used in deciding whether Member States meet the convergence criterion for EMU on price stability. The European Monetary Institute (EMI) and the European Commission will report to the Council of Ministers on progress against this criterion, as well as the other three criteria, on March 25 1998. The decision on who is eligible to take part in EMU, which is due to commence on 1 January 1999, will be made in May 1998.

The HICPs are also being used to produce an inflation index for the whole of the European Union and, in due course, will be used to construct an inflation index covering EMU members. These indices will be of use to central banks in Member States, providing cross-country comparisons of inflation on a comparable basis.

# **Revisions to HICP figures**

HICPs are revisable. However, during 1998, when first stage membership of the Monetary Union will be decided, and in the run-up to the start of EMU in January 1999, revisions to HICPs will be limited to the correction of mistakes and the correction of breaches of the rules underpinning the construction of the HICPs. Other revisions, for instance as a result of methodological changes or newer data, will not be allowed.

# Relationship between the HICPs and national CPIs

As previously mentioned, HICPs are designed expressly for international comparisons of inflation within Europe. The primary focus in their development has been on harmonising the methodology used to construct different national HICPs so that annual inflation rates are measured on a comparable basis. HICPs are not intended to replace national CPIs. Most Member States are likely to continue producing their existing CPIs for domestic purposes for the foreseeable future. This is certainly the case in the United Kingdom where the RPI remains the best measure of the impact of price changes on consumers and continues to be used for monitoring economic policy, indexation of contracts and social security benefits, and wage bargaining.

Although they serve different purposes, there are close links between national CPIs and HICPs. In particular, the actual price collections for HICPs often depend heavily on that of national CPIs, for reasons of economy and practicability. Furthermore, there are a number of research projects and studies under way in the context of the HICPs which may be of relevance to domestic CPIs. These include investigations into quality adjustment methods in a number of areas, sampling methods, and the possible use of scanner data. In the United Kingdom, developments in these and any other relevant areas will continue to be monitored for their potential benefit to the RPI.

## The development of the HICPs

### **Council Regulation**

Eurostat has been collaborating closely with National Statistical Institutes (NSIs) for over four years to produce HICPs. The first important and tangible outcome of this work was the Council Regulation<sup>2</sup> which gives the framework of rules by which HICPs are to be constructed. It also lays down a strict timetable, derived from the timetable in the Maastricht Treaty, for their introduction by Member States.

The Regulation states that harmonisation is to be achieved in two phases:

- (a) Stage I: the production of interim indices based on national CPIs by March 1996
- (b) Stage II: production of the first set of HICPs in March 1997

#### Interim indices of consumer prices

The interim indices of consumer prices were published by Eurostat from February 1996 to January 1997. Monthly index levels were published for 1994 to 1996, together with 12-month inflation rates for 1995 and 1996. These indices were used by the European Commission and the EMI in their first report to the Council of Ministers in 1996 on progress made against the convergence criteria.

The interim indices were constructed using the same methods as national CPIs but with the coverage of goods and services adjusted to be as similar as possible across Member States. The interim indices were therefore more comparable than the national measures excluding housing, which had previously been used for international comparisons. However, they omitted a wide range of products and still involved quite different methodologies. The main categories of expenditure excluded from the interim indices were owner-occupiers' housing costs, insurance, and health and educational goods and services. For each of these, the methods used to construct price indices varied considerably between countries and their inclusion would have seriously undermined comparability. Some categories of expenditure which were excluded from some national CPIs - in particular, alcoholic drinks and tobacco - were included for all Member States.

### First publication of the HICPs

The interim indices were replaced by the monthly publication of HICPs by Eurostat, starting in March 1997. In contrast to the interim indices, the HICPs are harmonised in several methodological areas, in particular the formulae used to combine prices at the most basic level. Coverage of goods and services is also more comprehensive although there are still several areas where further harmonisation is necessary, such as insurance and in the health and education fields. Figures for the United Kingdom are published in a separate ONS First Release, in advance of the Eurostat publication.

The monthly figures published by Eurostat are for each of the 15 Member States, together with those for Norway and Iceland. Indices for the European Union and the European Economic Area

(EU plus Norway and Iceland, but not Switzerland) are also calculated. The data published include: the monthly index level (starting in January 1995); the annual rate of change (starting in January 1996); and figures for the sub-indices.

Chart 1 shows the 12-month inflation rates for each country at December 1997 while Tables 1 and 2 show the monthly HICP indices and 12-month inflation rates since the start of 1995. Although the Regulations do not require the production of HICP indices prior to 1996, most countries have produced estimates for 1995 so that 12-month inflation rates during 1996 could be derived. The United Kingdom could not readily produce such estimates, so Eurostat produced their own estimates based on the 1995 interim indices, adjusted for the effect of using a different formula in the HICP for aggregating the basic price data. It should be noted that the Eurostat estimates can only be used to give a broad indication of trends; they are not consistent with the figures for later periods.



# **Details of the harmonisation measures**

### **HICP Regulations**

The Council Regulation set out a framework of rules for the construction of HICPs. The procedures to be followed in implementing the rules are detailed in a series of Commission Regulations. As with the Council Regulation, the Commission Regulations are legally binding on Member States. They are developed by Eurostat in conjunction with National Statistics Institutes and are generally approved by qualified majority voting in the Statistical Program Committee, which comprises heads of

National Statistical Institutes (such as the ONS), before adoption by the Commission. There are two general principles underlying the Regulations. Firstly, they specify the outputs which are required, rather than they how they are to be achieved. Secondly, they eliminate practices which may result in the HICPs not being comparable. The second of these principles has had the effect of achieving convergence on good practice and of raising the general quality of data.

