

Economic trends

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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 28 January 1999.
2. The four letter identification code at the top of each column of data (eg, DJDD) is ONS's own reference to this series of data on our database. Please quote the relevant code if you contact us requiring any further information about the data.

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

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

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

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

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

8. 'Billion' denotes one thousand million.

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

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

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

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

10. Symbols used:
- .. not available
 - nil or less than half the final digit shown
 - + alongside a heading indicates a series for which measures of variability are given in the table on page 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
February 1999

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

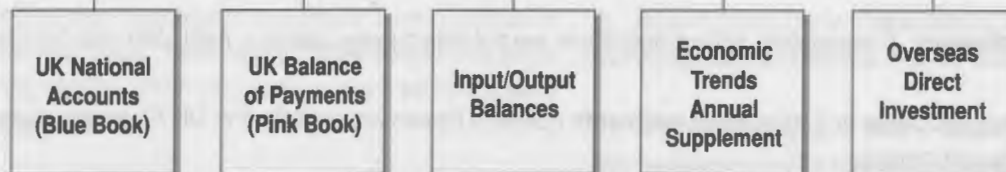
1998

<i>February</i>	Improvements to business inquiries through the new IDBR. Measuring public sector output.
<i>March</i>	Employment in the public and private sectors. Harmonised indices of consumer prices.
<i>April</i>	Effects of taxes and benefits on household income 1996-97.
<i>May</i>	The Budget: 17 March 1998. The economy; an overview.
<i>June</i>	Regional accounts 1996: part 2. Rebasing the national accounts.
<i>July</i>	Developing a methodology for measuring illegal activity for the UK National Accounts. New format for public finances.
<i>August</i>	PPI/RPI comparisons. Forthcoming changes to the national accounts. Research and experimental development (R & D) statistics 1996.
<i>September</i>	Development of the corporate services price index: a review of progress. Estimating and presenting short-term trends.
<i>October</i>	Environmental taxes in the United Kingdom. Measuring the output of non-market services. UK results from the Community Innovation Survey.
<i>November</i>	Improving the non-finance balance sheets. Developing the public sector balance sheet.
<i>December</i>	Geographical breakdown of the balance of payments current account. Harmonised index of consumer prices: historical estimates. The development of a Land Registry-based national house price index. Improving the quality of the producer price index.

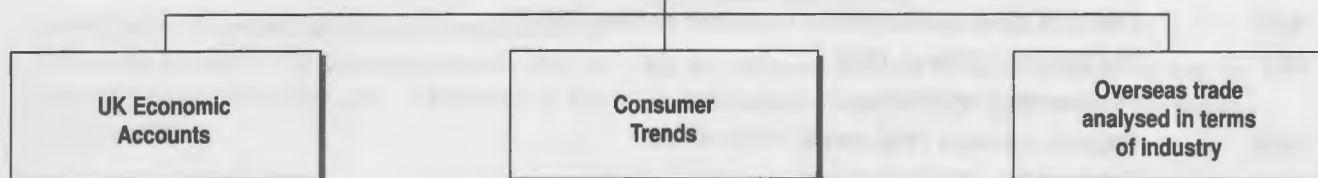
For articles published in earlier issues see the list in issue 509 (March 1996) of *Economic trends*. Copies of articles may be obtained from the National Statistics Library, Room 1.001, Government Buildings, Cardiff Road, Newport, NP9 1XG, telephone 01633 812973. The cost is £5.00 per copy inclusive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

United Kingdom Macro-Economic Statistics Publications

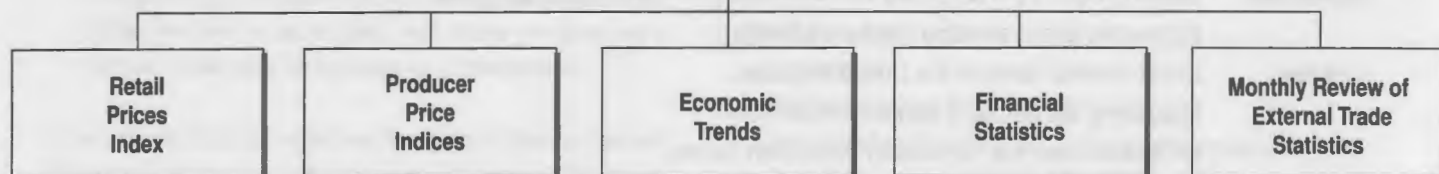
Annual Publications



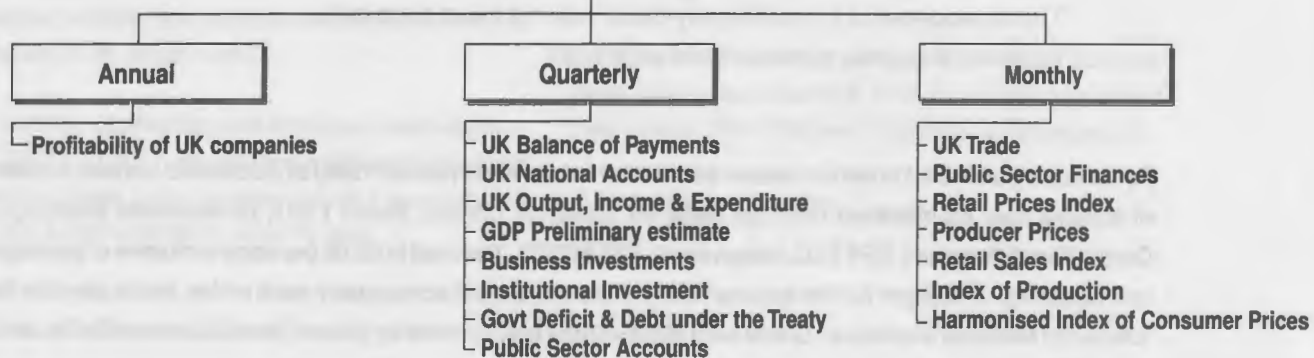
Quarterly Publications



Monthly Publications



First Releases



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

Tables

Table 2.11: Non- financial Corporations: Allocation of Primary Income Account

Table 2.12: Non- financial Corporations: Secondary Distribution of Income Account

Table 2.13: Non-financial Corporations: Capital Account

This month we will be including for the first time, tables covering the Private Non-financial corporations only, to replace those mentioned above. This reflects the change made in the Quarterly national accounts Q3 1998 First Release, ONS(98)436, that was issued on 21st December 1998. The new tables are:

Table 2.11: Private Non-financial corporations: Allocation of Primary Income Account

Table 2.12: Private Non- financial Corporations: Secondary Distribution of Income Account and Capital Account.

Articles

This month we feature two articles.

Michael Baxter and Dawn Camus of the ONS introduce the three year research programme on RPI methodology that aims to improve the quality of the RPI and its relevance for users. The article describes the current programme and highlights the main areas of investigation. The work programme consists of nine distinct but research related projects, and in addition some other issues will be investigated, e.g. technical issues relating to particular measurement problems (*page 25*).

Ian Hill of the ONS outlines the end-1997 Share Register Survey. This was commissioned by the ONS in order to obtain good quality benchmark data on the ownership of shares in listed companies. Accurate data is important for the financial balance sheets in the national accounts, and for dividends receipts data that is apportioned according to the balance sheets (*page 31*).

Future article

Regional Accounts 1997: Part1 that we aimed to publish in this edition, has been further delayed due to problems caused by the transition to the new ESA95 based national accounts data. This article will now appear in the March edition.

ECONOMIC UPDATE - FEBRUARY 1999

By Geoff Tily, Macro-Economic Analysis - Office for National Statistics

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Overview

Official figures continue to indicate a slowdown in activity. GDP growth is estimated to have slowed to 0.2 per cent into the fourth quarter of 1998; underlying this is a decline in recent monthly manufacturing data and a slowdown in services activity. Retail sales data shows a reduction in domestic demand in the fourth quarter, echoed by external surveys. On trade volumes, exports to non-EU countries continue to show the impact of the deterioration in the world economy, however EU exports and all imports remain relatively robust. Employment is still growing but at a slower rate. Producer price inflation is at historically low levels and consumer prices remain subdued.

Indicators included	
GDP preliminary estimate – Q4	Money supply – December
CIPS report on services – December	Consumer credit – November
Industrial production – November	Public sector net borrowing – December
CBI quarterly industrial trends survey - January	Labour market statistics – September - November
Retail sales – December	Retail prices – December
EC/GFK index of consumer confidence – December	Producer prices – December
UK external trade – November/December	

GDP Activity

The preliminary estimate of GDP at constant market prices showed the economy growing by 0.2 per cent into the fourth quarter, below growth of 0.4 per cent into the third. Annual growth fell to 1.6 per cent from 2.3 per cent (chart 1).

Alongside this slow down in activity, base rates were cut to 6.0 per cent in January.

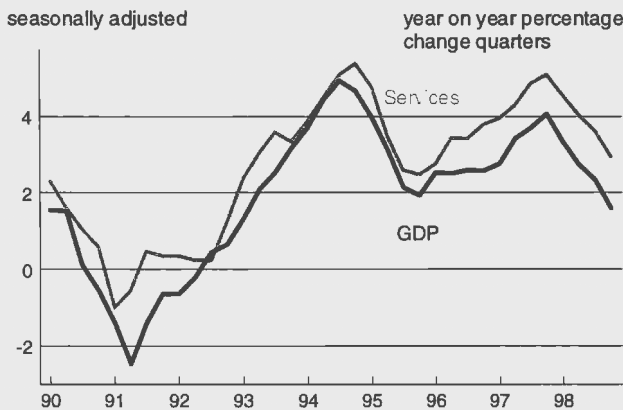
Output breakdown

Growth in the economy is now dominated by service sector activity. The preliminary estimate showed the service sector continued to grow by 0.6 per cent into the fourth quarter, slightly lower than growth into the third quarter of 0.8 per cent. The corresponding annual rate fell to 2.9 per cent from 3.6 per cent. (Chart 1 illustrates these annual rates). Within the service sector, growth of distribution, hotels and catering was estimated to have been flat on the quarter.

External sources painted a pessimistic picture of service sector activity. December data for The Chartered Institute of Purchasing and Supply (CIPS) showed the second monthly net fall in a row, with one in four companies reporting a fall in workload.

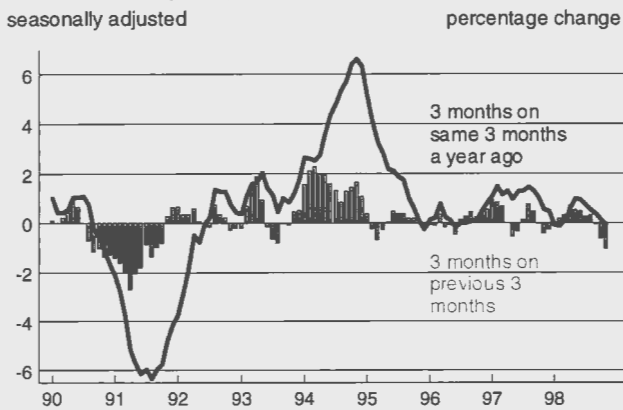
Chart 1

GDP



The latest monthly data for manufacturing output shows a fall of 1.1 per cent in the three months to November compared with the previous three months and a fall of 0.1 per cent compared with the same 3 months a year ago (chart 2). This slowdown in activity is seen across all types of manufacturing industry, with each published aggregate now showing declines in growth when looking at the three months to November compared with the previous three months.

Chart 2
Manufacturing output



On the other hand the January 1999 Confederation of British Industry Quarterly Industrial Trends Survey shows some improvement over the previous survey in October, which may have marked the low point of confidence. Overall optimism improved to a balance of -40 from -58 (although within this only 5 per cent of firms are actually recorded as feeling more optimistic). Other indicators show volumes of output over the past four months recorded as picking up to -27 from -30, and expected volumes of output over the next four months improving strongly to -13 from -29.

Domestic demand

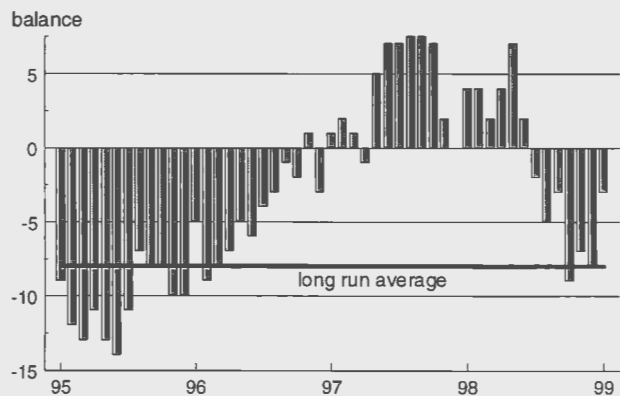
The latest retail sales figures showed a sharp decline in December following a similarly sharp rise into November. Looking at the three months to December we see a fall of 0.2 per cent compared with the previous three months and a rise of 1.4 per cent compared with the same three months a year ago. Chart 3 shows the above; it is notable that the position in recent months bears a resemblance to a position seen in 1995.

Chart 3
Retail sales



External indicators of optimism have improved in the latest months. The EC/GFK measure of consumer confidence for January 1999, with a balance of -3 per cent is above the long run average of -8 per cent, and shows a relatively strong increase over the December balance of -8 per cent (chart 4).

Chart 4
Consumer confidence - EC/GFK



Similarly, attitudes to major purchases saw a rise to 8 per cent in January compared with 2 per cent in December. MORI data also shows a slight improvement in November and December from what appears to have been a trough in confidence in October.

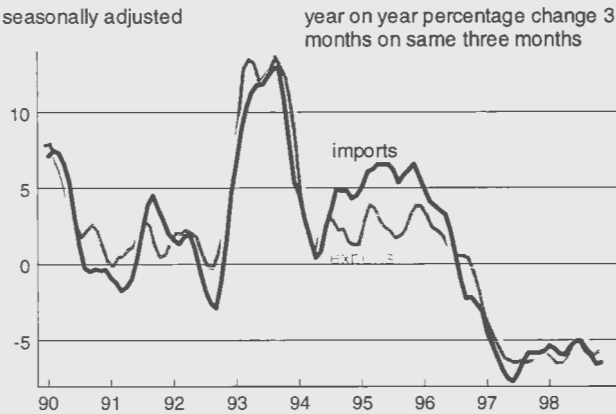
External demand and supply

The November 1998 trade data show the UK's overall balance with the rest of the world in deficit by £1.1bn, a decline over the deficit of £0.5bn in October. The ONS trend estimate remains of a widening balance. The deterioration across the month is explained by a fall in exports and an increase in imports of goods.

