Economic Trends

No. 529
December 1997

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London: The Stationery Office

Contents

Introduction

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

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

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

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

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

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

Notes on the tables

1. All data in the tables and accompanying charts is current, as far as possible, to 27 November 1997.

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, Technical Editor, ONS, Zone D4/19, 1 Drummond Gate, London, SW1V 2QQ or e-mail Uzair.Rizki@ONS.Gov.UK

Office for National Statistics
December 1997

In brief

Articles

This month we feature one article that discusses how economic statistics should respond to information technology. First it considers the problems in measuring new activities and the conceptual problems in compiling the economic accounts and secondly the ways in which links between accounts, policy issues and general concerns can be reinforced. Finally, the way in which information technology will affect data suppliers and users of the accounts is discussed, along with new policy concerns (page 23).

In the January edition of *Economic Trends*, we will publish details of a country by product analysis of trade in services for the first time. This analysis will cover exports and imports of trade in services for the year 1996 and is made possible by the expanded coverage and detail of the Overseas Trade in Services Inquiry (OTIS). The expansion of the OTIS in 1996 was partly funded by the DTI and to meet the terms of the agreement, the data will be released to the DTI during December and will be available to users at the same time. Please contact Simon Humphries (0171-533 6095) for further information.

Brief Guide to Official Statistics

The 1998 edition of the above publication is now available. It is a directory of key publications produced by the Government Statistical Service, together with contact details. Copies are available, free of charge, from the National Statistics Library at Newport, telephone 01633 812973. A fully comprehensive Guide to Official Statistics can also be found on the National Statistics web site at http://www.emap.co.uk/ons

Recent National Statistics publications

Travel Trends: a report on the 1996 International Passenger Survey. The Stationery Office, ISBN 0 11 620866 6, price £30. A summary of travel patterns to and from the United Kingdom in 1996. It illustrates how many people travelled, where they went and why and gives a picture of how long they stayed and what they spent.

Annual Employment Survey, part 1: results analysed by region and industry. National Statistics, ISBN 1 85774 245 1, price £25.

Annual Employment Survey, part 2: results analysed by local area and industry and by size-band. National Statistics, ISBN 1 85774 246 X, price £25.

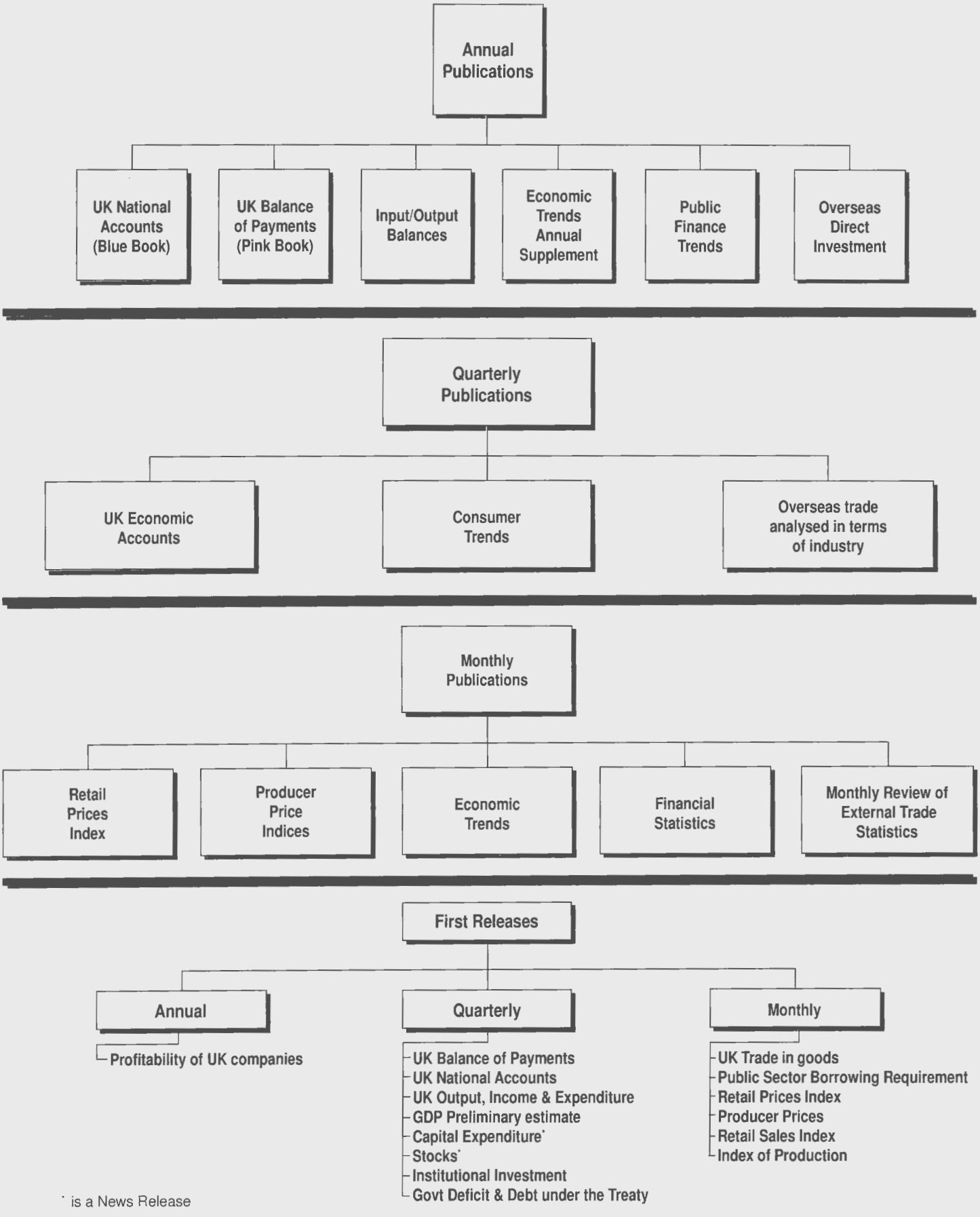
New Earnings Survey 1997, part E: analyses by region, county and small areas. The Stationery Office, ISBN 0 11 620939 9, price £22.

New Earnings Survey 1997, part F: distribution of hours; joint distribution of earnings and hours; analyses of earnings and hours for part-time employees; analyses of earnings and hours by age group. The Stationery Office, ISBN 0 11 620940 2, price £22.

UK Economic Accounts: 1997 quarter 2. The Stationery Office, ISBN 0 11 620857 0, price £22.50.
Consumer Trends: 1997 quarter 2. The Stationery Office, ISBN 0 11 620926 7, price £45.
Labour Market Trends, December 1997. The Stationery Office, ISBN 0 11 620893 7, price £6.00.
Financial Statistics, November 1997. The Stationery Office, ISBN 0 11 620880 5, price £22.50.

All of these publications are available from the National Statistics Sales Office, Zone B1/06, 1 Drummond Gate, London, SW1V 2QQ. Telephone 0171-533 5678 or fax 0171-533 5689. Subscriptions are available from The Stationery Office Publications entre, telephone 0171-873 9090.

United Kingdom Macro-Economic Statistics Publications



* is a News Release

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

Articles

Page

Articles published in *Economic Trends*

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

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

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

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

Other Articles

1997

January & February	Regional Accounts 1995: Part 1.
	Balancing GDP: United Kingdom annual input-output balances.
	The Budget: 26 November 1996.
	The economy: recent developments and prospects.
	ONS plans to extend publication of service sector statistics.
	The president's task force on service sector statistics.
March	Employment in the public and private sectors.
	The effects of taxes and benefits upon household income 1995-1996.
	Quarterly integrated economic accounts: the United Kingdom approach.
	International comparisons of GDP per head over time.
April	Methodology series for United Kingdom national accounts.
	Deflation of trade in goods statistics.
June	Regional Accounts 1995: Part 2.
	Competitiveness in manufactures.
August	Research and experimental development (R & D) statistics 1995.
	The Budget: 2 July 1997.
	The economy: developments and prospects.
September	Geographical breakdown of the balance of payments current account.
	Development of a final expenditure prices index.
	Overseas trade in services: publication of monthly estimates.
October	Environmental input-output tables for the United Kingdom.
	Implications of the US Boskin report for the UK retail prices index.
	A household satellite account for the United Kingdom.
November	Quarterly alignment adjustments in the UK National Accounts.
	Globalisation: scope, issues and statistics.
	The ABI respondents database: a new resource for industrial economics research.

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.

ECONOMIC UPDATE - DECEMBER 1997

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

Growth remained strong in the third quarter despite a slight slowing in construction activity and the closure of shops surrounding the death of Princess Diana, which reduced consumers' expenditure. Within the aggregate, growth remained very strong in some services. The balance of trade in goods and services improved in the third quarter, but this was due to the sale of an oil rig to Norway for around £400 million. Given the volatile changes in trade, it is hard to discern any impact from the appreciation of sterling. Money supply figures continued to show rapid growth in deposits and lending. Personal sector borrowing grew more rapidly than holdings. Despite strong growth, underlying inflationary pressure remained subdued with falling input prices, subdued output prices inflation and a fall in average earnings. Retail price inflation rose, due to food prices falling more slowly than they had the previous year. There was little data available on the labour market, making interpretation difficult, given the impact on unemployment caused by the changing behavior of students. One interesting aspect was the sharp fall in the long-term unemployed.

GDP Activity

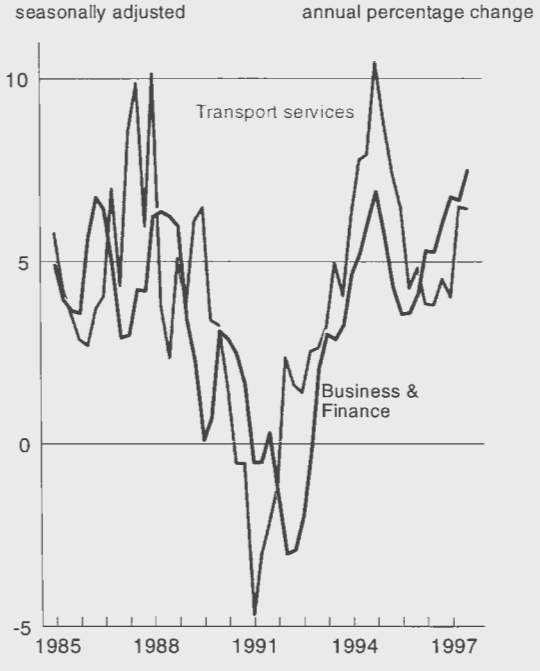
Growth remained strong in the third quarter. The second estimate of growth between the second and third quarters was revised down slightly, as growth in production was lower than estimated and distribution was also lower. Growth remains strong in financial and business services but some areas of services slowed and construction was little changed on the second quarter. Early income and expenditure estimates for 1997 Q3 show weaker growth than output estimates - they have been aligned upwards. Evidence outside the national accounts, such as labour market data, suggests strong growth. Annual growth in activity remains robust - between the third quarters of 1996 and 1997 the economy grew by 3.8%.

Output

There has been a slight change in the industrial breakdown of growth. Services growth has moderated recently but remains strong, while growth in production has accelerated. The rise in production output was due to a pick up in manufacturing output and strong growth in mining & quarrying and electricity, gas & water supply. Lower growth in retail sales in the quarter, following the large fall in September, reduced the growth of distributive trades. Growth in construction also appears to have fallen back. In contrast, growth in elements of the service sector remains rapid. Annual growth in excess of 6% was recorded in both business & finance services and transport, storage & communication. As shown below, business & finance services is growing at its strongest annual rate since the series began in 1984.

Chart 1

Services with rapid growth



Within industrial production, the main increases in output were for investment goods and intermediate goods. Production of consumer goods remained subdued, despite recent strong demand. Production of durable goods continued to fall in the third quarter. Non-durable consumer goods production grew in the third quarter, but also remained below its most recent high in

the first quarter. Production of investment goods has risen by over one per cent in each quarter of 1997 and grew rapidly in the third quarter.

The CBI monthly Industrial Trends Inquiry in Manufacturing reported that the current level of orders, seasonally adjusted by the ONS, remained negative. Manufacturers continue to report falling export orders, despite the strong growth in UK exports of manufactures reported by ONS. The CBI export orders balance, not seasonally adjusted, was -34 in November - which is around the level of the previous three months.

Demand for construction fell slightly in the third quarter. The volume of new construction orders in Great Britain, seasonally adjusted, was down 0.9%. The main reason for this was lower orders by the public sector. The main growth area was private commercial, with substantial growth during the first three quarters of 1997, particularly in Q1.

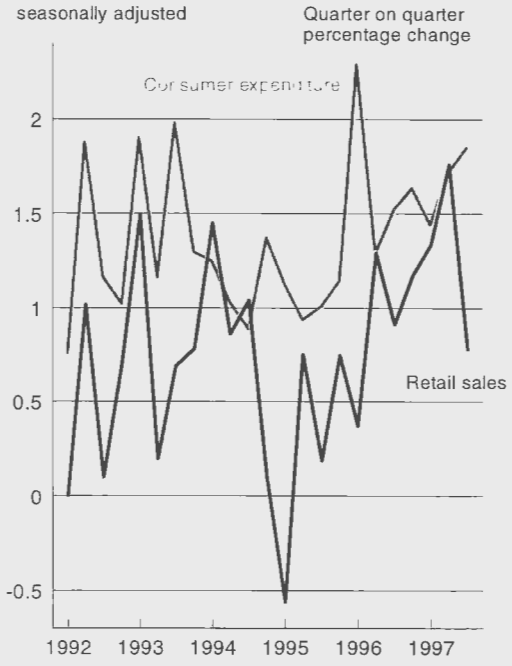
Domestic demand

Total domestic expenditure increased in the third quarter, but at a slightly lower rate. Consumers' expenditure growth remained strong, although slightly down on the second quarter. This was due to the significant fall in retail sales in September which is discussed below and shown in the chart. General government expenditure remained subdued and annual growth has fallen further. Gross fixed capital formation is lower, mainly due to a fall in the import of aircraft and little new investment in construction - in line with the output estimates. There was a small positive addition from stock building.

