OFFICE FOR NATIONAL STATISTICS

Economic trends

No. 548
July 1999

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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 February, May, August and November. Occasional articles comment on and analyse economic statistics and introduce new series, new analyses and new methodology.

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

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

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

Notes on the tables

1. All data in the tables and accompanying charts is current, as far as possible, to 28 June 1999.

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

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

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

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

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

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

8. 'Billion' denotes one thousand million.

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

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

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

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

10. Symbols used:

.. not available

- nil or less than half the final digit shown

+ alongside a heading indicates a series for which measures of variability are given in the table on page T79

† indicates that the data has been revised since the last edition; the period marked is the earliest in the table to have been revised

* average (or total) of five weeks.

If you have any comments or suggestions about *Economic trends,* please write to Adele Barklem, ONS, Zone D4/16, 1 Drummond Gate, London, SW1V 2QQ or e-mail adele.barklem@ons.gov.uk

Office for National Statistics
July 1999

Articles published in *Economic trends*

Regular articles

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

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

Regional economic indicators. Commentary, figures and charts are published every February, May, August and November.

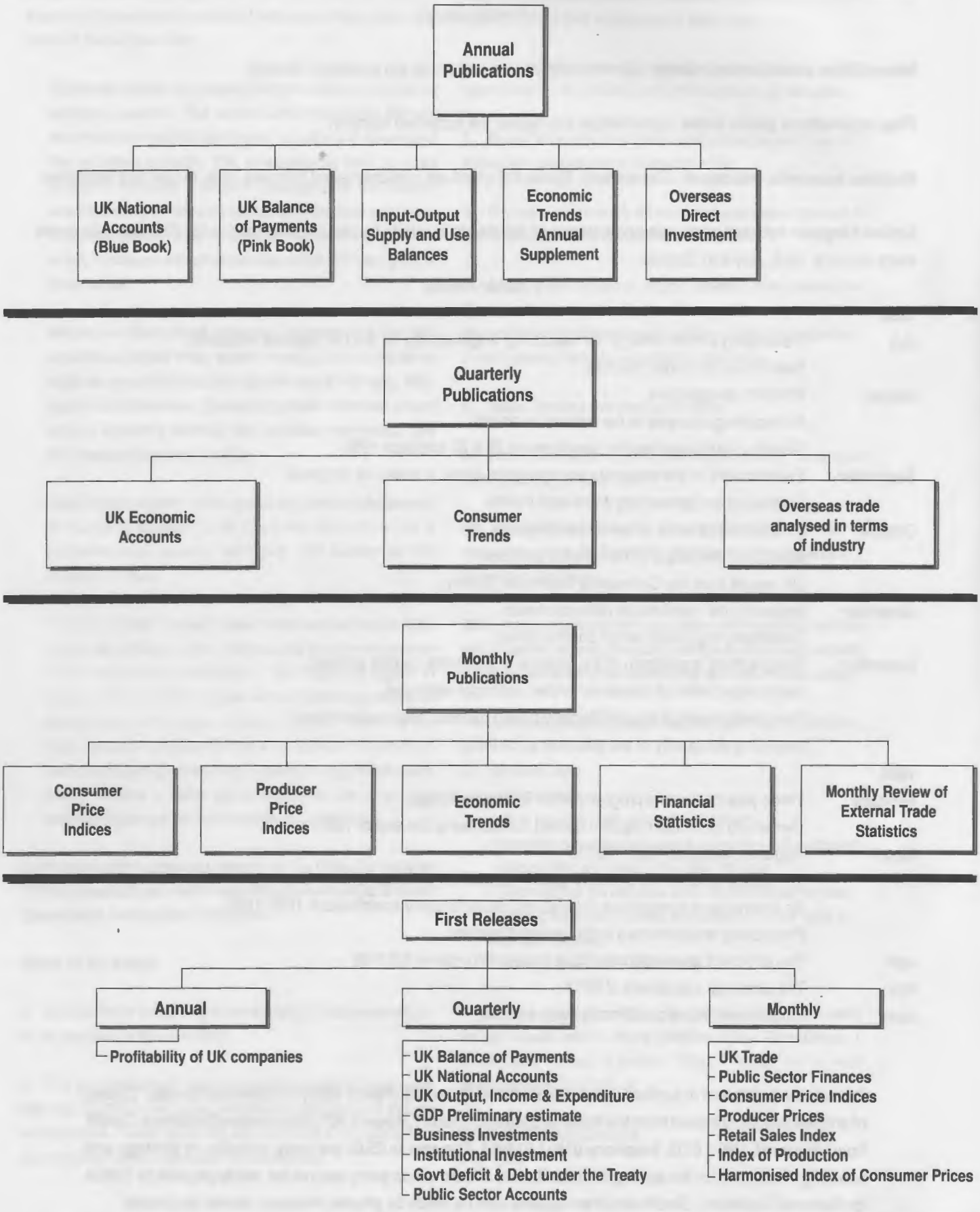
United Kingdom national accounts and **balance of payments** quarterly figures are published in *UK Economic Accounts* every January, April, July and October.

Other Articles

1998	
July	Developing a methodology for measuring illegal activity for the UK National Accounts.
	New format for public finances.
August	PPI/RPI comparisons.
	Forthcoming changes to the national accounts.
	Research and experimental development (R & D) statistics 1996.
September	Development of the corporate services price index: a review of progress.
	Estimating and presenting short-term trends.
October	Environmental taxes in the United Kingdom.
	Measuring the output of non-market services.
	UK results from the Community Innovation Survey.
November	Improving the non-finance balance sheets.
	Developing the public sector balance sheet.
December	Geographical breakdown of the balance of payments current account.
	Harmonised index of consumer prices: historical estimates.
	The development of a Land Registry-based national house price index.
	Improving the quality of the producer price index.
1999	
February	Three year ownership programme on RPI methodology.
	Ownership of United Kingdom quoted companies at the end of 1997.
March	Regional Accounts 1997: Part 1.
	The capital stock of the United Kingdom - some new developments in coverage and methodology.
	An international comparison of taxes and social security contributions 1986-1996.
	Productivity measurement in the United Kingdom.
April	The effects of taxes and benefits in household income 1997-98
May	The seasonal adjustment of RPIY.
June	Employment in the public and private sectors.

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, NP10 8XG, telephone 01633 812973. The cost is £5.00 per copy inclusive of postage and handling. A cheque for the appropriate remittance should accompany each order, made payable to 'Office for National Statistics'. Credit card transactions can be made by phone; invoices cannot be issued.

United Kingdom Macro-Economic Statistics Publications



***Other publications:** - Retail Prices 1914-1990 - Labour Market Trends - National Accounts Concepts, Sources and Methods - Sector Classification Guide for the National Accounts - Share Ownership - Financial Statistics Explanatory Handbook*

In brief

Articles

This month we feature three articles.

Anna Brueton of ONS outlines the ONS plans for the 1999 and 2000 Blue and Pink Books. In the 1999 *Blue Book* the format of the accounts is unchanged, but will include some additional material including two new chapters, one focusing on the European Union, the other on Enviromental Accounts. Issues for *Blue Book* 2000 are also covered, including new procedures for reviewing new methodology and more detailed industry analyses of gross fixed capital formation and of output, intermediate consumption, gross value added and capital consumption. Further developments beyond *Blue Book* 2000 are also outlined including regional accounts and derived input-output tables *(page 25).*

Nadim Ahmad of ONS explains the development of Constant Price Input-Output Supply-Use Balances. This at present ensures consistency in estimates of expenditure and output constant price GDP, but does not on its own ensure that constant price estimates of lower level aggregates and their associated deflators. The various benefits of compiling national accounts using constant price input-output supply use tables are outlined. After describing the accounting framework used in the constant price system, the present balancing process is described and the reasons for and resolution of imbalances discussed. Integration plans for incorporating constant price input-output into the national accounts schedule are outlined. Finally after defining the inconsistency and considering its causes, plans to correct it are summarised *(page 29).*

Robert Heath of the Bank of England's Centre for Central Banking Studies discusses Financial Market data for International Financial Stability. A number of financial crises in the 1990's, have emphasised the need for good quality and timely economic and financial data. This allows investors to make better informed decisions and highlights potential problems earlier, thus reducing the likelihood of sudden shocks with a consequential impact on the real economy. User's needs include traditional economic data series e.g. GDP and flow of funds data, and data on risk exposures of an economy. The latter category includes information on debt, banking sector indicators and new instruments such as derivatives. Finally the issues facing data providers are discussed *(page 37).*

Regional Accounts 1997: Part 2 due to have been published in this edition, should now be published in the August edition. This is mainly because a new regional breakdown of Household expenditure has had to be produced with the move to ESA95.

Changes to Tables

Table 4.5A – ILO Unemployment rates

This now contains seasonally adjusted data.

ECONOMIC UPDATE – JULY 1999

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

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Overview

Official figures continue to paint a mixed picture of activity in the economy, while forward looking private sector surveys continue to suggest a strong recovery in both business optimism and consumer confidence from a trough at the end of 1998. First quarter GDP is now estimated as being broadly unchanged on quarter four. Underlying this, some service industries and investment have slowed and profits have fallen, while the rate of decline of manufacturing output has eased. The latest retail sales figures give evidence of a further pick up in demand. Export growth to EU countries continues to slow sharply although there is evidence of a bottoming out of the decline in exports to SE Asia. The latest figures show employment growth slowed into the start of 1999 and - despite being at a nineteen year low - the unemployment trend remains flat. On prices, earnings growth has fallen back, retail goods and producer price inflation continued to fall, and only services prices show any evidence of inflationary pressure.

Indicators included	
UK Output, Income and expenditure – Q1	*Money supply – April*
Index of production – April	*Consumer credit – April*
CIPS reports on manufacturing and services – May	*Public sector net borrowing –May*
Retail sales – May	*Labour market statistics –February - April*
CBI distributive trades survey – May	*Consumer prices – May*
UK external trade – April/ May	*Producer prices – May*

GDP Activity

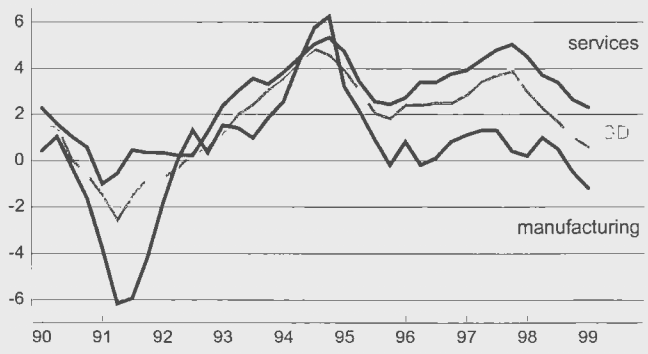
GDP growth at constant market prices in the first quarter of 1999 is estimated to be broadly unchanged compared with the previous quarter, with annual growth falling to 0.7 per cent compared to 1.1 per cent in quarter four (chart 1).

Chart 1

GDP

seasonally adjusted

year on year percentage change, quarters



Output breakdown

Underlying the first quarter figure was a further decline in the rate of growth of service industries, which were estimated to have grown by 0.4 per cent compared with 0.5 per cent into quarter four. The corresponding annual rate fell to 2.3 per cent from 2.6 per cent (chart 1). The slowdown in the quarterly rate was most marked in business services and finance.

Within GDP, manufacturing output showed a fall of 0.3 per cent into the first quarter. The subsequent index for April came in at the same level as the March figure, and the estimate for growth in the three months to April, compared with the previous three months, is now flat. Charts 2 and 3 show percentage changes for the main published industrial categories; we see pick-ups in the latest three months for most industries.

The only industry where the three monthly change in April is lower than the equivalent figure for March is engineering and allied industries. These industries account for a quarter of manufacturing output and have been the main area of growth over the past two years

Chart 2

Output of Manufacturing Industries

seasonally adjusted

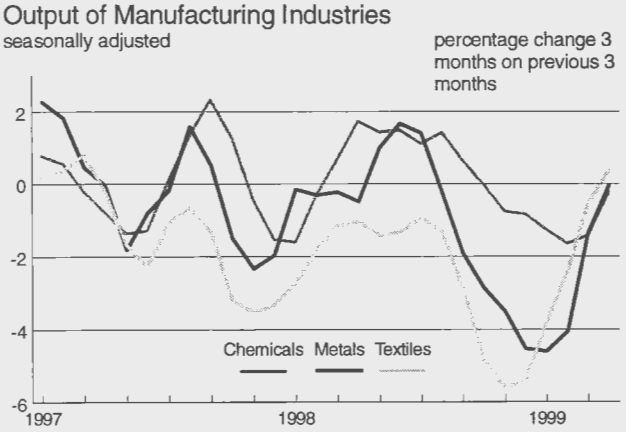
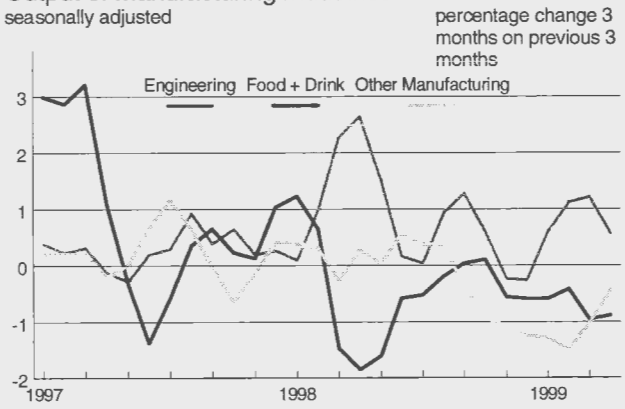


Chart 3

Output of Manufacturing Industries

seasonally adjusted



External surveys of business confidence largely continue to show improvements for both services and manufacturing industries. For example, the May CIPS Purchasing Managers' Index for the manufacturing industry rose for the seventh month in a row, although it continues to show a contraction overall (the index remains below 50). The same index for the service sector shows the third consecutive monthly rise in activity, although a lower increase than in the previous three months (chart 4).

Chart 4

CIPS - Purchasing Managers' Index

seasonally adjusted

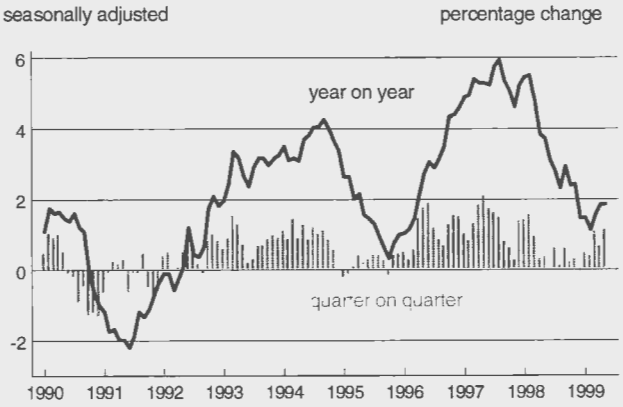
Domestic demand

Retail sales in the three months to May rose by 1.1% compared with the previous three months, up from the growth in the three months to April of 0.6% (chart 5). Annual growth in the three months to May was 1.9% compared to 1.8 % in the three months to April.

Chart 5

Retail Sales

seasonally adjusted



The growth in these series has now picked up from a low point at the end of 1998 and this echoes the strong revival in consumer confidence in the wake of base rate cuts by the Bank of England. These movements are broadly echoed by the May CBI retailing figures which show a rise in the volume of sales between April and May and increased optimism into June.

External demand and supply

The May 1999 trade data show the UK's deficit with the rest of the world rising to £1.4 billion compared with the revised deficit of £1.0 billion in March. The surplus on services of £0.8 billion continues to support the overall balance given the deficit on goods of £2.2 billion.