To date, two Commission Regulations have been adopted<sup>3,4</sup>. The Regulations have introduced a common expenditure classification, a common HICP coverage, and a series of minimum standards such as:

- the incorporation of newly significant goods and services (e.g. personal computers);
- quality adjustment;
- the use of comparable formulae for aggregating prices at the most basic level;
- representativity of the sample.

The issues addressed in the Regulations cover, by default, the main issues raised in the Boskin report<sup>5,6,7</sup> which looked at potential causes of bias in the US CPI. These were: quality adjustment, the basic formula and keeping up with market developments (new goods and expenditure weights).

In addition to the two Commission Regulations which have already been adopted, a Regulation on minimum standards for the quality of HICP weights has been passed and is awaiting adoption; and further Regulations are being developed to extend the coverage of goods and services, and harmonise the geographic and population coverage of the HICP.

The main requirements of the existing Regulations, and their effects, particularly on the United Kingdom, are described below.

# Classification

The assessment of price stability under the convergence criterion primarily concerns the "all items" HICPs. However, the analysis of sources of inflationary pressure requires a sub-division of the HICP into component parts relating to different product groups. International comparability of these sub-indices thus requires a common classification. The HICPs are compiled using the international classification of consumers' expenditure known as COICOP (Classification of Individual Consumption by Purpose). COICOP groups together consumption according to the purpose of its use. Thus the heading "clothing", for example, groups

Table 1: HICP index levels, 1996 = 100

	United Kingdom	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Irish Republic	Italy	Luxem- bourg	Nether- lands	Portugal	Spain	Sweden	EU 15 average
	CHVJ	CLMV	CLMW	CLMX	CLMY	CLMZ	CLNA	CLNB	CLNC	CLND	CLNE	CLNF	CLNG	CLNH	CLNI	CLNJ
1995	97.61	98.3	98.3	98.1	98.9	98.0	98.8	92.7	97.9*	96.2	98.8	98.6	97.2	96.6	99.2	97.7*
1996	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1997	101.8	101.2	101.5	102.0	101.2	101.3	101.5	105.4	101.2	101.9	101.4	101.9	101.9	101.9	101.9	101.7
1995 Jan	95.81	97.8	97.8	97.2	98.8	97.0	97.9	89.3	96.3 <sup>2</sup>	93.3	98.4	97.6	95.9	94.9	97.9	96.2*
Feb	96.31	98.0	97.9	97.6	99.1	97.3	98.5	88.9	97.0	94.0	98.6	98.2	96.4	95.3	98.3	96.7*
Mar	96.91	98.1	97.9	97.9	99.0	97.5	98.4	91.1	97.4 <sup>2</sup>	94.8	98.6	98.9	96.8	95.9	98.8	97.0*
Apr	97.51	98.1	98.0 98.1	98.2 98.5	99.0 99.1	97.7 97.8	98.6 98.7	92.1 93.0	97.6 <sup>2</sup> 97.2	95.3 95.9	98.6 98.7	99.1 98.9	97.3	96.4	99.4	97.4*
May	97.9¹ 97.9¹	98.2 98.4	98.1	98.3	99.1	97.8	99.0	93.0	97.2 98.0 <sup>2</sup>	95.9	98.8	98.7	97.2 96.9	96.4 96.5	99.5 99.3	97.6* 97.8*
Jun	91.9	90.4	90.1	30.3	33.2	97.0	33.0	50.0	90.0	30.3	30.0	30.7	90.9	30.3	39.3	97.0
Jul	97.41	98.4	98.4	97.7	99.2	97.6	99.2	91.8	97.8 <sup>2</sup>	96.7	98.8	98.0	96.9	96.5	99.0	97.7*