Retail sales rebounded sharply in October after the abrupt fall in September. The volume of sales fell by 1.8% in September and rose by 2.9% in October. Sales were badly affected by the closure of shops surrounding the death of Princess Diana. In October sales returned back to their previous path of strong growth. Sales of textiles, clothing & footwear rebounded strongly after falls in the previous two months. The warmer weather in September may have reduced demand for new season clothing, which picked up strongly when the weather turned colder. The monthly growth rate in October was the fastest since April 1987. Sales of clothing have grown rapidly since June 1996, increasing by 5% per annum in 12 out of 18 months and over 9% in 6 months. Household goods, despite recovering strongly in October, were still 1.2% down on the level reached prior to September. Sales of household goods grew rapidly in June, as windfall payments from the conversion of building reached a peak. Since then they have fallen back.

Chart 2

Consumer expenditure and retail sales



In November, consumer confidence fell back in November. The EC/Gfk survey shows that confidence peaked between August and October. There was also a sharp fall in the attitude to major purchases balance, although it remained positive. Attitudes to major purchases had been improving since early 1996 and this was the first monthly fall. Expenditure on vehicles accelerated in the second quarter of 1996, however, although sales of other durables did accelerate a little around this date, it was not until 1997 that sales growth became exceptionally rapid.

New car registrations, seasonally adjusted, rose by 4.8% in the three months to October, but rose by only 2% compared with October 1996. Quarterly growth became negative in the third quarter at -0.3%, down from 5.5% in the second quarter. Registrations are highly erratic and unreliable to gauge both consumer demand and investment.

External demand and supply

There still appears to be little sign of the appreciation of sterling having impacted on trade. Net exports improved in the third quarter, although this was due to the export of an oil rig. The main area where imports appear to be growing faster than exports is vis-a-vis non-EU countries, against whom sterling has appreciated least.

Estimates in the national accounts show that net exports of goods and services in Q3 rose by nearly £290 million in 1990

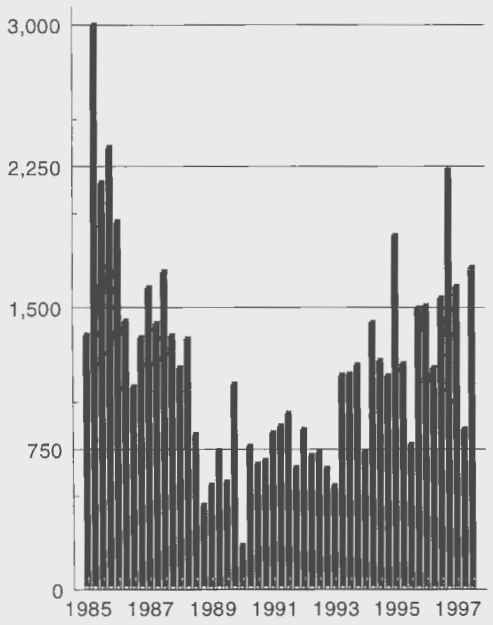
prices. The deterioration in the balance, which began in Q2, would have persisted into Q3, had it not been for the oil rig export to Norway, worth around £400 million.

The balance of total trade in goods and services went from a small surplus in August to a deficit of £0.6 billion in September. The surplus of trade in services remained stable, whereas the deficit on goods more than doubled. Approximately half of the increase was due to the balance on erratic items changing to a small negative. Although a negative balance is not unusual, erratics tend to make a positive contribution. In the period since 1986, exports of erratics have generally been higher than imports. There was also a recovery in imports of finished manufactures, after a fall in August, whereas export values continued to decline. Exports and imports are volatile from month to month and therefore it is hard to assess the extent to which the deterioration in the balance was influenced by the appreciation of sterling. Excluding oil and erratics, there was a deterioration in exports and an increase in imports. While trade in oil and erratics can be volatile, thereby making judgments of underlying movements difficult, both series tend to have higher exports than imports, as shown below, and should not therefore be discounted from the trade story. Revisions have increased the cumulative deficit in trade in goods for 1997 by £606 million, as imports have been revised up by more than exports.

Chart 3

Balance of oil and erratics

£ million seasonally adjusted



A comparison of trade by country shows that the trade balance deteriorated against both EU and non-EU countries in September. While the appreciation of sterling has been largely against EU currencies, the changes in export volumes do not necessarily reflect the expected loss of competitiveness that would entail. In September, import volumes partly recovered from their fall in August. The main area where they outpaced exports was finished manufactures. For Q3 as whole, export growth was stronger than that of imports, with exports of cars and capital goods well up on the second quarter. The main area of import growth was cars, with growth over 10% between the second and third quarters. In October, total imports of goods rose more rapidly than exports for non-EU countries. Export and import prices in September rose for the second consecutive month.

Income

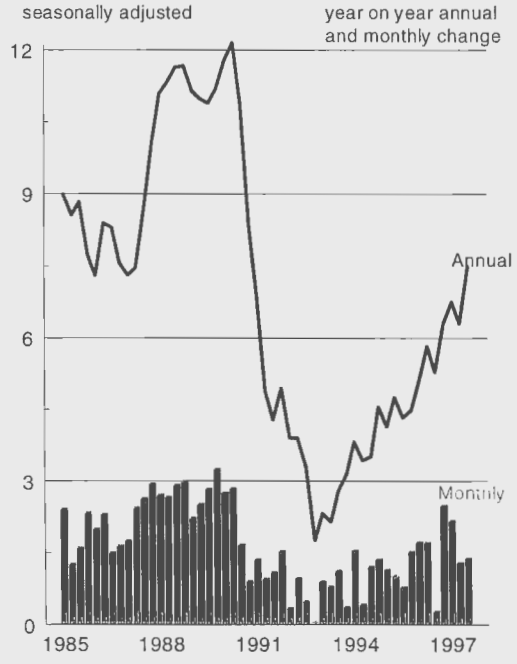
The income measure of GDP shows continued strong growth in income from employment, reflecting continued growth in employment and higher average earnings. As shown below, the annual growth rate of employment income is at its highest since the first quarter of 1991. At that time, inflation was significantly higher than at present - the consumers' expenditure deflator was 7.1% per annum, compared with close to 2% now. This implies current strong growth in real income for the personal sector.

Chart 4

Income from employment

seasonally adjusted

year on year annual and monthly change



Gross trading profits of companies are also estimated to have increased. The underlying trend in profits is difficult to discern currently, as two opposing factors are having an effect on profits. Companies have greater opportunity to earn profits, due to the strength of domestic demand, but this may be offset by lower

export margins. In addition, analysis is made more hazardous by the difficulty of matching profits to the quarter in which they occurred. However, there is good evidence that profits on oil extraction have risen as volumes and prices have increased.

Monetary & Sectoral indicators

The annual growth of narrow money (M0), seasonally adjusted, rose from 6.1% in September 1997 to 6.4% in October. Meanwhile, annual growth of broad money (M4), seasonally adjusted, decelerated from 11.6% to 10.9% over the same period. Both growth rates remain high.

A sectoral analysis of M4 shows that the growth in holdings by other financial institutions (OFIs) accelerated in the third quarter after falling back in the second. Growth in total M4 borrowing of OFIs fell further from the peak in the first quarter. The stock of borrowing by other financial institutions has grown rapidly and the amounts outstanding are now similar to those of industrial and commercial companies. Industrial and commercial companies also continued to build up their holdings of M4. The growth of holdings outpaced borrowing - the reverse of the position in the late 1980s. UK companies used substantial funds to acquire overseas companies in the third quarter - in particular ICI's acquisition of Unilever's Speciality Chemicals for £4.9 billion. Of the funds for acquisitions of overseas companies by UK companies, half was paid directly by the UK parent, over a quarter came from loans from the UK parent and the remainder was raised overseas.

The personal sector continued to increase its holdings of M4 in Q3, but at a much lower rate than in previous quarters. Sales of unit trusts and PEPs fell from their peak in the second quarter when they reached an all time high. Windfall receipts of shares from converting building societies reached a peak at that time and it may be that substantial funds realized from the sale of such shares flowed into other financial assets. Borrowing grew more rapidly than holdings, suggesting an increase in net borrowing, although the growth rate for borrowing fell. The growth of net consumer credit slowed by £1 billion in the third quarter. The slowdown in borrowing was due entirely to an increase of £1.7 billion in debt repayments. Gross consumer credit continued to grow, albeit at a slightly lower rate than in the second quarter. Net borrowing secured on dwellings grew further. The overall effect was that total net borrowing to the personal sector fell from £9.2 billion in the second quarter to £8.6 billion in the third.

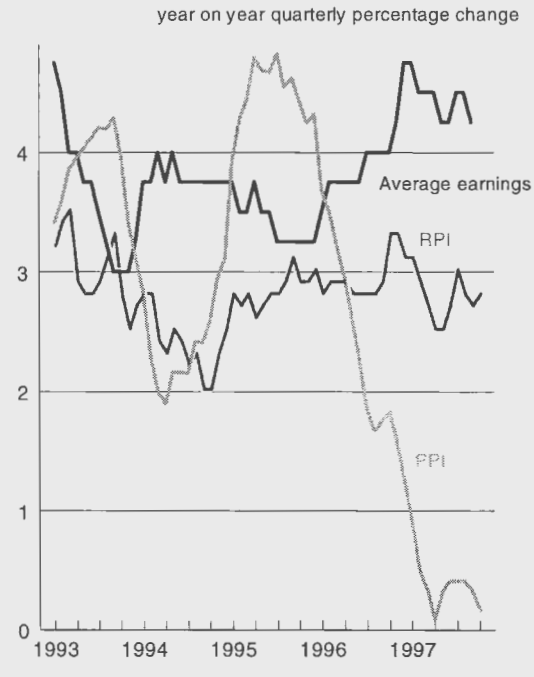
The public sector's financial position continued to improve in October. The public sector made a repayment of £5.7 billion, an increase on the repayment of £4.5 billion recorded in October 1996. For the first seven months of the financial year 1997-98, the PSBR was £2.6 billion, significantly lower than the £15.7 billion recorded in the first seven months of the financial year 1996-97. The improvement in the PSBR is due mainly to higher tax receipts and slightly lower cash outlays. It is also in spite of lower privatization proceeds, £2.2 billion lower than in 1996.

Prices and wages

Underlying inflationary pressure, illustrated below, remained subdued with falling input prices, subdued output price growth and a fall in underlying average earnings. More immediately, the RPI rose on all three main definitions, as food prices increased.

Chart 5

UK prices and earnings



Both input prices and output prices show little sign of inflationary pressure. Input prices continued to fall in the 12 months to October with the fall accelerating slightly in the last two months. Both fuel and material price falls became more pronounced in the 12 months to October. The output price index fell further between September and October. Prices excluding excise duties (seasonally adjusted) continued roughly stable, with inflation remaining at 0.2% in the 12 months to October. Producer output prices are historically low, showing little signs of inflationary pressure at the initial stage of the supply chain.

The CBI Monthly Trends Inquiry also shows little expectation of much movement in manufacturing prices. Manufacturers expect prices to fall slightly in the four months from November with a balance (seasonally adjusted by the ONS) of 1% of manufacturers expecting to reduce prices.

Underlying average earnings growth fell back in the 12 months to September to 4¼%. Within this, earnings growth in manufacturing fell to 4%, three quarters of a percentage point down on the start of 1997. Service sector earnings remained stable at 4½% - the same rate as in the previous four months. The rate is also down on earlier in the year - it reached 5% in February, when large bonuses boosted pay. There is a wide divergence in pay growth within services, with low pay growth in the public sector and stronger pay growth in sectors where activity is rapid and may be leading to labour shortages.

The headline rate of annual retail price inflation and excluding interest payments (RPIX) edged higher, by 0.1 percentage points, between September and October. Further excluding indirect taxes, the rate rose by 0.2 percentage points but remains relatively low at 2.2%. The increases were due to higher food prices than last year, when potato prices fell by over a quarter and supermarkets cut prices of other food to try to compete for market share.

Labour Market

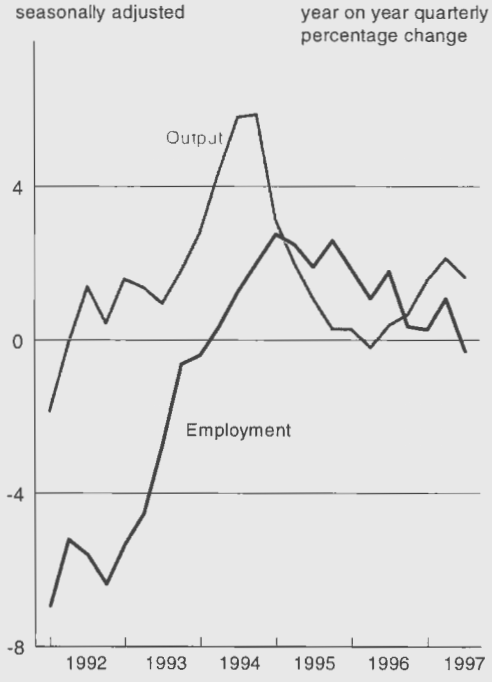
This month there is little news from the labour market and the information that is available has been affected by the changing behaviour of students temporarily entering and leaving the labour market. Given this problem, it is difficult to discern what signal the labour market is giving about activity. The position should become clearer when the workforce in employment figures are released next month.