Chart 6 shows index numbers of UK exports, excluding oil and erratic items, with non-EU and EU countries. The EU figures show a steep decline in export performance over the last six months. The non-EU figures are more erratic at the moment, with a high March due to exports to North America, but the figures after this show some levelling off in the decline in exports to South East Asia.

Chart 6
Exports Volumes
seasonally adjusted

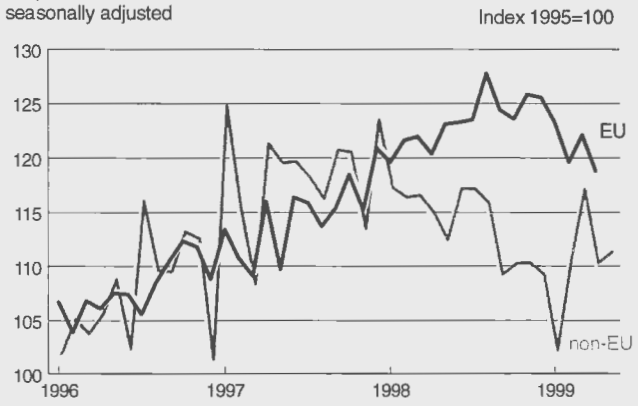


Chart 7 portrays UK exports to SE Asian countries on their own (although note they are value figures at current prices). These figures again demonstrate a levelling off, although it is perhaps too early to infer a recovery, particularly because the latest figures may have been distorted by the rise seen in oil prices. Imports continue their reasonably strong growth as advantage is taken of the strong pound.

Chart 7
Exports to SE Asia
seasonally adjusted

Monetary indicators and government finances

Broad money growth (M4) in May fell back to 7.0 per cent compared with the sharp increase to 7.3 per cent in April. The annual growth of narrow money (M0) in May increased to 6.6 per cent compared to 5.9 per cent in April; the third monthly increase in a row.

Consumer borrowing in April, as measured by gross consumer credit, fell back a little to £11.7 billion, from £12.5 billion in March. The annual growth in the three months to April, at 10.4 per cent, was above the corresponding figure for March of 10.0 per cent but remains well below the peak in rates of 20.5 per cent seen in the three months to March 1998.

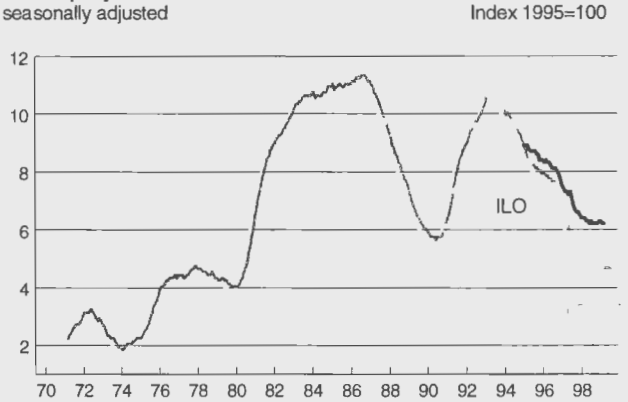
Public sector net borrowing data now reflects the early transactions in the new financial year 1999-2000. Over the year the Chancellor has forecast borrowing of £4.3 billion compared with an estimated repayment of £5.1 billion in 1998-99. The outturn data to May shows net borrowing of £3.5bn compared with £4.0bn in the same period of the previous financial year.

Labour Market

There is now evidence of a slowdown in employment growth in the labour market, echoing the earlier slowdown in the level of unemployment. The Labour Force Survey (LFS) data for February – April 1999 shows the employment rate of 73.9 per cent at the same level as in the previous three months. Similarly the quarter one figure for the employer survey based Workforce Jobs series was unchanged on the fourth quarter. Underlying these figures manufacturing employment fell by 1.2 per cent between the fourth and first quarters, while services employment rose by 0.2 per cent. The latter figure has now slowed quite markedly since its recent peak in the third quarter of 1998.

According to the claimant count, unemployment in May was 1.285 million, a rate of 4.6 per cent; this is the lowest level of claimant count unemployment since June 1980 (chart 8). However despite some moderate improvements in the latest months, the trend in both the claimant count and ILO unemployment seems to be largely flat.

Chart 8
Unemployment
seasonally adjusted



Following speculation about a pick up in average earnings growth, the headline rate fell back in April to 4.6 per cent from 4.8 per cent in March. Slower rates of growth were seen in both manufacturing and the service sector.

Prices

Inflation fell further into May 1999, with the headline RPI at 1.3 per cent compared with 1.6 per cent in April. RPIX, the government's target measure, fell to 2.1 per cent compared with 2.4 per cent in April.

Chart 9 shows the goods / services split underlying the headline rates. Goods inflation has been falling steadily since the end of 1995 with the May figure showing annual growth of 0.9 per cent. Over the same period services inflation actually increased and then flattened out at around 3.3 per cent over the latest year. This reflects both the contrasting performance of the two sectors and the effect of falling commodity prices on the manufacturing sector.

Chart 9
Retail Prices
seasonally adjusted
year on year percentage change

Despite recent increases to the price of oil, headline producer price inflation fell in the latest month. In May, output prices rose at an annual rate of 0.9 per cent compared with 1.0 per cent in April. Similarly, input prices fell by 2.6 per cent compared with a fall of 1.1 per cent in April. Chart 10 shows index numbers for producer prices excluding food, beverage, tobacco and petroleum products. Input prices are seen to have fallen by nearly 20 per cent since 1995, while output prices have fallen but to a lesser extent over the same period. Index numbers in the latest periods give little indication of a change in trend. Overall it seems that inflationary pressures continue to remain very subdued.

Chart 10
Producer Prices
seasonally adjusted
Index 1995=100

Forecasts for the UK Economy

A comparison of independent forecasts, June 1999

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

	Independent Forecasts for 1999		
	Average	Lowest	Highest
GDP growth (per cent)	0.8	-0.2	1.8
Inflation rate (Q4: per cent)			
- RPI	1.2	0.7	2.2
- RPI excl MIPs	2.2	1.7	2.9
Unemployment (Q4, mn)	1.43	1.20	1.60
Current Account (£ bn)	-8.2	-14.9	0.6
PSNB *(1999-00, £ bn)	3.4	-5.6	9.2

	Independent Forecasts for 2000		
	Average	Lowest	Highest
GDP growth (per cent)	2.1	0.6	3.1
Inflation rate (Q4: per cent)			
- RPI	2.6	1.4	3.8
- RPI excl MIPs	2.4	1.7	3.0
Unemployment (Q4, mn)	1.50	1.10	1.84
Current Account (£ bn)	-10.7	-26.6	-2.1
PSNB* (2000-01, £ bn)	7.2	2.9	15.0

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 27 variables and is published monthly by HM Treasury, available on annual subscription, price £75. Subscription enquiries should be addressed to Miss C T Coast-Smith, Public Enquiry Unit, HM Treasury, Room 110/2, Parliament Street, London SW1P 3AG (Tel: 0171-270 4558). It is also available at the Treasury's internet site: http://www.hm-treasury.gov.uk.

* PSNB: Public Sector Net Borrowing.

International Economic Indicators – July 1999

by Brian Golden, Macro-Economic Assessment - Office for National Statistics

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Overview

After a period of falling rates of inflation, there are signs of increased inflationary pressure impacting in April 1999. European economic expansion slowed in the fourth quarter of 1998 with significant divergences between France and Germany. In the first quarter of 1999, US retail sales volumes increased still further though production growth fell. At the same time, Japan showed signs of improvement in production and, in particular, retail sales.

EU15

The economies of the EU15 together grew by 2.7 per cent in both 1997 and 1998. However, the rate of growth slowed in the final quarter of 1998 to an annual rate of 2.2 per cent. This ended a period of robust growth that began in the second quarter of 1997. The slowdown primarily reflected a considerable fall in export volumes, though declining contributions from consumption and investment were also significant. Import volumes also fell but to a much lesser extent than the decline in exports. Consequently, the trade balance of the EU15 deteriorated though it remains a substantial surplus.

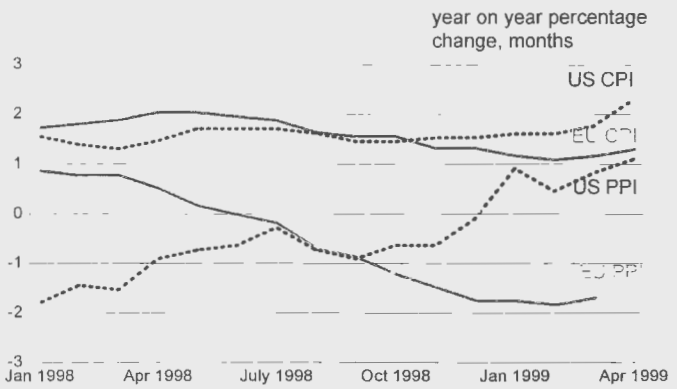
Industrial production slowed again in the first quarter of 1999, having slowed considerably in the previous quarter. This coincides with declining business confidence evident in European Commission surveys. German industrial production is acting as a significant negative drag on industrial production for the EU15.

The strong contribution of private consumption to economic expansion in 1997 and 1998 has been underpinned by buoyant retail sales. Growth in retail sales was flat in January from the previous month but February showed an improvement. European Commission surveys suggest that consumer confidence has been high throughout 1998 and the first quarter of 1999. Indications for domestic and external demand show that positive economic growth in the EU15 may be increasingly reliant on the former.

Producer prices deflated at an annual rate of 1.8 per cent in the first quarter of 1999. This was in contrast to US annual producer prices which inflated over the same period. Annual growth in both consumer and producer prices declined throughout 1998 and into 1999. However, growth rates for March and April 1999 tentatively suggest that these declines may have culminated.

Chart 1

Consumer and Producer Prices



The rate of unemployment remained at 9.6 per cent in April 1999 for the third month in a row. However, this is 0.5 percentage points below its rate of 10.1 per cent in April 1998 and is the lowest rate for the EU15 since the November 1992. Unemployment remains high when compared with the US or Japan though.

Germany

The pace of economic expansion in Germany fluctuated quite widely throughout 1998. The strongest contributors to annual growth of 2.5 per cent for the year were exports, changes in stock and private consumption. The German economy contracted in 1998 quarter four by 0.4 per cent, having grown by 0.9 per cent in the previous quarter. This was mainly due to external demand which fell as exports declined substantially, only partially offset by falling imports. Despite this, Germany's trade balance remains strongly positive. Sharp declines in investment and government spending growth, which resulted in negative GDP contributions, were primarily responsible for depressing domestic demand. Private consumption made a positive contribution of 0.5 per cent to GDP in quarter four.

The decline in the index of production, increasingly in evidence as 1998 progressed, has continued into the first quarter of 1999. Quarterly growth for the first quarter was negative with a decline of 0.9 per cent following on from a decline of 2.2 per cent in 1998 quarter four. An accumulation of stock resulting from strong stockbuilding through 1997 and 1998 may be precipitating some of the fall in production. The decline in production is also in line with pessimistic business sentiment, evident in business surveys.

Retail sales grew by 1.3 per cent in the first quarter of 1999 from the previous quarter. Although retail sales figures have recently been quite volatile in Germany, positive growth in quarter one is in line with strong consumer confidence as indicated in consumer surveys.

The annual inflation rate fell to just 0.3 per cent in the first quarter of 1999. This is the lowest rate since quarter two of 1987. However, the annual rate rose from 0.2 to 0.4 per cent from February to March, and April saw a further rise to 0.7 per cent. This coincides with similar rises in consumer price inflation rates in other G7 countries following gradually declining rates in the latter half of 1998. The price of oil increased substantially in late February and March in the wake of an OPEC agreement. This may be feeding into producer prices which could in turn be driving up consumer price indices.

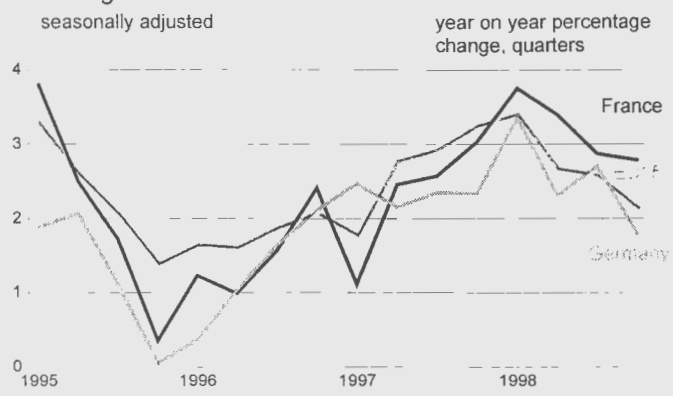
The rate of unemployment declined for the fifth consecutive quarter in quarter one, to a rate of 9.0 per cent. This rose to 9.1 per cent in April though it remains to be seen whether or not this simply represents a temporary blip in a declining trend.

France

In contrast to the German economy, quarterly GDP growth for France was 0.7 per cent in the final quarter of 1998. Export volumes fell sharply in the quarter in both countries. However, the offsetting effect of a decline in imports was greater in France. The other main differences were in investment and government spending. Investment made a positive contribution to French GDP compared with a negative contribution to German economic expansion. Government spending remained relatively stable in France also, while it declined substantially in Germany.

Chart 2

GDP growth



Production declined by 0.6 per cent in the first quarter of 1999 and has slowed considerably since the second quarter of 1997. This coincides with a sharp deterioration in business confidence since the middle of 1998. It follows impressive production growth in 1997 and in the first half of 1998.

The slowdown in industrial output contrasts with indicators of domestic demand. Private consumption did not fall in quarter four and so continued to contribute strongly to GDP growth, as it did throughout 1998. Strong retail sales volumes since the middle of 1997 have been reflected in private consumption. Volumes were particularly high in the fourth quarter of 1998. These levels were consolidated in the first quarter of 1999. These volumes are, in turn, supported by consumer confidence, which contrasts with that of business. It has risen since the start of 1998 and is now well above its long-term trend.

Despite strong retail sales volumes, annual consumer price inflation fell to a historically low level of 0.3 per cent in quarter one. Consumer prices seem to have been depressed by relatively strong deflation in producer prices. Producer prices declined by an annual rate of 2.9 per cent in the first quarter of 1999, compared with a decline of only 1.8 per cent for the EU15. Consumer price inflation has declined steadily since the middle of 1998 despite strong retail sales growth. The rise in oil prices has not yet become apparent in producer prices.

Unemployment is falling in France at a similar pace to that of the EU15. However, at 11.4 per cent in quarter one, the French unemployment rate still exceeded the EU average, by 1.8 percentage points.

Italy

After a period of disappointing growth in the light of the performance of the EU15, the Italian economy expanded steadily in the second and third quarters of 1998. Private consumption contributed strongly to GDP growth in both quarters. Despite rises in private consumption and investment in the third quarter, domestic demand declined as the contribution of stock changes fell by 0.9 per cent. This was counteracted by an improvement in the trade balance where a decline in exports was more than offset by a considerable decline in imports.

Production grew by 0.2 per cent in the first quarter of 1998 from the previous quarter. This represents a turnaround from a decline of 0.5 per cent in the third quarter which accelerated into a decline of 1.2 per cent in the fourth quarter of 1998. The contribution of changes in stock declined considerably in the third quarter of 1998 due to the amount of stock accumulation declining from a very high level in quarter two. Accumulation of stock was still strong in quarter three though. Thus, pressures on production caused by stock accumulation remain a significant risk in Italy.