Aug	97.91	98.4	98.7	97.9	98.9	98.1	99.1	91.9	98.3	96.9	98.8	98.1	97.3	96.8	99.0	97.9*
Sep	98.4 <sup>1</sup> 98.1 <sup>1</sup>	98.5	98.6	98.5 98.5	98.9 98.9	98.5 98.6	99.0 98.9	94.1 94.8	98.5 <sup>2</sup> 98.5 <sup>2</sup>	97.2 97.5	99.0 99.1	99.0 99.0	97.5	97.2	99.9	98.2*
Oct		98.4 98.4	98.4 98.5	98.5	98.9	98.6	98.9	94.8	98.5	97.5	99.1	99.0	97.8 97.9	97.3 97.6	100.0 100.0	98.3* 98.4*
Nov Dec	98.0¹ 98.7¹	98.4	98.7	98.6	98.5	98.8	99.1	96.7	98.8 <sup>2</sup>	98.2	99.3	98.5	97.9	97.6	99.7	98.6*
Dec	30.7	30.4	30.7	30.0	30.3	30.0	33.1	30.7	30.0	30.2	33.5	30.5	37.3	37.3	33.7	30.0
1996 Jan	98.5	99.4	99.1	98.4	99.2	98.9	99.2	96.3	98.5²	98.6	99.4	98.7	98.3	98.5	99.1	98.8*
Feb	98.9	99.7	99.2	99.0	99.6	99.3	99.7	96.1	99.2	99.0	99.5	99.2	98.8	98.7	99.3	99.2
Mar	99.4	100.0	99.5	99.6	99.8	100.0	99.8	98.9	99.72	99.3	99.6	100.4	99.0	99.1	100.0	99.6*
Apr	99.9	99.9	100.0	99.9	100.0	100.1	99.8	99.9	99.5 <sup>2</sup>	99.7	99.8	100.7	99.8	99.7	100.4	99.9*
May	100.2	99.8	100.1	100.1	100.3	100.3	100.0	100.7	99.7	100.1	99.9	100.3	100.2	100.1	100.5	100.1
Jun	100.3	100.1	100.0	100.1	100.3	100.2	100.1	100.9	99.9²	100.3	99.9	99.8	100.2	100.0	100.1	100.2*
Jul	99.6	100.2	99.9	99.9	100.3	100.0	100.4	99.1	99.7 <sup>2</sup>	100.2	100.0	99.5	100.4	100.1	99.9	100.1*
Aug	100.2	99.9	99.9	100.1	99.9	99.8	100.3	99.0	100.3	100.3	100.1	99.3	100.7	100.4	99.6	100.1
Sep	100.7	99.9	100.1	100.6	100.1	100.1	100.1	101.3	100.8 <sup>2</sup>	100.4	100.1	100.4	100.7	100.7	100.4	100.4*
Oct	100.6	100.1	100.6	100.8	100.2	100.4	100.2	102.1	100.72	100.5	100.3	100.7	100.5	100.8	100.4	100.5*
Nov	100.7	100.4	100.6 100.8	100.8 100.7	100.0 100.2	100.3	100.1	102.2 103.4	100.8 101.2 <sup>2</sup>	100.9 101.0	100.6 100.6	100.5 100.4	100.7	100.8	100.2 100.2	100.5 100.7*
Dec	101.0	100.7	100.8	100.7	100.2	100.5	100.3	103.4	101.2	101.0	100.6	100.4	100.7	101.1	100.2	100.7
1997 Jan	100.6	100.6	101.3	100.9	100.1	100.7	100.9	102.7	100.3	101.2	100.7	100.4	101.1	101.3	100.4	100.9
Feb	100.9	101.1	101.2	101.2	100.2	101.0	101.2	102.3	100.9	101.3	101.0	100.6	101.2	101.2	100.4	101.1
Mar	101.1	101.2	100.8	101.5	100.5	101.1	101.1	104.7	101.0	101.5	100.9	101.6	101.3	101.3	101.0	101.3
Apr	101.4	101.1	101.1	101.8	100.9	101.1	101.0	105.6	101.1	101.6	100.9	101.7	101.4	101.3	101.7	101.4
May	101.8	101.1	101.6	102.4	101.2	101.2	101.4	106.1	101.1	101.9	101.0	101.9	102.1	101.4	101.8	101.6
Jun	102.0	101.1	101.6	102.6	101.4	101.2	101.6	106.5	101.4	101.9	101.1	101.3	101.8	101.4	101.8	101.7
Jul	101.6	101.1	101.8	102.0	101.4	101.1	101.9	104.3	101.2	101.9	101.3	101.4	101.8	101.6	101.6	101.7
Aug	102.2	101.2	101.6	102.1	101.6	101.4	102.0	104.5	100.9	101.9	101.5	101.8	102.3	102.1	101.7	101.9
Sep	102.5	101.1	101.7	102.5	101.7	101.6	101.7	106.3	101.4	102.0	101.8	102.9	102.2	102.6	103.0	102.1
Oct	102.6	101.2	101.8	102.4	101.9	101.5	101.6	106.8	101.5	102.4	102.0	103.0	102.1	102.6	103.1	102.2
Nov	102.6	101.5	101.9	102.5	101.8	101.7	101.5	107.3	101.9 102.2	102.7 102.8	102.1 102.1	103.0 102.6	102.6 102.8	102.7 103.0	102.9 102.9	102.3
Dec	102.8	101.7	101.7	102.4	101.8	101.7	101.7	108.1	102.2	102.8	102.1	102.6	102.8	103.0	102.9	102.4