The story in volume terms continues to be of declining exports to non-EU countries, although there is some evidence of a levelling off in the rate of decline. Latest figures excluding oil and erratic items show a decline of 7.5 per cent in the three months to December compared with the same period months in 1997; the equivalent figures were falls of 7.6 and 7.2 per cent in November and October respectively. On the same basis, exports to EU countries and all imports continue to grow fairly strongly.

Prices of both imports and exports continue to fall sharply compared with a year ago. Chart 5 shows trends since 1990, with the latest figures showing export prices declining at 5.4 per cent and import prices declining by 6.4 per cent in the three months to November compared with the same period a year ago.

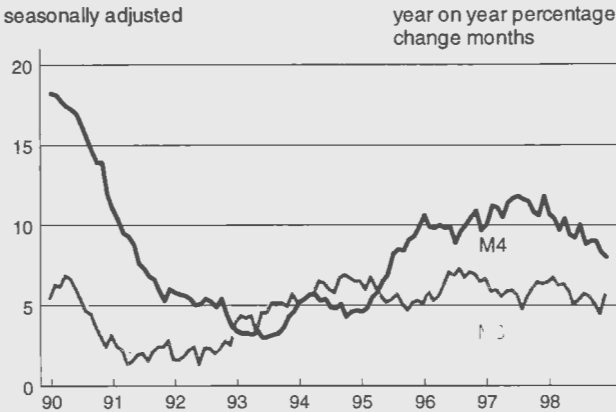
Chart 5
Import and export prices



Monetary indicators and government finances

Chart 6 shows that recent money supply data echoes the recent slowdown in the economy. The latest figures show narrow money (M0) growing at 6.0 per cent and broad money growing at 8.0 per cent in the twelve months to December. The high M0 growth in December should be treated with caution as the Bank of England note that there are seasonal adjustment difficulties at this time of year.

Chart 6
Money supply



Figures for gross consumer credit showed a rise to £11.8 billion, from £11.3 billion between November and October 1998. Despite this increase, over the latest few months annual rates have showed a decline since a recent peak of 20.5 per cent seen in the three months to March, to a rate of 15.2 per cent in the three months to November.

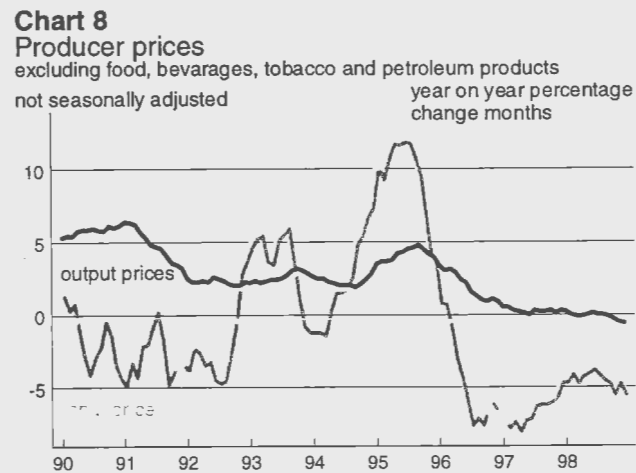
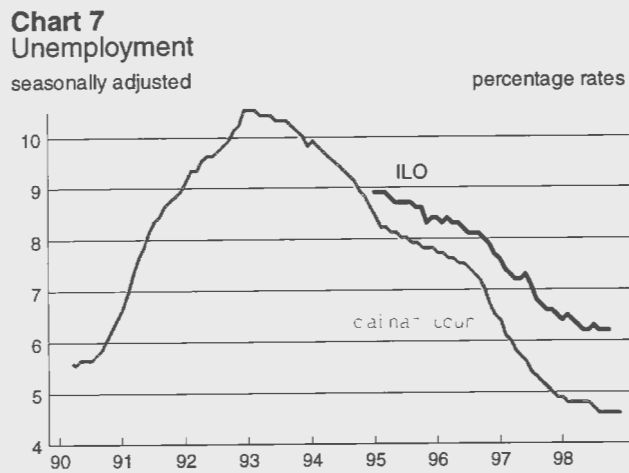
Public sector net borrowing was £0.9 billion in December 1998. Net borrowing for April to December in the 1998-99 financial year is estimated as £3.2 billion, which remains substantially lower than the corresponding figure of £10.6 billion for the previous financial year. The improvement over financial years is mainly due to high income and corporation tax receipts accompanied by only modest increases to expenditure.

Labour Market

The latest information on the labour market continues to show some evidence of improvements to employment. The Labour Force Survey employment rate, in the three months to November, was 73.8 per cent, up from 73.6 per cent in the three months to August. The increase was predominantly accounted for by female, part time jobs.

The total number in employment in the three months to November was 1.1 per cent higher than in the same period in 1998. However, within this figure, data for the manufacturing industry shows a fall of 1.5 per cent over the same period. Service sector employment data is only available for the third quarter of 1998; this shows an increase of 2.3 per cent compared with the third quarter of 1998.

The ILO unemployment rate of 6.2 per cent in the three months to November showed a slight improvement over the rate of 6.3 per cent in the three months to August. The claimant count rate was 4.6 per cent in December; the same rate as it has been in every month since August. Chart 7 compares the two unemployment rates and shows strong evidence of a slowdown in recent months.



Prices

The underlying rate of inflation as measured by the annual growth of the Retail Prices Index, excluding mortgage interest payments (RPIX), in December 1998 rose to 2.6 per cent from 2.5 per cent in November. The increase is largely explained by strong rises in furniture prices and a large rise in the price of seasonal food, where adverse weather conditions have affected supply.

The harmonised index of consumer prices shows inflation of 1.4 per cent in the year to November ; this is 0.4 per cent higher than the provisional EU 15 average of 1.0 per cent.

Producer price data continues to show falling prices at the factory gate. According to the headline measures, there was no annual growth in output prices in the year to December, and input prices fell by 9.1 per cent. Excluding food, beverages, tobacco and petroleum, output prices fell by 0.6 per cent and input prices fell by 5.2 per cent. Chart 8 shows recent trends in the latter series.

Forecasts for the UK Economy

A comparison of independent forecasts, January 1999

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 1999 and 2000, updated monthly.

	Independent Forecasts for 1999		
	Average	Lowest	Highest
GDP growth (per cent)	0.6	-0.5	2.1
Inflation rate (Q4: per cent)			
- RPI	1.5	0.5	3.1
- RPI excl MIPs	2.2	1.1	3.1
Unemployment (Q4, mn)	1.58	1.20	1.82
Current Account (£ bn)	-5.5	-15.0	0.5
PSNB *(1999-00, £ bn)	5.5	-5.0	18.0

	Independent Forecasts for 2000		
	Average	Lowest	Highest
GDP growth (per cent)	1.8	0.2	2.6
Inflation rate (Q4: per cent)			
- RPI	2.1	1.2	3.3
- RPI excl MIPs	2.2	1.2	2.9
Unemployment (Q4, mn)	1.77	1.30	2.77
Current Account (£ bn)	-6.6	-17.0	2.5
PSNB* (2000-01, £ bn)	9.1	-6.4	20.0

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 31 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>.

* PSNB: Public Sector Net Borrowing.

International Economic Indicators – February 1999

by Dermot Rhatigan, Macro-Economic Assessment - Office for National Statistics

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Overview

The US economy grew rapidly in the third quarter of 1998, while Japan fell deeper into recession. In Europe, domestic demand slowed in the second quarter of 1998, but remained buoyant. The European Union unemployment rate fell below 10.0 per cent in the third quarter, the first time since 1992. Consumer price inflation is falling across the board and prices actually fell in Japan.

EU15

Weaker domestic demand slowed the pace of economic growth in the European Union in the second quarter of 1998. GDP growth fell compared with both the previous quarter and the same quarter of 1997. Net trade had little effect on the quarter's change in GDP - exports and imports expanded at similar rates, leaving Europe's trade surplus almost unchanged.

Stockbuilding was the only component of domestic demand to increase its contribution between the latest quarters; final consumption spending (by individuals and governments) weakened and investment spending fell. However, the significance of these latest movements should not be overstated as annual consumption growth remained buoyant and erratic movements in Germany's series heavily influenced the investment numbers.

Industrial production slowed into the third quarter; year on year growth fell to 3.1 per cent, from 4.0 per cent in quarter two.

Annual consumer price inflation fell by 0.3 percentage points, to 1.4 per cent, between the third and fourth quarters. The downward trend in European inflation that has characterised the 1990's, has been influenced by a number of factors including the convergence criteria for entry to the euro, high unemployment and weakness in commodity prices, particularly oil prices. Producer prices fell by 1.9 per cent in the year to November.

The EU15 unemployment rate fell below 10.0 per cent in September, for the first time since 1992.

Germany

After virtually no movement in the preceding quarter, the German economy grew rapidly into the third quarter of 1998, up by 0.9 per cent. Looking at the annual rates, GDP grew by 2.7 per cent on the same quarter of 1997 – 0.3 percentage points higher than in the year to quarter two.

Assessing the underlying strength of the German economy in 1998 has been made more difficult by sharp movements in private consumption in the wake of fiscal changes in the first and second quarters. The most important of these stemmed from the announcement of April's VAT increase, which boosted sales in quarter one at the expense of those in quarter two. Private consumption increased by 0.9 per cent during the third quarter - more than reversing the decline of 0.4 per cent recorded in quarter two.

The third quarter saw a further increase in the Germany's trade surplus despite slower export growth. Net trade made a positive contribution to GDP as imports fell for only the second time since the start of 1993.

Despite powerful growth in the third quarter, investment expenditure remained below the levels recorded as far back as the last quarter of 1991. The fact that capital formation has been so weak at a time when financing costs have fallen so sharply, may indicate that uncertainty and the perception of risk have increased.

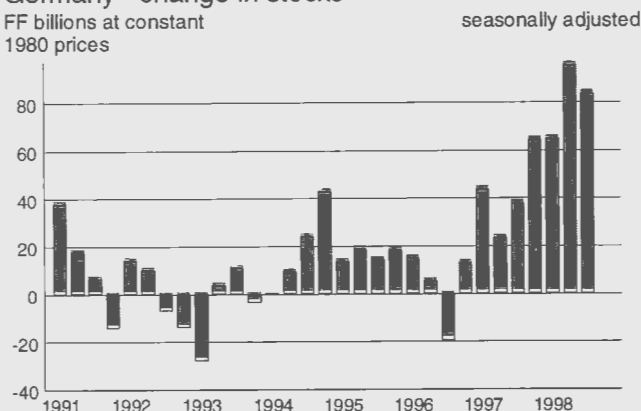
The weakness in capital formation in the last two years has, to some extent, been offset by the scale of stock accumulation. As Chart 1 shows, stock levels were added to in all but one of the preceding nineteen quarters up to quarter three 1998, with

particularly rapid growth in the last eight quarters. The extent to which this accumulation is involuntary, and needs to be unwound to return stocks to normal levels, will heavily influence the rate of production growth in coming quarters.

Chart 1

Germany - change in stocks

FF billions at constant 1980 prices



The fact that the expansion in German GDP, since the beginning of 1996 (GDP has risen in each quarter since Q1 1996), has been slow to translate into significantly higher demand may rest on the interaction of producers and the labour market. The gains in output in recent years have been delivered mainly from productivity gains rather than increased employment and unit wage costs have fallen. This trend has allowed year on year growth in GDP to average 2.1 per cent since start of 1994, while employment has continued to fall.

The existence of slack in the labour market and the emergence in August of year on year producer price falls helped to drive the consumer price inflation down to 0.6 per cent in December. The 0.1 percentage point fall between November and December took inflation to its lowest rate this decade - less than half that in the EU15.

France

French GDP increased by 0.5 per cent between the second and third quarters of 1998, down from 0.8 per cent in the preceding quarter. The slowdown into quarter three appeared to be more severe after quarter two growth was revised upwards by 0.2 percentage points. Domestic demand eased during the third quarter but remained buoyant, while net trade increased its contribution to GDP.

Domestic demand was dented in quarter three by slower stockbuilding, but year on year growth remained robust, at 3.2 per cent. External demand for French products has held up well in 1998 and France's trade surplus widened in quarter three as export growth, of 2.9 per cent, outpaced that of imports, which grew by 2.0 per cent.

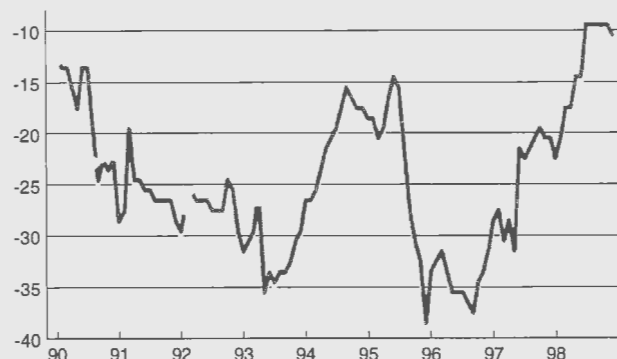
Consumer spending eased between the second and third quarters; retail sales volumes were flat in quarter three before returning to rapid growth in quarter four. Consumer activity has been supported in 1998 by falling inflation, real earnings growth and an improvement in the labour market. In the final months of 1998 INSEE's consumer confidence indicator reached its highest level of the 1990s.

Chart 2

France - INSEE consumer confidence indicator

% balance

seasonally adjusted



Annual growth in industrial production slowed sharply, to 3.2 per cent, in the third quarter, down from 5.4 per cent in quarter two.

As in the rest of Europe, consumer price inflation in France remained firmly on a downward trend in 1998. By December the annual rate had fallen to only 0.3 per cent. Falling commodity prices and modest earnings growth have played their part in moderating business costs, thus subduing upward pressure on prices.