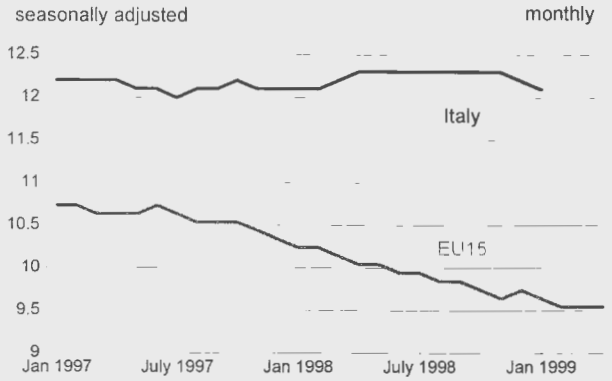
Retail sales fell in the third quarter of 1998 but still grew at an annual rate of 2.7 per cent. Volumes recovered in the fourth quarter with the annual rate reaching 4.5 per cent. It should be noted that retail sales volumes do not seem to bear a strong relationship to private final consumption in the Italian data.

Consumer price inflation fell by 0.2 percentage points in the first quarter of 1999 to an annual rate of 1.3 per cent. This was close to the rate for the EU15. However, the rate crept up from 1.2 per cent in February to 1.4 per cent in March, and 1.6 per cent in April. Signs of increasing wage pressures in the first two months of 1999 might be having an effect. Oil prices could also be a factor though the March rate of decline in producer prices matched that of February. Producer prices fell at an annual rate of 1.7 per cent in the first quarter of 1999, which was close to the rate for the EU15.

The unemployment figures have been revised back to the third quarter of 1997. The figures have all been revised upward, by between 0.3 and 0.4 percentage points. The steady decline in the unemployment rate of the EU15 since the second half of 1997 has not been matched in Italy. Throughout this period, the rate remained stubbornly high between 12.0 and 12.3 per cent. It remains to be seen if the decline of 0.2 percentage points in the rate between November 1998 and January 1999, to 12.1 per cent, represents the start of a downward trend.

Chart 3

Unemployment rates



USA

The US economy expanded strongly in the first quarter of 1999, with annual GDP growth of 3.9 per cent. This growth was driven by buoyant domestic demand. Private consumption and investment both made very strong contributions to GDP growth. Trade contributed negatively as the trade balance widened further. Quarterly growth in 1999 quarter one was negative for exports but strongly positive for imports. This is not surprising in the light of the relative strength of the US dollar.

Buoyant domestic demand has been driven by strong growth in retail sales since 1992, fuelling above trend GDP growth. Retail sales volumes grew particularly strongly in 1998. This pace of growth accelerated into the first quarter of 1999 with quarterly growth of 3.8 per cent and an annual growth rate of 8.9 per cent. Domestic credit has grown considerably since 1992 and particularly in 1998. Indications for the first four months of 1999 are that credit growth may have peaked in December 1998, though it is too early to draw firm conclusions.

Industrial production growth has been much lower since the start of 1998 than in 1997. In 1997, 6.0 per cent growth may have contributed to a build up of stocks. Since then, production growth has slowed though it remained high relative to the EU and Japan. Monthly growth picked up in March and April of 1999.

Consumer price inflation rose in quarter one to an annual rate of 1.7 per cent. Producer prices also rose, by an annual rate of 0.7 per cent having deflated on annual rates since the middle of 1997. However, both rates of inflation have risen notably between February and April. Earnings pressure had been particularly moderate from October 1998 to February 1999. However, the annual rate of earnings growth increased from 1.6 per cent in February 1999 to 3.2 per cent in May. This increased earnings

growth, strong retail sales, a tight labour market and increased oil prices are all potential explanations for higher US inflation.

Employment fell by 0.6 per cent in the first quarter of 1999. However, this largely reflects a 1.0 per cent fall in January 1999 from December 1998. Monthly growth in employment has been positive in each of the following four months. Annual rates of employment growth in 1999 are not far from an average rate of employment growth of 1.8 per cent in the US since 1961. In the longer term, employment, and GDP, growth has been boosted by a rapidly growing labour force.

The unemployment rate fell to 4.2 per cent in May 1999. Excluding March 1999, this is the lowest rate in the US since February 1970 and represents a further tightening of the labour market.

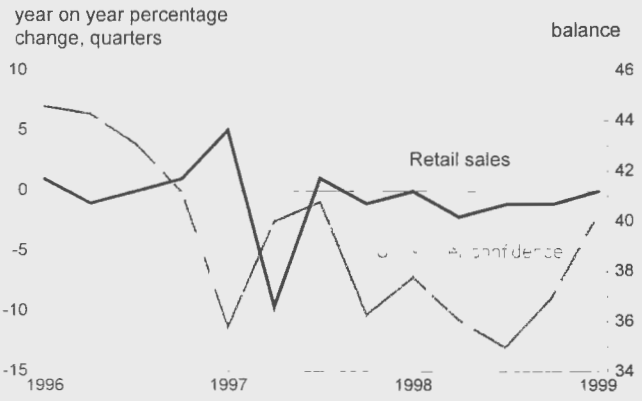
Japan

The Japanese economy contracted by 0.8 per cent in the fourth quarter of 1998. This represented the fifth consecutive quarter in which the economy shrunk. The main sources of contraction were exports and, in particular, capital formation. Declining exports are likely to reflect economic contraction in much of South East Asia. Depressed domestic demand has meant that imports have also declined. Consequentially, the trade balance still records a large surplus. Private consumption made no contribution to GDP in the fourth quarter. This contrasts with the positive role played by private consumption in European and, in particular, in US economic expansion.

However, there may be some signs of improvement for the first quarter of 1999. Industrial production grew by 0.4 per cent from the previous quarter. Business confidence remains low according to surveys.

Retail sales volumes also increased over the quarter, by 0.7 per cent. This represents a turnaround from a decline in retail sales volumes of 2.2 per cent in the previous quarter. This coincides with a significant rise in consumer confidence in surveys in quarter one. Monthly growth in April was also positive. These are positive indicators for the likely contribution of private consumption to GDP in the first quarter.

Chart 4
Japan - retail sales and consumer confidence



Annual consumer prices fell for the third consecutive month in April 1999, though the rate of decline fell from 0.5 per cent in March to 0.1 per cent in April. The annual rate of decline in producer prices lessened from a peak of 2.2 per cent in January to 1.9 per cent in April. The improvement in etail sales may be having an influence. Earnings are showing signs of recovery, having declined considerably in 1998. Annual earnings growth in March has been revised from a decline of 1.6 per cent to growth of 0.9 per cent and annual growth in April was 0.8 per cent.

The labour market worsened considerably in 1999 quarter one as employment fell by 1.7 per cent on the previous quarter. However, monthly growth in employment was positive in April and the annual rate of decline fell to 1.0 per cent. Unemployment has risen considerably in the first four months of 1999 from 4.4 per cent in December 1998 to a post-war high of 4.9 per cent in April 1999. This is significantly in excess of the US rate of unemployment, for the first time in decades.

Notes

The series presented here are taken from the OECD's Main Economic Indicators and are shown for each of the G7 (except the UK) economies and for the European Union (EU15) countries in aggregate. The definitions and methodologies used conform to SNA 68.

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

1 European Union 15

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier														
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1990	3.0	1.7	0.4	0.9	–0.1	1.7	1.6	2.0	1.2	5.7	2.5	6.6	1.6	8.1
1991	1.2	1.4	0.4	0.2	–0.2	0.4	0.9	–0.3	1.8	5.2	2.2	6.8	0.3	8.4
1992	1.0	0.9	0.4	–0.2	–0.1	0.9	0.9	–1.3	0.2	4.4	1.3	5.8	–1.7	9.1
1993	–0.5	–	0.2	–1.4	–0.4	0.4	–0.8	–3.4	–1.2	3.6	1.4	4.2	–2.0	10.7
1994	3.0	1.1	0.2	0.5	0.8	2.5	2.1	4.9	–0.5	3.0	2.2	3.8	–0.2	11.1
1995	2.4	1.1	0.2	0.7	–	2.5	2.1	3.5	–0.2	3.2	4.5	4.1	0.7	10.7
1996	1.8	1.2	0.3	0.4	–0.4	1.7	1.3	0.5	0.7	2.5	0.7	4.1	0.6	10.8
1997	2.7	1.3	–	0.6	0.4	3.2	2.8	4.1	2.9	2.0	0.9	3.0	0.7	10.7
1998	2.7	1.7	0.2	1.0	0.5	1.9	2.5	3.3	3.2	1.7	–0.3	2.9	1.4	10.0
1997 Q1	1.8	0.9	0.1	0.6	–0.3	2.1	1.6	2.0	2.0	2.1	0.3	3.8	0.4	10.8
Q2	2.8	1.4	–	0.5	0.5	3.3	3.0	3.8	3.0	1.7	0.7	2.3	0.7	10.7
Q3	3.0	1.2	–	0.6	0.6	3.8	3.2	5.0	3.0	2.0	1.4	3.0	0.8	10.6
Q4	3.3	1.6	–0.1	0.8	0.7	3.4	3.2	5.8	3.7	2.1	1.3	3.0	0.9	10.5
1998 Q1	3.5	1.7	0.2	1.3	0.6	3.0	3.4	5.3	3.5	1.8	0.8	2.2	1.4	10.3
Q2	2.7	1.5	0.2	0.8	0.7	2.3	2.8	4.2	2.6	2.1	0.3	3.7	1.2	10.1
Q3	2.6	1.8	0.2	1.0	0.4	1.5	2.4	2.8	2.9	1.7	–0.6	2.9	1.4	9.9
Q4	2.2	1.6	0.3	0.8	0.3	0.6	1.5	1.0	3.4	1.4	–1.5	2.9	1.4	9.8
1999 Q1	..	..	..	..	..	..	..	–0.1	..	1.2	–1.8	..	..	9.6
1998 Apr	..	..	..	..	..	..	..	4.1	1.9	2.1	0.5	..	..	10.1
May	..	..	..	..	..	..	..	4.7	2.9	2.1	0.2	..	..	10.1
Jun	..	..	..	..	..	..	..	3.8	2.9	2.0	–	..	..	10.0
Jul	..	..	..	..	..	..	..	2.9	2.9	1.9	–0.2	..	..	10.0
Aug	..	..	..	..	..	..	..	3.2	2.9	1.7	–0.7	..	..	9.9
Sep	..	..	..	..	..	..	..	2.6	2.9	1.6	–0.9	..	..	9.9
Oct	..	..	..	..	..	..	..	1.5	1.9	1.6	–1.2	..	..	9.8
Nov	..	..	..	..	..	..	..	1.6	4.8	1.3	–1.5	..	..	9.7
Dec	..	..	..	..	..	..	..	–0.2	3.8	1.3	–1.7	..	..	9.8
1999 Jan	..	..	..	..	..	..	..	0.8	0.9	1.2	–1.8	..	..	9.7
Feb	..	..	..	..	..	..	..	–0.4	2.8	1.1	–1.8	..	..	9.6
Mar	..	..	..	..	..	..	..	–0.5	..	1.2	–1.7	..	..	9.6
Apr	..	..	..	..	..	..	..	..	..	1.3	..	..	..	9.6

Percentage change on previous quarter										
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ	ILIT
1997 Q1	0.5	0.3	–	–0.1	0.3	0.4	0.4	1.2	1.7	–1.0
Q2	1.3	0.6	–	0.4	0.3	1.3	1.3	1.6	1.3	1.1
Q3	0.7	0.2	–	0.2	–0.1	1.3	0.7	1.9	0.3	0.7
Q4	0.7	0.5	–0.1	0.3	0.3	0.4	0.8	1.0	0.4	0.1
1998 Q1	0.7	0.4	0.2	0.4	0.2	–	0.6	0.7	1.5	–0.5
Q2	0.6	0.3	–	–0.1	0.3	0.7	0.7	0.5	0.4	0.9
Q3	0.7	0.5	0.1	0.4	–0.4	0.4	0.3	0.5	0.6	0.9
Q4	0.3	0.3	–	0.2	0.1	–0.4	–0.1	–0.8	0.9	0.1
1999 Q1	..	..	..	..	..	..	..	–0.4	..	..

Percentage change on previous month		
	ILKF	ILKP
1998 Apr	0.2	–
May	–0.3	–
Jun	0.3	1.9
Jul	1.2	–
Aug	–0.7	–0.9
Sep	–0.6	–
Oct	0.4	0.9
Nov	–0.5	0.9
Dec	–0.6	–0.9
1999 Jan	0.6	–
Feb	–0.6	0.9
Mar	0.3	..
Apr	..	..

GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
Imports = Imports of goods and services
IoP = Industrial Production
Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total labour force

Source: OECD - SNA68

2 Germany

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier														
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1990	..	..	..	..	..	..	..	5.2	7.8	2.7	2.1	5.0	2.8	4.8
1991	..	..	..	..	..	..	..	3.3	5.8	4.1	2.0	6.0	1.9	4.2
1992	1.8	1.4	0.8	0.6	–0.4	–0.4	0.3	–2.6	–2.1	5.0	2.0	5.3	–1.3	4.5
1993	–1.2	0.2	–0.1	–1.3	–0.2	–1.2	–1.5	–7.5	–4.3	4.5	–	5.3	–1.1	7.9
1994	2.8	0.7	0.4	0.8	0.8	1.9	1.9	3.5	–0.7	2.7	–	3.5	–0.4	8.4
1995	1.3	1.1	0.4	–	–0.1	1.7	1.9	1.0	1.4	1.7	2.9	4.0	–0.1	8.2
1996	1.3	0.8	0.5	–0.2	–0.4	1.4	0.8	0.7	–0.3	1.4	–	3.4	–0.4	8.9
1997	2.3	0.3	–0.1	–	1.3	3.1	2.3	3.7	–0.5	1.9	1.0	1.1	–0.4	9.9
1998	2.5	1.1	0.1	0.2	1.4	1.4	1.8	4.5	0.9	1.0	–0.9	1.5	0.5	9.4
1997 Q1	2.5	0.1	0.2	0.9	1.0	2.2	2.0	2.8	–1.0	1.8	–	1.6	–0.6	9.6
Q2	2.2	0.8	0.1	–0.3	0.6	3.1	2.1	3.5	1.0	1.5	–	0.4	–0.5	9.9
Q3	2.4	–0.2	–0.3	–0.2	1.9	3.9	2.7	3.6	–2.0	2.3	1.0	1.4	–0.4	10.1
Q4	2.3	0.5	–0.6	–0.2	1.7	3.2	2.3	5.1	–	2.1	1.0	1.0	–0.1	10.1
1998 Q1	3.4	1.1	0.1	0.9	0.6	2.6	2.0	6.6	2.7	1.2	1.0	0.4	0.2	9.8
Q2	2.3	0.3	–0.1	–0.1	2.5	2.2	2.4	5.1	–2.6	1.4	1.0	2.1	0.4	9.5
Q3	2.7	1.4	0.1	0.2	1.6	1.0	1.6	5.1	1.4	0.7	–0.9	1.2	0.7	9.3
Q4	1.8	1.4	0.3	–0.1	1.1	–	1.0	1.5	2.0	0.4	–0.9	2.2	0.7	9.1
1999 Q1	..	..	..	..	..	..	..	–1.8	–	0.3	..	..	..	9.0
1998 Apr	..	..	..	..	..	..	..	5.5	–5.7	1.5	0.4	..	..	9.6
May	..	..	..	..	..	..	..	6.8	1.0	1.4	0.3	..	..	9.5
Jun	..	..	..	..	..	..	..	3.1	–2.9	1.4	–	..	..	9.4
Jul	..	..	..	..	..	..	..	4.5	2.0	0.9	–	..	..	9.3
Aug	..	..	..	..	..	..	..	6.7	2.1	0.6	–0.5	..	..	9.3
Sep	..	..	..	..	..	..	..	4.0	–	0.6	–0.6	..	..	9.2
Oct	..	..	..	..	..	..	..	3.0	–2.0	0.5	–0.8	..	..	9.1
Nov	..	..	..	..	..	..	..	0.8	5.1	0.5	–1.0	..	..	9.1
Dec	..	..	..	..	..	..	..	0.8	3.2	0.4	–1.2	..	..	9.2
1999 Jan	..	..	..	..	..	..	..	0.2	–3.0	0.2	..	..	..	9.0
Feb	..	..	..	..	..	..	..	–2.1	–1.0	0.2	..	..	..	9.0
Mar	..	..	..	..	..	..	..	–3.4	3.8	0.4	..	..	..	9.0
Apr	..	..	..	..	..	..	..	..	..	0.7	..	..	..	9.1

Percentage change on previous quarter										
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW	ILIQ
1997 Q1	0.3	–0.1	0.1	–0.6	1.2	0.5	0.8	1.0	0.6	–1.9
Q2	1.0	0.7	0.1	0.2	–0.8	0.9	0.2	1.4	3.1	0.9
Q3	0.5	–0.5	–0.2	0.1	0.6	1.4	0.9	1.3	–3.0	0.6
Q4	0.5	0.4	–0.5	0.1	0.7	0.3	0.5	1.3	–0.6	0.3
1998 Q1	1.3	0.5	0.8	0.5	0.1	–0.1	0.5	2.4	3.4	–1.6
Q2	–	–0.2	–0.1	–0.8	1.0	0.6	0.6	–	–2.3	1.1
Q3	0.9	0.7	–	0.4	–0.3	0.2	0.1	1.3	1.0	0.9
Q4	–0.4	0.5	–0.3	–0.2	0.2	–0.7	–0.1	–2.2	–	0.3
1999 Q1	..	..	..	..	..	..	..	–0.9	1.3	..