Source: ONS / Eurostat

Table 2: HICP percentage change over 12 months

	United Kingdom	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Irish Republic	Italy	Luxem- bourg	Nether- lands	Portugal	Spain	Sweden	EU 15 average
	CJYR	CLNL	CLNM	CLNN	CLNO	CLNP	CLNQ	CLNR	CLNT	CLNU	CLNV	CLNW	CLNY	CLNZ	CLOA	CLNX
1996	2.51	1.8	1.8	1.9	1.1	2.1	1.2	7.9	2.2 <sup>2</sup>	4.0	1.2	1.4	2.9	3.6	0.8	2.5 <sup>2</sup>
1997	1.8	1.2	1.5	2.0	1.2	1.3	1.5	5.4	1.22	1.9	1.4	1.9	1.9	1.9	1.9	1.7 <sup>2</sup>
1996 Jan	2.81	1.6	1.3	1.2	0.4	2.0	1.3	7.8	2.3 <sup>2</sup>	5.7	1.0	1.1	2.5	3.8	1.2	2.72
Feb	2.71	1.7	1.3	1.4	0.5	2.1	1.2	8.1	2.3	5.3	0.9	1.0	2.5	3.6	1.0	2.62
Mar	2.61	1.9	1.6	1.7	0.8	2.6	1.4	8.6	2.42	4.7	1.0	1.5	2.3	3.3	1.2	2.6
Apr	2.51	1.8	2.0	1.7	1.0	2.5	1.2	8.5	1.92	4.6	1.2	1.6	2.6	3.4	1.0	2.6
May	2.31	1.6	2.0	1.6	1.2	2.6	1.3	8.3	1.9	4.4	1.2	1.4	3.1	3.8	1.0	2.6
Jun	2.51	1.7	1.9	1.8	1.1	2.5	1.1	7.9	1.92	3.9	1.1	1.1	3.4	3.6	0.8	2.42
Jul	2.31	1.8	1.5	2.3	1.1	2.5	1.2	8.0	1.9 <sup>2</sup>	3.6	1.2	1.5	3.6	3.7	0.9	2.4
Aug	2.31	1.5	1.2	2.2	1.0	1.7	1.2	7.7	2.0	3.5	1.3	1.2	3.5	3.7	0.6	2.2
Sep	2.31	1.4	1.5	2.1	1.2	1.6	1.1	7.7	2.3 <sup>2</sup>	3.3	1.1	1.4	3.3	3.6	0.5	2.2
Oct	2.51	1.7	2.2	2.3	1.3	1.8	1.3	7.7	2.22	3.1	1.2	1.7	2.8	3.6	0.4	2.3
Nov	2.81	2.0	2.1	2.1	1.4	1.6	1.3	7.4	2.1	2.9	1.3	1.5	2.9	3.3	0.2	2.2
Dec	2.31	2.3	2.1	2.1	1.7	1.7	1.2	6.9	2.42	2.9	1.3	1.9	2.9	3.3	0.5	2.1
1997 Jan	2.1	1.2	2.2	2.5	0.9	1.8	1.7	6.6	1.8 <sup>2</sup>	2.6	1.3	1.7	2.8	2.8	1.3	2.2
Feb	2.0	1.4	2.0	2.2	0.6	1.7	1.5	6.5	1.7	2.3	1.5	1.4	2.4	2.5	1.1	2.0
Mar	1.7	1.2	1.3	1.9	0.7	1.1	1.3	5.9	1.3 <sup>2</sup>	2.2	1.3	1.2	2.3	2.2	1.0	1.7
Apr	1.5	1.2	1.1	1.9	0.9	1.0	1.2	5.7	1.6 <sup>2</sup>	1.9	1.1	1.0	1.6	1.6	1.3	1.5
May	1.6	1.3	1.5	2.3	0.9	0.9	1.4	5.4	1.4	1.8	1.1	1.6	1.9	1.3	1.3	1.5
Jun	1.7	1.0	1.6	2.5	1.1	1.0	1.5	5.6	1.5 <sup>2</sup>	1.6	1.2	1.5	1.6	1.4	1.7	1.6
Jul	2.0	0.9	1.9	2.1	1.1	1.1	1.5	5.2	1.5 <sup>2</sup>	1.7	1.3	1.9	1.4	1.5	1.7	1.6
Aug	2.0	1.3	1.7	2.0	1.7	1.6	1.7	5.6	0.6	1.6	1.4	2.5	1.6	1.7	2.1	1.8
Sep	1.8	1.2	1.6	1.9	1.6	1.5	1.6	4.9	0.62	1.6	1.7	2.5	1.5	1.9	2.6	1.8
Oct	2.0	1.1	1.2	1.6	1.7	1.1	1.4	4.6	0.82	1.9	1.7	2.3	1.6	1.8	2.7	1.7
Nov	1.9	1.1	1.3	1.7	1.8	1.4	1.4	5.0	1.1	1.8	1.5	2.5	1.9	1.9	2.7	1.7
Dec	1.8	1.0	0.9	1.7	1.6	1.2	1.4	4.5	1.02	1.8	1.5	2.2	2.1	1.9	2.7	1.6

Source: ONS / Eurostat

<sup>(1)</sup> Eurostat estimates based on the Interim Index of Consumer Prices, adjusted for the effect of the different formula used in the HICP to aggregate prices at the most basic level. These estimates have been produced to give a broad estimate of trend. They are not on the same basis as later figures.
(2) Eurostat estimates. Monthly figures are only available from the start of 1997.
(\*) Eurostat estimates.

<sup>(1)</sup> Eurostat estimates produced to give a broad indication of trend. The 1995 index levels from which these figures are derived were based on the Interim Index of Consumer Prices, adjusted for the effect of the different formula used in the HICP to aggregate prices at the most basic level.

<sup>(2)</sup> Eurostat estimates.

together garments, clothing materials, laundry and repair which are all items associated with keeping oneself clothed.

A version of this classification has been specially adapted for the HICPs, known as COICOP/HICP. The weights assigned to each sub-index vary from country to country depending on the relative share of consumers' expenditure on each sub-category in each country.

The weights for the United Kingdom are shown in Table 3. It should be noted that the HICP classification differs substantially from that used in the RPI. For instance, the COICOP category 02.1, "alcoholic beverages", comprises off-sales only; sales of alcohol in bars and restaurants are included under 11.1, "catering". By contrast, in the RPI all expenditures on alcohol are included under the one heading. This means that it is often not straightforward to compare the weights and inflation rates for sub-indices of the UK HICP and the RPI. Another example where the two measures differ is insurance. In the RPI, the weight for insurance comprises total expenditure on the purchase of insurance policies. Under COICOP, the weight for insurance comprises the service charge element only: ie it excludes that part of expenditure on insurance policies which is paid out in claims. The claims element is, instead, redistributed to the COICOP headings under which the expenditure is made. For instance, claims for motor insurance are split between second hand cars, motor spares and repairs (COICOP headings 07.1.1B, 07.2.1 and 07.2.3).

#### **Product Coverage**

The interim indices produced during 1996 had a relatively limited coverage of goods and services. This coverage was extended for the HICPs when they were first published in March 1997 to include expenditures on, for example, insurance for cars and house contents, package holidays, banking services, and some goods and services in the fields of health and education.

There are still some categories of expenditure which are excluded from the coverage of the HICPs. These are the technically difficult areas where differences in national markets make the production of comparable indices difficult. For example, in the fields of health and education, many goods and services are heavily subsidised by the state; the extent of the subsidy varies substantially across Member States; and it is not always clear how or which prices should be measured. Work is underway to develop a harmonised methodology in these areas. Work is also progressing on the methodology to be used for insurance with the aim of extending coverage to include buildings, travel, health and other types of insurance. Further work remains to be done on certain financial

services, and social protection services, such as nurseries and retirement homes.