Recent movements in claimant unemployment have been volatile making an assessment of the underlying position of the labour market difficult. The rate of fall in the claimant count slowed further to 9,500 between September and October - well below the falls of around fifty thousand in July and August. However the claimant count appears to have been affected by a change in the behaviour of students, with fewer signing on in July and therefore fewer signing off in October. This is shown by outflow data from the claimant count, which fell rapidly in October. Claimant unemployment has now fallen to 1.464 million or 5.2% of the workforce - the lowest rate since July 1980. Those claiming benefit for more than six months fell by a third between January and October, showing a re-entry of the long term unemployed back into the labour market, which should aid potential labour shortages.

As shown below, employment in manufacturing has fallen back after recent growth. Furthermore, the figures have been revised downwards from previous estimates. Employment fell by ten thousand in the third quarter, after increases in the previous two quarters. Lower employment, along with higher output, has increased productivity growth, after a period where productivity growth was low. Higher productivity in manufacturing has also lowered unit wage costs, which peaked in the third quarter of 1996.

Chart 6

Manufacturing output & employment



Forecast for the UK Economy

A comparison of independent forecasts, November 1997

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 1997 and 1998, updated monthly.

	Independent Forecasts for 1997		
	Average	Lowest	Highest
GDP growth (per cent)	3.5	3.1	3.9
Inflation rate (Q4)			
- RPI	3.4	2.6	4.1
- RPI excl MIPS	2.6	2.0	3.0
Unemployment (Q4,mn)	1.44	1.30	1.60
Current Account (£,bn)	-0.7	-7.0	3.8
PSBR (1997-98,£ ,bn)	9.3	-2.0	14.2

	Independent Forecasts for 1998		
	Average	Lowest	Highest
GDP growth (per cent)	2.4	1.5	3.6
Inflation rate (Q4)			
- RPI	3.2	1.8	4.3
- RPI excl MIPS	2.8	2.3	3.8
Unemployment (Q4, mn)	1.32	0.78	1.59
Current Account (£,bn)	-7.7	-12.4	-0.5
PSBR (1998-99,£,bn)	3.9	-2.4	10.5

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 24 variables and is published monthly by HM Treasury, available on annual subscription, price £75,. Subscription enquiries should be addressed to Miss Jehal, Publishing Unit, Room 53a, HM Treasury, Parliament Street, London SW1P 3AG (0171 270 5607).

International Economic Indicators - December 1997

by Sue Holloway, Economic Assessment - Office for National Statistics

Address: D4/20, 1 Drummond Gate, London SW1V 2QQ Tel: 0171 533 5975

Overview

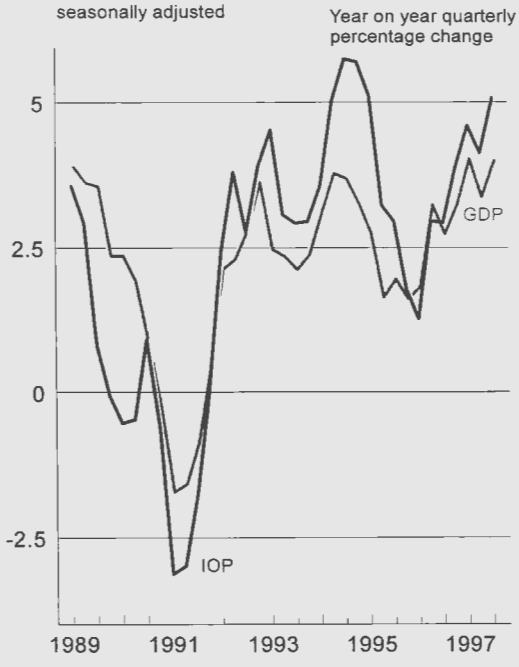
The US economy continued to grow strongly in Q3, with no signs of inflation picking up, although employment growth has slowed and unemployment remained steady. In Germany, strong growth in industrial production was accompanied by a slight increase in inflation, while Japanese output growth slowed and retail sales remained subdued.

Activity

US **gross domestic product** (GDP) continued to grow strongly in Q3, up 0.9% on the previous quarter and 4% on the same quarter of 1996. Strong growth in private final consumption and gross fixed capital formation were counteracted to some extent by a widening of the trade deficit, as imports grew more strongly than exports. As Chart 1 shows, growth in GDP was accompanied by an even larger increase in **industrial production.** At 1.7%, the increase represents the largest quarter on quarter growth figure since the middle of 1994, and is up 5% on the same quarter of 1996.

Chart 1

US Growth in activity and production



German industrial production also continued to grow strongly in Q3 - up 1.5% on the previous quarter and 3.8% on the same quarter of 1996. Year on year quarterly growth has been accelerating since 1996 Q3. In Japan, industrial production fell for the second successive quarter - down 0.6% on the first quarter. Year on year quarterly growth decelerated for the first time in twelve months, but remained high at 3.9%.

Demand

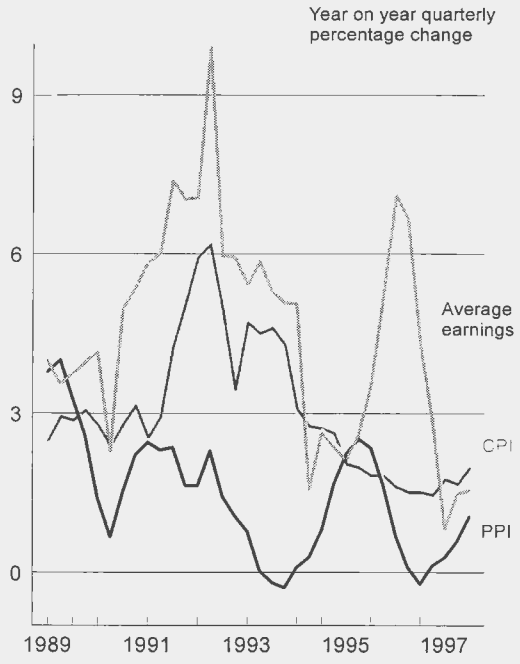
Retail sales volumes in Japan remained very subdued in Q3, at levels last seen in 1989. Quarter on quarter growth was 0.7% and year on year sales fell by 3.7%. French retail sales grew for the fourth successive quarter - by 0.7% quarter on quarter and 1.8% on 1996 Q3.

Inflation

Consumer price inflation remained stable but low in Italy at 1.5% in Q3, and at a similar level in Canada at 1.8%. Likewise, US consumer prices showed little movement in Q3, and Japanese price inflation remained relatively high at 2.1%. There was a slight pick-up in German and French inflation to 1.9% and 1.3% respectively. **Producer price inflation** also picked up in France and Germany in Q3. French producer prices showed the first year on year quarterly increase for 7 quarters, having fallen to levels last seen at the end of 1994. German producer prices, on the other hand, have been rising steadily since the beginning of 1994 and the inflation rate increased by 0.3 percentage points between Q2 and Q3. Japanese producer prices, which fell steadily between the end of 1991 and the beginning of 1997, rose for the second successive quarter, with producer price inflation running at 1.7% in the year to Q3. Producer price Inflation in the US was negative at -0.1%; falling for the fourth successive quarter.

Chart 2

German prices and earnings



Trade

In the second quarter of 1997, Germany showed a current account surplus for the first time since the beginning of 1991 - exports continued to grow strongly, while import growth was more moderate - as it has been since the beginning of 1996. France and Japan's **current account balance as a percentage of GDP** increased in Q2. French exports showed the highest year on year quarterly growth rate since 1988, which outweighed strong import growth. Japanese year on year export growth accelerated for the fourth successive quarter, while imports fell compared with the same period in 1996 providing a stimulus to an otherwise subdued economy. Both the United States and Canada continued to run current account deficits in Q2.

Labour Market

Average earnings growth in Germany experienced a 1% increase in Q3 to 1.6%; this marginal increase reinforces the 0.7% pick-up in the previous, but earnings growth still remains well below its 1996 Q1 peak. Earnings growth remained stable at 2.8% in France, and fell back slightly to 2.5% in the US. It also fell back in Italy to 3.4%, still considerably higher than 1996 growth rates. **Total employment** growth slowed in the US in Q3 for the second successive quarter, with a year on year increase of 2.1%. Japanese employment growth continued to slow in Q3 to 0.7% year on year. Canada produced the strongest growth since the beginning of 1995, with employment rising by 2.4% year on year in Q3. In the same quarter, **unemployment** remained stable in the US and Japan at 4.9% and 3.4% respectively, having fallen steadily in the former and risen steadily in the latter since 1992. Despite falling, Canadian unemployment, at 9%, remains well above the OECD and G7 average.

Notes

The series presented here are taken from the OECD's Main Economic Indicators, except for the United Kingdom. They are shown for each of the G7 economies and for the European Union (EU) and OECD 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 Gross domestic product at constant market prices

	United Kingdom	Germany[1]	France	Italy	EU	United States	Japan	Canada	Major 7	OECD
Percentage change on a year earlier										
	ILFX	ILFY	ILFZ	ILGA	ILGB	ILGC	ILGD	ILGE	ILGF	ILGG
1989	2.2	..	4.3	2.9	3.5	3.4	4.8	2.5	3.5	3.5
1990	0.4	..	2.5	2.2	3.0	1.3	5.2	–0.2	2.4	2.6
1991	–2.0	..	0.8	1.1	3.0	–0.9	3.8	–1.8	1.4	1.4
1992	–0.5	1.8	1.2	0.6	0.9	2.7	1.0	0.8	1.7	1.8
1993	2.1	–1.2	–1.3	–1.2	–0.5	2.3	0.3	2.2	1.0	1.1
1994	4.3	2.8	2.8	2.2	3.0	3.5	0.7	4.1	2.8	2.8
1995	2.7	1.9	2.1	2.9	2.5	2.0	1.3	2.3	2.0	1.9
1996	2.3	1.4	1.5	0.7	1.7	2.8	3.7	1.5	2.5	2.6
1996 Q3	2.2	1.9	1.7	0.7	1.9	2.7	3.5	1.8	2.5	2.7
Q4	2.8	2.1	2.2	0.3	2.2	3.3	3.0	2.3	2.7	3.0
1997 Q1	3.1	2.6	1.2	–0.6	1.9	4.0	2.4	2.8	2.9	3.0
Q2	3.6	2.0	2.4	1.9	2.7	3.4	–0.3	3.7	2.4	2.8
Q3	..	..	..	..	..	4.0	..	..	..	..
Percentage change, latest quarter on previous quarter										
	ILGH	ILGI	ILGJ	ILGK	ILGL	ILGM	ILGN	ILGO	ILGP	ILGQ
1995 Q3	0.5	–0.2	0.2	0.6	0.3	0.8	0.3	0.3	0.5	0.6
Q4	0.5	–0.1	–0.3	0.2	0.1	0.6	1.3	0.2	0.5	0.5
1996 Q1	0.6	–0.2	1.3	0.6	0.6	0.4	2.0	0.3	0.7	0.9
Q2	0.6	1.6	–0.2	–0.9	0.4	1.5	–0.3	0.4	0.8	0.7
Q3	0.6	0.5	0.8	0.7	0.7	0.3	0.3	0.8	0.4	0.5
Q4	1.1	0.2	0.2	–0.2	0.4	1.1	0.9	0.7	0.8	0.8
1997 Q1	0.9	0.3	0.3	–0.3	0.3	1.2	1.4	0.9	0.9	0.9
Q2	1.0	1.0	1.0	1.6	1.2	0.8	–2.9	1.2	0.3	0.6
Q3	..	..	..	..	..	0.9	..	..	..	..

1 Data available for unified Germany since 1991

2 Total industrial production

	United Kingdom	Germany[1]	France	Italy	EU	United States	Japan[2]	Canada[3]	Major 7	OECD[4]
Percentage change on a year earlier										
	ILGR	ILGS	ILGT	ILGU	ILGV	ILGW	ILGX	ILGY	ILGZ	ILHA
1989	2.1	4.7	3.7	3.1	3.9	1.8	5.7	–0.2	3.1	3.4
1990	–0.3	5.3	1.5	–	2.1	–0.2	4.3	–3.3	1.4	1.7
1991	–3.4	3.6	–1.2	–0.7	–0.1	–2.0	1.9	–4.2	–0.5	–0.4
1992	0.4	–2.6	–1.1	–0.3	–1.2	3.3	–5.7	1.1	–0.4	–0.3
1993	2.2	–7.2	–3.9	–2.3	–3.1	3.4	–4.3	4.4	–0.6	–0.6
1994	5.3	3.5	3.9	5.2	4.7	5.0	1.2	7.0	4.2	4.4
1995	2.2	2.1	2.0	5.4	3.7	3.3	3.3	3.4	3.2	3.0
1996	1.1	0.5	0.4	–1.7	0.5	2.7	2.7	1.7	1.8	2.1
1997 Q2	1.6	3.5	2.9	1.6	3.4	4.1	6.5	5.2	4.1	4.5
Q3	2.2	3.8	..	..	..	5.0	3.9	..	..	..
Percentage change, latest quarter on previous quarter										
	ILHB	ILHC	ILHD	ILHE	ILHF	ILHG	ILHH	ILHI	ILHJ	ILHK
1996 Q1	0.2	0.5	1.2	–2.4	–0.3	0.4	0.7	0.6	0.3	0.4
Q2	0.3	1.0	0.4	–0.5	0.6	1.5	–0.4	0.2	0.7	0.7
Q3	0.7	1.2	1.0	–0.8	0.7	0.8	1.8	2.1	1.0	1.1
Q4	0.4	–0.3	–0.6	–1.0	0.2	1.1	2.2	0.5	0.8	0.9
1997 Q1	–	1.6	0.2	0.9	0.5	1.1	2.3	0.7	1.2	1.0
Q2	0.6	1.0	2.3	2.5	2.0	1.1	–	1.7	1.0	1.4
Q3	1.3	1.5	..	..	..	1.7	–0.6	..	..	..
Percentage change: latest month on previous month										
	ILKB	ILKC	ILKD	ILKE	ILKF	ILKG	ILKH	ILKI	ILKJ	ILKK
1997 Jun	1.8	2.7	0.1	0.7	1.4	0.3	–2.8	–	0.1	0.2
Jul	1.0	4.0	2.8	–0.2	2.9	0.8	1.3	1.9	1.3	1.7
Aug	–0.7	–4.7	–	–1.0	–2.3	0.5	–2.8	–0.4	–1.0	–1.1
Sep	–0.3	–2.2	..	..	..	0.7	1.8	..	..	..