The unemployment rate in France, at 11.8 per cent, was 2.0 percentage points above the EU15 average rate in November. The rate dipped slightly in June, perhaps reflecting temporary employment connected with the World Cup Finals.

Italy

Higher export volumes in the second quarter of 1998 reversed the slight fall in Italy's GDP recorded in the previous quarter, and helped offset weakness in the home market as domestic demand growth fell for the second successive quarter. Stock levels continued to grow rapidly, although the rate of increase slowed.

Italy's economic recovery has yet to gather much momentum; following strong growth in 1995, growth in 1996, 1997 and the first half of 1998 was modest – GDP expanded by only 2.1 per cent in the ten quarters to quarter two 1998. Annual GDP growth of 1.2 per cent in quarter two, was less than half that recorded in the EU15.

Industrial production fell for the second quarter in succession in quarter three, but rose by 0.5 per cent in the year to quarter three. The fact that production fell in quarter two while stocks levels continued to rise, albeit at a slightly slower rate, underlines the weakness in demand. As in Germany, the rapid build-up in stocks, which began in the first quarter of 1997, may have implications for future production if stock levels are excessive.

The annual inflation rate fell from 1.8 per cent to 1.5 per cent between the third and fourth quarters - settling 0.1 percentage points above the average in the European Union.

The unemployment rate was steady between the second and third quarters, at 12.3 per cent – 2.3 percentage points above the EU15 average.

USA

The US economy grew rapidly in the third quarter of 1998, although year on year growth was almost unchanged at 3.5 per cent – the lowest rate for two years. The original estimate of third quarter GDP was revised upwards by two percentage points, to 1.0 per cent growth. Although erratic movements in the inventories series (reflecting the effects of strike action at General Motors in June and July) have obscured the underlying pattern of GDP in 1998, year on year growth appears to have passed its cyclical peak.

The US trade deficit continued to widen in quarter three, although the rate of change eased greatly as imports expanded more slowly and the decline in export volumes became less steep. Bearing in mind that the Europe Union continues to run a trade surplus, any signs that the US deficit is near to its cyclical trough may have implications for those Asian economies that are relying on export-led growth to pull their economies from the their present economic crisis.

Consumer spending growth eased slightly in quarter three but remained strong; total spending was up by 1.0 per cent in the quarter and by 4.7 per cent on the same quarter of 1997 while retail sales volumes increased by 7.4 per cent in the year to October. Recent turmoil in the financial markets appears to have done little to unsettle consumer confidence and hence spending. Although the stock market fell in quarter three share prices remained above those recorded at the start of the year, and still embody sizeable capital gains compared with the start of 1995. Consumer confidence, as measured by the University of Michigan, peaked in the first quarter, but remains extremely buoyant.

Growth in gross capital formation slowed from 2.4 per cent to 0.8 per cent between the second and third quarters, but it still increased by 8.1 per cent on the same quarter of 1997.

Production growth slowed in 1998, but the sequence of positive quarter on quarter growth, stretching back to the second quarter of 1991, was unbroken. Movements in the latest quarters were exaggerated as a result of industrial action at General Motors.

US inflation was steady at 1.5 per cent between October and November. Producer price falls and modest earnings growth have tempered the upward pressure on prices created by strong growth in demand and tightness in the labour market.

Japan

The third quarter of 1998 saw Japan's economy contract for the fourth consecutive quarter – GDP fell by 0.7 per cent compared with the previous quarter and by 3.5 per cent on the year before, as shown in Chart 3. Government final consumption, which increased by 0.9 per cent, made a positive contribution to third quarter GDP but its effect was dwarfed by falls in private final consumption and investment expenditure.

Investment spending emerged as the major source of contractionary pressure in 1997, and this pattern continued into 1998. Capital spending, which fell for the seventh consecutive quarter, has been hit by a sharp downturn in business confidence, and this factor has outweighed the benefit of extremely low financing costs, as interest rates have tumbled.

Chart 3

Japan - GDP

seasonally adjusted

year on year percentage
change quarters



The weakness in consumer activity that has characterised the period since 1992 worsened in quarter three. Attempts made by Japan's monetary and fiscal authorities to arrest the decline - interest rate cuts, public works and announcements of tax rebates - appear to have had little effect. The Bank of Japan has cut interest rates to extremely low levels (3-month rates have been below 1.0 since the second half of 1995); however, this has not led to higher consumption. The second round of income tax cuts that came through in August (announced in the April stimulus package) has made no discernible difference - retail sales volumes have stagnated. It appears that Japanese consumers are using the tax cuts to supplement precautionary savings rather than to boost spending.

The boost to domestic demand delivered by higher government expenditure in quarter three may reflect the work of Japan's automatic stabilisers (e.g. social security payments, responding to increased unemployment) and also elements of April's stimulus package, such as increased public works. Large percentage increases in government spending may be required to kick-start economic growth; as government spending forms a relatively small part of Japan's GDP and a greater propensity to save (as a result of increased uncertainty) will reduce the multiplier effects.

External demand for Japanese products picked up in quarter three - exports increased after falls in the two previous quarters. Imports fell by 0.4 per cent in the latest quarter and were down by 8.7 per cent in the year to quarter two. Thus, Japan's trade surplus increased.

Notes

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

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

1 European Union 15

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier														
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1990	3.0	1.7	0.4	0.8	-0.1	1.8	1.6	2.0	0.9	5.7	2.5	7.0	1.6	..
1991	3.1	2.7	1.0	0.7	-0.3	-	1.0	-0.2	1.9	5.2	2.2	6.8	0.1	..
1992	1.0	0.9	0.4	-0.2	-0.1	0.9	1.0	-1.4	0.1	4.4	1.3	5.8	-1.7	..
1993	-0.5	-0.1	0.2	-1.3	-0.5	0.4	-0.8	-3.3	-1.1	3.6	1.4	4.7	-2.0	10.7
1994	3.0	1.1	0.2	0.5	0.9	2.5	2.1	5.0	-0.6	3.0	2.2	3.8	-	11.1
1995	2.4	1.1	0.2	0.7	-	2.5	2.1	3.5	-	3.2	4.5	3.4	0.7	10.7
1996	1.8	1.2	0.3	0.3	-0.4	1.7	1.3	0.2	0.5	2.5	0.7	4.2	0.6	10.8
1997	2.7	1.3	-	0.6	0.4	3.1	2.8	3.7	3.1	2.0	0.9	3.2	0.6	10.7
1998	..	..	..	..	..	..	..	..	..	1.7	..	..	..	..
1996 Q1	1.7	1.4	0.3	0.1	0.1	1.3	1.6	-0.1	-0.3	2.8	1.9	4.8	0.7	10.9
Q2	1.6	0.9	0.4	0.4	-0.4	1.1	0.7	-0.2	-	2.6	0.6	4.0	0.7	10.9
Q3	1.9	1.2	0.4	0.4	-0.8	1.8	1.1	0.1	0.3	2.3	-0.1	3.9	0.5	10.8
Q4	2.0	1.3	0.2	0.5	-0.5	2.4	1.8	0.7	2.0	2.3	0.2	3.8	0.5	10.8
1997 Q1	1.8	0.9	0.1	0.5	-0.2	2.0	1.6	2.2	2.0	2.1	0.3	3.8	0.4	10.8
Q2	2.8	1.4	0.1	0.5	0.5	3.3	3.0	3.3	3.3	1.7	0.7	3.1	0.7	10.7
Q3	3.0	1.2	-	0.6	0.7	3.9	3.3	4.4	3.0	2.0	1.4	3.0	0.7	10.6
Q4	3.3	1.6	-	0.8	0.7	3.4	3.1	5.1	4.0	2.1	1.3	3.0	0.8	10.5
1998 Q1	3.5	1.6	0.2	1.3	0.7	3.2	3.4	4.9	3.5	1.8	0.4	2.2	1.2	10.3
Q2	2.8	1.3	0.2	0.7	0.8	2.3	2.6	4.0	2.6	2.1	-0.3	3.7	1.0	10.1
Q3	..	..	..	..	..	..	..	3.1	2.9	1.7	-1.1	..	..	10.0
Q4	..	..	..	..	..	..	..	..	..	1.4	..	..	..	..
1997 Dec	..	..	..	..	..	..	..	5.4	4.0	2.0	1.2	..	..	10.4
1998 Jan	..	..	..	..	..	..	..	5.3	3.9	1.8	0.4	..	..	10.3
Feb	..	..	..	..	..	..	..	5.1	2.9	1.8	0.4	..	..	10.3
Mar	..	..	..	..	..	..	..	4.6	3.9	1.8	0.4	..	..	10.2
Apr	..	..	..	..	..	..	..	3.8	1.9	2.1	0.1	..	..	10.1
May	..	..	..	..	..	..	..	4.9	2.9	2.1	-0.4	..	..	10.1
Jun	..	..	..	..	..	..	..	3.5	2.9	2.0	-0.5	..	..	10.0
Jul	..	..	..	..	..	..	..	3.3	2.9	1.9	-0.7	..	..	10.0
Aug	..	..	..	..	..	..	..	3.3	2.9	1.7	-1.2	..	..	10.0
Sep	..	..	..	..	..	..	..	2.9	2.9	1.7	-1.3	..	..	9.9
Oct	..	..	..	..	..	..	..	2.5	..	1.6	-1.7	..	..	9.8
Nov	..	..	..	..	..	..	..	..	..	1.4	-1.9	..	..	9.8
Dec	..	..	..	..	..	..	..	..	..	1.3	..	..	..	..
Percentage change on previous quarter														
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ				ILIT	
1996 Q1	0.8	0.7	0.1	-0.1	-0.2	0.8	0.6	-0.7	2.0				-0.9	
Q2	0.3	-	0.1	0.3	-0.4	0.1	-0.1	0.5	-				0.8	
Q3	0.6	0.5	0.1	0.1	-0.3	0.7	0.5	0.6	0.6				0.6	
Q4	0.3	0.1	-0.1	-	0.4	0.7	0.8	0.3	-0.6				-	
1997 Q1	0.5	0.3	-	-	0.2	0.4	0.4	0.9	2.0				-1.0	
Q2	1.3	0.5	-	0.3	0.2	1.4	1.3	1.5	1.3				1.1	
Q3	0.8	0.2	-	0.2	-0.1	1.3	0.8	1.7	0.3				0.6	
Q4	0.6	0.5	-0.1	0.2	0.4	0.2	0.6	0.9	0.4				0.1	
1998 Q1	0.8	0.3	0.2	0.5	0.2	0.2	0.7	0.7	1.5				-0.6	
Q2	0.5	0.2	0.1	-0.2	0.3	0.5	0.5	0.6	0.4				0.9	
Q3	..	..	..	..	..	..	..	0.8	0.6				..	
Q4	..	..	..	..	..	..	..	..	..				..
Percentage change on previous month														
								ILKF	ILKP					
1997 Dec								1.0	-					
1998 Jan								-0.1	2.9					
Feb								0.3	-0.9					
Mar								0.4	-					
Apr								0.1	-					
May								0.5	-					
Jun								-0.3	1.9					
Jul								1.7	-					
Aug								-0.9	-0.9					
Sep								-0.9	-					
Oct								1.0	..					
Nov								..	..			
Dec								..	..			