Due to large differences between Member States, no agreement has been reached on the appropriate treatment of owner-occupiers' housing costs in the HICP. The use of imputed rents (as used in the National Accounts) or mortgage interest payments (as used in the RPI and by some other Member States) are considered by some as inappropriate. It has been argued that imputed rents are not actual prices while mortgage interest payments are considered to be a charge on credit rather than a price for the housing service received, which is the approach adopted in the RPI. The main options seem to be either the total exclusion of owner-occupiers' housing costs or the inclusion of an index for the acquisition of new houses. The treatment of owner-occupiers' housing costs in the RPI was last considered by the 1992-94 RPI Advisory Committee<sup>8</sup>.

In the United Kingdom, product coverage for the HICP is, on the whole, very similar to that of the RPI, and prices are obtained from the same sources. However, there are a few notable exceptions. A number of RPI series are excluded from the HICP; in particular, mortgage interest payments, house depreciation and council tax which, together, account for around 10 per cent of expenditure covered by the RPI. Also excluded are direct expenditure by households on education and health care and the proxy indicator for new car prices. The latter is based on movements in used car prices; the HICP uses movements in list prices of new cars in its place (ideally, the prices used should take account of the discounts obtained by most purchasers, but these are not readily available).

The HICP also includes an index for personal computers and an index for air fares neither of which are currently included in the RPI. These items are included in the HICP because their expenditures exceed one part per thousand of total consumers' expenditure, the threshold set by Eurostat above which items have to be included (see next section).

### **New Products**

CPIs are often criticised for being slow to include new products, such as mobile phones and personal computers. If some Member States add important new products but others fail to do so, it could lead to significant differences in the relative rates of measured inflation. To overcome this, a new product must be included in a Member State's HICP if it achieves a sales volume of over one part per thousand of total consumers' expenditure in that country.

Member States have to be able to identify when new goods and services emerge on the market and gain the required volume of sales. To aid this process, Eurostat acts as an information exchange, informing each Member State of the products identified as newly significant by other Member States. In the United Kingdom, this information is taken into account during the annual review of the "basket of goods and services" for which prices will be collected for the HICP and RPI.

#### Quality change

Like most CPIs, the HICPs aim to measure the change in prices of specified goods and services through time. However, product developments, seasonal variability in the availability of some goods, and changes in consumer preferences, often make this difficult. If for example, a motor car priced in January is replaced by a new model in August, the price difference may be a result of a quality change as well as a price change. Differences in the procedures used to adjust for quality change are probably the biggest source of non-comparability between Member States' HICPs. To help counter this, minimum standards for quality adjustment have been specified and a number of research projects and study groups have been set up. Specific aspects which are being looked at include quality changes for personal computers, new cars and clothing.

Quality adjustments can be explicit or implicit. An explicit adjustment would be one where differences between the characteristics of the original and its replacement are compared and valued. In practice, explicit adjustments are time-consuming and expensive and most quality adjustments applied by Member States are implicit. For instance in the United Kingdom, replacements are generally judged to be either of comparable quality or not. For comparable items, the full price difference between the original and its replacement is taken into the index. Otherwise, the price change is generally assumed to be in line with other items belonging to the same group; the remaining difference in price between the original and its replacement being the implicit valuation of the quality change.

One particular type of implicit quality adjustment has been ruled out if applied automatically without justification. This is the practice of "linking" where no price change is taken into the index when an item is replaced. This is equivalent to assuming that the difference in price between an item and its replacement is wholly attributable to a difference in quality.

In the UK HICP, the only items for which explicit quality adjustments are made are new cars and personal computers. With these, the option cost approach is used. This involves assigning a value to different parts of the specification of the replacement (e.g. sunroof or CD-ROM), based on the cost of buying these differences as options. The price of the old model is then adjusted using 50 per cent of these option costs, to allow a like for like comparison. The figure of 50 per cent was arrived after discussions with international experts on CPIs, and with economists, and implies that each option which is included as standard on the new model would have been bought as an extra by half the purchasers of the old model. For these purchasers, the true price change is the difference between the price of the new model and the old price plus the option now included as standard. For the people who would not have bought the option, the true price change is the difference between the price of the two models. To date, these explicit quality adjustments have not been used in the RPI.

#### Formulae used to construct the HICPs

The HICPs are constructed using a Laspeyres-type index. This means they are calculated as a weighted arithmetic average of the component price indices, using weights which reflect the expenditure patterns of the index population in the weight reference period.

An "elementary aggregate" is the most basic level at which prices are combined. Below this level, expenditure weights are not available. An example of an elementary aggregate might be the price of "a double wardrobe" or "carrots" in a particular region and / or shop type. The price index for an elementary aggregate is obtained by combining prices together using an appropriate formula. In the HICP, the two main formulae used are the ratio of arithmetic means (RA) and the geometric mean (see Appendix). Alternative formulae can also be used provided they do not result in annual inflation rates which differ systematically from an index compiled by either of the given formulae by more than 0.1 per cent on average over a year.

The average of price relatives formula (AR) can only be used in the HICP if it can be shown to produce results comparable with other formulae. In general, this will not be the case and eight countries had to change the formula from that used in their national CPI to comply with this requirement. The eight countries are: Denmark, Greece, France, Italy, Luxembourg, Austria, Finland and the United Kingdom. In almost all cases, the geometric mean

was introduced for all elementary aggregates. The exceptions were Italy which changed to RA; France which introduced the geometric mean for products where the items surveyed vary substantially in price (heterogeneous products), but retained RA for homogenous products; and Austria which switched to the geometric mean for all except certain items such as fruit and vegetables for which RA is used. All countries, except for Austria and the United Kingdom, introduced the change in formula into their national CPIs.

It should be noted that the decision effectively to rule out AR in the HICP was not taken on the grounds that it is wrong but rather that it does not give results which are "comparable" to those given by other formulae. In other words, differences in Member States' inflation rates will not be due to the formulae used to create price indices for elementary aggregates.