1 Data available for Unified Germany from 1991
2 Not adjusted for unequal number of working days in a month
3 GDP in industry at factor cost and 1986 prices
4 Some countries excluded from area total

3 Retail Sales (volume)

	United Kingdom	Germany	France	Italy	EU	United States	Japan	Canada	Major 7	OECD
Percentage change on a year earlier										
	ILHL	ILHM	ILHN	ILHO	ILHP	ILHQ	ILHR	ILHS	ILHT	ILHU
1989	2.1	3.5	1.5	8.4	3.7	2.2	3.9	–0.4	2.8	2.9
1990	0.7	8.0	0.7	–2.2	2.3	0.6	4.9	–1.9	1.5	1.6
1991	–1.3	5.8	–0.2	0.3	1.5	–2.5	2.3	–4.4	–0.5	–0.3
1992	0.7	–2.3	0.3	1.8	–	3.2	–1.0	2.5	1.6	1.3
1993	3.0	–4.2	0.2	–3.0	–1.3	4.5	–3.0	3.4	1.3	1.2
1994	3.7	–1.3	–0.2	–5.9	–0.4	5.7	0.2	6.3	3.0	2.7
1995	1.2	1.1	0.1	–5.1	–0.3	2.6	0.2	0.1	1.1	1.3
1996	2.9	–	–0.3	..	0.8	3.7	1.0	0.8	2.2	2.2
1997 Q2	5.3	0.7	0.9	..	2.7	2.9	–5.1	6.2	1.8	1.8
Q3	5.1	..	1.8	..	..	..	–3.7	..	..	..
Percentage change, latest quarter on previous quarter										
	ILHV	ILHW	ILHX	ILHY	ILHZ	ILIA	ILIB	ILIC	ILID	ILIE
1995 Q4	0.7	–1.0	–3.1	–8.2	–1.3	0.7	–	–0.8	–0.7	–0.7
1996 Q1	0.4	1.4	2.7	..	2.0	1.4	2.0	0.2	2.3	1.6
Q2	1.3	1.6	–1.8	..	1.6	1.0	–1.7	–0.2	0.3	0.9
Q3	0.9	–1.0	–0.2	..	–2.0	0.4	–0.7	1.2	–0.3	–0.3
Q4	1.2	–2.0	0.4	..	–1.3	0.8	1.7	1.5	–	–
1997 Q1	1.3	1.0	0.3	..	3.8	2.2	6.0	2.0	3.3	3.0
Q2	1.8	2.7	0.4	..	2.3	–0.5	–11.3	1.4	–1.2	–0.9
Q3	0.8	..	0.7	..	..	..	0.7	..	..	..
Percentage change, latest month on previous month										
	ILKL	ILKM	ILKN	ILKO	ILKP	ILKQ	ILKR	ILKS	ILKT	ILKU
1997 Jul	0.3	–2.0	3.9	..	1.9	0.9	–	1.4	0.9	0.9
Aug	0.3	–3.0	–0.5	..	..	..	2.1	–0.4	..	..
Sep	–1.8	..	–2.0	..	..	..	–2.1	..	..	..

4 Consumer prices[1]

	United Kingdom	Germany[2]	France	Italy	EU	United States	Japan	Canada	Major 7	OECD[3]
Percentage change on a year earlier										
	FRAN	HVLL	HXAA	HYAA	HYAB	ILAA	ILAB	ILAC	ILAD	ILAE
1989	7.8	2.9	3.4	6.6	5.2	4.9	2.2	5.0	4.5	6.2
1990	9.5	2.7	3.5	6.0	5.7	5.4	3.1	4.8	5.0	6.8
1991	5.9	3.7	3.2	6.5	5.2	4.2	3.2	5.6	4.3	6.1
1992	3.7	5.0	2.4	5.3	4.5	3.1	1.7	1.5	3.2	5.0
1993	1.6	4.4	2.1	4.2	3.5	3.0	1.2	1.9	2.7	4.3
1994	2.4	2.7	1.7	3.9	3.0	2.5	0.8	0.2	2.3	4.4
1995	3.5	1.9	1.7	5.4	3.2	2.8	–0.1	2.2	2.4	5.5
1996	2.4	1.5	2.1	3.8	2.5	3.0	0.1	1.5	2.2	5.1
1995 Q4	3.2	1.8	1.9	5.9	3.0	2.7	–0.6	2.0	2.2	5.7
1996 Q1	2.8	1.5	2.1	5.0	2.8	2.8	–0.4	1.4	2.3	5.5
Q2	2.2	1.5	2.4	4.2	2.6	2.8	0.1	1.5	2.2	5.0
Q3	2.1	1.5	1.8	3.5	2.3	3.0	0.2	1.3	2.2	4.8
Q4	2.6	1.4	1.7	2.7	2.3	3.1	0.5	2.0	2.4	4.8
1997 Q1	2.7	1.7	1.5	2.4	2.1	2.9	0.6	2.1	2.2	4.5
Q2	2.7	1.6	0.9	1.6	1.7	2.3	2.1	1.6	2.0	4.2
Q3	3.5	1.9	1.3	1.5	2.0	2.2	2.1	1.8	2.1	4.3
1997 Apr	2.4	1.4	0.9	1.7	1.6	2.5	1.9	1.7	2.1	4.2
May	2.6	1.7	0.9	1.6	1.8	2.2	2.0	1.5	1.9	4.1
Jun	2.9	1.7	1.0	1.4	1.8	2.3	2.2	1.8	2.1	4.2
Jul	3.3	1.8	1.0	1.6	1.9	2.2	1.9	1.8	2.0	4.2
Aug	3.5	2.0	1.5	1.5	2.1	2.2	2.1	1.8	2.1	4.3
Sep	3.6	1.9	1.3	1.4	2.1	2.2	2.4	1.6	2.2	4.3
Oct	3.7	1.8	..	..	..	..	..	..	..	..

1 Components and coverage not uniform across countries
2 Data available for Unified Germany from 1991
3 OECD data includes 'higher inflation' countries (Mexico and Turkey)

5 Producer prices (manufacturing)

	United Kingdom	Germany[1]	France[2]	Italy	EU	United States	Japan	Canada	Major 7	OECD[3]
Percentage change on a year earlier										
	EUAA	ILAF	ILAG	ILAH	ILAI	ILAJ	ILAK	ILAL	ILAM	ILAN
1989	5.0	3.4	5.0	5.9	4.9	5.1	2.1	1.9	4.3	5.8
1990	5.8	1.4	–0.9	4.1	2.5	5.0	1.6	0.3	3.4	4.7
1991	4.8	2.2	–1.2	3.3	2.2	2.2	1.1	–1.0	1.9	3.4
1992	2.3	1.6	–1.1	1.9	1.3	1.3	–0.9	0.5	0.9	2.3
1993	2.6	0.1	–2.2	3.8	1.3	1.3	–1.6	3.3	0.8	2.1
1994	2.3	0.7	1.3	3.7	2.1	0.6	–1.7	5.7	0.8	3.3
1995	4.4	2.2	5.1	7.9	4.5	1.9	–0.6	8.1	2.6	6.1
1996	2.0	0.2	–2.6	1.9	0.7	2.6	–0.8	0.5	1.2	3.9
1995 Q4	4.6	1.6	2.4	7.2	3.6	2.2	–0.7	5.8	2.3	5.8
1996 Q1	3.5	0.7	–0.9	4.9	1.9	2.2	–0.9	1.8	1.5	4.7
Q2	2.4	0.1	–2.7	1.6	0.7	2.4	–0.9	0.4	1.1	3.8
Q3	1.2	–0.2	–3.8	0.4	–0.1	2.9	–0.8	–	1.0	3.6
Q4	0.8	0.1	–3.1	0.8	0.3	3.0	–0.6	–0.2	1.2	3.7
1997 Q1	0.5	0.3	–2.2	0.9	0.3	2.1	–0.3	0.1	0.9	3.1
Q2	..	0.6	–0.9	1.1	0.7	0.3	1.8	1.1	0.7	2.8
Q3	..	1.0	0.4	..	1.4	–0.1	1.8	..	0.6	2.9
1997 Jun	0.6	0.8	–0.4	1.6	1.1	–0.1	1.8	0.9	0.6	2.8
Jul	0.7	0.9	0.1	1.7	1.3	–0.1	1.9	0.9	0.6	2.9
Aug	0.7	1.2	0.5	1.6	1.6	–0.2	1.7	0.9	0.6	2.9
Sep	0.7	1.0	0.5	..	1.4	–	1.7	..	0.6	3.0

1 Data available for Unified Germany from 1991
2 Producer prices in intermediate goods
3 OECD includes 'higher inflation' countries (Mexico and Turkey)

6 Average wage earnings in manufacturing[1]

	United Kingdom[2]	Germany[3]	France	Italy	EU	United States	Japan[4]	Canada	Major 7	OECD
Percentage change on a year earlier										
	ILAY	ILAO	ILAP	ILAQ	ILAR	ILAS	ILAT	ILAU	ILAV	ILAW
1989	8.76	3.9	3.9	6.0	5.6	2.9	5.6	5.4	4.4	4.4
1990	9.50	4.2	4.9	7.3	7.0	3.2	5.1	4.7	4.7	5.2
1991	7.75	6.6	4.7	9.8	6.8	3.3	3.5	4.8	4.8	5.2
1992	5.50	7.1	4.0	5.4	5.8	2.4	1.3	3.4	3.3	3.6
1993	4.25	5.4	2.5	3.7	4.7	2.4	0.4	2.1	3.0	2.9
1994	5.00	2.9	1.9	3.3	3.8	2.8	2.2	1.6	2.7	3.1
1995	4.00	3.3	2.4	3.1	3.7	2.7	3.0	1.4	3.1	3.3
1996	4.75	5.2	2.4	1.8	3.7	3.1	2.6	3.2	3.0	3.3
1995 Q3	4.00	3.5	2.5	3.5	4.1	3.1	3.2	2.4	2.6	3.4
Q4	4.00	5.2	2.5	3.9	4.0	2.7	2.4	2.0	3.4	3.4
1996 Q1	4.25	7.1	2.3	1.9	4.0	2.9	1.7	1.8	3.4	3.4
Q2	4.25	6.7	2.3	2.1	4.0	3.2	1.6	3.0	2.5	3.4
Q3	4.50	4.3	2.6	1.7	3.1	3.1	4.9	3.8	3.4	3.3
Q4	4.75	2.9	2.6	1.6	3.8	3.5	2.3	4.1	2.5	3.3
1997 Q1	4.50	0.8	3.0	4.0	3.1	3.4	5.2	3.3	3.3	3.3
Q2	4.25	1.5	2.7	3.8	3.1	2.8	2.7	1.7	3.3	3.3
Q3	4.00	1.6	2.8	3.4	..	2.5	..	..	..	..
1997 May	4.25	..	..	3.8	..	3.4	2.8	2.9	..	..
Jun	4.25	..	..	3.7	..	2.5	2.8	–0.6	..	..
Jul	4.25	1.6	2.8	3.4	..	2.5	3.3	–0.1	..	..
Aug	4.25	..	..	3.4	..	2.5	0.7	–1.3	..	..
Sep	4.00	..	..	3.4	..	2.5	..	..	..	..

1 Definitions of coverage and treatment vary among countries
2 Figures for Great Britain refer to underlying weekly earnings;others hourly
3 Western Germany (Federal Republic of Germany before unification)
4 Figures for Japan monthly and seasonally adjusted

7 Total employment [1]

	United Kingdom	Germany[2,3]	France[3]	Italy	EU	United States[3]	Japan	Canada[3]	Major 7	OECD
Percentage change on a year earlier										
	ILIF	ILIG	ILIH	ILII	ILIJ	ILIK	ILIL	ILIM	ILIN	ILIO
1989	2.9	1.5	1.6	–0.5	1.7	2.1	2.0	2.1	1.8	1.9
1990	0.6	2.8	0.8	1.4	1.6	0.5	1.9	0.6	1.2	1.2
1991	–2.9	2.0	0.1	1.3	0.1	–0.9	1.9	–1.9	–	–
1992	–2.6	–1.4	–0.6	–1.1	–1.7	0.6	1.1	–0.6	–	–0.4
1993	–1.1	–1.1	–1.3	–4.2	–2.0	1.5	0.2	1.3	–	–0.2
1994	0.9	–0.4	0.1	–1.6	–0.2	3.2	–	2.2	1.3	1.2
1995	0.8	–0.3	1.0	–0.6	0.5	1.4	0.1	1.6	0.8	0.9
1996	1.3	–1.2	–0.2	0.4	0.2	1.5	0.5	1.3	0.7	0.9
1997 Q1	1.7	–1.5	–0.3	–0.1	0.2	2.5	1.6	1.0	1.3	1.3
Q2	1.9	–1.5	–0.1	0.1	0.3	2.4	1.4	1.8	1.4	1.4
Q3	..	..	..	–	..	2.1	0.7	2.4	..	..
Percentage change,latest quarter on quarter										
	ILIP	ILIQ	ILIR	ILIS	ILIT	ILIU	ILIV	ILIW	ILIX	ILIY
1995 Q4	0.4	0.1	–0.1	–0.7	–	–0.3	–1.2	–2.4	–0.4	–0.4
1996 Q1	0.3	–2.0	–0.1	–1.3	–1.0	–1.2	–1.6	–1.9	–1.3	–1.2
Q2	0.1	0.6	–0.1	1.2	0.8	2.0	3.1	3.5	1.8	1.7
Q3	0.7	0.2	–0.2	1.2	0.5	1.2	0.5	2.0	0.9	0.9
Q4	0.5	–0.2	–	–0.8	–0.1	0.1	–1.0	–2.3	–0.3	–0.3
1997 Q1	0.3	–2.1	–	–1.6	–1.0	–0.8	–0.9	–2.1	–1.1	–1.0
Q2	0.3	0.6	0.1	1.4	0.9	1.9	2.9	4.3	1.9	1.8
Q3	..	..	..	1.1	..	0.9	–0.3	2.6	..	..
Percentage change, latest month on previous month										
	ILKV	ILKW	ILKX	ILKY	ILKZ	ILLA	ILLB	ILLC	ILLD	ILLE
1997 Jun	..	..	..	..	..	0.6	0.8	2.4	..	..
Jul	..	..	..	..	..	0.7	–0.5	0.5	..	..
Aug	..	..	..	..	..	–0.4	–0.9	0.3	..	..
Sep	..	..	..	..	..	–0.7	0.1	–1.9	..	..