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

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

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage change on a year earlier														
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1990	..	..	..	..	..	..	..	5.2	7.8	2.7	1.4	5.6	2.8	-
1991	..	..	..	..	..	..	..	3.2	5.8	4.1	2.2	6.4	1.9	-
1992	1.8	1.4	0.8	0.6	-0.4	-0.4	0.3	-2.5	-2.1	5.0	1.6	5.2	-1.3	-
1993	-1.2	0.2	-0.1	-1.3	-0.2	-1.2	-1.5	-7.6	-4.3	4.5	0.1	5.2	-1.1	7.9
1994	2.8	0.7	0.4	0.8	0.8	1.9	1.9	3.6	-0.7	2.7	0.7	3.6	-0.4	8.4
1995	1.3	1.1	0.4	-	-0.1	1.7	1.9	1.0	1.4	1.9	2.3	3.5	-0.1	8.2
1996	1.3	0.8	0.5	-0.2	-0.4	1.4	0.8	0.4	-0.3	1.5	0.1	3.2	-0.4	8.9
1997	2.3	0.3	-0.1	-	1.3	3.1	2.3	3.6	-0.3	1.7	0.7	1.2	-0.6	10.0
1998	..	..	..	..	..	..	..	..	..	1.0	..	..	..	..
1996 Q1	0.4	1.2	0.7	-1.5	-	1.2	1.2	-0.9	-1.0	1.5	0.8	5.2	-0.7	8.7
Q2	1.0	0.4	0.7	-	-0.5	0.6	0.1	-0.8	-0.4	1.5	0.1	3.4	-0.3	8.8
Q3	1.7	1.0	0.7	0.1	-1.1	1.6	0.6	0.9	1.0	1.5	-0.2	2.5	-0.3	8.9
Q4	2.1	0.8	0.2	0.5	-0.2	2.3	1.4	2.5	-0.6	1.4	0.2	1.7	-0.6	9.2
1997 Q1	2.5	0.2	0.2	0.9	1.0	2.2	2.0	2.7	-0.6	1.7	0.3	1.6	-0.6	9.6
Q2	2.2	0.7	0.1	-0.3	0.6	3.1	2.1	3.3	1.0	1.6	0.7	0.8	-0.5	9.9
Q3	2.4	-0.2	-0.3	-0.2	1.9	3.9	2.7	3.9	-2.0	1.9	1.0	1.6	-0.6	10.1
Q4	2.3	0.6	-0.6	-0.2	1.7	3.1	2.3	4.6	0.3	1.8	0.9	0.8	-0.5	10.3
1998 Q1	3.4	1.1	-	0.9	0.7	2.6	1.9	6.3	2.3	1.1	0.6	-	-0.3	10.0
Q2	2.4	0.2	-0.2	-0.3	2.3	2.5	2.1	4.9	-2.3	1.3	0.2	1.6	-0.2	9.8
Q3	2.7	1.2	-	-	1.5	0.9	1.0	5.2	1.7	0.8	-0.4	0.8	..	9.6
Q4	..	..	..	..	..	..	..	..	..	0.6	..	..	..	..
1997 Dec	..	..	..	..	..	..	..	4.8	-1.0	1.7	0.8	..	..	10.3
1998 Jan	..	..	..	..	..	..	..	7.0	-1.0	1.2	0.6	..	..	10.1
Feb	..	..	..	..	..	..	..	5.9	-	1.1	0.6	..	..	10.0
Mar	..	..	..	..	..	..	..	6.2	8.3	1.1	0.6	..	..	10.0
Apr	..	..	..	..	..	..	..	4.9	-4.8	1.4	0.4	..	..	9.9
May	..	..	..	..	..	..	..	6.9	1.0	1.3	0.3	..	..	9.8
Jun	..	..	..	..	..	..	..	3.2	-2.9	1.2	-	..	..	9.7
Jul	..	..	..	..	..	..	..	4.3	2.0	0.9	-	..	..	9.6
Aug	..	..	..	..	..	..	..	7.1	2.1	0.7	-0.5	..	..	9.6
Sep	..	..	..	..	..	..	..	4.2	1.0	0.8	-0.6	..	..	9.5
Oct	..	..	..	..	..	..	..	3.3	-2.0	0.7	-0.8	..	..	9.4
Nov	..	..	..	..	..	..	..	..	..	0.7	-1.0	..	..	9.4
Dec	..	..	..	..	..	..	..	..	..	0.6	..	..	..	..
Percentage change on previous quarter														
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
1996 Q1	-	0.6	0.1	-1.0	-0.1	0.7	0.2	0.4	1.0				-1.9	
Q2	1.3	0.1	0.2	1.5	-0.3	-	0.1	0.9	1.0				0.8	
Q3	0.4	0.4	0.2	-	-0.8	0.8	0.3	0.9	-				0.5	
Q4	0.4	-0.3	-0.3	-	1.1	0.7	0.8	0.2	-2.6				-	
1997 Q1	0.4	-	0.1	-0.5	1.0	0.6	0.8	0.6	1.0				-1.9	
Q2	1.0	0.6	0.1	0.2	-0.7	0.9	0.2	1.5	2.6				0.9	
Q3	0.6	-0.5	-0.2	0.1	0.5	1.7	0.9	1.5	-3.0				0.4	
Q4	0.3	0.4	-0.6	-	0.9	-0.1	0.3	0.9	-0.3				0.1	
1998 Q1	1.4	0.5	0.7	0.6	-	0.1	0.4	2.2	3.1				-1.7	
Q2	-	-0.2	-0.1	-1.0	1.0	0.8	0.4	0.2	-2.0				1.0	
Q3	0.9	0.5	-	0.4	-0.4	0.1	-0.2	1.8	1.0				..	
Q4	..	..	..	..	..	..	..	..	..				..
Percentage change on previous month														
								ILKC	ILKM					
1997 Dec								1.0	-3.1					
1998 Jan								1.3	4.2					
Feb								-0.1	1.0					
Mar								1.4	4.0					
Apr								-1.0	-3.8					
May								1.1	-2.0					
Jun								-1.1	1.0					
Jul								3.6	3.0					
Aug								-0.6	-2.9					
Sep								-3.0	-					
Oct								1.1	-					
Nov								..	..			
Dec								..	..			

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

Source: OECD

¹ Excludes members of armed forces

3 France

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI ¹	Earnings	Empl ²	Unempl
Percentage change on a year earlier														
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1990	2.5	1.6	0.4	0.6	0.2	1.3	1.6	1.5	1.9	3.2	-0.9	4.9	0.8	8.9
1991	0.8	0.8	0.5	-	-0.7	1.0	0.8	-1.2	-0.2	3.2	-1.2	4.7	0.1	9.5
1992	1.2	0.8	0.6	-0.6	-0.6	1.3	0.3	-1.2	0.3	2.4	-1.1	4.0	-0.7	10.4
1993	-1.3	0.1	0.6	-1.4	-1.5	-0.1	-1.0	-3.8	0.2	2.1	-2.1	2.5	-1.2	11.7
1994	2.8	0.8	0.2	0.3	1.7	1.6	1.8	3.9	-0.1	1.7	1.2	1.9	0.1	12.3
1995	2.1	1.0	-	0.5	0.3	1.8	1.4	2.0	-	1.7	5.2	2.4	0.9	11.7
1996	1.6	1.2	0.5	-0.1	-0.7	1.5	0.9	0.2	-0.4	2.1	-2.7	2.4	0.1	12.4
1997	2.3	0.5	0.2	-	0.1	3.8	2.4	3.8	1.1	1.1	-0.5	2.8	0.6	12.4
1998	..	..	..	..	..	..	..	..	2.7	0.7	..	2.3	..	..
1996 Q1	1.3	2.1	0.4	-0.3	-0.9	0.8	0.7	-1.0	0.7	2.1	-0.8	2.3	0.4	12.3
Q2	1.0	0.5	0.5	-	-0.1	0.3	0.3	-0.3	-0.8	2.4	-2.7	2.3	0.2	12.4
Q3	1.5	1.1	0.6	-0.1	-1.5	2.1	0.6	0.3	-2.3	1.8	-3.8	2.6	-0.1	12.4
Q4	2.4	1.1	0.5	-	-0.2	2.9	1.9	1.9	1.1	1.7	-3.1	2.6	-	12.4
1997 Q1	1.2	-0.3	0.3	-0.2	0.3	2.0	0.9	0.6	-1.4	1.5	-2.3	3.0	-	12.4
Q2	2.4	0.4	0.2	-0.1	-	4.5	2.6	3.4	0.8	0.9	-0.9	2.7	0.5	12.4
Q3	2.6	0.5	0.2	0.1	0.4	4.6	3.2	5.0	1.7	1.3	0.3	2.8	0.8	12.4
Q4	3.1	1.6	0.2	0.2	-0.2	4.1	2.8	6.2	3.0	1.1	0.7	2.8	0.9	12.3
1998 Q1	3.6	1.9	0.2	0.8	0.6	3.8	3.7	7.2	2.3	0.6	0.6	2.6	1.3	12.1
Q2	3.3	2.4	0.3	0.7	0.5	1.9	2.6	5.4	3.4	1.0	-0.3	2.4	1.3	11.9
Q3	2.8	2.2	0.3	0.7	-0.1	1.8	2.1	3.2	2.3	0.6	-1.3	2.0	1.5	11.9
Q4	..	..	..	..	..	..	..	..	2.9	0.3	..	2.0	..	..
1997 Dec	..	..	..	..	..	..	..	7.1	5.3	1.1	0.7	..	..	12.2
1998 Jan	..	..	..	..	..	..	..	6.5	5.8	0.5	0.6	..	..	12.1
Feb	..	..	..	..	..	..	..	6.6	2.0	0.7	0.5	..	..	12.1
Mar	..	..	..	..	..	..	..	8.4	-0.8	0.8	0.6	..	..	12.0
Apr	..	..	..	..	..	..	..	4.4	4.0	1.0	-	..	..	11.9
May	..	..	..	..	..	..	..	5.8	1.2	1.0	-0.3	..	..	11.9
Jun	..	..	..	..	..	..	..	6.1	4.9	1.0	-0.7	..	..	11.8
Jul	..	..	..	..	..	..	..	3.3	2.9	0.8	-1.0	..	..	11.9
Aug	..	..	..	..	..	..	..	3.3	2.0	0.7	-1.3	..	..	11.9
Sep	..	..	..	..	..	..	..	3.1	1.7	0.5	-1.6	..	..	11.9
Oct	..	..	..	..	..	..	..	1.9	2.9	0.4	-2.0	..	..	11.8
Nov	..	..	..	..	..	..	..	4.8	4.4	0.3	-2.1	..	..	11.8
Dec	..	..	..	..	..	..	..	..	1.5	0.3	..	..	..	..
Percentage change on previous quarter														
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1996 Q1	1.4	1.5	0.2	-0.2	-0.8	1.5	0.9	1.3	2.5				0.1	
Q2	-0.1	-0.6	0.1	0.1	0.4	-0.4	-0.3	0.1	-1.7				-0.2	
Q3	0.8	0.6	0.1	-	-0.3	0.9	0.5	0.6	0.1				-0.1	
Q4	0.3	-0.3	0.1	-	0.5	0.8	0.8	-0.1	0.2				0.2	
1997 Q1	0.2	0.1	-	-0.3	-0.3	0.6	-	-	-				0.1	
Q2	1.1	0.1	-	0.2	0.1	2.0	1.4	2.9	0.5				0.3	
Q3	0.9	0.7	0.1	0.2	0.1	1.1	1.1	2.1	1.0				0.2	
Q4	0.8	0.7	0.1	0.1	-	0.3	0.3	1.0	1.5				0.3	
1998 Q1	0.7	0.4	0.1	0.3	0.4	0.4	0.8	0.9	-0.7				0.5	
Q2	0.8	0.6	0.1	0.2	0.1	0.1	0.3	1.2	1.6				0.3	
Q3	0.5	0.4	-	0.2	-0.5	1.0	0.6	-	-0.1				0.4	
Q4	..	..	..	..	..	..	..	..	2.1				..	
Percentage change on previous month														
								ILKD	ILKN					
1997 Dec								1.9	2.8					
1998 Jan								-0.7	2.8					
Feb								0.7	-4.8					
Mar								1.4	-2.7					
Apr								-0.3	5.9					
May								0.4	-1.6					
Jun								0.4	1.2					
Jul								-0.1	1.1					
Aug								-	-1.6					
Sep								-0.7	-0.9					
Oct								0.7	4.8					
Nov								1.0	-2.1					
Dec								..	-0.1					

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GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
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Sales = Retail Sales volume
CPI = Consumer Prices, coverage not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP = Index of Production

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

Source: OECD

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier														
	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1990	2.2	1.5	0.2	0.7	0.1	1.2	1.6	-0.5	-2.2	6.0	4.2	7.3	1.4	9.1
1991	1.1	1.7	0.3	0.2	-0.3	-0.1	0.5	-0.9	3.2	6.5	3.3	9.7	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	-2.9	4.2	3.7	3.7	-4.1	10.3
1994	2.2	0.9	-0.1	0.1	0.6	2.3	1.6	6.3	-6.0	3.9	3.8	3.3	-1.8	11.4
1995	2.9	1.2	-0.2	1.2	-	2.7	1.9	6.1	-4.9	5.4	7.9	3.1	-0.5	11.9
1996	0.7	0.5	-	0.1	-0.3	-0.1	-0.4	-2.9	-2.4	3.8	1.8	3.1	0.4	12.0
1997	1.5	1.4	-0.1	0.1	1.0	1.6	2.5	2.8	7.0	1.8	1.3	3.6	-	12.1
1998	..	..	..	..	..	..	..	..	..	1.7	..	..	..	..
1996 Q1	1.7	0.8	0.1	0.7	0.8	-0.1	0.5	-	-3.6	5.0	4.7	3.2	0.8	12.0
Q2	0.7	0.4	0.1	0.3	-0.2	-1.2	-1.2	-1.2	-4.0	4.2	1.6	3.3	0.3	12.0
Q3	0.5	0.2	0.1	-0.2	-0.9	0.1	-1.1	-4.6	-5.1	3.4	0.3	3.0	0.3	12.0
Q4	-0.2	0.6	-0.1	-0.5	-1.1	0.9	0.1	-5.5	3.5	2.7	0.7	2.9	0.2	12.1
1997 Q1	-0.8	1.2	-0.2	-0.3	-1.4	-0.7	-0.6	0.1	4.1	2.4	0.9	3.9	-0.1	12.2
Q2	2.0	1.6	-0.2	-	2.2	1.7	3.3	2.4	7.2	1.7	1.1	3.8	0.1	12.1
Q3	2.1	1.7	-0.1	0.2	1.2	3.1	4.0	3.2	8.7	1.6	1.7	3.4	-	12.1
Q4	2.8	1.3	-	0.5	1.9	2.2	3.1	5.3	8.0	1.6	1.5	3.3	-	12.1
1998 Q1	2.5	0.7	0.2	0.6	2.6	2.9	4.5	3.3	2.4	1.7	1.1	2.1	0.6	12.1
Q2	1.2	0.5	0.2	0.4	0.6	1.7	2.3	1.3	4.2	1.7	0.6	3.1	0.1	12.3
Q3	..	..	..	..	..	..	..	0.5	..	1.8	-0.2	..	0.6	12.3
Q4	..	..	..	..	..	..	..	..	..	1.5	..	..	..	..
1997 Dec	..	..	..	..	..	..	..	6.5	8.0	1.5	1.4	3.1	..	12.0
1998 Jan	..	..	..	..	..	..	..	6.5	2.1	1.6	1.2	1.6	..	12.0
Feb	..	..	..	..	..	..	..	2.4	3.2	1.8	1.2	1.8	..	12.1
Mar	..	..	..	..	..	..	..	1.3	2.1	1.7	0.9	2.8	..	12.1
Apr	..	..	..	..	..	..	..	0.7	3.2	1.8	0.9	3.0	..	12.2
May	..	..	..	..	..	..	..	2.9	4.3	1.7	0.6	3.2	..	12.3
Jun	..	..	..	..	..	..	..	0.3	5.1	1.8	0.4	3.0	..	12.3
Jul	..	..	..	..	..	..	..	1.5	3.2	1.8	0.2	2.5	..	12.3
Aug	..	..	..	..	..	..	..	-1.6	3.1	1.9	-0.2	3.0	..	12.3
Sep	..	..	..	..	..	..	..	1.5	..	1.8	-0.6	..	..	12.3
Oct	..	..	..	..	..	..	..	1.6	..	1.7	-0.9	..	..	12.3
Nov	..	..	..	..	..	..	..	-0.4	..	1.5	-1.2	..	..	..
Dec	..	..	..	..	..	..	..	..	..	1.5	..	..	..	..
Percentage change on previous quarter														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
1996 Q1	0.8	0.1	-	-0.2	0.2	0.6	-0.1	-3.7	6.6				-1.3	
Q2	-1.0	-	-	-0.1	-1.8	-0.5	-1.4	-0.5	-2.2				1.2	
Q3	0.4	0.1	-	-0.1	0.3	0.4	0.3	-0.3	-0.3				1.2	
Q4	-0.4	0.4	-0.1	-0.1	0.3	0.4	1.3	-1.0	-0.3				-0.8	
1997 Q1	0.2	0.7	-0.1	-	-0.2	-1.1	-0.8	1.9	7.2				-1.6	
Q2	1.8	0.4	-	0.2	1.8	1.9	2.6	1.8	0.7				1.4	
Q3	0.6	0.2	-	0.1	-0.6	1.8	1.0	0.6	1.1				1.1	
Q4	0.3	-	-	0.2	0.9	-0.4	0.4	0.9	-1.0				-0.8	
1998 Q1	-0.1	0.1	0.1	0.1	0.5	-0.4	0.5	-	1.7				-1.0	
Q2	0.4	0.2	0.1	-	-0.1	0.6	0.4	-0.2	2.5				0.9	
Q3	..	..	..	..	..	..	..	-0.3	..				1.6	
Q4	..	..	..	..	..	..	..	..	..				..
Percentage change on previous month														
								ILKE	ILKO					
1997 Dec								-0.1	1.1					
1998 Jan								0.9	1.1					
Feb								-1.0	1.0					
Mar								-0.9	-1.0					
Apr								-0.2	-					
May								2.5	1.0					
Jun								-2.2	6.2					
Jul								0.8	-4.9					
Aug								-1.6	1.0					
Sep								1.7	..					
Oct								1.3	..					
Nov								-1.5	..					
Dec												