Percentage change on previous month		
	ILKC	ILKM
1998 Apr	–0.7	–4.8
May	0.2	–1.0
Jun	–0.7	1.0
Jul	3.3	3.0
Aug	–1.0	–2.9
Sep	–2.7	–1.0
Oct	1.0	–
Nov	–2.0	5.1
Dec	1.0	–4.9
1999 Jan	0.8	–2.0
Feb	–2.3	3.1
Mar	–0.2	9.1
Apr	..	..

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

Source: OECD - SNA68

1 Excludes members of armed forces

3 France

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI[1]	Earnings	Empl[2]	Unempl
Percentage change on a year earlier														
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1990	2.5	1.6	0.4	0.6	0.2	1.3	1.6	1.5	1.9	3.5	–0.9	4.9	0.8	8.9
1991	0.8	0.8	0.5	–	–0.7	1.0	0.8	–1.2	–0.2	3.2	–1.2	4.7	0.1	9.5
1992	1.2	0.8	0.6	–0.6	–0.6	1.3	0.3	–1.2	0.3	2.4	–1.1	4.0	–0.7	10.4
1993	–1.3	0.1	0.6	–1.5	–1.5	–0.1	–1.0	–3.8	0.2	2.1	–2.1	2.5	–1.2	11.7
1994	2.8	0.8	0.2	0.3	1.7	1.6	1.8	3.9	–0.1	1.7	1.2	1.9	0.1	12.3
1995	2.1	1.0	–	0.5	0.3	1.8	1.4	2.0	–	1.7	5.2	2.4	0.9	11.7
1996	1.5	1.2	0.5	–0.1	–0.7	1.5	0.9	0.2	–0.3	2.1	–2.7	2.4	0.2	12.4
1997	2.3	0.5	0.2	0.1	0.1	3.8	2.4	3.9	1.0	1.1	–0.5	2.8	0.5	12.3
1998	3.2	2.2	0.2	0.8	0.3	2.1	2.5	4.5	2.6	0.8	–0.9	2.3	1.5	11.7
1997 Q1	1.1	–0.3	0.3	–0.1	0.1	2.0	0.9	0.6	–1.3	1.5	–2.3	3.0	0.1	12.4
Q2	2.5	0.4	0.3	–	–0.1	4.5	2.6	3.5	0.7	0.9	–0.9	2.7	0.3	12.4
Q3	2.6	0.5	0.2	0.2	0.3	4.6	3.2	5.1	1.8	1.3	0.3	2.8	0.7	12.4
Q4	3.0	1.5	0.2	0.2	–0.1	4.1	2.8	6.2	2.8	1.1	0.7	2.8	1.0	12.2
1998 Q1	3.8	2.0	0.2	0.8	0.7	3.8	3.6	7.3	2.2	0.8	0.6	2.6	1.3	11.9
Q2	3.4	2.6	0.2	0.7	0.6	1.9	2.6	5.5	3.1	1.1	–0.3	2.4	1.5	11.7
Q3	2.9	2.3	0.2	0.8	–	1.8	2.2	3.3	2.3	0.7	–1.3	2.0	1.7	11.7
Q4	2.8	2.1	0.2	1.0	0.2	0.9	1.5	2.1	2.8	0.4	–2.3	2.0	1.5	11.6
1999 Q1	..	..	..	..	..	..	..	0.6	3.4	0.3	–2.9	..	..	11.4
1998 Mar	..	..	..	..	..	..	..	8.6	–0.5	1.0	0.6	..	..	11.8
Apr	..	..	..	..	..	..	..	4.3	3.7	1.1	–	..	..	11.8
May	..	..	..	..	..	..	..	5.9	1.0	1.0	–0.3	..	..	11.7
Jun	..	..	..	..	..	..	..	6.3	4.9	1.1	–0.7	..	..	11.6
Jul	..	..	..	..	..	..	..	3.2	2.9	1.0	–1.0	..	..	11.7
Aug	..	..	..	..	..	..	..	3.2	2.1	0.7	–1.3	..	..	11.7
Sep	..	..	..	..	..	..	..	3.4	1.9	0.5	–1.6	..	..	11.7
Oct	..	..	..	..	..	..	..	1.5	2.4	0.5	–2.1	..	..	11.6
Nov	..	..	..	..	..	..	..	3.7	4.5	0.3	–2.3	..	..	11.6
Dec	..	..	..	..	..	..	..	0.8	1.6	0.3	–2.5	..	..	11.5
1999 Jan	..	..	..	..	..	..	..	1.3	0.2	0.3	–2.7	..	..	11.4
Feb	..	..	..	..	..	..	..	0.5	3.5	0.2	–2.9	..	..	11.4
Mar	..	..	..	..	..	..	..	–0.2	6.5	0.4	–3.0	..	..	11.4

Percentage change on previous quarter

	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX	ILIR
1997 Q1	0.1	0.1	–	–0.3	–0.4	0.6	–0.1	–0.1	0.4	0.1
Q2	1.2	0.1	–	0.3	0.2	2.0	1.4	2.9	0.1	0.2
Q3	0.9	0.7	–	0.1	0.1	1.1	1.2	2.2	1.3	0.3
Q4	0.8	0.6	0.1	0.1	–	0.3	0.3	1.0	1.0	0.4
1998 Q1	0.8	0.5	0.1	0.3	0.4	0.3	0.8	0.9	–0.2	0.4
Q2	0.9	0.7	0.1	0.3	0.1	0.2	0.4	1.2	1.0	0.4
Q3	0.4	0.4	0.1	0.2	–0.5	1.0	0.7	0.1	0.5	0.5
Q4	0.7	0.4	–	0.3	0.2	–0.6	–0.3	–0.2	1.5	0.2
1999 Q1	..	..	..	..	..	..	..	–0.6	0.4	..

Percentage change on previous month

	ILKD	ILKN
1998 Mar	1.5	–1.7
Apr	–0.4	3.7
May	0.5	–1.2
Jun	0.5	1.3
Jul	–0.3	0.9
Aug	–	–1.0
Sep	–0.3	–0.6
Oct	0.2	2.7
Nov	–	–0.6
Dec	–0.6	–0.3
1999 Jan	–0.1	0.5
Feb	–0.5	–0.2
Mar	0.8	1.1

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

Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP=Index of Production

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

Source: OECD - SNA68

4 Italy

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier														
	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1990	2.2	1.5	0.2	0.7	0.1	1.2	1.6	–0.5	–2.2	6.0	4.2	7.3	1.4	9.1
1991	1.1	1.7	0.3	0.2	–0.3	–0.1	0.5	–1.8	3.2	6.5	3.3	9.7	1.3	8.8
1992	0.6	0.7	0.2	–0.4	0.1	1.1	1.1	–0.9	1.8	5.3	1.9	5.4	–1.1	9.0
1993	–1.2	–1.5	0.1	–2.5	–0.6	1.7	–1.7	–2.4	–2.9	4.2	3.7	3.7	–4.1	10.3
1994	2.2	0.9	–0.1	0.1	0.6	2.3	1.6	5.8	–6.0	3.9	3.8	3.3	–1.8	11.4
1995	2.9	1.2	–0.2	1.2	–	2.7	1.9	5.8	–4.9	5.4	7.9	3.1	–0.5	11.9
1996	0.7	0.5	–	0.1	–0.3	–0.1	–0.4	–1.5	–2.4	3.8	1.8	3.1	0.4	12.0
1997	1.5	1.4	–0.1	0.1	1.0	1.6	2.5	3.7	7.0	1.8	1.3	3.6	–	12.1
1998	..	..	..	..	..	..	..	1.4	3.5	1.7	0.1	2.7	0.5	12.3
1997 Q1	–0.9	1.2	–0.2	–0.3	–1.5	–0.8	–0.6	–1.8	4.1	2.4	0.9	3.9	–0.1	12.2
Q2	2.0	1.6	–0.2	–0.1	2.2	1.8	3.3	4.0	7.2	1.7	1.1	3.8	0.1	12.1
Q3	2.2	1.7	–0.1	0.2	1.4	3.0	4.0	5.4	8.7	1.6	1.7	3.4	–	12.1
Q4	2.8	1.3	–	0.5	1.8	2.3	3.1	7.5	8.0	1.6	1.5	3.3	–	12.1
1998 Q1	2.5	0.8	0.1	0.7	2.4	3.0	4.5	5.2	2.4	1.7	1.1	2.1	0.6	12.1
Q2	1.2	0.7	0.2	0.4	0.8	1.4	2.3	2.4	4.2	1.7	0.6	3.1	0.1	12.3
Q3	1.2	1.0	0.2	0.4	0.3	–	0.8	0.4	2.7	1.8	–0.2	2.8	0.6	12.3
Q4	..	..	..	..	..	..	..	–2.2	4.5	1.5	–1.1	3.0	0.8	12.3
1999 Q1	..	..	..	..	..	..	..	–1.4	..	1.3	–1.7	..	1.0	..
1998 Apr	..	..	..	..	..	..	..	2.3	3.2	1.8	0.9	3.0	..	12.3
May	..	..	..	..	..	..	..	2.4	4.3	1.7	0.6	3.2	..	12.3
Jun	..	..	..	..	..	..	..	2.3	5.1	1.8	0.4	3.0	..	12.3
Jul	..	..	..	..	..	..	..	1.2	3.2	1.8	0.2	2.5	..	12.3
Aug	..	..	..	..	..	..	..	–1.3	3.1	1.9	–0.2	3.0	..	12.3
Sep	..	..	..	..	..	..	..	1.2	2.1	1.8	–0.6	3.0	..	12.3
Oct	..	..	..	..	..	..	..	–1.9	4.2	1.7	–0.9	3.0	..	12.3
Nov	..	..	..	..	..	..	..	–0.4	5.3	1.5	–1.2	3.1	..	12.3
Dec	..	..	..	..	..	..	..	–4.5	4.2	1.5	–1.3	3.1	..	12.2
1999 Jan	..	..	..	..	..	..	..	–1.0	..	1.3	–1.6	3.5	..	12.1
Feb	..	..	..	..	..	..	..	–2.2	..	1.2	–1.8	3.3	..	..
Mar	..	..	..	..	..	..	..	–0.8	..	1.4	–1.8	..	..	..
Apr	..	..	..	..	..	..	..	..	..	1.6	..	..	..	..
Percentage change on previous quarter														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
1997 Q1	0.1	0.7	–0.1	–	–	–1.3	–0.8	1.4	7.2				–1.6	
Q2	1.9	0.4	–	0.2	1.7	2.2	2.6	2.9	0.7				1.4	
Q3	0.5	0.2	–	0.2	–0.5	1.5	0.9	1.5	1.1				1.1	
Q4	0.3	–	–	0.2	0.6	–0.2	0.3	1.5	–1.0				–0.8	
1998 Q1	–0.1	0.1	0.1	0.1	0.6	–0.5	0.5	–0.7	1.7				–1.0	
Q2	0.6	0.4	0.1	–0.1	–	0.6	0.4	0.2	2.5				0.9	
Q3	0.5	0.6	0.1	0.2	–0.9	0.1	–0.5	–0.5	–0.4				1.6	
Q4	..	..	..	..	..	..	..	–1.2	0.7				–0.6	
1999 Q1	..	..	..	..	..	..	..	0.2	..				–0.8	
Percentage change on previous month														
								ILKE	ILKO					
1998 Apr								0.4	–					
May								–0.8	1.0					
Jun								0.5	6.2					
Jul								0.4	–4.9					
Aug								–2.5	1.0					
Sep								2.4	–1.0					
Oct								–1.2	1.0					
Nov								0.5	–					
Dec								–3.0	–					
1999 Jan								2.1	..					
Feb								–0.7	..					
Mar								1.5	..					
Apr								..	..					