1 Not seasonally adjusted except for the United Kingdom
2 Data available for Unified Gemany from 1991
3 Excludes members of armed forces

8 Standardised unemployment rates: percentage of total labour force[1]

	United Kingdom	Germany[2]	France	Italy	EU	United States	Japan	Canada	Major 7	OECD
	GABF	GABD	GABC	GABE	GADR	GADO	GADP	GADN	GAEQ	GADQ
1989	7.3	5.6	9.3	10.0	8.7	5.3	2.3	7.5	5.7	6.3
1990	7.0	4.8	9.0	9.1	8.1	5.6	2.1	8.1	5.6	6.1
1991	8.8	4.2	9.5	8.8	8.4	6.9	2.1	10.4	6.4	6.8
1992	10.1	4.6	10.4	9.0	9.1	7.5	2.2	11.3	6.9	7.4
1993	10.5	7.9	11.7	10.3	10.8	6.9	2.5	11.2	7.2	8.0
1994	9.6	8.4	12.3	11.4	11.1	6.1	2.9	10.4	7.1	7.9
1995	8.7	8.2	11.7	11.9	10.7	5.6	3.1	9.5	6.8	7.6
1996	8.2	8.9	12.4	12.0	10.9	5.4	3.3	9.7	6.8	7.6
1995 Q4	8.5	8.4	12.0	11.9	10.8	5.6	3.3	9.4	6.8	7.6
1996 Q1	8.4	8.7	12.3	12.0	10.9	5.6	3.3	9.5	6.9	7.6
Q2	8.3	8.8	12.4	12.1	10.9	5.4	3.5	9.6	6.8	7.6
Q3	8.2	8.9	12.5	12.0	10.9	5.3	3.3	9.8	6.8	7.5
Q4	7.8	9.2	12.6	12.0	10.8	5.3	3.3	9.9	6.8	7.5
1997 Q1	7.5	9.4	12.5	12.2	10.8	5.3	3.3	9.6	6.8	7.5
Q2	7.2	9.6	12.6	12.6	10.8	4.9	3.5	9.4	6.6	7.3
Q3	..	..	..	..	..	4.9	3.4	9.0	..	..
1997 May	7.2	9.6	12.6	12.6	10.8	4.8	3.6	9.5	6.6	7.4
Jun	7.0	9.7	12.6	12.7	10.7	5.0	3.5	9.1	6.7	7.3
Jul	6.9	9.7	12.6	12.8	10.6	4.8	3.4	9.0	6.6	7.2
Aug	6.8	9.8	12.6	..	10.6	4.9	3.4	9.0	6.6	7.3
Sep	..	..	..	..	..	4.9	3.4	9.0	..	..

1 Uses an ILO based measure of those without work, currently available for work, actively seeking work or waiting to start a job already obtained
2 Data available on Unified Germany from January 1993

9 Balance of payments current account as percentage of GDP

	United Kingdom	Germany[1,2]	France	Italy	United States[1]	Japan[1]	Canada
	ILAZ	ILBA	ILBB	ILBC	ILBD	ILBE	ILBF
1985	0.6	0.6	–	–0.3	–3.1	3.6	–1.3
1990	–3.4	3.2	–0.8	–1.5	–1.6	1.2	–3.4
1991	–1.4	–1.0	–0.5	–2.1	–0.1	2.1	–3.8
1992	–1.7	–0.9	0.3	–2.4	–1.0	3.0	–3.6
1993	–1.7	–0.8	0.7	1.0	–1.5	3.1	–3.9
1994	–0.4	–1.0	0.6	1.4	–2.1	2.8	–2.7
1995	–0.5	–1.0	0.7	2.5	–1.8	2.1	–0.9
1996	–	–0.6	1.3	3.3	–1.9	1.4	0.5
1995 Q1	0.2	–1.2	1.2	1.7	–1.9	2.2	–0.8
Q2	–0.8	–0.5	0.9	2.9	–2.0	2.3	–2.3
Q3	–0.8	–0.8	0.1	3.1	–1.8	2.2	–1.0
Q4	–0.7	–1.4	0.6	2.2	–1.4	1.9	0.3
1996 Q1	–0.7	–0.7	1.7	2.1	–1.8	1.4	0.2
Q2	0.4	–0.8	0.8	3.6	–1.9	1.4	1.2
Q3	–0.2	–0.4	1.4	4.7	–2.2	1.4	0.8
Q4	0.3	–0.5	1.4	3.0	–1.9	1.5	–0.3
1997 Q1	0.8	–1.3	2.8	3.0	–2.0	1.5	–0.4
Q2	..	0.3	3.1	2.4	–1.9	2.6	–1.5

1 Balance as percentage of GNP
2 Data available for Unified Germany from July 1990

10 World trade in goods[1]

	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
1989	8.5	8.2	9.9	8.6	8.8	8.2	7.0	7.3	6.3	7.0	7.4	6.0	8.6	7.0
1990	4.9	5.1	4.0	6.0	5.6	7.1	4.2	5.1	1.8	5.0	5.2	4.4	5.5	4.6
1991	3.5	2.4	8.0	4.9	3.6	8.8	3.7	3.2	5.1	4.3	3.3	7.3	4.2	4.0
1992	3.8	3.3	5.7	4.7	4.5	5.2	4.2	3.6	5.8	4.5	4.2	5.5	4.2	4.4
1993	3.9	1.7	12.1	3.0	1.1	8.1	4.1	2.3	9.0	3.4	1.6	8.7	3.4	3.8
1994	11.5	10.2	15.9	12.3	12.1	12.8	9.9	9.1	11.6	10.7	10.2	11.9	11.9	10.3
1995	10.0	9.4	12.2	11.2	9.6	15.2	8.7	8.1	10.0	9.2	7.5	13.7	10.6	9.0
1996	5.7	6.8	2.3	5.2	6.6	1.7	5.0	6.2	2.3	4.5	5.5	2.1	5.4	4.8
1996 Q2	5.2	6.2	2.2	4.1	5.6	0.3	4.2	5.1	1.9	3.5	4.5	0.8	4.7	3.8
Q3	6.1	7.5	1.7	5.7	7.3	1.8	5.6	7.1	2.1	4.9	6.0	2.3	5.9	5.3
Q4	6.0	7.5	1.0	5.1	6.8	1.1	5.8	7.5	1.4	5.0	6.5	1.5	5.5	5.4
1997 Q1	7.5	8.0	5.8	..	..	..	..	..	..	..	..	..	..	..
Percentage change, latest quarter on previous quarter														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q2	1.4	1.1	2.6	2.0	1.4	3.4	1.1	0.7	2.1	1.8	1.2	3.2	1.7	1.4
Q3	1.4	1.2	1.8	1.5	1.2	2.5	1.2	1.1	1.5	1.3	0.9	2.2	1.5	1.3
Q4	1.4	1.7	0.8	1.6	2.0	0.7	1.1	1.3	0.6	0.8	0.9	0.8	1.5	1.0
1996 Q1	1.2	1.8	–0.6	0.5	1.9	–2.9	1.0	1.6	–0.4	0.6	1.8	–2.4	0.9	0.8
Q2	1.1	1.4	0.2	0.4	0.5	0.1	0.7	0.9	0.2	0.6	0.8	0.2	0.7	0.7
Q3	2.2	2.5	1.4	3.1	2.8	4.0	2.6	3.0	1.7	2.8	2.4	3.7	2.7	2.7
Q4	1.3	1.7	–	1.1	1.5	–	1.2	1.7	–	0.9	1.3	–	1.2	1.1
1997 Q1	2.7	2.3	4.1	..	..	..	..	..	..	..	..	..	..	..

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

Final Expenditure Prices Index (Experimental) - October 1997

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

Summary

The Final Expenditure Prices Index (FEPI) for October shows an annual rate of 2.2 per cent, up from 2.1 per cent in September. The increase in the annual rate of the FEPI reflects increases in the annual rates of the Index of Consumer Prices (ICP) and the Index of Investment Prices (IIP).

The FEPI annual percentage change

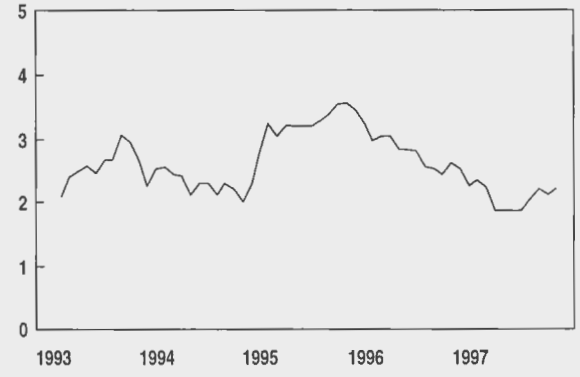


Table A

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

		Index of Consumer Prices (ICP)		Index of Investment Prices (IIP)		Index of Government Prices (IGP)		Final Expenditure Prices Index (FEPI)	
		Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change
1997	May	117.0	2.3	110.8	0.6	114.6	2.0	115.1	1.9
	Jun	117.2	2.3	110.8	0.6	114.6	1.6	115.3	1.9
	Jul	116.7	2.5	111.1	0.9	114.4	1.9	115.0	2.0
	Aug	117.5	2.6	111.3	0.6	115.2	2.3	115.7	2.2
	Sep	117.9	2.3	111.6	1.1	114.9	2.3	115.9	2.1
	Oct	118.0	2.4	112.0	1.3	115.1	2.1	116.1	2.2

The Index of Consumer Prices (ICP)

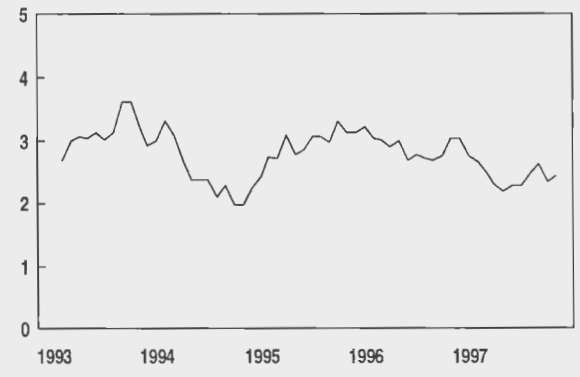
Consumer price inflation, as measured by the ICP, was 2.4 per cent over the 12 months to October, up from 2.3 per cent in September.

Upward pressure came mainly from prices for:

- Food, for which the 12-month rate rose from 1.3 per cent in September to 1.9 per cent in October;
- Household goods and services, whose 12-month rate rose from 0.7 per cent to 0.9 per cent.

Downward pressure on the 12-month rate came mainly from prices for Clothing and footwear, for which the 12-month rate fell from 0.9 per cent in September to 0.5 per cent in October.

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 October, up from 1.1 per cent in September.

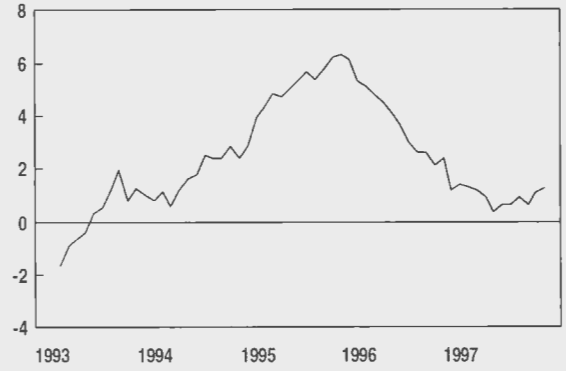
Upward pressure on the 12-month rate came mainly from:

- Plant and machinery whose 12-month rate rose from -5.2 per cent in September to -4.4 per cent in October.

  Note, the annual rate has been negative since June 1996, reflecting the impact of Sterling's strength on import prices;
- Vehicles, ships and aircraft whose 12-month rate rose from -0.6 per cent to 0.3 per cent.

Downward pressure on the 12-month rate came mainly from: New dwellings, whose 12-month rate fell from 8.0 per cent in September to 7.9 per cent in October.

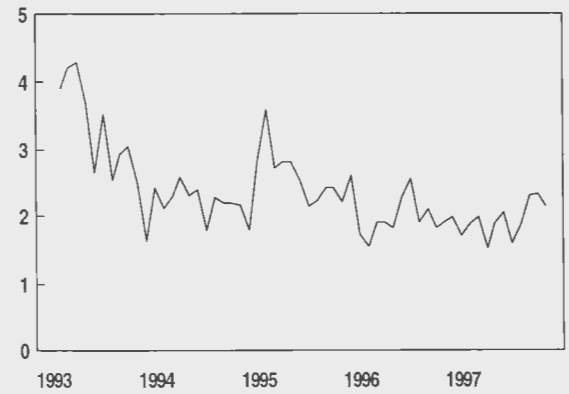
The IIP annual percentage change



The Index of Government Prices (IGP)

Inflation affecting Government expenditure, as measured by the IGP, was 2.1 per cent over the 12 months to October, down from 2.3 per cent in September. This should not be interpreted as being of particular significance - see note 7.