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Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment not seasonally adjusted

Source: OECD

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage change on a year earlier														
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1990	1.2	1.1	0.4	-0.2	-0.4	0.7	0.4	-0.2	0.6	5.4	4.9	3.2	1.2	5.6
1991	-0.9	-0.4	0.2	-1.1	-0.2	0.6	-0.1	-2.0	-2.5	4.2	2.1	3.3	-0.9	6.8
1992	2.7	1.9	-	0.8	0.2	0.6	0.8	3.2	3.2	3.1	1.3	2.4	0.7	7.5
1993	2.3	2.0	-	0.8	0.2	0.3	1.0	3.5	4.5	3.0	1.3	2.4	1.4	6.9
1994	3.5	2.2	0.1	1.1	0.6	0.8	1.4	5.4	5.7	2.6	0.6	2.8	2.4	6.1
1995	2.3	1.8	-0.1	0.8	-0.5	1.2	1.1	5.0	3.1	2.7	2.0	2.7	1.4	5.6
1996	3.4	2.2	0.1	1.4	-	1.0	1.2	4.4	4.6	3.0	2.6	3.1	1.5	5.4
1997	3.9	2.3	0.2	1.3	0.5	1.6	1.9	6.0	4.2	2.3	0.4	3.1	2.2	5.0
1998	..	..	..	..	..	..	..	3.7	..	..	..	2.5	..	..
1996 Q1	2.4	2.0	-0.1	0.9	-0.6	1.0	0.8	2.6	4.4	2.8	2.2	2.9	0.6	5.6
Q2	3.9	2.3	0.1	1.4	0.1	1.1	1.0	4.7	5.0	2.8	2.4	3.2	1.3	5.4
Q3	3.5	2.1	0.1	1.6	0.5	0.6	1.4	5.2	4.3	3.0	2.8	3.1	1.7	5.3
Q4	3.9	2.2	0.3	1.5	0.2	1.2	1.6	5.3	4.4	3.1	3.1	3.5	2.1	5.3
1997 Q1	4.1	2.3	0.3	1.3	0.6	1.4	1.8	6.3	4.8	2.9	2.0	3.4	2.5	5.3
Q2	3.6	1.8	0.2	1.2	0.7	1.7	2.0	5.4	3.1	2.3	0.4	2.8	2.4	4.9
Q3	4.1	2.5	0.2	1.4	-	2.0	2.0	5.8	4.8	2.2	-0.1	2.5	2.1	4.9
Q4	3.8	2.5	0.2	1.3	0.5	1.2	2.0	6.6	4.0	1.9	-0.8	3.4	2.0	4.7
1998 Q1	4.2	2.8	0.1	1.8	0.5	0.9	1.9	5.4	5.1	1.4	-1.5	3.1	1.9	4.7
Q2	3.6	3.6	0.2	1.9	-0.5	0.1	1.7	4.6	7.6	1.6	-0.7	2.5	1.5	4.4
Q3	3.5	3.2	0.1	1.5	0.1	-0.3	1.3	2.9	5.6	1.6	-0.6	2.5	1.2	4.5
Q4	..	..	..	..	..	..	..	1.9	..	..	..	1.9	..	..
1997 Dec	..	..	..	..	..	..	..	6.6	4.6	1.7	-1.3	2.5	2.2	4.7
1998 Jan	..	..	..	..	..	..	..	6.0	4.9	1.6	-1.8	3.3	2.0	4.7
Feb	..	..	..	..	..	..	..	5.1	4.9	1.4	-1.4	3.3	2.1	4.6
Mar	..	..	..	..	..	..	..	5.1	5.4	1.3	-1.5	2.5	1.6	4.7
Apr	..	..	..	..	..	..	..	4.9	7.0	1.5	-0.9	2.5	1.7	4.3
May	..	..	..	..	..	..	..	5.1	8.2	1.7	-0.7	2.5	1.5	4.3
Jun	..	..	..	..	..	..	..	3.5	7.5	1.7	-0.6	2.5	1.4	4.5
Jul	..	..	..	..	..	..	..	2.7	5.5	1.7	-0.4	1.7	1.1	4.5
Aug	..	..	..	..	..	..	..	3.6	5.1	1.6	-0.8	2.5	1.0	4.5
Sep	..	..	..	..	..	..	..	2.6	6.1	1.5	-0.9	3.3	1.5	4.6
Oct	..	..	..	..	..	..	..	2.2	7.4	1.5	-0.6	1.6	..	4.6
Nov	..	..	..	..	..	..	..	1.4	..	1.5	-0.6	2.4	..	4.4
Dec	..	..	..	..	..	..	..	1.9	..	..	..	1.6	..	..
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1996 Q1	0.8	0.6	0.1	0.5	-0.1	0.1	0.4	0.7	1.4				-1.2	
Q2	1.5	0.8	0.3	0.5	0.2	0.2	0.4	2.3	1.5				2.0	
Q3	0.5	0.3	-	0.3	0.3	0.1	0.4	1.4	0.4				1.2	
Q4	1.0	0.5	-	0.2	-0.2	0.9	0.2	0.8	1.1				0.1	
1997 Q1	1.0	0.7	-	0.3	0.3	0.3	0.6	1.6	1.8				-0.8	
Q2	1.0	0.3	0.1	0.4	0.3	0.5	0.6	1.4	-0.2				2.0	
Q3	1.0	1.0	-	0.5	-0.4	0.3	0.5	1.8	2.1				0.9	
Q4	0.7	0.5	-	0.1	0.2	0.1	0.2	1.5	0.4				-	
1998 Q1	1.4	1.0	-0.1	0.8	0.3	-0.1	0.6	0.5	2.8				-1.0	
Q2	0.5	1.0	0.2	0.5	-0.7	-0.3	0.4	0.7	2.2				1.6	
Q3	0.9	0.7	-	0.2	0.2	-0.1	0.1	0.2	0.1				0.6	
Q4	..	..	..	..	..	..	..	0.5	..				..
Percentage change on previous month														
								ILKG	ILKQ				ILLA	
1997 Dec								0.3	0.6				-0.2	
1998 Jan								-	1.3				-1.5	
Feb								-0.1	1.1				0.5	
Mar								0.4	0.5				0.6	
Apr								0.5	0.6				0.5	
May								0.5	1.2				0.5	
Jun								-1.0	0.3				0.5	
Jul								-0.1	-0.7				0.4	
Aug								1.4	0.1				-0.4	
Sep								-0.4	0.6				-0.3	
Oct								0.2	1.2				..	
Nov								-0.3	
Dec								0.8	

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Source: OECD

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP ¹	Sales	CPI	PPI	Earnings ²	Empl	Unempl
Percentage change on a year earlier														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1990	5.2	2.6	0.1	2.6	-0.2	0.7	0.8	4.7	5.1	3.1	1.6	5.1	1.9	2.1
1991	3.8	1.5	0.2	1.1	0.3	0.6	-0.3	2.3	2.5	3.3	1.1	3.5	1.9	2.1
1992	1.0	1.2	0.2	-0.5	-0.4	0.5	-	-5.5	-1.1	1.6	-0.9	1.3	1.1	2.1
1993	0.3	0.7	0.2	-0.6	-0.2	0.2	-	-4.7	-3.2	1.2	-1.7	0.4	0.2	2.5
1994	0.7	1.1	0.2	-0.2	-0.2	0.5	0.8	1.3	0.3	0.8	-1.7	2.2	-	2.9
1995	1.4	1.2	0.3	0.4	0.2	0.7	1.4	3.2	-	-0.1	-0.7	3.0	0.1	3.1
1996	5.2	1.7	0.2	3.4	0.4	0.8	1.3	2.4	0.7	0.1	-1.8	2.6	0.5	3.4
1997	1.4	0.6	0.1	-0.7	-0.1	1.4	0.1	3.6	-2.3	1.8	0.7	2.9	1.1	3.4
1998	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1996 Q1	6.4	3.1	0.2	3.8	0.5	0.5	1.7	1.7	2.0	-0.4	-1.7	1.7	0.1	3.3
Q2	4.9	1.5	0.2	4.2	0.5	0.2	1.6	0.4	0.3	0.1	-1.9	1.7	0.3	3.5
Q3	4.3	1.0	0.1	3.3	0.3	0.8	1.1	3.5	-0.6	0.2	-1.7	4.9	0.7	3.3
Q4	5.1	1.4	0.3	2.5	0.3	1.5	0.9	3.9	1.0	0.5	-1.6	2.3	0.9	3.3
1997 Q1	3.8	2.7	-	0.6	-0.4	1.5	0.6	5.2	3.7	0.6	-0.9	5.1	1.6	3.3
Q2	0.9	-0.2	0.2	-1.0	-	2.0	0.1	5.8	-4.7	2.1	1.3	2.6	1.4	3.5
Q3	1.7	0.6	0.4	-0.8	0.1	1.4	-	4.0	-3.5	2.1	1.3	2.6	0.7	3.4
Q4	-0.8	-0.6	-0.1	-1.5	-	1.0	-0.4	-0.6	-4.7	2.1	1.1	1.6	0.7	3.4
1998 Q1	-3.6	-2.4	0.2	-2.4	0.2	0.3	-0.6	-3.6	-9.6	2.0	0.4	-0.2	-	3.6
Q2	-1.8	0.5	-	-2.7	-0.1	-0.5	-1.0	-7.9	-2.6	0.4	-1.9	-0.2	-0.8	4.2
Q3	-3.5	-0.6	-	-3.3	-0.3	-0.2	-1.0	-7.9	-3.5	-0.2	-1.9	-1.7	-0.9	4.2
Q4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1997 Dec	..	..	..	..	..	..	..	-0.8	-5.1	1.8	0.9	1.5	0.8	3.4
1998 Jan	..	..	..	..	..	..	..	-2.3	-5.0	1.8	0.9	-0.5	0.6	3.5
Feb	..	..	..	..	..	..	..	-3.8	-7.9	1.9	0.4	0.2	-0.1	3.6
Mar	..	..	..	..	..	..	..	-4.8	-15.6	2.2	0.1	-0.2	-0.3	3.8
Apr	..	..	..	..	..	..	..	-6.1	-	0.5	-2.0	-0.3	-0.7	4.1
May	..	..	..	..	..	..	..	-10.5	-3.2	0.5	-1.9	-0.1	-0.5	4.3
Jun	..	..	..	..	..	..	..	-7.2	-4.3	0.1	-1.9	-0.3	-1.1	4.3
Jul	..	..	..	..	..	..	..	-8.5	-3.2	-0.1	-1.9	-2.3	-1.1	4.1
Aug	..	..	..	..	..	..	..	-8.3	-4.2	-0.3	-1.9	-2.7	-0.7	4.3
Sep	..	..	..	..	..	..	..	-7.1	-3.2	-0.2	-2.0	-0.1	-1.0	4.3
Oct	..	..	..	..	..	..	..	-7.4	-6.3	0.2	-2.0	0.4	-1.1	4.2
Nov	..	..	..	..	..	..	..	-5.2	-3.2	0.7	-2.1	0.8	-0.8	4.5
Dec	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDD	ILHH	ILIB				ILIV	
1996 Q1	2.9	0.9	-	1.7	0.4	0.3	0.3	0.6	2.0				-1.6	
Q2	0.2	-0.2	-	0.8	-0.1	-	0.3	-0.7	-1.7				3.1	
Q3	0.3	0.1	-	-0.3	-	0.6	-	1.8	-0.6				0.5	
Q4	1.5	0.7	0.3	0.3	-	0.6	0.2	2.2	1.3				-1.0	
1997 Q1	1.6	2.1	-0.2	-0.2	-0.2	0.3	0.1	1.9	4.7				-0.9	
Q2	-2.5	-3.0	0.2	-0.7	0.3	0.5	-0.2	-0.2	-9.6				2.9	
Q3	1.0	0.9	0.1	-0.1	0.1	-	-0.1	-	0.6				-0.3	
Q4	-0.9	-0.5	-0.2	-0.5	-0.1	0.2	-0.2	-2.2	-				-1.0	
1998 Q1	-1.2	0.2	0.1	-1.1	-0.1	-0.4	-0.1	-1.2	-0.6				-1.5	
Q2	-0.7	-0.1	-	-1.0	-0.1	-0.3	-0.7	-4.7	-2.6				2.1	
Q3	-0.7	-0.2	0.1	-0.8	-0.1	0.2	-	-	-0.3				-0.5	
Q4	..	..	..	..	..	..	..	..	..				..
Percentage change on previous month														
								ILKH	ILKR				ILLB	
1997 Dec								2.0	-				-0.4	
1998 Jan								2.2	2.1				-0.8	
Feb								-3.6	-3.1				-0.7	
Mar								-2.2	-1.1				0.9	
Apr								-1.4	-				1.0	
May								-1.8	-				1.1	
Jun								1.7	-2.2				0.1	
Jul								-0.8	1.1				-0.5	
Aug								-1.2	-				-0.5	
Sep								3.2	-				-0.3	
Oct								-1.1	-2.2				-	
Nov								-2.1	2.2				-0.7	
Dec								..	..				..