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

Source: OECD - SNA68

5 USA

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1990	1.2	1.1	0.4	–0.2	–0.4	0.7	0.4	–0.2	0.6	5.4	4.9	3.2	1.2	5.6
1991	–0.9	–0.4	0.2	–1.1	–0.2	0.6	–0.1	–2.0	–2.5	4.2	2.1	3.3	–0.9	6.8
1992	2.7	1.9	–	0.8	0.2	0.6	0.8	3.2	3.2	3.1	1.3	2.4	0.7	7.5
1993	2.3	2.0	–	0.8	0.2	0.3	1.0	3.5	4.5	3.0	1.3	2.4	1.4	6.9
1994	3.5	2.2	0.1	1.1	0.6	0.8	1.4	5.4	5.7	2.6	0.6	2.8	2.4	6.1
1995	2.3	1.8	–0.1	0.8	–0.5	1.2	1.1	5.0	3.1	2.7	2.0	2.7	1.4	5.6
1996	3.4	2.2	0.1	1.4	–	1.0	1.2	4.4	4.6	3.0	2.6	3.1	1.5	5.4
1997	3.9	2.3	0.2	1.3	0.5	1.6	1.9	6.0	4.2	2.3	0.4	3.1	2.2	4.9
1998	3.9	3.3	0.2	1.8	–0.1	0.2	1.6	3.7	6.5	1.5	–0.8	2.6	1.5	4.5
1997 Q1	4.1	2.3	0.3	1.3	0.6	1.4	1.8	6.3	4.8	2.9	2.0	3.4	2.5	5.2
Q2	3.6	1.8	0.2	1.2	0.7	1.7	2.0	5.4	3.1	2.3	0.4	2.8	2.4	5.0
Q3	4.1	2.5	0.2	1.4	–	2.0	2.0	5.8	4.8	2.2	–0.1	2.5	2.1	4.9
Q4	3.8	2.5	0.2	1.3	0.5	1.2	2.0	6.6	4.0	1.9	–0.8	3.4	2.0	4.7
1998 Q1	4.2	2.8	0.1	1.8	0.5	0.9	1.9	5.4	5.1	1.4	–1.5	3.1	1.9	4.6
Q2	3.6	3.6	0.2	1.9	–0.5	0.1	1.7	4.6	7.6	1.6	–0.7	2.5	1.5	4.4
Q3	3.5	3.2	0.1	1.5	0.1	–0.3	1.3	2.9	5.6	1.6	–0.6	2.8	1.2	4.5
Q4	4.3	3.6	0.3	1.9	–0.3	0.1	1.5	1.9	7.9	1.5	–0.5	1.9	1.4	4.4
1999 Q1	3.9	3.7	0.4	1.8	–0.7	–	1.5	1.7	8.9	1.7	0.7	1.9	1.7	4.3
1998 May	..	..	..	..	..	..	..	5.1	8.2	1.7	–0.7	2.5	1.5	4.4
Jun	..	..	..	..	..	..	..	3.5	7.5	1.7	–0.6	2.5	1.4	4.5
Jul	..	..	..	..	..	..	..	2.7	5.5	1.7	–0.3	2.5	1.1	4.5
Aug	..	..	..	..	..	..	..	3.6	5.1	1.6	–0.7	2.5	1.0	4.5
Sep	..	..	..	..	..	..	..	2.6	6.1	1.5	–0.9	3.3	1.5	4.5
Oct	..	..	..	..	..	..	..	2.4	7.5	1.5	–0.6	1.6	1.4	4.5
Nov	..	..	..	..	..	..	..	1.8	7.8	1.5	–0.6	2.4	1.2	4.4
Dec	..	..	..	..	..	..	..	1.6	8.3	1.5	–	1.6	1.5	4.3
1999 Jan	..	..	..	..	..	..	..	1.5	8.5	1.6	0.9	1.6	1.9	4.3
Feb	..	..	..	..	..	..	..	1.7	9.4	1.6	0.5	1.6	1.7	4.4
Mar	..	..	..	..	..	..	..	1.9	8.9	1.8	0.8	2.4	1.6	4.2
Apr	..	..	..	..	..	..	..	2.0	..	2.3	1.1	2.4	1.4	4.3
May	..	..	..	..	..	..	..	..	..	..	..	3.2	1.4	4.2
Percentage change on previous quarter	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1997 Q1	1.0	0.7	–	0.3	0.3	0.3	0.6	1.6	1.8				–0.8	
Q2	1.0	0.3	0.1	0.4	0.3	0.5	0.6	1.4	–0.2				2.0	
Q3	1.0	1.0	–	0.5	–0.4	0.3	0.5	1.8	2.1				0.9	
Q4	0.7	0.5	–	0.1	0.2	0.1	0.2	1.5	0.4				–	
1998 Q1	1.4	1.0	–0.1	0.8	0.3	–0.1	0.6	0.5	2.8				–1.0	
Q2	0.5	1.0	0.2	0.5	–0.7	–0.3	0.4	0.7	2.2				1.6	
Q3	0.9	0.7	–	0.2	0.2	–0.1	0.1	0.2	0.1				0.6	
Q4	1.5	0.8	0.2	0.5	–0.2	0.6	0.5	0.5	2.6				0.2	
1999 Q1	1.0	1.1	–	0.6	–0.1	–0.2	0.6	0.3	3.8				–0.6	
Percentage change on previous month								ILKG	ILKQ				ILLA	
1998 May								0.5	1.2				0.5	
Jun								–1.0	0.3				0.5	
Jul								–0.1	–0.7				0.4	
Aug								1.4	0.1				–0.4	
Sep								–0.4	0.6				–0.3	
Oct								0.4	1.2				0.5	
Nov								–0.1	0.8				0.1	
Dec								0.1	1.0				0.1	
1999 Jan								–0.1	1.5				–1.0	
Feb								0.1	2.0				0.2	
Mar								0.5	–				0.5	
Apr								0.6	..				0.2	
May								..	..				0.6	

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

Source: OECD - SNA68

1 Excludes members of armed forces

6 Japan

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP[1]	Sales	CPI	PPI	Earnings[2]	Empl	Unempl
Percentage change on a year earlier														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1990	5.2	2.6	0.1	2.6	–0.2	0.7	0.8	5.2	5.2	3.1	1.6	5.1	1.9	2.1
1991	3.8	1.5	0.2	1.1	0.3	0.6	–0.3	1.9	2.5	3.3	1.1	3.5	1.9	2.1
1992	1.0	1.2	0.2	–0.5	–0.4	0.5	–	–5.7	–0.2	1.6	–0.9	1.3	1.1	2.1
1993	0.3	0.7	0.2	–0.6	–0.2	0.2	–	–3.5	–2.9	1.2	–1.7	0.4	0.2	2.5
1994	0.7	1.1	0.2	–0.2	–0.2	0.5	0.8	1.2	0.3	0.8	–1.7	2.1	–	2.9
1995	1.4	1.2	0.3	0.4	0.2	0.7	1.4	3.3	0.1	–0.1	–0.7	3.0	0.1	3.1
1996	5.2	1.7	0.2	3.4	0.4	0.8	1.3	2.4	0.7	0.1	–1.8	2.5	0.5	3.4
1997	1.4	0.6	0.1	–0.7	–0.1	1.4	0.1	3.5	–2.0	1.8	0.7	3.0	1.1	3.4
1998	–2.9	–0.7	0.1	–2.7	–0.1	–0.3	–0.9	–6.5	–5.2	0.6	–1.4	–0.6	–0.7	4.1
1997 Q1	3.8	2.7	–	0.6	–0.4	1.5	0.6	5.2	5.4	0.6	–0.9	5.0	1.6	3.3
Q2	0.9	–0.2	0.2	–1.0	–	2.0	0.1	5.8	–4.8	2.1	1.3	2.7	1.4	3.4
Q3	1.7	0.6	0.4	–0.8	0.1	1.4	–	4.0	–3.7	2.1	1.3	2.6	0.7	3.4
Q4	–0.8	–0.6	–0.1	–1.5	–	1.0	–0.4	–0.7	–5.0	2.1	1.1	1.7	0.7	3.5
1998 Q1	–3.6	–2.4	0.2	–2.4	0.2	0.3	–0.6	–4.2	–9.9	2.0	0.4	–	–	3.7
Q2	–1.8	0.5	–	–2.7	–0.1	–0.5	–1.0	–7.9	–2.1	0.4	–1.9	–0.3	–0.8	4.1
Q3	–3.1	–0.5	–	–3.0	–0.3	–0.2	–1.0	–7.8	–3.2	–0.2	–1.9	–1.7	–0.9	4.2
Q4	–3.0	–	0.1	–2.9	–0.3	–0.9	–1.0	–6.3	–4.9	0.5	–2.0	–0.6	–1.0	4.4
1999 Q1	..	..	..	..	..	..	..	–4.2	–3.9	–0.1	–2.1	–0.3	–1.2	4.6
1998 Apr	..	..	..	..	..	..	..	–5.9	–1.1	0.5	–2.0	–0.3	–0.7	4.1
May	..	..	..	..	..	..	..	–11.0	–2.1	0.5	–1.9	–0.2	–0.5	4.1
Jun	..	..	..	..	..	..	..	–6.8	–3.2	0.1	–1.9	–0.3	–1.1	4.2
Jul	..	..	..	..	..	..	..	–8.4	–3.2	–0.1	–1.9	–2.3	–1.1	4.1
Aug	..	..	..	..	..	..	..	–7.4	–3.2	–0.3	–1.9	–2.8	–0.7	4.3
Sep	..	..	..	..	..	..	..	–7.7	–3.2	–0.2	–2.0	–	–1.0	4.3
Oct	..	..	..	..	..	..	..	–7.9	–6.3	0.2	–2.0	0.4	–1.1	4.3
Nov	..	..	..	..	..	..	..	–4.6	–3.2	0.7	–2.1	1.8	–0.8	4.5
Dec	..	..	..	..	..	..	..	–6.5	–5.3	0.6	–2.0	–4.1	–1.0	4.4
1999 Jan	..	..	..	..	..	..	..	–8.1	–5.3	0.3	–2.2	–2.3	–1.2	4.5
Feb	..	..	..	..	..	..	..	–3.9	–3.2	–0.1	–2.1	0.5	–1.2	4.6
Mar	..	..	..	..	..	..	..	–0.6	–3.2	–0.5	–2.0	0.9	–1.3	4.7
Apr	..	..	..	..	..	..	..	–1.7	–1.1	–0.1	–1.9	0.8	–1.0	4.9
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1997 Q1	1.6	2.1	–0.2	–0.2	–0.2	0.3	0.1	1.8	5.0				–0.9	
Q2	–2.5	–3.0	0.2	–0.7	0.3	0.5	–0.2	–0.1	–9.9				2.9	
Q3	1.0	0.9	0.1	–0.1	0.1	–	–0.1	–	0.7				–0.3	
Q4	–0.9	–0.5	–0.2	–0.5	–0.1	0.2	–0.2	–2.3	–0.4				–1.0	
1998 Q1	–1.2	0.2	0.1	–1.1	–0.1	–0.4	–0.1	–1.8	–0.3				–1.5	
Q2	–0.7	–0.1	–	–1.0	–0.1	–0.3	–0.7	–4.0	–2.1				2.1	
Q3	–0.3	–0.1	0.1	–0.4	–0.1	0.3	–	0.1	–0.3				–0.5	
Q4	–0.8	–	–0.1	–0.4	–	–0.5	–0.2	–0.7	–2.2				–1.0	
1999 Q1	..	..	..	..	..	..	..	0.4	0.7				–1.7	
Percentage change on previous month														
								ILKH	ILKR				ILLB	
1998 Apr								–1.5	–1.1				1.0	
May								–2.6	–				1.1	
Jun								2.7	–				0.1	
Jul								–1.0	–				–0.5	
Aug								–0.4	–				–0.5	
Sep								1.7	–1.1				–0.3	
Oct								–1.1	–1.1				–	
Nov								–0.8	–				–0.7	
Dec								–	–1.1				–0.6	
1999 Jan								–0.6	1.1				–1.0	
Feb								0.9	1.1				–0.7	
Mar								2.5	–1.1				0.8	
Apr								–2.6	1.1				1.3	

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

Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP=Index of Production

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

Source: OECD - SNA68

7 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	manufact-ures	goods
Percentage change on a year earlier														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1990	5.9	5.9	5.5	5.5	5.5	5.4	4.5	5.6	1.6	4.5	5.2	2.8	5.7	4.5
1991	3.8	2.5	9.6	5.2	3.5	10.0	4.0	3.5	5.2	4.5	3.2	8.1	4.5	4.2
1992	4.5	3.7	7.7	5.1	4.5	6.7	4.5	3.8	6.1	5.0	4.3	6.7	4.8	4.7
1993	4.2	1.9	13.1	3.3	1.1	9.3	4.2	2.5	8.5	3.7	1.4	9.6	3.8	3.9
1994	11.2	10.2	14.7	12.3	12.8	11.1	10.1	9.2	12.2	10.6	10.7	10.3	11.7	10.3
1995	9.9	9.8	10.2	9.8	9.3	11.2	8.7	8.7	8.8	8.3	7.3	10.7	9.9	8.5
1996	5.6	6.4	3.0	5.6	7.0	2.2	5.0	6.0	2.7	5.1	6.1	2.6	5.6	5.0
1997	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1995 Q1	13.5	13.5	13.6	13.8	14.0	13.1	11.6	12.1	10.1	12.0	11.6	12.9	13.6	11.8
Q2	10.7	10.9	9.9	12.1	11.4	14.0	9.2	9.7	7.9	10.8	9.6	13.9	11.4	10.0
Q3	9.3	9.8	7.5	10.4	9.4	13.1	8.0	8.5	6.8	9.1	7.7	12.9	9.9	8.6
Q4	7.4	7.7	6.4	7.6	6.6	10.4	6.6	6.6	6.7	6.2	4.9	9.9	7.5	6.4
1996 Q1	6.4	6.8	5.1	7.8	7.7	8.2	6.1	6.0	6.4	6.8	6.5	7.4	7.1	6.4
Q2	6.1	6.6	4.2	6.3	6.4	6.0	6.1	6.0	6.3	5.6	5.9	5.0	6.2	5.9
Q3	7.4	8.1	4.6	7.9	8.7	5.6	7.3	7.7	6.5	6.9	7.8	4.5	7.6	7.1
Q4	9.0	9.8	6.2	8.4	8.9	7.0	8.6	9.2	7.0	7.9	8.6	6.0	8.7	8.3
1997 Q1	9.1	9.3	8.5	8.2	8.3	7.9	8.3	8.4	8.0	7.3	7.4	7.1	8.7	7.8
Q2	13.2	14.0	10.2	12.0	13.0	9.2	11.7	12.8	8.7	10.2	10.8	8.6	12.6	10.9
Q3	14.2	15.2	10.6	11.8	12.5	9.6	12.0	13.1	8.8	10.0	10.3	9.2	13.0	11.0
Q4	12.2	12.8	9.9	11.4	12.1	9.4	10.3	11.1	8.3	9.8	10.1	8.9	11.8	10.1
1998 Q1	10.1	11.0	6.5	9.5	12.0	2.8	9.0	10.1	5.9	8.3	10.3	2.8	9.8	8.6
Q2	5.5	5.5	5.5	6.3	8.7	–0.5	5.1	4.9	5.5	5.4	7.5	–0.2	5.9	5.2
Q3	3.1	3.0	3.8	4.4	7.2	–3.7	2.7	2.3	4.0	3.5	6.0	–3.3	3.7	3.1
Q4	..	2.5	..	..	6.9	..	..	1.6	..	..	5.5	..	..	..
Percentage change on previous quarter														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q1	3.2	3.5	1.9	2.1	1.6	3.4	2.5	2.8	1.7	1.6	1.0	3.4	2.6	2.1
Q2	1.4	1.3	1.9	2.3	1.9	3.3	1.1	0.9	1.6	2.2	1.8	3.3	1.8	1.7
Q3	1.0	0.9	1.4	1.2	0.9	2.2	1.2	1.1	1.6	1.2	0.9	2.1	1.1	1.2
Q4	1.7	1.8	1.0	1.9	2.2	1.1	1.6	1.6	1.6	1.1	1.2	0.9	1.8	1.4
1996 Q1	2.2	2.6	0.6	2.3	2.6	1.3	2.0	2.3	1.3	2.1	2.5	1.0	2.2	2.1
Q2	1.1	1.1	1.0	0.8	0.7	1.2	1.1	1.0	1.6	1.1	1.2	0.9	1.0	1.1
Q3	2.3	2.4	1.8	2.7	3.0	1.8	2.4	2.6	1.8	2.4	2.6	1.6	2.5	2.4
Q4	3.2	3.4	2.6	2.4	2.3	2.4	2.9	3.1	2.1	2.1	2.0	2.3	2.8	2.5
1997 Q1	2.3	2.1	2.8	2.1	2.0	2.2	1.7	1.5	2.3	1.6	1.4	2.1	2.2	1.6
Q2	4.9	5.5	2.7	4.3	5.0	2.4	4.3	5.1	2.2	3.8	4.4	2.3	4.6	4.1
Q3	3.2	3.5	2.2	2.5	2.6	2.2	2.6	2.9	1.9	2.2	2.2	2.1	2.9	2.4
Q4	1.4	1.2	2.0	2.0	2.0	2.2	1.4	1.2	1.7	1.9	1.8	2.1	1.7	1.6
1998 Q1	0.4	0.6	–0.4	0.3	1.9	–4.0	0.4	0.6	–	0.2	1.6	–3.6	0.4	0.3
Q2	0.5	0.2	1.7	1.3	2.0	–0.9	0.6	0.1	1.9	1.0	1.6	–0.7	0.9	0.8
Q3	0.9	1.0	0.5	0.6	1.2	–1.0	0.3	0.3	0.5	0.4	0.8	–1.0	0.8	0.3
Q4	..	0.7	..	..	1.6	..	..	0.5	..	..	1.3	..	..	..