In the United Kingdom, the RPI continues to use a combination of the two arithmetic mean formulae. RA is used for more homogeneous items, where the products surveyed do not vary greatly in price. AR is used where the prices are less homogeneous, so that the index is not unduly influenced by movements in the highest priced items, as can happen with RA. The use of AR smoothes out some of the price variation which can be caused by the sampling of items with a wide range of prices.

### Weights and population coverage

The geographical and population coverage for expenditures used to calculate weights in the HICP are not fully harmonised. They are harmonised to the extent that the weights must cover all households, regardless of income, resident in any part of the economic territory. To comply with this, the United Kingdom, Greece and Portugal had to adjust their weights to cover households excluded from their national CPIs.

There are two main areas where the coverage of the weights is not harmonised: expenditure by residents of institutions (such as retirement homes), and expenditure by foreign visitors. The majority of Member States do not include the expenditure of institutional households; France, Italy and Denmark are exceptions. Expenditure by foreign visitors is included in the weights of those Member States which use National Accounts as their primary data source (about half) but is excluded by those who base their weights on household budget surveys. Consideration is being given to further harmonisation of geographical and population coverage.

In the United Kingdom, weights for the HICP are constructed in a very similar way to the RPI. There are two main differences. First, the HICP uses the COICOP classification whereas the RPI has its own distinct system. Secondly, the HICP covers all private households whereas the RPI excludes the expenditure of the top four per cent of households by income, and of pensioner households who derive at least 75 per cent of their income from state benefits. The RPI coverage is designed to prevent it being unduly influenced by the spending patterns of these households which are likely to differ significantly from the average.

As for RPI section weights, data for HICP weights (down to the 3-digit COICOP published figures) are primarily obtained via the Family Expenditure Survey (FES). However, certain categories of expenditure which are known to be under-recorded in the FES, such as alcohol, tobacco, soft drinks and confectionery, are constructed using National Accounts data. All weights below 3-digit COICOP (such as those for items within product groupings and shop type) are derived in the same manner, and from the same sources, as those used in the RPI.

### Updating of weights

No specific measures relating to the updating of weights were required of Member States for the launch of the HICP. The majority of Member States update weights every five years but there are a few which revise their weights annually, namely: the United Kingdom, France, Sweden and, from the start of 1998, the Netherlands.

The Council Regulation does not require household budget surveys (such as the FES in the United Kingdom) to be conducted more frequently than every five years for the purpose of obtaining information on spending patterns for use in weights. A draft Commission Regulation, which has been passed by Member States and is awaiting adoption, builds on this. It stipulates that the weights used can, in general, relate to a weight reference period up to seven years prior to the current year. However, adjustments need to be made for significant changes in expenditure patterns in the intervening periods. This will typically be to take account of products which are significantly losing or gaining in importance, such as personal computers, where five year old weights might not correctly reflect their relative importance.

In all countries, HICP weights down to 3-digit COICOP level are updated annually from their weight reference period to December of the latest year using movements in the relevant price index. This annual updating also needs to take account of any newly

significant goods and services which have been identified. In the case of the United Kingdom, the weight reference period is December of the previous year; for instance, 3-digit COICOP weights for the 1998 HICP will be based on expenditure patterns at December 1996 uprated to December 1997.

In the United Kingdom, the weight of items below 3-digit COICOP and the items in the "basket of goods and services" are reviewed annually. Since the HICP is based on the RPI price collections, the updated weights and sample of items are introduced at the same time as they are in the RPI, in January of each year. This means that the annual chain-linking used in the UK HICP is a two-stage process, with a link at December to take account of the updated weights at 3-digit COICOP level and above, and a link at January to take account of the updated sample of items.

### Sample Design and Maintenance

All CPIs are based on the regular measurement of a sample of prices of specified goods and services. To ensure the long term representativeness and comparability of the HICPs, the samples need to be kept up-to-date. There are several aspects to this including the incorporation of newly significant products (discussed earlier); regular reviews of products and retail outlets; sampling methods for products and outlets, which is the subject of a research project; and the replacement of products and retail outlets when they disappear from the market.

To ensure the sample of products is kept up-to-date, rules have been developed for how long a target item can be kept in the sample if its price is missing. These state that for items surveyed monthly, estimated prices may be used for up to two consecutive months if a price is not available for a specific target item. However, a replacement item has to be introduced if the price is unavailable for a third month. For prices collected less frequently than monthly, an estimated price may be used on the first occasion a price is not available but a replacement item has to be introduced on the second occasion.

#### Further harmonisation work

Although considerable progress has been made towards harmonisation through the HICPs, more work remains to be done. Further technical Regulations are under development to harmonise the geographical and population coverage of the HICP and to extend the coverage of goods and services. Guidelines are also

being developed to ensure that discounts (e.g. three for the price of two; temporary sales; end of line sales; loyalty cards) and tariffs (e.g. gas and electricity prices, the price of a stamp) are treated in a comparable fashion.

Study groups and special Task Forces, comprising representatives of National Statistical Institutes and other international experts, have also been set up to look at specific issues. The subjects being tackled include: how to incorporate insurance, health and education into HICPs; the harmonisation of methods, including quality adjustment procedures, in the areas of new cars, clothing, and personal computers; and sampling methods.