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

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
IoP = Index of Production

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

Source: OECD

7 World trade in goods¹

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
Percentage change on a year earlier														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1990	5.9	5.9	5.5	5.5	5.5	5.4	4.5	5.6	1.6	4.5	5.2	2.8	5.7	4.5
1991	3.8	2.5	9.6	5.2	3.5	10.0	4.0	3.5	5.2	4.5	3.2	8.1	4.5	4.2
1992	4.5	3.7	7.7	5.1	4.5	6.7	4.5	3.8	6.1	5.0	4.3	6.7	4.8	4.7
1993	4.2	1.9	13.1	3.3	1.1	9.3	4.2	2.5	8.5	3.7	1.4	9.6	3.8	3.9
1994	11.2	10.2	14.7	12.3	12.8	11.1	10.1	9.2	12.2	10.6	10.7	10.3	11.7	10.3
1995	9.9	9.8	10.2	9.8	9.3	11.2	8.7	8.7	8.8	8.3	7.3	10.7	9.9	8.5
1996	5.6	6.4	3.0	5.6	7.0	2.2	5.0	6.0	2.7	5.1	6.1	2.6	5.6	5.0
1997	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1995 Q1	13.3	13.5	12.6	13.1	13.6	12.0	11.7	12.1	10.9	11.0	11.0	11.0	13.2	11.4
Q2	10.4	10.1	11.3	11.0	10.3	12.7	9.2	9.0	9.8	9.6	8.5	12.3	10.7	9.4
Q3	9.1	8.9	9.8	9.1	8.1	11.6	7.9	7.7	8.4	7.8	6.5	11.2	9.1	7.9
Q4	7.1	7.1	6.8	6.4	5.6	8.4	6.0	6.0	6.1	5.2	3.9	8.3	6.7	5.6
1996 Q1	5.7	6.1	4.5	6.2	7.3	3.6	4.8	5.3	3.7	5.5	6.0	4.4	6.0	5.2
Q2	5.3	6.2	2.4	4.7	6.5	0.4	4.6	5.6	2.1	4.4	5.8	1.1	5.0	4.5
Q3	6.4	7.9	1.7	7.0	8.7	2.7	5.8	7.4	2.0	6.1	7.5	2.7	6.7	5.9
Q4	7.3	8.5	3.4	6.7	8.6	2.3	6.6	8.1	3.0	6.7	8.5	2.3	7.0	6.6
1997 Q1	7.2	7.9	4.9	7.3	7.6	6.7	6.7	7.2	5.5	6.8	6.8	6.7	7.3	6.7
Q2	10.8	12.3	5.9	10.5	11.9	7.0	9.8	11.5	5.9	9.1	10.1	6.4	10.7	9.5
Q3	12.6	13.5	9.5	10.8	12.6	6.4	10.8	11.9	8.0	9.5	10.7	6.8	11.7	10.2
Q4	9.3	10.5	5.0	..	..	..	..	..	..	..	..	..	..	..
1998 Q1	9.1	8.8	10.0	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q1	3.2	3.5	2.2	1.5	0.9	2.8	2.6	2.8	2.1	1.0	0.5	2.3	2.3	1.8
Q2	1.1	0.8	2.1	1.8	1.4	3.0	0.8	0.4	1.7	1.9	1.4	3.3	1.5	1.4
Q3	1.0	0.7	1.9	1.1	0.8	1.9	1.1	0.8	1.7	1.0	0.6	2.0	1.1	1.1
Q4	1.6	2.0	0.5	1.8	2.4	0.5	1.5	1.9	0.5	1.1	1.4	0.6	1.7	1.3
1996 Q1	1.9	2.5	-0.1	1.3	2.6	-1.8	1.4	2.1	-0.3	1.3	2.5	-1.4	1.6	1.4
Q2	0.7	0.9	-	0.4	0.6	-0.2	0.6	0.7	0.1	0.9	1.2	-	0.5	0.7
Q3	2.1	2.4	1.2	3.3	2.9	4.3	2.2	2.5	1.6	2.7	2.3	3.6	2.7	2.4
Q4	2.5	2.5	2.3	1.6	2.2	-	2.3	2.6	1.4	1.7	2.3	0.1	2.0	2.0
1997 Q1	1.8	1.9	1.4	1.9	1.7	2.5	1.5	1.2	2.2	1.4	0.9	2.8	1.8	1.5
Q2	4.1	5.0	0.9	3.3	4.6	0.1	3.6	4.8	0.5	3.0	4.3	-0.2	3.7	3.3
Q3	3.7	3.5	4.7	3.6	3.6	3.7	3.1	2.9	3.7	3.1	2.8	4.0	3.7	3.1
Q4	-0.5	-0.1	-1.9	..	..	..	..	..	..	..	..	..	..	..
1998 Q1	1.6	0.3	6.2	..	..	..	..	..	..	..	..	..	..	..

¹ Data used in the World and OECD aggregates refer to Germany after unification

Source: OECD

Final Expenditure Prices Index (Experimental) - December 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

1. The Average Earnings Index series was again not published in January, pending completion of a review of methodology. Since components of the Average Earnings Index are used in calculating the pay component of the Index of Government Prices (IGP), it has therefore not been possible to calculate an IGP from October to December. Consequently it has also not been possible to determine an overall value for the FEPI itself. Nevertheless, the ICP and the IIP have been calculated as per normal. As soon as the Average Earnings Index series has been re-instated the missing IGP and FEPI will, of course, be calculated retrospectively.

2. Since it has not been possible to calculate the overall FEPI since September 1998, the chart on the right goes up to September only. The annual percentage change for the Index of Consumer Prices (ICP) rose from 2.0 per cent in November to 2.1 per cent in December. The annual percentage change in the Index of Investment Prices (IIP) fell from 1.5 per cent to 1.3 per cent.

The FEPI annual percentage change



Table A

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

		Index of Consumer Prices (ICP)		Index of Investment Prices (IIP)		Index of Government Prices (IGP)		Final Expenditure Prices Index (FEPI)	
		Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change
1998	Jul	119.2	2.1	112.7r	1.4	117.0	2.1	117.3	1.9
	Aug	119.6	1.8	112.7r	1.3	117.1	2.2	117.6	1.8
	Sep	120.1	1.9	112.5r	1.0r	117.3	2.1	117.9	1.7
	Oct	120.1	1.8	112.6r	1.3r	..	..	..	..
	Nov	120.3	2.0	112.8	1.5	..	..	..	..
	Dec	120.6	2.1	112.5	1.3	..	..	..	..

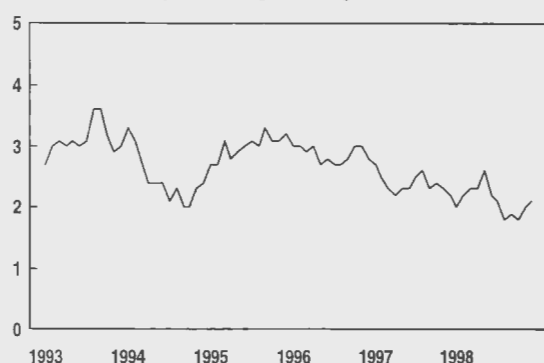
The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, rose from 2.0 per cent in November to 2.1 per cent in December.

Upward pressure came from:

- Food, whose 12-month rate rose from 2.0 per cent to 2.7 per cent in December, as prices for fresh vegetables were affected by floods and frost which limited supply.
- Fuel and power, the 12-month rate rose from -2.2 per cent to -1.9 per cent in December.
- Household goods & services, the 12-month rate rose from 1.2 per cent to 2.2 per cent mainly due to price increases for furniture.
- Alcoholic drink whose 12-month rate rose from 3.4 per cent to 3.7 per cent in December as Christmas discounting by retailers was not as deep as in the previous year.
- Tobacco, the 12-month rate rose from 7.6 per cent to 8.4 per cent due to retailers passing on budget increases in tobacco duty which took effect in December 1998.

The ICP annual percentage change



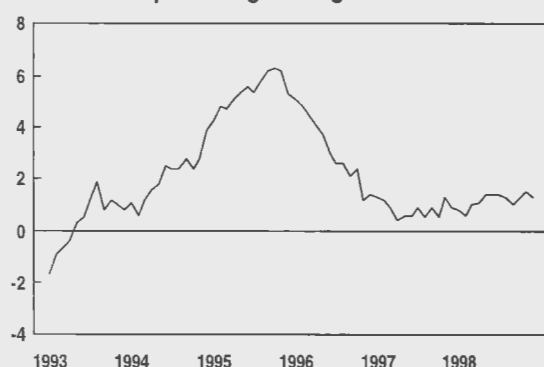
The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, was 1.3 per cent over the 12 months to December, down from 1.5 per cent in November.

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

- New dwellings, whose 12-month rate fell from 8.6 per cent to 7.8 per cent in December.
- Plant and machinery, where the 12-month rate fell from -5.5 per cent in November to -6.0 per cent in December.

The IIP annual percentage change



The Index of Government Prices (IGP)

It has not been possible to calculate the IGP from October to December for reasons given above in the summary.

Comparison between the FEPI and other inflation measures

Table B

Measures of Inflation (annual percentage changes)

		FEPI	RPIX	HICP	PPI
1998	Jul.	1.9	2.6	1.5	0.8
	Aug	1.8	2.5	1.3	0.5
	Sep	1.6	2.5	1.5	0.3
	Oct.	..	2.5	1.3	0.1
	Nov	..	2.5	1.4	0.1
	Dec	..	2.6	1.5	0.0

NOTES

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

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

The Index of Consumer Prices (ICP)

The Index of Investment Prices (IIP)

The Index of Government Prices (IGP).

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

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

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

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

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

1 Final Expenditure Prices Index (Experimental)

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices ¹ IGP	Final Expenditure Prices Index ¹ FEPI	Annual percentage changes			
					ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1996	604	164	232	1000				
1997	605	165	230	1000				
1998	605	169	226	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1996 Dec	115.6	110.1	113.3	113.9	2.8	1.4	1.7	2.2
1997 Jan	115.3	110.4	113.7	113.9	2.7	1.3	1.9	2.3
Feb	115.7	110.6	113.8	114.2	2.5	1.2	2.0	2.2
Mar	116.0	110.6	113.9	114.4	2.3	0.9	1.5	1.9
Apr	116.6	110.7	114.1	114.8	2.2	0.4	1.9	1.9
May	117.0	110.8	114.7	115.2	2.3	0.6	2.1	1.9
Jun	117.2	110.8	114.8	115.3	2.3	0.6	1.8	1.9
Jul	116.7	111.1	114.6	115.1	2.5	0.9	2.0	2.1
Aug	117.5	111.2	114.6	115.5	2.6	0.5	1.8	2.0
Sep	117.9	111.4	114.9	115.9	2.3	0.9	2.3	2.1
Oct	118.0	111.2	115.1	115.9	2.4	0.5	2.1	2.0
Nov	117.9	111.1	115.6	116.0	2.3	1.3	2.2	2.1
Dec	118.1	111.1	115.6	116.1	2.2	0.9	2.0	1.9
1998 Jan	117.6	111.3	116.2	116.0	2.0	0.8	2.2	1.8
Feb	118.3	111.3	115.9	116.3	2.2	0.6	1.8	1.8
Mar	118.7	111.7	116.3	116.7	2.3	1.0	2.1	2.0
Apr	119.3	111.9	116.3	117.2	2.3	1.1	1.9	2.1
May	120.0	112.4	116.7	117.7	2.6	1.4	1.7	2.2
Jun	119.8	112.4	117.1	117.7	2.2	1.4	2.0	2.1
Jul	119.2	112.7	117.0	117.3	2.1	1.4	2.1	1.9
Aug	119.6	112.7	117.1	117.6	1.8	1.3	2.2	1.8
Sep	120.1	112.5r	117.3	117.9	1.9	1.0r	2.1	1.7
Oct	120.1	112.6r	..	..	1.8	1.3r	..	..
Nov	120.3	112.8	..	..	2.0	1.5	..	..
Dec	120.6	112.5	..	..	2.1	1.3	..	..

The symbol r denotes revisions to previous months' data

¹ Please note that, because of the temporary suspension of the Average Earnings Index, it has not been possible to calculate the IGP (or the FEPI) from October to December 1998.