The IGP annual percentage change



Comparison between the FEPI and other inflation measures

Table B

Measures of Inflation (annual percentage changes)

		FEPI	RPIX	HICP	PPI
1997	May	1.9	2.5	1.6	1.0
	Jun	1.9	2.7	1.7	1.1
	Jul	2.0	3.0	2.0	1.3
	Aug	2.2	2.8	2.0	1.4
	Sep	2.1	2.7	1.8	1.3
	Oct	2.2	2.8	1.9	1.2

NOTES

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

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

   The Index of Consumer Prices (ICP)
   The Index of Investment Prices (IIP)
   The Index of Government Prices (IGP).

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

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

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

6. The FEPI and its components are subject to revision for up to six months after they are first published.

7. Care should be taken when trying to interpret monthly movements in the IGP. This index is particularly volatile on a month-to-month basis, so that 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.

8. An article describing the development and composition of the FEPI is included in *Economic Trends*, No 526, September 1997.

9. Longer runs of the FEPI back to January 1992, are available in computer readable form from the ONS Sales Office (telephone 0171 533 5670) or on paper from David Wall.

1 Final Expenditure Prices Index (Experimental)

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP	Final Expenditure Prices Index FEPI	Annual percentage changes ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1995	601	162	237	1000				
1996	604	164	232	1000				
1997	605	165	230	1000				
	CUSE	CUSK	CUSO	CUSP				
1995 Oct	111.8	108.0	110.6	110.7	*3.1*	*6.3*	*2.2*	*3.6*
Nov	111.9	108.4	110.9	110.8	*3.1*	*6.2*	*2.6*	*3.5*
Dec	112.5	108.6	111.4	111.4	*3.2*	*5.3*	*1.7*	*3.2*
1996 Jan	112.3	109.0	111.6	111.3	*3.0*	*5.1*	*1.5*	*3.0*
Feb	112.9	109.3	111.6	111.7	*3.0*	*4.8*	*1.9*	*3.0*
Mar	113.4	109.6	112.2	112.3	*2.9*	*4.5*	*1.9*	*3.0*
Apr	114.1	110.3	112.0	112.7	*3.0*	*4.1*	*1.8*	*2.8*
May	114.4	110.1	112.3	113.0	*2.7*	*3.7*	*2.3*	*2.8*
Jun	114.6	110.1	112.8	113.2	*2.8*	*3.0*	*2.5*	*2.8*
Jul	113.9	110.1	112.3	112.7	*2.7*	*2.6*	*1.9*	*2.5*
Aug	114.5	110.6	112.6	113.2	*2.7*	*2.6*	*2.1*	*2.5*
Sep	115.2	110.4	112.3	113.5	*2.8*	*2.1*	*1.8*	*2.4*
Oct	115.2	110.6	112.7	113.6	*3.0*	*2.4*	*1.9*	*2.6*
Nov	115.3	109.7	113.1	113.6	*3.0*	*1.2*	*2.0*	*2.5*
Dec	115.6	110.1	113.3	113.9	*2.8*	*1.4*	*1.7*	*2.2*
1997 Jan	115.3	110.4	113.7	113.9	*2.7*	*1.3*	*1.9*	*2.3*
Feb	115.7	110.6	113.8	114.2	*2.5*	*1.2*	*2.0*	*2.2*
Mar	116.0	110.6	113.9	114.4	*2.3*	*0.9*	*1.5*	*1.9*
Apr	116.6	110.7	114.1	114.8	*2.2*	*0.4*	*1.9*	*1.9*
May	117.0	110.8	114.6	115.1	*2.3*	*0.6*	*2.0*	*1.9*
Jun	117.2	110.8	114.6	115.3	*2.3*	*0.6*	*1.6*	*1.9*
Jul	116.7	111.1	114.4	115.0	*2.5*	*0.9*	*1.9*	*2.0*
Aug	117.5	111.3	115.2	115.7	*2.6*	*0.6*	*2.3*	*2.2*
Sep	117.9	111.6	114.9	115.9	*2.3*	*1.1*	*2.3*	*2.1*
Oct	118.0	112.0	115.1	116.1	*2.4*	*1.3*	*2.1*	*2.2*

2 FEPI - Index of Consumer Prices (Experimental)

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communi-cation	Recreation, Entertain-ment and Education	Other Goods and Services	Index of Consumer Prices ICP
January 1992=100											
Weights											
1995	132	69	31	66	84	42	73	185	111	207	1000
1996	128	70	30	67	85	40	72	190	113	205	1000
1997	126	68	30	67	90	39	71	189	119	201	1000
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
1995 Oct	107.3	116.0	131.0	105.7	118.0	105.4	108.3	110.9	107.9	115.9	111.8
Nov	107.5	115.3	131.0	106.3	118.1	105.4	109.3	110.3	107.9	116.1	111.9
Dec	108.4	114.2	134.2	106.4	118.1	105.5	110.4	111.8	108.3	116.6	112.5
1996 Jan	109.0	115.2	136.8	100.3	118.5	105.6	107.1	112.8	108.2	116.7	112.3
Feb	110.1	116.0	137.4	101.3	118.6	105.6	108.8	113.0	108.6	117.3	112.9
Mar	111.1	116.3	137.5	102.7	118.7	105.7	110.3	113.2	108.8	117.7	113.4
Apr	111.2	116.8	138.7	104.2	120.8	105.7	109.7	113.9	109.3	118.4	114.1
May	112.1	117.2	139.6	104.4	121.0	105.6	110.5	114.3	109.3	118.7	114.4
Jun	112.1	117.8	139.8	104.3	121.3	105.8	110.6	114.4	109.3	118.9	114.6
Jul	110.7	118.4	139.6	99.2	121.9	105.9	108.8	114.3	108.9	118.9	113.9
Aug	111.8	118.3	139.8	100.5	122.0	105.7	110.1	115.1	109.2	119.4	114.5
Sep	110.8	118.5	140.1	105.4	122.1	105.8	110.8	116.3	109.6	119.9	115.2
Oct	110.1	118.8	140.2	105.5	122.2	105.6	110.4	116.4	109.8	120.3	115.2
Nov	109.7	118.6	140.0	106.6	122.4	105.0	111.4	116.0	110.1	120.4	115.3
Dec	109.7	118.0	142.8	106.6	122.5	104.8	112.3	116.7	110.1	120.7	115.6
1997 Jan	110.6	118.6	145.6	100.5	123.4	104.2	108.8	117.5	109.9	120.7	115.3
Feb	110.3	119.3	146.2	102.0	123.6	104.3	109.7	118.1	110.1	121.2	115.7
Mar	109.8	119.2	146.6	104.0	123.9	104.4	111.7	118.0	109.9	121.6	116.0
Apr	110.2	119.7	148.3	105.5	125.8	104.2	111.1	118.0	110.3	122.4	116.6
May	110.9	120.4	148.9	106.0	126.0	103.7	111.6	118.1	110.5	123.0	117.0
Jun	111.8	120.6	149.2	105.4	126.2	103.3	111.4	118.5	110.5	123.3	117.2
Jul	111.3	121.1	149.3	100.3	126.2	102.8	109.6	119.4	110.3	123.4	116.7
Aug	112.6	121.3	151.2	102.3	126.4	102.8	110.8	120.0	110.2	124.0	117.5
Sep	112.2	121.4	151.5	106.3	126.6	100.0	111.6	120.4	110.7	124.4	117.9
Oct	112.2	121.7	151.7	106.0	126.8	100.0	111.4	120.3	110.8	124.8	118.0

Annual Percentage Changes

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communi-cation	Recreation Entertain-ment and Education	Other Goods and Services	Index of Consumer Prices ICP
1995 Oct	*4.7*	*4.4*	*6.9*	*0.2*	*3.8*	*0.5*	*3.1*	*2.0*	*2.0*	*4.3*	*3.1*
Nov	*4.5*	*4.1*	*7.1*	*0.3*	*3.7*	*0.6*	*3.2*	*1.8*	*1.9*	*4.2*	*3.1*
Dec	*4.5*	*3.4*	*7.9*	*0.3*	*3.4*	*0.7*	*3.7*	*2.3*	*2.2*	*4.1*	*3.2*
1996 Jan	*4.1*	*2.8*	*7.0*	*−0.7*	*3.8*	*0.5*	*2.8*	*2.6*	*2.0*	*4.1*	*3.0*
Feb	*4.6*	*2.7*	*6.5*	*−1.0*	*3.7*	*0.4*	*2.9*	*2.4*	*2.2*	*4.3*	*3.0*
Mar	*4.9*	*2.6*	*6.5*	*−1.0*	*3.6*	*0.4*	*3.2*	*2.0*	*2.3*	*4.1*	*2.9*
Apr	*5.0*	*2.9*	*6.4*	*−1.0*	*2.7*	*0.2*	*2.7*	*2.2*	*2.4*	*4.0*	*3.0*
May	*4.2*	*2.7*	*6.6*	*−1.0*	*2.8*	*0.4*	*2.4*	*2.3*	*2.2*	*3.7*	*2.7*
Jun	*4.7*	*2.8*	*6.6*	*−0.9*	*2.9*	*0.6*	*2.7*	*2.0*	*2.1*	*3.8*	*2.8*
Jul	*3.9*	*2.9*	*6.5*	*−1.1*	*3.7*	*0.6*	*2.4*	*2.2*	*1.8*	*3.6*	*2.7*
Aug	*3.2*	*2.8*	*6.6*	*−1.3*	*3.4*	*0.4*	*2.4*	*3.0*	*1.9*	*3.6*	*2.7*
Sep	*2.1*	*2.7*	*6.9*	*−0.5*	*3.4*	*0.3*	*1.8*	*4.2*	*1.6*	*3.5*	*2.8*
Oct	*2.6*	*2.4*	*7.0*	*−0.2*	*3.6*	*0.2*	*1.9*	*5.0*	*1.8*	*3.8*	*3.0*
Nov	*2.0*	*2.9*	*6.9*	*0.3*	*3.6*	*−0.4*	*1.9*	*5.2*	*2.0*	*3.7*	*3.0*
Dec	*1.2*	*3.3*	*6.4*	*0.2*	*3.7*	*−0.7*	*1.7*	*4.4*	*1.7*	*3.5*	*2.8*
1997 Jan	*1.5*	*3.0*	*6.4*	*0.2*	*4.1*	*−1.3*	*1.6*	*4.2*	*1.6*	*3.4*	*2.7*
Feb	*0.2*	*2.8*	*6.4*	*0.7*	*4.2*	*−1.2*	*0.8*	*4.5*	*1.4*	*3.3*	*2.5*
Mar	*−1.2*	*2.5*	*6.6*	*1.3*	*4.4*	*−1.2*	*1.3*	*4.2*	*1.0*	*3.3*	*2.3*
Apr	*−0.9*	*2.5*	*6.9*	*1.2*	*4.1*	*−1.4*	*1.3*	*3.6*	*0.9*	*3.4*	*2.2*
May	*−1.1*	*2.7*	*6.7*	*1.5*	*4.1*	*−1.8*	*1.0*	*3.3*	*1.1*	*3.6*	*2.3*
Jun	*−0.3*	*2.4*	*6.7*	*1.1*	*4.0*	*−2.4*	*0.7*	*3.6*	*1.1*	*3.7*	*2.3*
Jul	*0.5*	*2.3*	*6.9*	*1.1*	*3.5*	*−2.9*	*0.7*	*4.5*	*1.3*	*3.8*	*2.5*
Aug	*0.7*	*2.5*	*8.2*	*1.8*	*3.6*	*−2.7*	*0.6*	*4.3*	*0.9*	*3.9*	*2.6*
Sep	*1.3*	*2.4*	*8.1*	*0.9*	*3.7*	*−5.5*	*0.7*	*3.5*	*1.0*	*3.8*	*2.3*
Oct	*1.9*	*2.4*	*8.2*	*0.5*	*3.8*	*−5.3*	*0.9*	*3.4*	*0.9*	*3.7*	*2.4*

3 FEPI - Index of Investment Prices (Experimental)

	New Buildings and Works	Plant and Machinery	Vehicles, etc	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100						
Weights						
1995	276	376	106	37	206	1000
1996	266	378	108	38	209	1000
1997	267	390	103	33	207	1000
	CUSF	CUSG	CUSH	CUSI	CUSJ	CUSK
1995 Oct	101.6	115.7	117.1	129.7	97.9	108.0
Nov	102.4	116.2	117.3	130.0	97.6	108.4
Dec	103.2	116.2	117.8	128.6	97.4	108.6
1996 Jan	103.7	116.7	118.5	127.1	97.5	109.0
Feb	104.2	116.3	118.7	129.8	98.2	109.3
Mar	104.8	116.0	118.8	130.5	99.3	109.6
Apr	105.2	116.7	119.2	135.7	100.1	110.3
May	105.7	115.4	119.1	135.8	100.5	110.1
Jun	106.1	114.7	118.9	135.5	101.1	110.1
Jul	106.5	113.5	119.0	138.1	102.0	110.1
Aug	106.9	114.0	119.6	139.2	102.7	110.6
Sep	107.3	113.1	119.7	139.3	102.7	110.4
Oct	107.7	113.0	119.2	140.9	102.8	110.6
Nov	108.1	110.6	117.6	140.9	103.0	109.7
Dec	108.5	111.0	117.5	141.0	103.8	110.1
1997 Jan	108.8	111.1	118.2	139.3	104.3	110.4
Feb	109.1	111.2	118.7	141.8	104.4	110.6
Mar	109.4	110.1	118.9	142.2	105.6	110.6
Apr	109.5	109.8	118.5	142.8	106.9	110.7
May	109.4	109.4	118.5	144.8	107.6	110.8
Jun	109.4	108.8	118.3	144.9	108.6	110.8
Jul	110.2	108.0	118.1	150.8	109.8	111.1
Aug	110.9	107.6	118.6	151.9	110.5	111.3
Sep	111.7	107.2	119.0	153.5	110.9	111.6
Oct	112.1	108.0	119.5	153.3	110.9	112.0