# The UK HICP compared with the RPI

### Summary of methodological differences

The UK HICP uses the same basic price collections as the RPI. However, as noted in the preceding sections, there are a number of areas where the methodologies differ. These are summarised below:

- a. the coverage of the HICP is based on the international classification system, COICOP, whereas the RPI uses its own distinct system;
- a number of RPI components are excluded from the HICP, most notably, owner-occupiers' housing costs, house depreciation and council tax which together make up 10 per cent of the weight of the RPI. Other components excluded are: the cost of the annual road fund licence; health insurance; private education; medical fees;
- the HICP includes indices for air fares and personal computers, which are not currently included in the RPI. In addition, the HICP includes an index for actual list prices of new cars rather than a proxy index based on used car prices;
- the HICP series for personal computers and new cars are explicitly adjusted for changes in quality;
- the HICP uses the geometric mean to aggregate the prices at the lowest level while the RPI uses arithmetic means (a combination of the ratio of averages and the average of relatives - see Appendix);
- f. the average household expenditure pattern on which the HICP is based is that of the whole UK private household population. In the RPI, the expenditure of the highest income households, and of pensioner households mainly dependent on state benefits, are excluded;
- g. the HICP is a revisable index while the RPI is never revised.

# Comparison of inflation rates

The UK HICP consistently records a lower rate of inflation than the RPI and other indices such as the RPI excluding Mortgage Interest Payments (RPIX) which are derived from it. Chart 2 shows how the annual inflation rate for the HICP compares with the RPIX. On average during 1997, the annual rate of inflation for the HICP was 0.9 percentage points lower. The average monthly differences during 1997 between the two measures can be broken down as follows:

- a) the effect of using the geometric mean in the HICP, as opposed to arithmetic means in the RPIX, contributes -0.5 percentage points to the difference between the RPIX and the HICP. This effect is much greater than the 0.1 reduction reported by most other countries which have adopted the geometric mean. The ONS is researching the reasons for the difference:
- the exclusion of Council Tax and house depreciation from the HICP contributes -0.2 percentage points to the difference between the RPIX and the HICP;
- the inclusion and subsequent quality adjustment of an index for personal computers in the HICP contributes -0.1 percentage points to the difference between the RPIX and the HICP;
- d) the exclusion of some health and education expenditures from the HICP and the broader coverage of household expenditure in the HICP contribute a further -0.1 percentage points to the difference between the RPIX and the HICP.

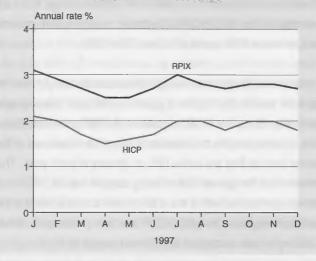
Other differences in the construction of the two measures, such as the inclusion of air fares in the HICP; the inclusion of new cars, rather than relying on used cars as a proxy; and the use of COICOP have negligible effect on the overall difference between the two measures.

# Conclusion

The HICP and the RPI differ in their purpose and construction. The RPI is the best indicator of consumer price inflation in the United Kingdom. The HICP is used for international comparisons of inflation in Europe. There has been considerable progress made towards harmonising the methods used to construct HICPs, in particular the elimination of some of the main practices which may have led to HICPs not being comparable. Nonetheless, harmonisation is not complete and work is proceeding in a number of areas to improve further the comparability of the indices.

Chart 2

RPIX and HICP inflation rates



# **Appendix: Construction of elementary aggregates**

#### **Formulae**

An elementary aggregate is the lowest level for which information on expenditure shares is available; below this level, data are not available to weight the individual price quotes together. In the HICP, elementary aggregates can be constructed using either the ratio of averages (RA) or the geometric mean (G). Use of the average of relatives (AR) is effectively banned as it does not produce results comparable with the other two formulae. If prices  $p_{1,0}$  to  $p_{n,0}$  are obtained in the base period and matching prices  $p_{1,1}$  to  $p_{n,1}$  are obtained for the same commodities in a subsequent month t, then:

AR: 
$$I_{t} = \frac{1}{n} \sum_{i=1}^{n} \frac{p_{it}}{p_{i0}}$$

RA: 
$$I_{t} = \frac{\sum_{j=1}^{n} p_{jt}/n}{\sum_{i=1}^{n} p_{j0}/n}$$

G: 
$$I_{t} = \left(\prod_{i} \frac{p_{it}}{p_{i0}}\right)^{l/n} = \frac{\left(\prod_{i} p_{it}\right)^{l/n}}{\left(\prod_{i} p_{i0}\right)^{l/n}}$$

# Properties of the formulae

Both AR and RA have the effect of giving implicit fixed weights to each price quote. This can be seen by considering the following expression:

$$I_{t} = \sum_{i=1}^{n} w_{i} \frac{p_{it}}{p_{i0}}$$

If all the  $w_i$  are equal, this formula becomes AR while if the weights are proportional to the base price  $p_{i,0}$  it becomes RA. By contrast, G is equivalent to assuming that expenditure shares remain constant, so that if one price doubles while the others stay the same, the quantity purchased of the former will halve. Thus the implicit weights will vary through time.

G is always lower than AR (unless the price relatives,  $p_n/p_0$ , are all equal, in which case G=AR). If most price relatives are roughly equal but there are a few outliers, G is not raised as much as AR by large price relatives, but is lowered more by small ones. For example, suppose n=10 and nine of the price relatives equal 1. If the other price relative is 2, AR is 1.1 and G is 1.072. However, if the other price relative is 0.1, AR is 0.91 and G is 0.794.

G may be higher or lower than RA. If the coefficient of variation of the prices (standard deviation divided by mean) is higher in month t than in the base month 0, then RA > G and vice versa.