2 FEPI - Index of Consumer Prices (Experimental)

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communication	Recreation, Entertainment and Education	Other Goods and Services	Index of Consumer Prices ICP
January 1992=100											
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
1998	127	68	29	67	87	39	71	188	118	205	1000
1996 Dec											
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
	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
1997 Jul											
	111.3	121.1	149.3	100.3	126.2	102.8	109.6	119.4	110.3	123.4	116.7
Aug	112.6	121.3	151.2	102.3	126.4	102.8	110.8	120.0	110.2	124.0	117.5
Sep	112.2	121.4	151.5	106.3	126.6	100.0	111.6	120.4	110.7	124.4	117.9
Oct	112.2	121.7	151.7	106.0	126.8	100.0	111.4	120.3	110.8	124.8	118.0
Nov	111.6	121.1	151.8	107.2	126.9	99.6	112.3	120.0	110.7	124.8	117.9
Dec	111.7	120.6	155.1	106.7	127.0	99.1	113.2	120.0	110.7	125.2	118.1
1998 Jan											
	111.7	122.1	159.3	99.7	127.3	98.4	109.8	120.6	110.3	125.4	117.6
Feb	111.7	123.1	159.5	102.0	127.4	98.7	111.5	120.8	110.5	126.4	118.3
Mar	111.5	123.5	159.5	104.1	127.6	98.9	113.1	120.8	110.4	126.9	118.7
Apr	111.8	123.6	162.1	105.0	129.9	98.9	112.1	122.1	110.8	127.6	119.3
May	113.5	124.5	162.6	106.0	130.1	98.3	113.3	122.3	111.1	128.1	120.0
Jun	113.1	124.4	162.8	105.7	130.2	97.6	112.7	122.2	110.7	128.4	119.8
1998 Jul											
	112.8	124.9	163.0	99.3	130.4	97.3	111.4	122.0	110.4	128.6	119.2
Aug	114.1	125.2	163.1	101.2	130.6	97.2	112.2	121.9	110.4	128.8	119.6
Sep	113.7	125.3	163.2	105.8	130.8	97.3	112.9	121.9	111.0	128.7	120.1
Oct	113.9	125.6	163.4	104.7	131.1	97.5	112.4	121.5	111.2	129.5	120.1
Nov	113.8	125.2	163.4	105.3	131.3	97.4	113.6	121.1	111.2	130.2	120.3
Dec	114.7	125.1	168.2	104.7	131.4	97.2	115.7	120.5	111.0	130.6	120.6
Annual Percentage Changes											
	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communication	Recreation Entertainment and Education	Other Goods and Services	Index of Consumer Prices ICP
	CGAP	CGAQ	CGAR	CGAS	CGAT	CGAU	CGAV	CGAW	CGAX	CGAY	CGAZ
1996 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
1997 Jul											
	0.5	2.3	6.9	1.1	3.5	-2.9	0.7	4.5	1.3	3.8	2.5
Aug	0.7	2.5	8.2	1.8	3.6	-2.7	0.6	4.3	0.9	3.9	2.6
Sep	1.3	2.4	8.1	0.9	3.7	-5.5	0.7	3.5	1.0	3.8	2.3
Oct	1.9	2.4	8.2	0.5	3.8	-5.3	0.9	3.4	0.9	3.7	2.4
Nov	1.7	2.1	8.4	0.6	3.7	-5.1	0.8	3.4	0.5	3.7	2.3
Dec	1.8	2.2	8.6	0.1	3.7	-5.4	0.8	2.8	0.5	3.7	2.2
1998 Jan											
	1.0	3.0	9.4	-0.8	3.2	-5.6	0.9	2.6	0.4	3.9	2.0
Feb	1.3	3.2	9.1	-	3.1	-5.4	1.6	2.3	0.4	4.3	2.2
Mar	1.5	3.6	8.8	0.1	3.0	-5.3	1.3	2.4	0.5	4.4	2.3
Apr	1.5	3.3	9.3	-0.5	3.3	-5.1	0.9	3.5	0.5	4.2	2.3
May	2.3	3.4	9.2	-	3.3	-5.2	1.5	3.6	0.5	4.1	2.6
Jun	1.2	3.2	9.1	0.3	3.2	-5.5	1.2	3.1	0.2	4.1	2.2
1998 Jul											
	1.3	3.1	9.2	-1.0	3.3	-5.4	1.6	2.2	0.1	4.2	2.1
Aug	1.3	3.2	7.9	-1.1	3.3	-5.4	1.3	1.6	0.2	3.9	1.8
Sep	1.3	3.2	7.7	-0.5	3.3	-2.7	1.2	1.2	0.3	3.5	1.9
Oct	1.5	3.2	7.7	-1.2	3.4	-2.5	0.9	1.0	0.4	3.8	1.8
Nov	2.0	3.4	7.6	-1.8	3.5	-2.2	1.2	0.9	0.5	4.3	2.0
Dec	2.7	3.7	8.4	-1.9	3.5	-1.9	2.2	0.4	0.3	4.3	2.1

The symbol r denotes revisions to previous months' data

3 FEPI - Index of Investment Prices (Experimental)

	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100						
Weights						
1996	378	108	266	38	209	1000
1997	390	103	267	33	207	1000
1998	387	103	277	37	196	1000
	CUSG	CUSH	CUSF	CUSI	CUSJ	CUSK
1996 Dec	111.0	117.5	108.5	141.0	103.8	110.1
1997 Jan	111.1	118.2	108.8	139.3	104.3	110.4
Feb	111.2	118.7	109.1	141.8	104.4	110.6
Mar	110.1	118.9	109.4	142.2	105.6	110.6
Apr	109.8	118.5	109.5	142.8	106.9	110.7
May	109.4	118.5	109.4	144.8	107.6	110.8
Jun	108.8	118.3	109.4	144.9	108.6	110.8
Jul	108.0	118.1	110.2	150.8	109.8	111.1
Aug	107.2	118.4	111.1	151.9	110.5	111.2
Sep	107.1	118.6	111.5	153.4	110.6	111.4
Oct	106.6	118.4	112.0	152.2	110.4	111.2
Nov	105.9	118.1	112.4	153.1	110.5	111.1
Dec	105.8	118.5	112.8	152.2	110.5	111.1
1998 Jan	105.6	119.1	113.3	151.7	110.6	111.3
Feb	105.0	118.8	113.8	153.6	111.2	111.3
Mar	104.5	119.5	114.3	154.9	113.1	111.7
Apr	103.7	119.3	114.6	159.6	115.0	111.9
May	103.8	120.4	115.0	160.3	115.9	112.4
Jun	102.9	120.1	115.3	161.0	117.7	112.4
Jul	102.2	120.4	115.8	165.4	118.9	112.7
Aug	101.6	121.3r	116.1	165.1	119.5	112.7
Sep	100.6r	120.9r	116.5	165.9	120.0	112.5r
Oct	100.1	121.1r	117.1	167.3r	120.1r	112.6r
Nov	100.1r	122.2	117.6	166.9r	120.0r	112.8
Dec	99.5	122.5	118.2	166.1	119.1	112.5
Annual Percentage Changes						
	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
	CGBB	CGBC	CGBA	CGBD	CGBE	CGBF
1996 Dec	-4.5	-0.3	5.1	9.6	6.6	1.4
1997 Jan	-4.8	-0.3	4.9	9.6	7.0	1.3
Feb	-4.4	-	4.7	9.2	6.3	1.2
Mar	-5.1	0.1	4.4	9.0	6.3	0.9
Apr	-5.9	-0.6	4.1	5.2	6.8	0.4
May	-5.2	-0.5	3.5	6.6	7.1	0.6
Jun	-5.1	-0.5	3.1	6.9	7.4	0.6
Jul	-4.8	-0.8	3.5	9.2	7.6	0.9
Aug	-6.0	-1.0	3.9	9.1	7.6	0.5
Sep	-5.3	-0.9	3.9	10.1	7.7	0.9
Oct	-5.7	-0.7	4.0	8.0	7.4	0.5
Nov	-4.2	0.4	4.0	8.7	7.3	1.3
Dec	-4.7	0.9	4.0	7.9	6.5	0.9
1998 Jan	-5.0	0.8	4.1	8.9	6.0	0.8
Feb	-5.6	0.1	4.3	8.3	6.5	0.6
Mar	-5.1	0.5	4.5	8.9	7.1	1.0
Apr	-5.6	0.7	4.7	11.8	7.6	1.1
May	-5.1	1.6	5.1	10.7	7.7	1.4
Jun	-5.4	1.5	5.4	11.1	8.4	1.4
Jul	-5.4	1.9	5.1	9.7	8.3	1.4
Aug	-5.2	2.4	4.5	8.7	8.1	1.3
Sep	-6.1r	1.9	4.5	8.1	8.5	1.0r
Oct	-6.1	2.3r	4.6	9.9	8.8r	1.3r
Nov	-5.5r	3.5	4.6	9.0r	8.6r	1.5
Dec	-6.0	3.4	4.8	9.1	7.8	1.3

The symbol r denotes revisions to previous months' data

4 FEPI - Index of Government Prices (Experimental)

	Local Government Total	Central Government Total	Education Grants	Index of Government Prices ¹ IGP	Annual percentage changes			
					Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP
January 1992=100								
Weights								
1996	344	597	59	1000				
1997	347	589	64	1000				
1998	342	591	67	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1996 Dec	114.9	112.3	114.9	113.3	2.0	1.6	2.0	1.7
1997 Jan	115.4	112.6	115.5	113.7	2.4	1.6	1.9	1.9
Feb	115.5	112.7	115.5	113.8	2.4	1.7	1.9	2.0
Mar	116.0	112.6	115.5	113.9	2.7	0.9	1.9	1.5
Apr	115.7	112.9	115.5	114.1	2.6	1.3	1.9	1.9
May	117.0	113.2	116.5	114.7	2.4	2.0	1.9	2.1
Jun	117.6	112.9	116.5	114.8	2.4	1.3	1.9	1.8
Jul	117.0	112.7	118.5	114.6	2.4	1.6	3.5	2.0
Aug	117.2	112.7	118.5	114.6	2.7	1.1	3.4	1.8
Sep	117.2	113.2	118.6	114.9	2.7	2.1	3.5	2.3
Oct	117.5	113.4	118.6	115.1	2.6	1.7	3.5	2.1
Nov	118.4	113.6	118.6	115.6	2.8	1.8	3.3	2.2
Dec	117.8	113.9	118.7	115.6	2.5	1.4	3.3	2.0
1998 Jan	118.3	114.6	119.8	116.2	2.5	1.8	3.7	2.2
Feb	118.2	114.1	119.8	115.9	2.3	1.2	3.7	1.8
Mar	118.9	114.4	119.7	116.3	2.5	1.6	3.6	2.1
Apr	118.6	114.7	119.8	116.3	2.5	1.6	3.7	1.9
May	120.1	114.3	120.7	116.7	2.6	1.0	3.6	1.7
Jun	120.7	114.7	120.6	117.1	2.6	1.6	3.5	2.0
Jul	120.4	114.6	121.1	117.0	2.9	1.7	2.2	2.1
Aug	119.6	115.3	121.1	117.1	2.0	2.3	2.2	2.2
Sep	119.7	115.4	121.1	117.3	2.1	1.9	2.1	2.1
Oct	..	..	..	..	..	..	..	..
Nov	..	..	..	..	..	..	..	..
Dec	..	..	..	..	..	..	..	..

The symbol r denotes revisions to previous months' data

¹ Note that because of the temporary suspension of the Average Earnings index, it has not been possible to calculate the IGP from October to December 1998

Three Year Research Programme on RPI Methodology



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Summary

There has been much interest in recent years in the possibility of bias in consumer price indices. The Office for National Statistics (ONS) has ongoing research to investigate the methodology of its own Retail Prices Index (RPI), with the aim of ensuring that the best possible methodology is used. This article describes the current programme and highlights the main areas of investigation. It follows on from Baxter (1997)¹, which discussed methodological issues and their relevance to the RPI. The UK research programme is not restricted to the five areas raised in the US Boskin Report².

Introduction

The US Boskin Report drew attention to the possibility of bias in the US Consumer Prices Index and recommended changes to correct errors and improve the index in general. Some of the arguments used by Boskin were contentious. The report did nevertheless prompt many national statistical offices, the ONS included, to review, and in the case of ONS expand, their own research programmes and reconsider the methodology underpinning their price indices.

The UK research programme extends over three years. Its aim is to improve the quality of the RPI and its relevance for users. We intend to evaluate the current methodology against recent thinking and ensure we maintain our position with other leaders in this field. This includes:

- taking into account changing economic behaviour;
- becoming aware of changes abroad and resulting new methodology;
- taking advantage of new data sources;
- making use of improved computer technology.

Considerable research has already been carried out in recent years, but further work is needed to consolidate and amplify this before any changes in RPI methodology can be considered. The intention is to conduct extensive research which will, where appropriate, lead to the introduction of methodological improvements. It should be noted that for many of the tasks listed even if there is a recommendation for change it could be minor with little visible impact on the RPI.

Bias in the RPI

Some of the projects in this work programme are concerned with potential bias in the RPI. However, it should be noted that the question of whether there is bias in a price index depends on what it is used for and what it is trying to measure, as this will affect the conceptual basis of the index. The RPI is currently defined as an annually chain-linked Laspeyres index, which specifically details a fixed basket of goods (and implicitly locations and outlets). By implication, this means that any good or service not available when the basket was chosen should not be included until the basket is next reviewed. But there are alternative concepts to choose from, notably a Cost of Living Index. The latter is a measure of the minimum cost of achieving the level of utility attained in the base period and is concerned with value to the consumer, allowing for the consumer's personal needs and preferences and for external factors such as environment. Conceptual issues relating to price indices are discussed further in Baxter (1997). However, it should be noted that many of the tasks in the research programme are independent of any decision concerning the conceptual basis of the RPI.

The Work Programme

The work programme consists of nine distinct but related research projects. The first five include the issues raised in the Boskin report.

1. Choice of items;
2. Quality adjustment;
3. Formula effects including geometric mean;
4. Outlet bias;
5. Commodity substitution;
6. Sampling of locations;
7. Treatment of discounts and temporary size changes;
8. Index population and weights;
9. Variance.

These are described below.

Project 1 - Choice of items

The objectives of this project are:

- to investigate possible bias due to the non-inclusion and delayed inclusion of new goods, and where appropriate to devise new methodology for their inclusion;
- to investigate possible bias due to the non-representativity of sampled items;
- to improve the item selection procedures to reduce any such bias.

There are three main tasks within this project. The first is to carry out retrospective research to measure the presence of new items bias, if any. This will involve finding prices for items currently in the RPI basket for the period before their inclusion and estimating expenditure weights for this period. It will then be possible to recompute the RPI for this period but including these new items to see what effect there would have been if these new items had been included earlier.

The second task is to see if price movements in items not included in the basket differ systematically from those included, and the extent to which their omission affects the index.

The third task will be to recalculate the index excluding new items introduced at the annual update of the basket. This will show whether the annual review of the basket has a significant effect.

Project 2 - Quality adjustment

The objectives of this project are:

- to see if quality change has a significant distorting effect on recorded price change, and if so to see whether

existing methods of allowing for quality change used in the RPI properly reflect changes in quality. Part of this exercise will involve assessing the magnitude of any implicit or explicit quality adjustment already in the RPI;

- to identify items for which existing methods (if any) of quality adjustment are inadequate and to devise and implement new methods for these items.

There are three main tasks within this project.

The first is to review conceptual and theoretical considerations involved in quality adjustment. This will involve:

- undertaking a general evaluation of hedonic regression, option costs and other methods of quality adjustment in the context of the RPI;
- reviewing the overseas experience.