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

Source: OECD - SNA68

Final Expenditure Prices Index (Experimental) - May 1999

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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 rate of inflation, as measured by the Final Expenditure Price Index (FEPI) for May 1999, was unchanged at 1.9 per cent. Consumer price inflation, as measured by the Index of Consumer Prices (ICP), fell from 2.0 per cent in April to 1.7 per cent in May. Investment price inflation, as measured by the Index of Investment Prices (IIP) was 1.0 per cent, down from 1.3 per cent recorded in April; while inflation as measured by the Index of Government Prices (IGP) rose from 2.5 per cent in April to 3.0 per cent in May.

The FEPI annual percentage change

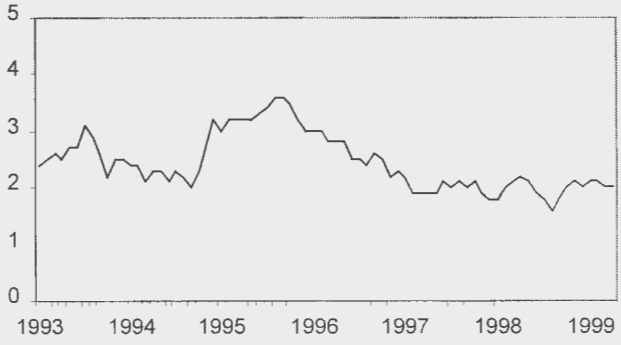


Table A

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

		Index of Consumer Prices (ICP)		Index of Investment Prices (IIP)		Index of Government Prices (IGP)		Final Expenditure Prices Index (FEPI)	
		Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change
1998	Dec	120.6	2.1	112.7	1.4	118.3	2.3	118.5	2.1
1999	Jan	120.0	2.0	112.9	1.4	119.1r	2.5r	118.3	2.0
	Feb	120.4	1.8	113.0	1.5	119.3r	2.9r	118.7	2.1
	Mar	121.1	2.0	113.3	1.4	119.3	2.6	119.1	2.1
	Apr	121.7	2.0	113.3r	1.3r	119.2r	2.5r	119.4r	1.9r
	May	122.0	1.7	113.5	1.0	120.2	3.0	119.9	1.9

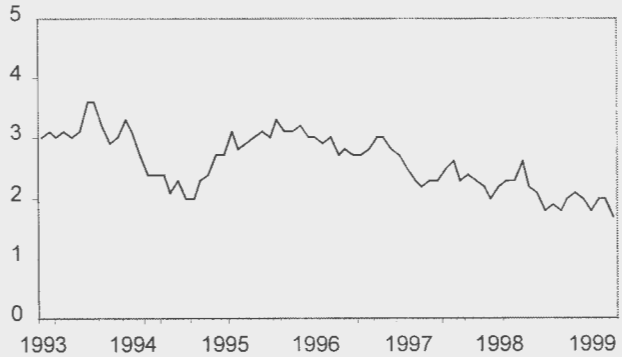
The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, fell from 2.0 per cent in April to 1.7 per cent in May.

Downward pressure came from:

- Food, whose 12-month rate fell from 2.1 per cent to 1.1 per cent. The price of seasonal food was affected by potatoes, other fresh vegetables and fresh fruit. Prices for these items were high last year because of shortages resulting from bad weather.
- Clothing and footwear, particularly women's outerwear, also exerted downward pressures as prices increased by less than last May.

The ICP annual percentage change



The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, was 1.0 per cent over the 12 months to May, down from 1.3 per cent in April.

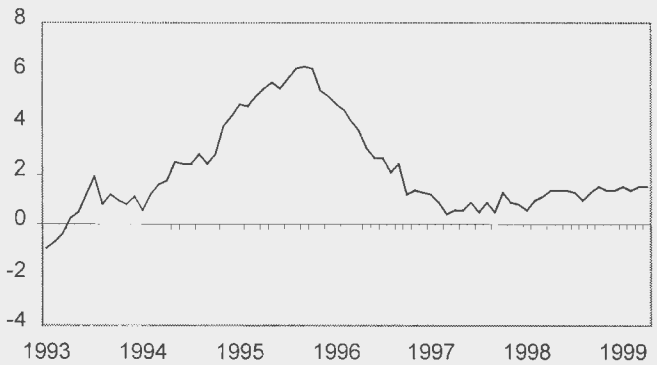
Downward pressure on the 12-month rate came mainly from:

- Vehicles, whose 12-month rate fell from 3.3 per cent in April to 2.3 per cent in May.
- Plant and machinery, where the 12-month rate fell from –5.0 per cent in April to –5.6 per cent in May.
- New buildings and works, where the 12-month rate fell from 4.1 per cent in April to 3.9 per cent in May. This is the fifth consecutive month when the rate has fallen.

Upward pressure came from:

- Transfer costs of land and buildings, where the 12-month rate rose from 9.1 per cent in April to 9.9 per cent in May.
- New Dwellings, where the 12-month rate rose from 6.9 per cent in April to 7.8 per cent in May.

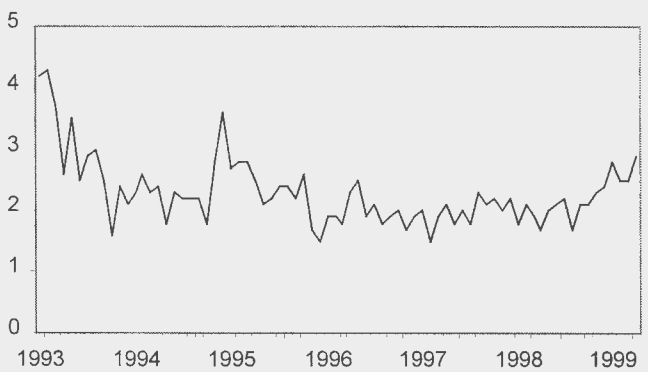
The IIP annual percentage change



The Index of Government Prices (IGP)

The IGP inflation rate rose from 2.5 per cent in April to 3.0 per cent in May.

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
1998	Dec	2.1	2.6	1.5	-0.1
1999	Jan	2.0	2.6	1.6	-0.1
	Feb	2.1	2.4	1.5	0.2
	Mar	2.1	2.7	1.7	0.5
	Apr	1.9	2.4	1.5	1.0
	May	1.9	2.1	1.3	0.9

NOTES

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

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

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

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

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

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

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

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

1 Final Expenditure Prices Index (Experimental)

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP	Final Expenditure Prices Index FEPI	Annual percentage changes ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1997	605	165	230	1000				
1998	605	169	226	1000				
1999	609	182	209	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1997 May	117.0	110.8	114.7	115.2	2.3	0.6	2.1	1.9
Jun	117.2	110.8	114.8	115.3	2.3	0.6	1.8	1.9
Jul	116.7	111.1	114.6	115.1	2.5	0.9	2.0	2.1
Aug	117.5	111.2	114.6	115.5	2.6	0.5	1.8	2.0
Sep	117.9	111.4	114.9	115.9	2.3	0.9	2.3	2.1
Oct	118.0	111.2	115.1	115.9	2.4	0.5	2.1	2.0
Nov	117.9	111.1	115.6	116.0	2.3	1.3	2.2	2.1
Dec	118.1	111.1	115.6	116.1	2.2	0.9	2.0	1.9
1998 Jan	117.6	111.3	116.2	116.0	2.0	0.8	2.2	1.8
Feb	118.3	111.3	115.9	116.3	2.2	0.6	1.8	1.8
Mar	118.7	111.7	116.3	116.7	2.3	1.0	2.1	2.0
Apr	119.3	111.9	116.3	117.2	2.3	1.1	1.9	2.1
May	120.0	112.4	116.7	117.7	2.6	1.4	1.7	2.2
Jun	119.8	112.4	117.1	117.7	2.2	1.4	2.0	2.1
Jul	119.2	112.7	117.0	117.3	2.1	1.4	2.1	1.9
Aug	119.6	112.7	117.1	117.6	1.8	1.3	2.2	1.8
Sep	120.1	112.5	116.9	117.8	1.9	1.0	1.7	1.6
Oct	120.1	112.6	117.5	118.0	1.8	1.3	2.1	1.8
Nov	120.3	112.8	118.0	118.3	2.0	1.5	2.1	2.0
Dec	120.6	112.7	118.3	118.5	2.1	1.4	2.3	2.1
1999 Jan	120.0	112.9	119.1r	118.3	2.0	1.4	2.5r	2.0
Feb	120.4	113.0	119.3r	118.7	1.8	1.5	2.9r	2.1
Mar	121.1	113.3	119.3	119.1	2.0	1.4	2.6	2.1
Apr	121.7	113.3r	119.2r	119.4r	2.0	1.3r	2.5r	1.9r
May	122.0	113.5	120.2	119.9	1.7	1.0	3.0	1.9

The symbol r denotes revisions to previous months' data

2 FEPI - Index of Consumer Prices (Experimental)

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communi-cation	Recreation, Entertain-ment and Education	Other Goods and Services	Index of Consumer Prices ICP
January 1992=100											
Weights											
1997	126	68	30	67	90	39	71	189	119	201	1000
1998	127	68	29	67	87	39	71	188	118	205	1000
1999	119	66	27	70	85	34	75	192	114	218	1000
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
1997 May	110.9	120.4	148.9	106.0	126.0	103.7	111.6	118.1	110.5	123.0	117.0
Jun	111.8	120.6	149.2	105.4	126.2	103.3	111.4	118.5	110.5	123.3	117.2
Jul	111.3	121.1	149.3	100.3	126.2	102.8	109.6	119.4	110.3	123.4	116.7
Aug	112.6	121.3	151.2	102.3	126.4	102.8	110.8	120.0	110.2	124.0	117.5
Sep	112.2	121.4	151.5	106.3	126.6	100.0	111.6	120.4	110.7	124.4	117.9
Oct	112.2	121.7	151.7	106.0	126.8	100.0	111.4	120.3	110.8	124.8	118.0
Nov	111.6	121.1	151.8	107.2	126.9	99.6	112.3	120.0	110.7	124.8	117.9
Dec	111.7	120.6	155.1	106.7	127.0	99.1	113.2	120.0	110.7	125.2	118.1
1998 Jan	111.7	122.1	159.3	99.7	127.3	98.4	109.8	120.6	110.3	125.4	117.6
Feb	111.7	123.1	159.5	102.0	127.4	98.7	111.5	120.8	110.5	126.4	118.3
Mar	111.5	123.5	159.5	104.1	127.6	98.9	113.1	120.8	110.4	126.9	118.7
Apr	111.8	123.6	162.1	105.0	129.9	98.9	112.1	122.1	110.8	127.6	119.3
May	113.5	124.5	162.6	106.0	130.1	98.3	113.3	122.3	111.1	128.1	120.0
Jun	113.1	124.4	162.8	105.7	130.2	97.6	112.7	122.2	110.7	128.4	119.8
Jul	112.8	124.9	163.0	99.3	130.4	97.3	111.4	122.0	110.4	128.6	119.2
Aug	114.1	125.2	163.1	101.2	130.6	97.2	112.2	121.9	110.4	128.8	119.6
Sep	113.7	125.3	163.2	105.8	130.8	97.3	112.9	121.9	111.0	128.7	120.1
Oct	113.9	125.6	163.4	104.7	131.1	97.5	112.4	121.5	111.2	129.5	120.1
Nov	113.8	125.2	163.4	105.3	131.3	97.4	113.6	121.1	111.2	130.2	120.3
Dec	114.7	125.1	168.2	104.7	131.4	97.2	115.7	120.5	111.0	130.6	120.6
1999 Jan	115.1	126.5	172.0	97.6	131.5	97.3	111.3	121.2	110.7	130.6	120.0
Feb	115.4	126.8	172.1	100.0	131.5	97.2	112.8	121.2	110.6	131.0	120.4
Mar	114.7	126.8	178.2	101.6	131.4	97.5	114.5	122.6	110.7	131.3	121.1
Apr	114.1	127.0	180.7	102.0	133.5	97.3	113.2	124.1	111.1	132.3	121.7
May	114.7	127.6	180.7	102.5	133.6	97.1	114.6	124.1	111.2	132.5	122.0

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
	CGAP	CGAQ	CGAR	CGAS	CGAT	CGAU	CGAV	CGAW	CGAX	CGAY	CGAZ
1997 May	–1.1	2.7	6.7	1.5	4.1	–1.8	1.0	3.3	1.1	3.6	2.3
Jun	–0.3	2.4	6.7	1.1	4.0	–2.4	0.7	3.6	1.1	3.7	2.3
Jul	0.5	2.3	6.9	1.1	3.5	–2.9	0.7	4.5	1.3	3.8	2.5
Aug	0.7	2.5	8.2	1.8	3.6	–2.7	0.6	4.3	0.9	3.9	2.6
Sep	1.3	2.4	8.1	0.9	3.7	–5.5	0.7	3.5	1.0	3.8	2.3
Oct	1.9	2.4	8.2	0.5	3.8	–5.3	0.9	3.4	0.9	3.7	2.4
Nov	1.7	2.1	8.4	0.6	3.7	–5.1	0.8	3.4	0.5	3.7	2.3
Dec	1.8	2.2	8.6	0.1	3.7	–5.4	0.8	2.8	0.5	3.7	2.2
1998 Jan	1.0	3.0	9.4	–0.8	3.2	–5.6	0.9	2.6	0.4	3.9	2.0
Feb	1.3	3.2	9.1	–	3.1	–5.4	1.6	2.3	0.4	4.3	2.2
Mar	1.5	3.6	8.8	0.1	3.0	–5.3	1.3	2.4	0.5	4.4	2.3
Apr	1.5	3.3	9.3	–0.5	3.3	–5.1	0.9	3.5	0.5	4.2	2.3
May	2.3	3.4	9.2	–	3.3	–5.2	1.5	3.6	0.5	4.1	2.6
Jun	1.2	3.2	9.1	0.3	3.2	–5.5	1.2	3.1	0.2	4.1	2.2
Jul	1.3	3.1	9.2	–1.0	3.3	–5.4	1.6	2.2	0.1	4.2	2.1
Aug	1.3	3.2	7.9	–1.1	3.3	–5.4	1.3	1.6	0.2	3.9	1.8
Sep	1.3	3.2	7.7	–0.5	3.3	–2.7	1.2	1.2	0.3	3.5	1.9
Oct	1.5	3.2	7.7	–1.2	3.4	–2.5	0.9	1.0	0.4	3.8	1.8
Nov	2.0	3.4	7.6	–1.8	3.5	–2.2	1.2	0.9	0.5	4.3	2.0
Dec	2.7	3.7	8.4	–1.9	3.5	–1.9	2.2	0.4	0.3	4.3	2.1
1999 Jan	3.0	3.6	8.0	–2.1	3.3	–1.1	1.4	0.5	0.4	4.1	2.0
Feb	3.3	3.0	7.9	–2.0	3.2	–1.5	1.2	0.3	0.1	3.6	1.8
Mar	2.9	2.7	11.7	–2.4	3.0	–1.4	1.2	1.5	0.3	3.5	2.0
Apr	2.1	2.8	11.5	–2.9	2.8	–1.6	1.0	1.6	0.3	3.7	2.0
May	1.1	2.5	11.1	–3.3	2.7	–1.2	1.1	1.5	0.1	3.4	1.7