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Table 3 Weights used for the HICP in 1996 and 1997

			1996	1997			1996	19
ICP	Overall index)	CHZQ	1000	1000	05.4	Giassware, tableware and household utensils CJVJ	7	
1	Food and Non-Alcoholic Beverages	CHZR	156 70	152 71	05.5	Tools and equipment for house and garden CJVK	9	
2 3	Alcoholic Beverages and Tobacco Clothing and Footwear	CHZT	67	68	05.6	Goods and services for routine maintenance CJVL	17	
ء 4	Housing, Water, Electricity, Gas and Other Fuels	CHZU	134	133	00.0	05.6.1 Non-durable household goods CJXK	9	
	Household Furnishings, Equipment and Maintenance	CHZV	90	91		05.6.2 Domestic services and home care services CJXL	8	
	Health - paid by the consumer and not reimbursed	CHZW	7	7				
	Transport	CHZX	154	155	07.1	Purchase of vehicles CJVM	58	
	Communications	CHZY	21	21		07.1.1A New motor cars CJXN	13	
	Recreation and Culture	CHZZ	131	130		07.1.1B Second-hand motor cars CJXO	43	
Α	Education - commonly paid by consumers	CJUU	11	11		07.1.2/3 Motor cycles and bicycles CJXP	2	
	Hotels, Cafes and Restaurants	CJUV	111	112				
	Miscellaneous Goods and Services	CJUM	48	49	07.2	Operation of personal transport equipment CJVN	76	
						07.2.1 Spares, parts and accessories CJXQ	8	
1	Food	CJUX	141	137		07.2.2 Fuels and lubricants CJXR	40 21	
	01.1.1 Bread and cereals	CJWB	25	25		07.2.3 Maintenance and repairs CJXS 07.2.4A Other services CJXT	7	
	01.1.2 Meat	CJWC	34	34 5		07.2.4A Other services CJXT	/	
	01.1.3 Fish	CJWD	6 21	21	07.2	Transport services CJVO	20	
	01.1.4 Milk, cheese and eggs	CJWE	4	4	07.3	07.3.1A Passenger transport by railway CJXU	6	
	01.1.5 Oils and fats 01.1.6 Fruit	CJWG		9		07.3.2A Passenger transport by road CJXV	11	
	01.1.7 Vegetables including potatoes and tubers	CJWH		17		07.3.3A Passenger transport by air CJXW	2	
	01.1.8 Sugar, jam, syrups, chocolate, confectionery	CJWI	15	15		07.3.4A Passenger transport by sea and inland waterway CJXX	1	
	01.1.9 Food products nec1	CJWJ	7	7		<del></del>		
	V1.1.0 1 000 products 1100		-		08.1	Communications CJVP	21	
2	Non-alcoholic beverages	CJUY	15	15		08.1.1 Postal services CJYA	2	
	01.2.1 Coffee, tea and cocoa	CJWK	5	5		08.1.2/3 Telephone and telefax equipment and services CJYB	19	
	01.2.2 Mineral waters, soft drinks and juices	CJWL	10	10				
					09.1		46	
ı	Alcoholic beverages	CJUZ	35	35		09.1.1 Reception and reproduction of sound and pictures CJYC	8	
	02.1.1 Spirits	CJWM		10		09.1.2 Photographic, cinematographic and optical equipment CJYD	5	
	02.1.2 Wine	CJWN		15		09.1.3 Data processing equipment CJYE	5	
	02.1.3 Beer	CJWO	10	10		09.1.5 Games, toys, hobbies, sports and camping CJYG	8	
						09.1.6 Recording media for pictures and sound CJYH	4	
2	Tobacco	CJWP	35	36		09.1.7 Gardening CJYI	6	
						09.1.8 Pets CJYJ	9	
1	Clothing	CJVA	55	56		09.1.9 Repair of equipment for leisure and culture CJYK	1	
	03.1.2 Garments	CJWR		51 4	00.24	Recreational and cultural services CJVR	34	
	03.1.3 Other clothing and clothing accessories	CJWS	1	1	09.2A	Recreational and cultural services Covn	34	
	03.1.4 Dry-cleaning, repair and hire of clothing	CJWT	1	•	09.3	Newspaper, books and stationery CJVS	20	
2	Footwear, including repairs	CJVB	12	12		,		
	Actual rentals for housing	CJVC	55	55	09.4	Package holidays CJVT	31	
1	Actual remais for flousing	0010	55	00	11.1	Catering CJVU	107	H
3	Regular maintenance and repair of the dwelling	CJVD	19	19		11.1.1 Restaurants and cafes CJYL	100	
•	04.3.1 Products for maintenance and repair	CJWU		8		11.1.2 Canteens CJYM	7	
	04.3.2 Services for maintenance and repair	CJWV		11				
4 A	Other convices relating to the dwelling	CJVE	15	15	11.2	Accommodation services CJVV	4	
4 A	Other services relating to the dwelling	COVE	13	15	12.1	Personal care CJVW	26	
5	Electricity, gas and other fuels	CJVF	45	44	7=	12.1.1 Hairdressing and personal grooming establishments CJYN	7	
	04.5.1 Electricity	CJXA	22	22		12.1.2 Appliances, articles and products for personal care CJYO	19	
	04.5.2 Gas	CJXB	20	19				
	04.5.3 Liquid fuels	CJXC	1	1	12.2	Personal effects nec¹ CJVX	9	1
	04.5.4 Solid fuels	CJXD	2	2				
					12.4A	Insurance CJVY	6	
1	Furniture, furnishing, decorations, carpets	CJVG	38	39		12.4.2A Contents insurance CJYP	2	
	05.1.1 Furniture and furnishings	CJXF	28	29		12.4.4A Car insurance CJYQ	4	/
	05.1.2 Carpets and other floor coverings	CJXG	10	10	10 58	Banking services nec¹ CJVZ	2	,
2	Household textiles	CJVH	6	6	12.5A	Daliking Services nec. CJVZ	2	
					12.6A	Other services nec¹ CJWA	5	
_	Household appliances, fitting and repair	CJVI	13	13 11				
.3	05.3.1/2 Major appliances and small electric goods	CJXI	- 11					

Note new weights are introduced with the index for January each year (1) nec - not elsewhere covered

Source: ONS