The second is to review the existing allowance for quality change in the RPI and assess whether methods currently used properly reflect the actual change in the quality of goods and services. This will include a duplication, using UK data, of the study described in Moulton and Moses (1997)³. This study investigated the pure price change introduced into the index at the point where an old item is replaced by a new one. Results from the UK study will give, among other things, an estimate of the extent to which current UK methods already implicitly adjust for quality change.

The third task is to devise procedures for treatment of quality change using the results of the previous two tasks to identify the best methods of adjustment and making due allowance for the extent to which quality adjustment is already included in the index.

Project 3 - Formula effects/geometric means

The objectives of this project are:

- to consider the conceptual basis of different aggregation formulae and their mathematical characteristics;
- to investigate the impact on the index of the choice of aggregation formula used at the elementary aggregate level, the lowest level of aggregation of price data where no explicit weights are used;
- to identify specific items for which the choice of formula has a large effect on the item index and to investigate the reasons for this, and

- to study the interactions between formula effects, and other methodological issues including chain linking, stratification and weighting.

There are five main interlinking tasks within this project.

The first is to review the different conceptual bases which can be used for consumer price indices. There is no universally accepted conceptual basis for consumer price indices. This is illustrated by the various conceptual bases underlying price indices produced by different national statistical offices around the world. The RPI is currently defined as a Laspeyres (fixed weight) price index, and this is also the basis used in other European Union countries.

The second task is to undertake an assessment of different formulae which could be used. The latter are, to some degree, dependent on the conceptual basis of the index.

The third task is to investigate “price bounce” and other mathematical characteristics of formulae. “Price bounce” takes its name from the effect where a return to a regular price from a short-term sales price, or a return to a low sales price in some outlets, does not return the index to the level it was at before the sale price or during the sale. This term is now used to describe any sort of price movement of this type and its effect on the formula used. The fact that a formula is subject to price bounce would be just one factor in determining its suitability but is large enough to merit investigation in its own right.

The fourth task is to study in more detail the impact on the UK RPI of using the geometric mean rather than the average of relatives or the ratio of averages. It should be noted that any numerical difference in indices constructed with these different formulae does not necessarily mean that there is a bias in a particular index as this depends, among other things, on the conceptual basis of that index. Even so, it may raise sampling and price collection issues as it can be shown mathematically that the difference in the results from different formulae depends on the variability of the price data, including the heterogeneity of elementary aggregates.

The last main task under this topic, like heterogeneity, relates to price variability but warrants a separate mention. It relates to an evaluation of the merits of moving the chain link month from January. Prices collected in the base month may have a formulaic effect on the index throughout the year. The question is whether the choice of January has an atypical effect on the index. The effect of choice of chain link month on the merits of different formulae will be compared.

Project 4 - Outlet bias

The objectives of this project are:

- to investigate any bias due to a switch in consumers' expenditure from outlets or types of outlets where prices are high or rising rapidly to those where they are not (outlet substitution bias) and vice versa, and
- to review outlet sampling procedures to ensure representativity.

Outlet bias is likely to increase both with the turnover of shops and with shifts in shopping patterns. The main task in the project is to collect prices in new outlets to gauge the impact they have on the index and determine what corrective action, if any, needs to be taken.

Project 5 - Commodity substitution

The objective of this project is:

- to identify whether there are issues to be addressed relating to shifts in consumer spending from products with rapidly increasing prices to those where the price is increasing slowly, or falling.

Previous research, already reported in Baxter (1997)¹, will be extended to more recent years.

Project 6 - Sampling of locations

The objectives of this project are:

- to assess whether current procedures for sampling locations are adequate, and if not, to investigate how to adjust for this by appropriate weighting, and
- to improve sampling procedures, possibly by using new data sources.

There are two main tasks.

The first is to carry out an investigation into location bias and the re-selection of locations, particularly the impact of any delay in the introduction of new out of town shopping centres into the sample. This work will also involve identifying and testing new sources of data such as the Inter-Departmental Business Register (IDBR) for location selection and stratification.

The second task is to consider using a “variable basket” in some locations with the aim of producing a more efficient and representative sample. This would mean that:

- (i) in the smallest locations (currently roughly ten in total) there would be reduced price collections restricted mainly to food and alcohol;
- (ii) in those out-of-town shopping centres so large that they are treated as separate locations (currently roughly ten in total) collection would be restricted to the other half of the basket; mainly clothing and footwear, furniture and leisure goods will be collected.

Project 7 - Treatment of discounts and temporary size changes

The objective of this project is:

- to investigate the various forms of discounting now offered by retailers and whether different treatment of discounts and temporary size changes would have a significant impact on the RPI; if so, to determine what would be the most appropriate treatment given the aims and uses of the RPI.

The main task is to review the treatment of discounts, temporary size changes, and other product bonuses, looking at how current practice picks up the range of discounts offered. This work will draw on the experiences of other countries. An assessment will be made of whether the current treatment of discounts is adequate and, if not, identify a more appropriate set of rules and quantifying their impact on the index.

Project 8 - Index population and weights

The objectives of this project are:

- to review the effect on the index of changing the population coverage of the RPI;
- to examine various aspects of the weights used, and
- to review the sub-indices published to see whether they should be increased or reduced.

The tasks include quantifying the effects, if any, of changing the definition of index households. Alternative sources of information to provide the RPI weights, including scanner data, will also be investigated.

The review of the sub-indices will take account of their weight, accuracy and continuing relevance in the light of changing spending patterns and user requirements.

Project 9 - Variance

The objective of this project is:

- To estimate the variance of the RPI and related indices.

The project will also include an estimate of the variance of the Harmonised Index of Consumer Prices (HICP).

The main task is to assess the variance of the RPI. This task is divided into two stages:

- (i) to calculate variance estimates of the twelve month change in the RPI between consecutive base months;
- (ii) to determine an optimal allocation of the number of prices to be collected for each commodity group of the RPI so as to minimise the sampling error for a given cost.

Other topics

Finally, it should be noted that a number of other matters will be investigated which are not covered by Projects 1 to 9 listed above. These include reviewing the conventions used for the internal validation of prices and specific technical issues relating to particular measurement problems such as the treatment of insurance.

Research Priorities

There are a number of factors which will determine the priorities of tasks including results of initial research. Many of the tasks are linked and the outcome of one may affect one or more others; so some tasks have to be carried out in a specific order. This means that priorities will be reviewed regularly by a Technical Board set up to quality assure research and advise on future work (see below). However, the ONS will initially focus on issues which international research have shown might be important and/or where progress can be made relatively quickly.

RPI Technical Board

An RPI Technical Board was set up in Summer 1998 to oversee this work. It consists of those people most involved in the work,

together with other ONS staff who have relevant experience to offer. It meets about every month. In addition, external consultants including academics are being brought in as required to offer advice on particular aspects of the work programme. This is being done both to supplement the skills base of ONS and also to provide an independent audit of ONS work.

User views

The ONS is keen to receive customer feedback. Any comments on the programme should be sent to the authors of this article by e-mail or letter to the addresses given above.

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Ownership of United Kingdom quoted companies at the end of 1997



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Introduction

The value of the United Kingdom's Stock Market forms a large proportion of the United Kingdom's financial wealth produced as a part of the National Accounts. There are few good quality sources of data for ownership of shares in listed companies, and in some cases there are no sources. Accurate figures are important, not only for the quality of the financial balance sheets in the National Accounts, but also for dividends receipts data which is apportioned according to the balance sheets.

The end-1997 Share Register Survey, which has just been published, was commissioned by the ONS in order to obtain a good quality benchmark. Georgeson & Co Inc were contracted to allocate beneficial owners to 99,721 holdings from 197 share registers.

Background

Surveys of the pattern of shareholding in UK companies have been carried out at intervals since the late 1950s (in 1957, 1963, 1969, 1975, with a small survey in 1981). In 1989 the Pickford report on UK economic statistics¹ recommended that surveys should be carried out more frequently in order to improve the National Accounts. Accordingly, surveys were carried out annually between 31 December 1989 and 31 December 1994 (some were full scale, benchmark, surveys, and some were small scale surveys). After the 1994 survey it was decided that the costs of carrying out the survey annually were prohibitive, so the survey would in future only be carried out every third year. In future it is hoped to resume annual publication using data available from the CREST system. The results of the surveys are used to supplement or replace other sources of information on company securities in preparing the financial balance sheets and financial transaction accounts in the ONS's annual *Blue Book*².

End-1997 survey

The end-1997 survey, the subject of this report, was carried out during 1998. It was a full scale survey looking at registers from 196 companies (two registers were analysed for HSBC plc). Georgeson & Co Inc were contracted to allocate beneficial owners to 99,721 holdings from these 197 share registers.

Companies were sampled proportional to size at 30 June 1997. To do this, companies were ranked according to their market capitalisation. A sampling interval was set, all companies with a market capitalisation greater than the sampling interval were selected. The probability of other companies being selected was directly proportional to their market capitalisation. Where Companies smaller than the sampling interval that ceased to exist before 31 December 1997, were replaced in the sample. It was also ensured that all new companies with a market capitalisation greater than the sampling interval were included.

All except three of the selected companies agreed to take part. Copies of the share registers for those companies who had agreed to participate were purchased from their registrars and supplied to Georgeson. At the second stage of the processing, a sample of shareholdings was extracted from each register (with probability proportional to size of holding) according to a sampling strategy set out by the ONS.

Georgeson extracted the samples from the registers, and allocated each holding to one of the categories of beneficial ownership specified by the ONS. These categories are based on the Sectors used in the National Accounts, broken down into some further detail. Georgeson also recorded, for each holding, key information on the size of the holding, the register from which it had been drawn, and the industry and size of the issuing company.

Summary Results

The headline findings of the end-1997 Share Register Survey are set out in the following paragraphs, but for full details the publication *Share Ownership*, published by The Stationery Office for ONS in January 1999 should be consulted.

Institutional shareholders (e.g. pension funds, insurance companies etc.) accounted for 52.7 per cent of UK ordinary shares at 31 December 1997, with a combined value of £669 billion. Of this, the largest component was held by insurance companies (£290 billion).

At end-1997, individuals' holdings amounted to £203 billion, or 16.0 per cent. This excludes individuals' ownership of unit trust units which in turn represented substantial amounts of shares.

Rest of the World holders owned 23.3 per cent of the ordinary shares, representing investments of £296 billion. Whereas in the end-1994 survey they owned 16.3 per cent of the ordinary shares, worth £124.3 billion.

As would be expected, individuals held a significantly larger proportion of the recently de-mutualised companies (Alliance & Leicester, Halifax, Norwich Union and Woolwich), at 60.6 per cent, compared with the market as a whole (16.0 per cent).

United States investors account for just over half of all Rest of the World shareholdings. The other major investors are those in the

European Union, which accounts for one-fifth of all Rest of the World holdings.

Holdings in companies included the FT-SE 100 index were held by categories in approximately the same proportions as for all companies. This contrasts to the end-1994 survey where there were differences.

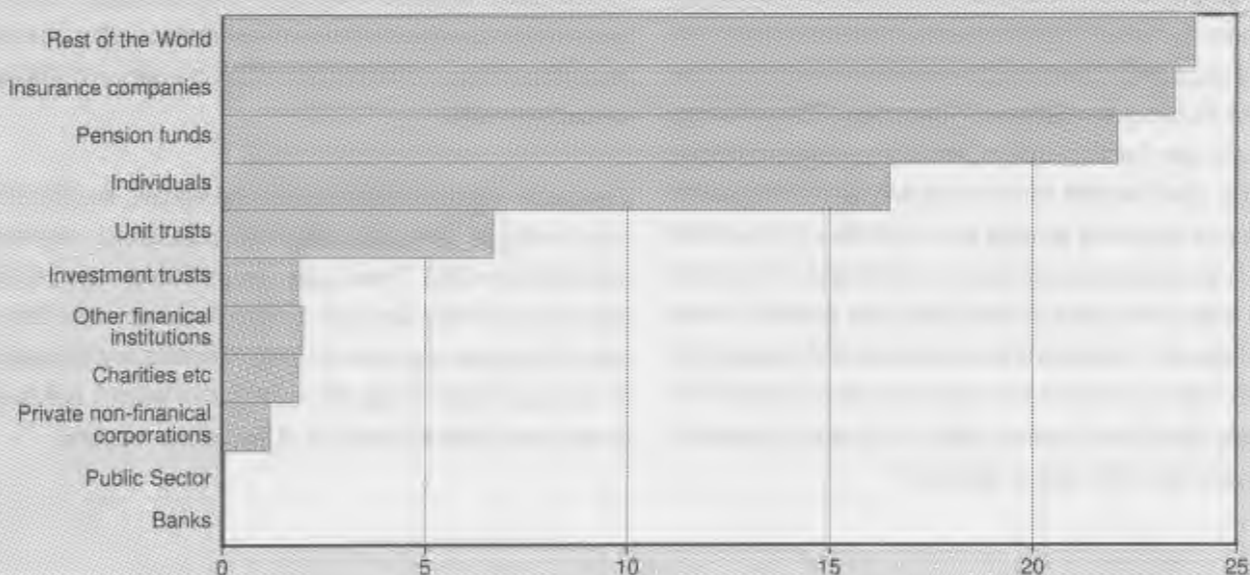
Total equity owned	
31 December 1997,	£ billion
Rest of the world	304.2
of which:	
USA	155.5
EU	61.7
Insurance companies	298.8
Pension funds	279.8
Individuals	208.8
Unit Trusts	85.2
Investment Trusts	24.2
Other Financial Institutions	25.9
Charities etc	24.3
Private non-financial companies	14.8
Other	1.9
Total	1,267.9

Unidentified holders have been allocated proportionately across all beneficial sectors

Chart 1

Beneficial ownership of UK shares End 1997

Percentage



Further Information

Further Information can be obtained from the publication:

Share Ownership, end 1997

ISBN 0 11 621076 1

ISSN 1465-2757

Price £39.50

Published by The Stationery Office

To obtain your copy call the Stationery Office on 0171 873 9090

Footnotes

1. *Government Economic Statistics*, a scrutiny report by Stephen Pickford and others, HMSO, 1989.
2. *United Kingdom National Accounts (The ONS Blue Book)*, The Stationery Office annual publication.

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