The symbol r denotes revisions to previous months' data

3 FEPI - Index of Investment Prices (Experimental)

	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100						
Weights						
1997	390	103	267	33	207	1000
1998	387	103	277	37	196	1000
1999	413	106	256	40	185	1000
	CUSG	CUSH	CUSF	CUSI	CUSJ	CUSK
1997 May	109.4	118.5	109.4	144.8	107.6	110.8
Jun	108.8	118.3	109.4	144.9	108.6	110.8
Jul	108.0	118.1	110.2	150.8	109.8	111.1
Aug	107.2	118.4	111.1	151.9	110.5	111.2
Sep	107.1	118.6	111.5	153.4	110.6	111.4
Oct	106.6	118.4	112.0	152.2	110.4	111.2
Nov	105.9	118.1	112.4	153.1	110.5	111.1
Dec	105.8	118.5	112.8	152.2	110.5	111.1
1998 Jan	105.6	119.1	113.3	151.7	110.6	111.3
Feb	105.0	118.8	113.8	153.6	111.2	111.3
Mar	104.5	119.5	114.3	154.9	113.1	111.7
Apr	103.7	119.3	114.6	159.6	115.0	111.9
May	103.8	120.4	115.0	160.3	115.9	112.4
Jun	102.9	120.1	115.3	161.0	117.7	112.4
Jul	102.2	120.4	115.8	165.4	118.9	112.7
Aug	101.5	121.2	116.1	165.1	119.5	112.7
Sep	100.5	120.9	116.5	165.9	120.0	112.5
Oct	100.3	121.3	117.1	166.1	120.2	112.6
Nov	100.3	122.4	117.7	165.6	119.7	112.8
Dec	99.8	123.0	118.2	164.8	119.1	112.7
1999 Jan	100.2	122.8	118.5	167.4	118.8	112.9
Feb	100.1	123.4	118.8	168.7r	119.0	113.0
Mar	99.7	123.5r	119.1	171.3r	120.7r	113.3
Apr	98.5r	123.2r	119.3	174.2r	122.9r	113.3r
May	98.0	123.2	119.5	176.2	124.9	113.5

Annual Percentage Changes

	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
	CGBB	CGBC	CGBA	CGBD	CGBE	CGBF
1997 May	–5.2	–0.5	3.5	6.6	7.1	0.6
Jun	–5.1	–0.5	3.1	6.9	7.4	0.6
Jul	–4.8	–0.8	3.5	9.2	7.6	0.9
Aug	–6.0	–1.0	3.9	9.1	7.6	0.5
Sep	–5.3	–0.9	3.9	10.1	7.7	0.9
Oct	–5.7	–0.7	4.0	8.0	7.4	0.5
Nov	–4.2	0.4	4.0	8.7	7.3	1.3
Dec	–4.7	0.9	4.0	7.9	6.5	0.9
1998 Jan	–5.0	0.8	4.1	8.9	6.0	0.8
Feb	–5.6	0.1	4.3	8.3	6.5	0.6
Mar	–5.1	0.5	4.5	8.9	7.1	1.0
Apr	–5.6	0.7	4.7	11.8	7.6	1.1
May	–5.1	1.6	5.1	10.7	7.7	1.4
Jun	–5.4	1.5	5.4	11.1	8.4	1.4
Jul	–5.4	1.9	5.1	9.7	8.3	1.4
Aug	–5.3	2.4	4.5	8.7	8.1	1.3
Sep	–6.2	1.9	4.5	8.1	8.5	1.0
Oct	–5.9	2.4	4.6	9.1	8.9	1.3
Nov	–5.3	3.6	4.7	8.2	8.3	1.5
Dec	–5.7	3.8	4.8	8.3	7.8	1.4
1999 Jan	–5.1	3.1	4.6	10.3	7.4	1.4
Feb	–4.7	3.9	4.4	9.8r	7.0	1.5
Mar	–4.6	3.3	4.2	10.6r	6.7r	1.4
Apr	–5.0r	3.3r	4.1	9.1r	6.9r	1.3r
May	–5.6	2.3	3.9	9.9	7.8	1.0

The symbol r denotes revisions to previous months' data

4 FEPI - Index of Government Prices (Experimental)

	Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP	Annual percentage changes: Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP
January 1992=100								
Weights								
1997	347	589	64	1000				
1998	342	591	67	1000				
1999	350	567	83	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1997 May	117.0	113.2	116.5	114.7	2.4	2.0	1.9	2.1
Jun	117.6	112.9	116.5	114.8	2.4	1.3	1.9	1.8
Jul	117.0	112.7	118.5	114.6	2.4	1.6	3.5	2.0
Aug	117.2	112.7	118.5	114.6	2.7	1.1	3.4	1.8
Sep	117.2	113.2	118.6	114.9	2.7	2.1	3.5	2.3
Oct	117.5	113.4	118.6	115.1	2.6	1.7	3.5	2.1
Nov	118.4	113.6	118.6	115.6	2.8	1.8	3.3	2.2
Dec	117.8	113.9	118.7	115.6	2.5	1.4	3.3	2.0
1998 Jan	118.3	114.6	119.8	116.2	2.5	1.8	3.7	2.2
Feb	118.2	114.1	119.8	115.9	2.3	1.2	3.7	1.8
Mar	118.9	114.4	119.7	116.3	2.5	1.6	3.6	2.1
Apr	118.6	114.7	119.8	116.3	2.5	1.6	3.7	1.9
May	120.1	114.3	120.7	116.7	2.6	1.0	3.6	1.7
Jun	120.7	114.7	120.6	117.1	2.6	1.6	3.5	2.0
Jul	120.4	114.6	121.1	117.0	2.9	1.7	2.2	2.1
Aug	119.6	115.3	121.1	117.1	2.0	2.3	2.2	2.2
Sep	119.6	114.9	121.1	116.9	2.0	1.5	2.1	1.7
Oct	120.2	115.5	121.1	117.5	2.3	1.9	2.1	2.1
Nov	121.1	115.9	121.2	118.0	2.3	2.0	2.2	2.1
Dec	120.5	116.7	121.2	118.3	2.3	2.5	2.1	2.3
1999 Jan	121.0	117.5	122.9r	119.1r	2.3	2.5	2.6r	2.5r
Feb	120.9	117.8	123.9r	119.3r	2.3	3.2	3.4r	2.9r
Mar	121.1r	117.7r	123.9r	119.3	1.9r	2.9r	3.5r	2.6
Apr	121.1r	117.6r	123.9r	119.2r	2.1r	2.5r	3.4r	2.5r
May	122.5	118.3	125.3	120.2	2.0	3.5	3.8	3.0

The symbol r denotes revisions to previous months' data

ONS Plans for the 1999 and 2000 Blue and Pink Books

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Overview

This article describes ONS plans for the 1999 and 2000 *Blue Book* and *Pink Book* and related publications and datasets.

Background

Last year saw the most substantial changes to national accounts since their inception in the 1940s, including the introduction of the European System of Accounts 1995 (ESA95) and the fifth edition of the *Balance of Payments Manual* (BPM5). Although the major part of the ESA95 programme is complete, including the framework, new terminology and new concepts, some quite substantial parts remain to be implemented. The Eurostat timetable for the remainder of ESA95 extends to 2005, though the UK has delivered much of this ahead of schedule, in order to minimise the disruption for users and to maintain the previous coverage of the accounts as far as possible.

The completion of the ESA95 programme includes the filling of some gaps in the national accounts data set as compared with what was previously published, and some new developments. Examples of the gaps to be filled: the financial accounts before 1987, capital stock and non-financial balance sheets. The latter two were excluded because development work was still in progress; articles in *Economic Trends* in November 1998 and March 1999 give details and preliminary figures.

Major new developments for the future include the provision of annual constant price supply and use tables, which form part of the additional ESA95 developments up to 2005, and a programme over the same period to harmonise estimates at constant prices.

In planning the work to fill in gaps in the data set, and implement new developments, the ONS has also to consider its internal requirements. Following last year's extensive *Blue Book* exercise there has been a pressing need to consolidate the new systems developed to compile ESA95 estimates, and also to ensure that systems which were not Year 2000 compliant were replaced. In this context, and taking into account the later publication date for the 1998 *Blue Book* and *Pink Book*, there was little scope for including major developments in the 1999 annual round.

Revisions policy

In order to allow a breathing space for this process of consolidation, we have planned for minimal revisions in the 1999 *Blue Book* and *Pink Book*, to be followed by a more open policy in 2000, in which changes which affect historic series can be more readily implemented. For this year's *Blue Book*, revisions will be restricted to 1997 and 1998 (though the quarterly path may change in 1996). For the 2000 *Blue Book*, more extensive revisions to earlier periods will be considered, though it is too soon to say what areas will be affected.

New in 1999

The formats of the 1999 *Blue Book* and *Pink Book* were substantially changed in 1998 to reflect the adoption of the new European System of Accounts and the *Balance of Payments Manual*. The format of the accounts in the *Blue Book* is unchanged, but some additional material will be included. The most important of these are two new chapters. Chapter 11 focuses on the European Union, and includes data provided to the EU for budgetary purposes, transactions with EU institutions and UK debt and deficit statistics. Chapter 12, on Environmental Accounts, updates the information published in *UK Environmental Accounts 1998* and presents two new tables: use of energy by industrial sector; and production and stocks of radioactive waste. The geographical breakdown of the current account will be restored as Chapter 9 of the *Pink Book*. Details of all changes to the 1999 *Blue Book* and *Pink Book* are given in the box below.

Issues for the 1999 *Blue Book*

The accompanying article "Experimental Constant price Input-Output Supply-Use Balances: An approach to improving the quality of the national accounts" discusses how the development of constant price supply and use tables has identified inconsistencies in the distribution of value-added at the industry level for the period 1994-1996 in the current data set. These concerns cannot be fully resolved in time for the 1999 *Blue Book*. As a result we are not yet in a position to rebalance the supply and use tables for this period, and will therefore not revise them for this year's *Blue Book*.

As the quality of estimates of levels of value-added by industry in 1996 is lower than usual, the quality of the industry detail of estimates of growth by industry in this year's *Blue Book* is also poorer.

Changes to 1999 publications

Changes to publications, including new analyses, are outlined below.

Blue Book

Former Table 1.3	now included in new Chapter 11; Tables 1.4 – 1.8.9 re-numbered.
Former Table 1.7S	now included as Table 10.1 in Chapter 10. Supplementary government tables.
Former Table 1.8.0	no longer included.
Tables 1.7.1 – 1.7.9 (old Tables 1.8.1 – 1.8.9)	The 3-year analysis provided for the 1998 *Blue Book* was very lengthy; subsequent editions will give 1 year (1997) only; other years available on request.
Former Table 5.4	Now included as Table 10.2 in Chapter 10, Supplementary government tables.
Table 6.1.4S **new**	Social benefits and social contributions.
Tables SUP1 – SUP5	Renumbered Tables 9.1 – 9.5 within Chapter 9, Supplementary gross fixed capital formation tables.
Table SUP6	Renumbered Table 10.3 within Chapter 10, Supplementary government tables.
Table SUP7	Now included as Table 11.2 within new Chapter 11.
Table 10.4 **new**	Public sector expenditure and key fiscal balances.
Part 4(iii) Chapter 11 **new**	**European Union**: includes data provided to the EU for budgetary purposes; transactions with EU institutions; UK debt and deficit statistics
Part 5 Chapter 12 **new**	**Environmental accounts**: updates the information published in UK Environmental Accounts 1998 and presents two new tables: use of energy by industrial sector; and production and stocks of radioactive waste

Pink Book

Chapter 9	restoration of geographical breakdown of current account.
Input-Output Supply and Use Balances	Balances for 1997 only.

In view of the limited changes to the 1999 accounts, we do not intend to publish a revised *National Accounts Concepts, Sources and Methods* in 1999.

Issues for *Blue Book* 2000

Review of methodology

Starting with the 2000 *Blue Book*, we will be introducing a more rigorous process to ensure that new methodology is subject to fuller review before it is adopted. Changes will be assessed by peer group review, with the aim of ensuring that the methods used are robust and justified, and any impact on series elsewhere in the accounts is fully explored prior to implementation. This new procedure is part of our aim to continuously improve the quality of the accounts.

Further ESA95 requirements

The main requirements in 2000 are for more detailed industry analyses. These include:

- gross fixed capital formation by industry, at current and constant prices; output, intermediate consumption, gross value added and capital consumption by industry (effectively an extension of *Blue*

Book Table 2.2 to include the most recent full year and years before 1989).

In addition we intend to improve non-financial balance sheets – with particular emphasis on the public sector – and carry forward development work on capital stock estimates, which will provide improved figures for consumption of fixed capital.

Measurement of General Government Output

There is a continuing project to measure the output of areas of general government directly, rather than assume that it equals constant price expenditure (see Caplan (1997)). The earlier work is being refined and extended for the 2000 *Blue Book*.

Ahead of the Eurostat timetable, we plan to begin the introduction of annual constant price supply and use tables as a means to provide more coherent constant price estimates. This new methodology is described in more detail in the accompanying article 'Experimental Constant Price Input-Output Supply Use Balances'.

Publications in 2000

The scale of changes in the 2000 Blue Book suggests that there will be a need to make available details of new methodologies through a revised version of *National Accounts Concepts Sources and Methods*. Consultation with users about whether they would prefer a completely new edition, or a package of amendments – possibly as downloadable files via the Internet – suggest that the latter would be more appropriate.

An article giving more detail of the changes to the 2000 *Blue Book* will be published early next year.

Beyond BB 2000

As explained earlier, much of the national accounts development programme is driven by ESA95 requirements. The developments after 2000 are mainly focussed in two areas:

- regional accounts;
- derived input-output tables and associated analyses (five-yearly only).

In addition, a number of related developments will improve constant price estimates. Over the period to 2005 we will be contributing to the harmonisation of constant price estimates across EU member states by improving deflation methodology. We plan to improve the comparability of UK estimates of growth by introducing chain-linked estimates of GDP and its components by 2002. A summary of changes is given in the box below.

National Accounts Developments Beyond 2000

Requirement	Date
Regional accounts: ● Industry by region (17 industries x 37 areas - NUTS2) ● Industry by region (3 industries x 133 areas -NUTS3) ● household accounts by region (NUTS2)	2001
Non-financial accounts: ● complete data for 1980-1989	2001
Supply and use tables at constant prices	2000-02
Symmetric input-output tables for domestic output and imports 5-yearly tables cross-classified by industry (data for 2000)	2002
Chain-linked estimates of constant price GDP and its components	2002-03
5-yearly cross-classification by industry (year 2000): ● production accounts by industry (60 industries) and sector ● capital formation by industry and product (31 industries x 3 products) (current and constant prices) ● fixed assets by industry and product (31 industries x 3 product groups)	2003
Improved methods for deflation of constant price estimates	2000-2005
Financial intermediation services indirectly measured	implementation date not yet determined
Treatment of monetary gold	by 2005

Timing of annual publications

Recent developments have tended to lengthen the time needed to produce the *Blue Book* and *Pink Book* datasets, as most of the processes involved are sequential. In particular the need to provide sector production accounts has added several weeks to the process. Further ESA developments planned over the next five years will add extra processes to the critical path for data preparation. There is little scope for starting earlier, because it is not generally possible to bring forward data delivery, at least not without affecting quality. It is therefore unavoidable that publication date will be later than was the case before the introduction of ESA95.

We intend to publish the revised quarterly national accounts consistent with the *1999 Blue Book* on 29th July, following a June publication which covers GDP only, with data revisions only to the first quarter of

1999. The *Blue Book* and *Pink Book* electronic data sets will be released on the same day. The *Blue Book* and *Pink Book* will appear in August 1999. Publication in 2000 will be somewhat later, to accommodate the extra analyses required that year, and the longer-run revisions planned.

This later timetable is not ideal. We plan to review the annual production cycle to see if there is scope for efficiencies.

We welcome the views of national accounts users on any of the issues raised in this article. Contact names are given below.

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Constant price input output supply and use tables and output discrepancy	Nadim Ahmad	nadim.ahmad@ons.gov.uk
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Experimental Constant Price Input-Output Supply-Use Balances: An approach to improving the quality of the national accounts

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Introduction

Constant Price Input-Output Supply and Use tables are increasingly receiving international recognition as the best way in which to balance the constant price national accounts and produce constant price GDP. A number of countries, including the Netherlands, Canada and Denmark, already balance their accounts in this way.