Annual Percentage Changes

	New Buildings and Works	Plant and Machinery	Vehicles, etc	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
1995 Oct	*13.0*	*5.1*	*5.4*	*2.9*	*0.5*	*6.3*
Nov	*12.9*	*5.1*	*5.2*	*3.6*	*0.1*	*6.2*
Dec	*12.8*	*3.4*	*4.8*	*1.7*	*–0.1*	*5.3*
1996 Jan	*12.2*	*2.6*	*4.3*	*1.6*	*0.7*	*5.1*
Feb	*11.8*	*1.5*	*4.0*	*3.7*	*1.9*	*4.8*
Mar	*11.4*	*1.0*	*4.2*	*4.9*	*1.7*	*4.5*
Apr	*10.3*	*0.9*	*3.8*	*5.5*	*1.5*	*4.1*
May	*9.5*	*0.0*	*3.3*	*6.3*	*2.3*	*3.7*
Jun	*8.6*	*–1.2*	*2.9*	*5.1*	*2.8*	*3.0*
Jul	*7.9*	*–2.2*	*2.8*	*6.3*	*3.6*	*2.6*
Aug	*7.1*	*–2.0*	*2.2*	*7.1*	*4.4*	*2.6*
Sep	*6.4*	*–2.9*	*2.2*	*6.9*	*4.7*	*2.1*
Oct	*6.0*	*–2.3*	*1.8*	*8.6*	*5.0*	*2.4*
Nov	*5.6*	*–4.8*	*0.3*	*8.4*	*5.5*	*1.2*
Dec	*5.1*	*–4.5*	*–0.3*	*9.6*	*6.6*	*1.4*
1997 Jan	*4.9*	*–4.8*	*–0.3*	*9.6*	*7.0*	*1.3*
Feb	*4.7*	*–4.4*	*0.0*	*9.2*	*6.3*	*1.2*
Mar	*4.4*	*–5.1*	*0.1*	*9.0*	*6.3*	*0.9*
Apr	*4.1*	*–5.9*	*–0.6*	*5.2*	*6.8*	*0.4*
May	*3.5*	*–5.2*	*–0.5*	*6.6*	*7.1*	*0.6*
Jun	*3.1*	*–5.1*	*–0.5*	*6.9*	*7.4*	*0.6*
Jul	*3.5*	*–4.8*	*–0.8*	*9.2*	*7.6*	*0.9*
Aug	*3.7*	*–5.6*	*–0.8*	*9.1*	*7.6*	*0.6*
Sep	*4.1*	*–5.2*	*–0.6*	*10.2*	*8.0*	*1.1*
Oct	*4.1*	*–4.4*	*0.3*	*8.8*	*7.9*	*1.3*

4 FEPI - Index of Government Prices (Experimental)

	Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP	Annual percentage changes: Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP
January 1992=100								
Weights								
1995	347	588	65	1000				
1996	344	597	59	1000				
1997	347	589	64	1000				
	CUSL	CUSM	CUSN	CUSO				
1995 Oct	112.1	109.6	112.6	110.6	*1.9*	*2.4*	*2.9*	*2.2*
Nov	112.5	109.7	112.6	110.9	*2.3*	*2.6*	*2.9*	*2.6*
Dec	112.7	110.5	112.7	111.4	*0.5*	*2.5*	*3.0*	*1.7*
1996 Jan	112.7	110.8	113.4	111.6	*1.7*	*1.4*	*3.0*	*1.5*
Feb	112.8	110.8	113.3	111.6	*1.8*	*2.0*	*2.9*	*1.9*
Mar	113.0	111.6	113.3	112.2	*1.2*	*2.3*	*2.9*	*1.9*
Apr	112.8	111.4	113.3	112.0	*1.7*	*1.8*	*2.9*	*1.8*
May	114.3	111.0	114.3	112.3	*2.5*	*2.2*	*3.1*	*2.3*
Jun	114.8	111.5	114.3	112.8	*2.7*	*2.4*	*3.1*	*2.5*
Jul	114.3	110.9	114.5	112.3	*2.0*	*1.9*	*1.7*	*1.9*
Aug	114.1	111.5	114.6	112.6	*1.8*	*2.3*	*1.8*	*2.1*
Sep	114.1	110.9	114.6	112.3	*2.1*	*1.6*	*1.8*	*1.8*
Oct	114.5	111.5	114.6	112.7	*2.1*	*1.7*	*1.8*	*1.9*
Nov	115.2	111.6	114.8	113.1	*2.4*	*1.7*	*2.0*	*2.0*
Dec	114.9	112.3	114.9	113.3	*2.0*	*1.6*	*2.0*	*1.7*
1997 Jan	115.4	112.6	115.5	113.7	*2.4*	*1.6*	*1.9*	*1.9*
Feb	115.5	112.7	115.5	113.8	*2.4*	*1.7*	*1.9*	*2.0*
Mar	116.0	112.6	115.5	113.9	*2.7*	*0.9*	*1.9*	*1.5*
Apr	115.7	112.9	115.5	114.1	*2.6*	*1.3*	*1.9*	*1.9*
May	116.5	113.2	116.5	114.6	*1.9*	*2.0*	*1.9*	*2.0*
Jun	117.0	112.9	116.5	114.6	*1.9*	*1.3*	*1.9*	*1.6*
Jul	116.5	112.7	118.5	114.4	*1.9*	*1.6*	*3.5*	*1.9*
Aug	118.8	112.7	118.5	115.2	*4.1*	*1.1*	*3.4*	*2.3*
Sep	117.2	113.2	118.5	114.9	*2.7*	*2.1*	*3.4*	*2.3*
Oct	117.4	113.3	118.6	115.1	*2.5*	*1.6*	*3.5*	*2.1*

How should economic statistics respond to information technology?[1]

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Introduction

There is a widespread sense that information technology has transformed the nature of the economy in a way which renders traditional tools of analysis ineffective. For example

> "A second source of downward bias, emphasised in congressional testimony by Mr Alan Greenspan, the Federal reserve chairman, reflects the failure of statisticians to keep pace with the changing structure of the economy the progressive substitution of intangible services for physical output".
>
> "Under existing conventions a steel mill is treated as capital investment and added to GDP. Corporate expenditure on computer software, however, is treated as a cost of production and fails to appear as part of the economy's final output".

(Michael Prowse "How High Can the Eagle Fly?" *Financial Times* 26th August 1996)

The aim of this paper is to translate this unease into identifiable problems, and offer possible ways forward. It will argue that there is a range of problems, the conflation of which leads to a sense of impotence or a desire for extreme responses. Starting from a vague sense of disquiet will not normally lead to a useful work programme. By trying to specify the issues more clearly it may be possible to identify steps forward. This note divides the concerns into four groups:-

> Constructing accounts is made more difficult because much activity is new and so hard to measure.
>
> Conceptual problems with accounts become harder. There are two particular problems.
>
> the definition of intangible capital and its relation to investment. These are the well known problems of R & D and human capital
>
> the measurement of quality change.
>
> Finally there are problems of linking the accounts to public and policy concern.

What we have is a combination of some genuinely new problems, the revival in a very slightly different form of familiar and difficult problems and the stirring up of some issues which have been dormant for some time.

Much of this paper is based largely on the dichotomy between those who use the accounts as a measure of welfare - that is the extent to which the output of a nation improves the well-being of its inhabitants - and those who use them to measure capacity - the extent to which the output of the nation uses its resources of labour capital etc.[2] While many national accountants do not endorse the view that national accounts measure welfare, much of the concern to which information technology has given rise comes from the beliefs of users that they do. Those who criticise national accounts on environmental grounds often do so on the basis of a welfare interpretation - they argue that apparent increased welfare must be balanced against a deteriorating environment. While national accounts can provide the material for measuring welfare or capacity, such measures are not what core accounts do. The contention of this paper is that much of the present disquiet derives either from a belief that accounts should do things they were not designed to do, or a justified feeling that it is harder to maintain the relevance of economic statistics in a period of rapid change. Neither justifies a radical change in the systems of national accounts. What is needed is a three pronged approach involving the collection of more and more relevant data, the review of the links between economic accounts and policy issues and a reassertion of the role of economic accounts and its limits.

1. This paper is a modified version of a paper presented to the UN Statistical Commission meeting in February 1997.
2. For a fuller discussion see Neuberger (1996)

This paper is divided into six sections. Following this introduction, the next considers what we are talking about. This is followed by a consideration of industry and product. A fourth section looks at how to reinforce the links between national accounts and issues of policy and general concern. This is followed by a section which looks at how technology may change the process of data collection and the nature of policy itself. Finally it concludes with some recommendations.

What are the effects of information technology?

There can be little doubt that new techniques of communications, information etc are changing the nature of our economy. The concern people feel about the impact of information technology is expressed in terms of the increasing intangibility of the economy. "Intangible" is an adjective. Much of the confusion which surrounds the issues it raised is generated by the illusion that there is a set of distinct entities called intangibles. It is much simpler to look at intangibility as an aspect of a range of things. When people talk of the increasing intangibility of the economy, they are speaking about developments in industrial production like the rapid development of microprocessors, in products like information, in transactions like communication over the Internet, in productive assets like software and research, and in commercial assets like patents, goodwill, corporate organisation or skilled staff. These aspects coincide only partly.

It has always been true that there has been an intangible element to nearly all dimensions of the economy. What has happened recently is that intangibility has increased in most dimensions, More of the products people use are intangible, and where products are tangible, more of their qualities are intangible, more of the "equipment" and "raw materials" used are intangible. As a result, the area in which several dimensions of intangibility overlap has increased. The speed of change has underlined the chronic difficulty that statisticians have in tracking an economy in flux; the increased complexity of the links between transactors has put the links between statistics and policy concerns under strain.

IIndustry and product

Industrial classification

The one noun to which intangible does not seem readily to apply is production. Whatever is being produced, the production process itself seems to be reasonably clear and well-specified. The difficulty arises because most of the aspects we use to measure production, such as product or input are both less easy to measure and have less well-defined links with the scale of the production process.

One response to the problem has been the development of the North American Industrial Classification System (NAICS) , a system of industrial classification which moves on from ISIC. NAICS agreement number 18 suggests an industrial classification for Information to be treated as distinct from goods and services. The classification encompasses parts of the existing goods and service industries - mainly services. The characteristics it identifies as justifying this third category are:-

1. variability of form
2. no direct contact between transactors
3. value does not lie in tangible qualities
4. easy to copy
5. property defined in terms of rights - ease of distribution
6. distributors can easily add value

Within the NAICS framework, there is a range of other activities which might also be candidates for inclusion in the category of information type. In terms of technological characteristics, there are a range of products from biotechnology which are often associated with similarly rapid technical advance and intellectual characteristics which make the definition of rights complex. While the legal definition of property rights in the pharmaceutical area is more elaborate, the fruits of scientific research are becoming increasingly difficult to package into a commodity. There may be a case for including parts of the medical and pharmaceutical industries with the new sector. Sport has characteristics like artistic production.

A different argument might apply to large parts of public services. Arrow (1962) has pointed out that many information products are non-exclusive like public services. The provision of defence and security by states has always been measured in terms which are conventional to the point of distortion. Environmental services could be regarded in a similar light. While SNA 93 still identifies the public sector as the consumer, the provision for transfer in kind to the final user implies a recognition of the same point. The products are used in a way which obviates any link between producer and consumer, while location is vague. It could be argued that the timing of production and consumption are even more separate than traditional products. Once information is produced and available it can be used at any time and for many times. The private provision of security is arguably more appropriable, but is otherwise quite similar and insurance is notoriously tricky for the present system. An even stronger case can be made for education which has many of the use characteristics of information industries and is likely increasingly to partake of their technical characteristics.

The characteristics used in the NAICS classification appear to be those of products rather than of industries. The case for approaching the problem through industrial classification is that the link between product and industry is the main source of concern. Any review of options should re-examine this issue and consider whether product/commodity classification should take precedence over, industry classification, and whether the traditional distinction between goods and services is as fundamental as it once was.

Any new product/commodity classification needs to be fairly thoroughgoing so that it is clear what are goods, what are services and what is information-like. It would seem that goods can no longer be defined in terms of their physical characteristics. Goods should include only those products which have reasonably uniform and predictable set of characteristics. Services should encompass commodities for which a contract can be identified and a clear link between producer and consumer. Information-like products cover the remainder ie they are defined to some extent by negative characteristics.

One important function of an industrial classification is the analysis of stages in the economic development of economies. There is a widespread belief that information technology is a factor in maintaining the lead of industrial countries as a against third world countries. While much of the cost of products like consumer durables lies in physical elements which could be produced cheaply in third world , much of the value added lies in high technology elements in the original product and in its servicing, which keep production near the markets. In so far as analysts track economic progress by the proportions of different industries in GDP, these classifications need to assess such developments.

If the NAICS route of an industry classification is adopted, then there must be some concern about revising the ISIC so soon. The flexibility provided in the SNA 93 by the introduction of satellites seems to provide the opportunity to present an alternative classification.. Intangibility affects industries and products, and therefore requires a restructuring of input-output tables. This will enable countries to experiment with the new classification while maintaining comparability with other countries. We shall argue later that satellites will, in any case, be needed for other purposes. Even if it is clear, on examination, that industrial classification needs to change, this is unlikely to be the whole story.

Time and place

Time and place raise further difficulties. The lack of a direct link between the producer and consumer means that production and consumption need not take place in either the same place or the same time. So long as there are commercial transactions which can be recorded, accounts at current prices can still be compiled with the usual techniques. If all that can be sold over the Internet is the opportunity to access a data set or read a bulletin board, then that is the output. It is no more problematic than transactions in commodities like insurance or perennial flowers. In such cases the transaction is only opening the gates to a continuous services. The transaction only stands as a loose approximation to the value and the location of what is accessed. This is already to be used in SNA 93 for an important area of information production - own account computer software. Similarly the problems of national location of production are already well recognised.

One step for addressing this range of problems would be the development of a classification for both visible and invisible trade which matches the new industrial classification evolved from the NAICS. At present the classification of international trade in services has less sophistication than its visible trade equivalent. A breakdown of international trade in the same way as production would seem to be a logical next step. This will, like its production equivalent, preserve the form of accounts but may not deal with the whole of the concern. .

Prices and deflation

Partitioning of current price GDP change into price and volume also become difficult. The problems of quality change and heterogeneity have long been recognised as a problem in deflation. The divorce between output and outcome has meant that the form of the transaction even in traditional services may bear little relation to the value of the service to either producer or consumer. Hedonic pricing techniques are being developed in an attempt to address this. Information technology, by stepping up the speed at which products change their form and quality may have added to the pressures on any system of hedonic indices. Up to now such techniques have been most successful on producers' goods, but the theory of derived demand, upon which assessment of intermediate products must rely, may come under some pressure. In itself this is of little use except for allocating value added between industries. Until quality measurement can be applied to final consumption, a problem will remain.

The development of information technology means that for companies to make money, products have to be charged for by charging for general access to them, rather than on a per unit basis. This means that what is being paid in no way represents either the scale of what is purchased or, except as a minimum, its value. Once a television licence is purchased or an Internet connexion made, the usage made is not subject to direct charge and products contributing to welfare cannot therefore be linked to

a transaction. It is likely that techniques for charging for information products will improve - as in pay-per view television, but substantive developments are likely to outrun charging techniques for some time.

Linking economic statistics and policy concerns

National accounts have traditionally underpinned the analysis of economic policy and are increasingly expected to help with wider policy concerns. They have served as indicators of both pressure on resource and of welfare. Keynes's "How to Pay for the War", for example, was designed not to find the resources to fight the war, which he argued would inevitably be forthcoming, but to do so in a way which minimised inflationary pressures.

With the development of information type industries, the notion of resources and productive potential will increasingly become divorced from traditional concepts. The divorce of output from welfare is already the subject of a large literature dating back at least to Tobin and Northeast in 1972. The development of information industries only gives this a further twist. The flexibility provided by satellite accounts, social accounting matrices and quality adjustment in price indices should enable national accounts to address many of the issues.

Capacity

Capacity is linked to accounts through the notion of factors of production. The notions of factors of production and incomes owing to them are rooted in the theories of the political economists of the late eighteenth and early nineteenth century. These notions lie at the root of the distinction between primary incomes which form part of GNP and transfers of income which do not. The nature of information technology challenges these traditional notions based on physical processes using labour, land and capital processes raw material to produce an output. The value added in industries using information technology, as well as those creating it, are not like this, and output will become more unstable and harder to record. The usage of a piece of software will be linked only very loosely to its availability. Many will use it rarely, some will use it in a standard way, while others will use it as the basis for wholly new pieces of equipment. The apparent productivity in different contexts will thus vary by orders of magnitude.

It will increasingly be the control by companies of intellectual property, generating quasi-rents, which will determine their profits. Company balance sheets already display a range of assets like brands, patents and goodwill. Accountants, even so, remain concerned that these are not sufficient to reflect the full value of companies; they do not reflect the organisational assets of a company for example. We have already seen that a trained workforce itself is only an asset to its employers so long as they remain in its employment. Training therefore is a national asset which cannot be appropriated to individual companies and therefore should appear at least in part as an asset of the household sector. By contrast there are some company sector assets which are only partly of value to society as a whole. Brands, while representing to some extent value to the consumer by acting as a symbol of quality, are mainly designed to enable companies to extract quasi-rents from production which put a divergence between price and cost or value. To some extent such assets are in effect a claim on the future income of others and as such should, like financial assets be offset by liabilities in other balance sheets. This is most striking in the case of patents which arise not from the research efforts of the patentors but as a result of the patenting of what was previously, or would otherwise have been common. Thus, much of company surplus will be a reward not to risk taking and enterprise as the traditional rubric has it, but to the ability to generate, or more commonly to acquire, unique assets and maintain their uniqueness. Such assets represent the right to transfers rather than to increase or enhance production. As such they cannot be seen as an enhancement to national capacity. Their tendency, unlike much traditional fixed capital, will be to reinforce rather than to abate inflation. Their measurement as commercial assets is even more vulnerable than are traditional assets to obsolescence. Software products can suddenly and dramatically lose their value.

Labour will become increasingly diverse. The importance of experience and training will mean that an increasing share of the rewards to labour will in effect be returns to embedded capital. What are normally called wages and salaries thus contains and will in future contain more of an element of returns to investment, even though that investment may have been financed by someone else. These will blur the current distinction between factor incomes. The notion of a transfer will need to be applied more widely, and will thus threaten the clarity not only of the allocation of GNP, but of its total. The distinction between returns to factors of production and other income transfers will become vaguer and thus make the total GNP more ambiguous. These issues have all been well rehearsed in the context of the debate on human capital.

The questions policy makers ask about the capacity of the economy remain relevant. The response from economic statistics will therefore have to be further developed for example through more disaggregated analysis of input output. In traditional input output it is almost impossible to distinguish the technologies of service industries like retail or cleansing which use predominantly

unskilled labour and finance or health which use a substantial fraction of qualified labour. Disaggregations along the lines proposed by social accounting matrices will enable this to be clarified and analysed. The idea of coefficients of production independent of scale, as implied in input output, may be hard to sustain. As Goldfinger (1996) puts it, information creates a non-linear world

Welfare

In the introduction we identified two main threads in the use of national accounts - monitoring capacity and monitoring welfare. The previous section discussed the first. In recent years their role on the latter has been subject to sustained attack. National accountants themselves have resisted the idea that GDP measures welfare. Yet critics and more sympathetic analysts continue to look in the accounts for the basis from which welfare can be measured. We have already referred to satellite accounts as the context in which to present new industry and product classifications. They can also be used to develop indicators of welfare. The ability to combine monetary and non-monetary statistics creates the possibility of linking outputs to outcomes and so to welfare.

Section I of Chapter 16 of the SNA 93 explains the difference between outcomes and outputs.

> The output of the health services needs to be clearly distinguished from the health of the community... Similarly the output of the education service is quite different from the level of knowledge or skills possessed by members of the community.

Traditionally national accounts have dealt with links between outputs and inputs. Any attempt to measure welfare must however deal with outcomes rather than outputs. The provision in SNA 93 for satellite accounts can be seen as a way of addressing this. If we are to use satellite accounts to develop wider measures of welfare, then we shall need a framework into which to put them. The strength of the core accounts was that such a framework emerged automatically. Satellite accounts, while employing accounting disciplines as an aid to compilation and drawing more value out of statistics do not provide an overall framework. Because satellites can be put together using a variety of units and without any overall structure which ensures comprehensive coverage and absence of overlaps, they cannot be relied on to measure consistently in the way that the traditional national accounts can. While the SNA specifies the internal structure of each account in such a way as to ensure consistency, it does less to ensure consistency and comprehensiveness between them.

The following two paragraphs can do no more than sketch one of a range of possible ways forward. The suggestion made here is designed more as a provocative illustration of the kind of approach envisaged. There will be many others. Any further work will need to narrow and clarify the options.

One system of economic frameworks which could be developed to cover this wider picture is Amartya Sen's system of functionings, entitlements and capabilities. This system has been developed over an extensive literature, which can only be crudely summarised here. Very roughly a functioning is something like enjoying a meal, and entitlement is access to the means of fulfilling wants and needs. Broadly speaking functionings correspond to consumption and entitlements to income. In industrial countries the main source of entitlement is employment or social security transfers. Both apply however directly both to market transactions and to other influences on human activity and the capacity to make choices. Capabilities refer to the endowments of capacity to earn entitlements and use resources to achieve functions. They are a modifier which transforms activities into functionings. The thought behind these proposals is that functioning can be related to more enduring human needs and wants. Where as in the industrial revolution of the eighteenth and nineteenth century, or in the present development of information, human needs are being met by radically different means. This means that measuring the means of meeting needs may become increasingly difficult, and some more direct assessment of the satisfaction of wants required.

For many activities the appropriate metric of functionings which are the elements of welfare are quality and time. The pattern of time use in terms of sequence and interruptedness may matter, but, crudely, the quality of peoples' lives can be assessed by the amount of time spent doing things about which they feel positive and the things about which they feel negative. Investment in enhanced capability will be an important modifier of the level of welfare to be derived form activities as well as an indication of the capacity to achieve entitlements. The development of a time use framework and welfare metrics based on it, may help to address the need to measure welfare directly as the link between output and outcome becomes more remote.

Sources and uses of economic statistics

So far this paper has discussed the impact of information technology on the nature of the economy and the way in which the changes it brings about might alter the way in which it should be measured. In this section we go further and look at the way in which the technology itself will affect suppliers of data and users of the accounts.

Statistical sources

One of the main sources of concern about intangibility is the speed at which the economy is changing. This underlines the chronic problem faced by economic statisticians, that they cover well traditional parts of the economy and new parts less well. This is to some extent inevitable, but it requires special efforts to overcome when the system appears to be losing relevance. In some ways the national accounts mitigate this problem. A system based purely on measuring production is more vulnerable than one which also monitors expenditure and income. While all these measures suffer to some extent, the possibility of balancing different measures ensures a more general coverage. While we may well fail to survey traders producing new kinds of products, we are less likely to miss consumer spending on them, or employment producing them.

New technology underlines the problems; it may also offer some help. We are already seeing the impact of information technology on the collection of data from traders. In the next few years, the ability of firms to send data electronically and download it from their systems will not only have a substantial impact on compliance costs and the costs of national statistical offices. It may also impact on sample sizes and frequency of monitoring. It may even become possible eventually to monitor the economy more rapidly and at greater frequency. Data supply could also become much more of an interactive process with data being compiled and disseminated along the same links.

It is also possible to envisage similar developments on the personal survey side. Again there are already considerable technical advances in computer aided interviewing, but if households are to become routinely connected to some kind of low cost information network, then the scope for large sample and timely monitoring will also be available.

New policy concerns

The changes in the nature of the economy may have an impact on what are the concerns of policy makers. Here there is probably little value in speculating far. We have already discussed the increasing fragility of the balance of payments and the location of production and value added. Similar concerns will apply to notions of capital stock and the stock of money, while concerns about inflation and the overheating of the economy or the under use of resources will take on very different meanings. A recent example is given by Robert Reich writing in the Financial Times

> More value is added through design, styling, manufacturing-engineering, advertising, marketing servicing selling, consulting, advising. As a result of this continuing shift in the value-added composition of goods and services, increases in the price of materials or energy pose less of an inflationary threat.
>
> *Financial Times September 24th*

Such speculations go far beyond the scope of this paper, but it would seem wise to start the process of thought so that the next SNA can be up to date with what might by the time it has completed its deliberations be the concerns of policy makers.

One example is the problem of inflation. As products become more heterogeneous and change their nature more frequently it will become increasingly difficult to identify something which could be called a cost of living and something which will be called a rate of inflation. Policy makers using cost-of living adjustments for the purposes of calculating benefits are already baffled by the ambiguities that quality change brings into measurement. The concept of inflation has played a range of roles in economic policy, and there has been concern that one indicator cannot necessarily capture all these roles. The use of concepts like entitlement, described in section 5b, may help to sort out the extent to which inflation represents a frustration of expectations, as well as providing a basis for cost of living measurement which is less tied to the technicalities of price indices. Those aspects which reflect a notion of social dislocation may have to seek very different indicators which may or may not come from the national accounts.

The link between money and prices or transaction is likely to be affected by information technology in two ways. The development of electronic money will make the measuring of the money supply even more difficult. The output of the banking sector including central banks will become even more elusive. At the same time, the idea of a stock of money held for transaction purposes which has lain at the heart of much analysis of monetary phenomena is likely to be more unstable and harder to measure - let alone control or target.

Conclusions and recommendations

Information technology is arguably the biggest technical change to the economy since present system of measuring the economy was put in place. Even so, need does not represent a fundamental threat to the system of measurement. National accounts may remain perfectly feasible. What is under threat is the relevance of such accounts to policy and user concerns. It is also likely that the nature of policy concerns will change.

This paper has set out a wide range of problems which affect many aspects of economic statistics and national accounts. These are only sketched in this paper. The paper to the UN meeting made the following suggestions:-

that an expert group be set the task of taking these issues forward. In the first instance it was suggested that this group operate by correspondence with meeting taken when opportunities present. The February 1997 UN Statistical Commission Meeting should establish the membership of the group and set terms of reference along the following lines.

It should set itself an agenda which should examine the following actions.

Data

- Look at the balance of data collection in relation to intangible aspects of the economy
- Review the links between company and national accounts of intangible assets
- Review the implications for data compilation of electronic data capture.

Classification

- Consider the proposals for an information sector as in the NAICS
- Review other classifications in the light of it a parallel development of product and trade classification should also be considered.

Links between accounts and users

- Consider the application of disaggregated input output to capacity measurement
- Review the role of Aexternal@ satellites in welfare measurement
- Design a comprehensive framework for different satellites.

Policy

- Hold discussions with policy makers and analysts on the likely development of policy concerns.

General

- Seek ways of restoring confidence in national accounts by expounding the strengths and limitations of accounts.

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