Since late 1996 the ONS has been investigating the feasibility of producing constant price input-output supply and use tables for the UK. This article begins by giving some background to the development of constant price supply-use tables in the UK, together with their benefits. Some conceptual issues on deflation are explained, followed by a description of the Office's plans for integrating constant price supply-use tables into the National Accounts' annual balancing process.

The article ends by describing how experimental constant price supply-use tables, produced earlier this year, for 1996 in 1995 prices, have quantified inconsistencies in the national accounts, between the Index of Production for manufacturing and current price input-output tables, together with our plans for resolving them.

Background

Input-Output balances at current prices are now a central part of the United Kingdom's National Accounts. Since 1992 the input-output framework has been fully integrated within the National Accounts' production process. Annual current price input-output supply-use tables are now the mechanism used to ensure consistency between the production, income and expenditure components of GDP. The result has been estimates of GDP, at current prices, that not only have greater internal coherence but also a higher quality.

Currently a different approach is used to derive estimates of constant price GDP. This compares the expenditure based estimate of GDP - derived by deflating the current price final demand and import aggregates that are implied by the current price supply-use tables - and the production based estimates that are produced as part of the quarterly national accounts production process. Balanced estimates of constant price GDP are the outcome of this balancing process.

We plan to improve the quarterly production based estimates of constant price value-added by developing an improved Index of Services. This development should also help to improve the quality of the annual services output data used in the current price input-output tables.

Our present process for balancing input-output years - that is those years that are balanced using the input-output framework - at constant prices, is not as conceptually rigorous as that used to balance current price GDP. Although our approach ensures consistency in estimates of constant price GDP measured by the expenditure and output approaches it does not, on its own, ensure that constant price estimates of lower level national accounts aggregates, and their associated deflators, implied or otherwise, are consistent. Equally, on its own, the present balancing system cannot ensure that constant price estimates of output say used in the Index of Production are consistent with the current price estimates used in the current price supply-use tables.

However, in practice, quarterly constant price estimates are used to inform the current price balances, and there are several relationships between deflators which have been built into the accounts over the years. For example we ensure that the deflators applied to imported industrial goods are the same at the time of import as when they go into capital formation or inventories. Similarly since 1993 we have ensured that goods produced for export are deflated in the same way as the export figures used in the trade statistics. These relationships ensure reasonable consistency of the building blocks but there is no overall comprehensive framework.

Benefits of Constant Price Input-Output Supply-Use Tables

Altogether, the benefits of compiling the national accounts using constant price supply-use tables include:

- A comprehensive framework within which constant price GDP is balanced.
- Coherent supply and demand estimates at the disaggregate level in constant prices.
- Coherent estimates of constant price and current price industry output.
- Coherent deflation of GDP and its components.
- A mechanism to feed back improvements into the current price supply-use balancing process via simultaneous balancing at current and constant prices.

In addition, constant price supply-use tables provide:

- Double deflated estimates (see section 'Double deflation') of value added by industry, with inputs being separately deflated from outputs.
- A framework to analyse industry production and cost functions, allowing the extension of productivity analysis beyond the more conventional assessment of labour productivity.
- A full description of how Supply-Demand economic relationships have evolved by measuring the real flow of goods and services between producers and consumers, showing the real contribution of each towards gross domestic product at constant prices.
- A framework which will facilitate the eventual production of chain-linked measures of GDP (as required by the 1995 European System of Accounts, ESA 95) and enable other constant price series (such as the Index of Production) to be annually benchmarked.

It must be recognised however that there are a number of difficulties in producing constant price supply-use tables, such as:

- Availability of data; and
- Potentially large variance in the double-deflated estimates of industries with small value-added to gross output ratios.

But development of price indices by ONS in recent years means that many of these difficulties are being overcome. ONS has recognised the benefits by developing a framework for the National Accounts within which constant price GDP is balanced using a supply-use framework.

The view that considerable benefits can be gained via the production of constant price supply-use tables is also recognised within the European System of Accounts 1995 which recommends them as the basis for estimating constant price aggregates and requires the UK to produce annual balances, for all but the most recent years, from 2002 onwards.

Double Deflation

Very simply, double-deflation is a method for calculating constant price value-added by industry that takes separate account of the differing price and volume movements of inputs and outputs in an industry's production process.

In current prices, total gross value added at basic prices by industry is defined as the sum of incomes accuring to land, labour and capital: the primary factors of production. In input-output terms, it is the sum of wages and salaries, gross trading profits and surpluses, rental income, consumption of fixed capital, and taxes, less subsidies, on production. Alternatively, industry value added can be calculated as the difference between industry total output and total intermediate consumption; where intermediate consumption is defined as expenditure on inputs used in the production process.

Because it is difficult, and for profits literally impossible, to sensibly deflate the income components of value added using price indices, the approach used is to take the difference between deflated industry output and deflated intermediate consumption. This is analogous to the current price method described above and is known as double deflation.

Of course the Index of Production, which as its names suggests covers the production side of the economy only, is already used to provide estimates of constant price output by industry, and is currently the nearest measure we have to constant price value-added by industry for the production sector but these estimates of value-added are based on the assumption that net-to-gross ratios do not change[1]; in other words that constant price value-added grows at the same rate as constant price (gross) output. Any actual divergence from these ratios, between re-basing periods, will result in estimates of value-added, at the industry level, which will not be consistent with corresponding estimates derived via current price supply-use balances. Double deflated estimates of value-added can overcome this.

The Accounting Framework

The balancing and structure of the United Kingdom's current price input-output tables are described in detail in *Input-Output Tables: a Methodological Guide*[2]. The contents of this section are confined to briefly describing the basic methods by which the balanced current price system together with price information are transformed into a constant price system.

The process of producing input-output supply-use tables at constant prices can be spilt into four main stages: (1) production of current price input-output supply-use balances; (2) deflation; (3) balancing; and (4) feedback to current price input-output.

The deflation and balancing processes can be thought of as the application of models involving consistency and logic. The consistency, related to the deflation process, is that price indices must refer to the same value concept as the figures that they are to deflate. The logic, used in the balancing process, is that total supply must equal total demand and that total inputs equal total outputs.

The important aspect of the constant price input-output framework is that, wherever possible, independent estimates of supply and demand are derived. This is important because creating balanced constant price tables could be a trivial and uninformative task. For example, final demand aggregates and industry output figures at constant prices are already produced in the UK. Getting from there to constant price supply-use balances could be easily achieved if intermediate consumption were to be used as a balancing item - (as is the practice in some countries). But whether this would be meaningful is another question. Allowing intermediate consumption, or indeed any other aggregate, to be pre-determined as a balancing item does not allow the balancing process to improve the quality of the supply, intermediate consumption, or final demand figures.

However it is not always possible to use separate deflators for supply and demand, so, for some products and industries, accounting identities that determine either constant price supply or demand as being equal to either constant price demand or supply are needed. For example the gross outputs of the electricity and gas industries are better-determined using demand-side estimates. This is done because, although estimates of volume for both of these industries are available – say total kilowatts produced by the electricity industry – these estimates do not reflect the fact that different customers pay different prices for, ostensibly, the same product. This does not however mean that, in the balancing process, these products are not subject to as much scrutiny as other products. Any implied deflator that arises from enforced balancing still needs to be thoroughly investigated.

Balancing

Background to the Present Balancing Process

It is instructive first to review how constant and current price tables are presently compiled in the UK's National Accounts for input-output years, and the primary purposes of current price supply-use tables and the IOP:

- Current price supply-use tables use data on production, income, and expenditure to arrive at the best **level** of current price GDP, and estimates of gross value added by industry consistent with this level.

- Short-term quarterly estimates of GDP also use estimates of income, output and expenditure. However, the respective quality of the data sources at this stage means that more weight is generally given to output than either expenditure or income in arriving at a balanced estimate of GDP growth. But the most recent input-output balances are generally produced eighteen months after the data period to which they refer, and so the quality of income and expenditure data is more robust than at the quarterly stage and consequently carries greater weight in the balancing process. How much weight depends largely on the quality of the three distinct data sources of GDP in any particular year. Some years the three measures may be given nearly equal weight but in others GDP levels might be determined by giving greatest weight to, say, expenditure data, with estimates of gross value-added by industry adjusted to agree with this GDP estimate.

- Once a current price balance has been set, constant price GDP levels are set by deflating the final demand and import categories that come out of the current price balancing process, and total constant price gross value-added is calculated by deducting taxes and subsidies on production and products.

- Estimates of constant price gross value-added for the Production industries are largely unaffected by the current price balancing process. Estimates of constant price value-added for non-production industries can be. Their total originates from the quarterly estimates but is generally balanced as the residual of constant price value-added - based on the final demand levels set above - and the constant price value-added of the production sector, based on the IOP. In practice this balancing rarely leads to significant change to the non-production estimates.

- The IOP's main purpose is to provide the best estimates of constant price value-added **growth** by industry grouping – using information largely from the Monthly Production Inquiry.

Balancing with Constant Price Input-Output

Reasons for Imbalances

The overall deflation process in a supply-use framework is unlikely to result in balanced constant price supply-use tables in the first instance, since most of the deflators used in constant price input-output tables are derived independently of each other. The aim of the balancing process is to ensure that total supply equals total demand and that total gross outputs are equal to total gross inputs. With the process focussing on quality considerations and industry-product historic relationships.

The **quality considerations** can be numerous, but in the main they boil down to two: the quality of the current price data and the quality and relevance of the deflators. Because of some of the assumptions needed in order to deflate, and because the current price data is usually subject to a greater degree of scrutiny, the emphasis on quality assessment is usually placed on the appropriateness of price indices.

How are Imbalances Resolved?

One of the main properties of input-output supply-use balances is that they depict the industry-product relationships between goods and services, and the industries and consumers that produce or use them. It is these relationships that can be used to identify possible explanations for imbalances in the accounts.

The main focus of analysis is carried out by looking at the behaviour of input-output ratios and by comparing double deflated estimates of value added with single indicator methods - *that is by deflating current price value added directly, albeit using rather less specific deflators for profits.* For example in the manufacturing sector one would expect to see a fair degree of stability in the goods to gross output ratios[3] of individual industries. Where there appears to be higher than expected movements in these, or other diagnostic ratios, the data for the industry, inputs and outputs, both in current and constant prices, can be re-examined. The outcome may be that changes in ratios have occurred for genuine reasons. For example, the electricity generating industry switching from coal to gas as a generating fuel; as has increasingly been the case in the UK since the early 1990s. On the other hand the outcome may be that a balance can only be achieved if current price data or deflators are adjusted.

Further checks on the output figures can be made by comparing the constant price supply-use output figures against those produced as part of the Quarterly National Accounts process.

Other checks are related to the appropriateness of the price indices used for deflation. Corrective action may involve an expansion of the product classification used in the current price supply-use tables allowing for the use of more specific price indices.

It is important to recognise that because industries and final demand are inter-related, any adjustment made on account of one industry, could result in changes to other industries or final demand. Indeed final demand aggregates, imports, taxes and margins, should be subject to as much scrutiny as estimates of industry activity. These figures can be checked for plausibility using broad rules-of-thumb. For example one might expect the growth in expenditure by consumers on any specific product to be related to its price change relative to the headline RPI. Or put more simply, if the price of say potatoes rose relative to the price of rice, one might expect consumption of rice to rise relative to that of potatoes.

Particular care needs to be taken with those industries that have small value-added to gross output ratios. This is because small errors in total intermediate consumption and gross output can have disproportionate effects on the value-added estimates of these industries. In other words the smaller the net-to-gross ratio the higher the relative variance on value-added induced by double deflation. For example, if errors of about one per cent were made in calculating the intermediate consumption and gross output of a hypothetical industry, with respective values for both of 99 and 100, double deflated estimates of value added could give anything between 3 and –1, when of course it should be 1. In these circumstances it may be necessary to fix the value added of the industry in question using single indicator methods or base year value added to gross output ratios.

Integration Plans for Constant Price Input-Output

The aim is to compile constant price supply-use tables at the same time as current price tables. This will allow the overall balancing process to exploit the feedback synergies between the current, constant, annual and quarterly data sources with a consistent approach to deflation across the accounts.

The next step in our plans to meet this aim is to publish a further *Economic Trends* article, with more detail on the data sources that underpin constant price balances together with a set of illustrative constant price supply-use balances for 1997 in 1995 prices, towards the end of this year. Coming after *Blue Book* 1999 these balances will of course reflect the current price balances in *Blue Book* 1999, but they will not have had a significant influence on them.

For *Blue Book* 2000 our plans are that constant price input-output tables will be able to inform the annual balancing process. We describe this process as balancing in a 'quasi-simultaneous' environment; which largely reflects the fact that constant price tables will be new to the *Blue Book* process and will need some proving before they are allowed to have their full impact on the annual balancing process.

We aim to have completed this proving exercise by the time *Blue Book* 2001 arrives, at which stage current and constant price balances will be produced concurrently and will have a major role to play in the balancing process.

For the longer term we are considering benchmarking the IOP, and the indices of non-production gross value added, such as the planned Index of Services, to the latest set of constant price supply-use balances: alleviating some of the short-comings of net-to-gross ratio drift, and differences in estimates of gross output.

What have experimental balances told us?

As can be inferred from the above, the difficulty with our present balancing process is that, although constant and current price estimates of **GDP** and final demand have an in-built consistency, estimates of current and constant price value-added and output **by industry** do not.

In the absence of constant price input-output our approach has been to recognise the existence of inconsistencies whilst at the same time recognising, because of their focus, that current price input-output tables provide the best estimates of the distribution of value-added by industry and the IOP provides the best estimates of constant price growth.

Constant price input-output tables allow these inconsistencies to be quantified and corrected: which is one of the many reasons that we began to develop them. Importantly they introduce a mechanism that allows the monthly production inquiries and the quarterly turnover inquiries, used to produce estimates of quarterly constant price output and value-added by industry, to inform the annual balancing process. This mechanism will be strengthened further by the data improvements resulting from the planned Index of Services

Earlier this year, experimental constant price supply-use tables for 1996 in 1995 prices were produced. These balances confirmed, and quantified, the existence of inconsistencies between the Office's estimates of current and constant price value-added and output by industry. These inconsistencies are larger in the *Blue Book* 1998 data set than they have been in previous *Blue Books*.

Where is the inconsistency?

The inconsistency is between estimates of growth rates for **output** by industry, implied by the IOP for manufacturing, and the equivalent growth rates implied by deflating current price input-output balances. This feeds through into estimates of value-added by industry, but because of movements in net-to-gross ratios the size of the inconsistency is smaller in 1996.

The cause of the discrepancy largely reflects differences in estimates of current price industry **output** given in the Annual Business Inquiry (ABI – previously ACOP) – for current price input output – and the Monthly Production Inquiry (MPI) – for the IOP. Other things being equal, because of the way in which GDP is balanced, estimates of value-added for non-production industries are affected by an equal and opposite amount.

Although no estimates of current price output used in the Index of Production are produced, users can infer the consequential inconsistencies on value-added by comparing Tables 2.3 and 2.4 in last year's *Blue Book*. Although deductions are difficult to make because, as explained earlier, value-added by industry can only sensibly be deflated via double deflation.

How big is the inconsistency?

Because of the way constant price GDP is calculated, all estimates of value-added for all industries are affected, but the inconsistency is driven by differences between estimates of manufacturing output used in the IOP and the equivalent estimates used in current price input-output. Because of the input-output balancing process, which uses estimates of expenditure and income, estimates of constant and current price GDP totals are more robust than the estimates of value-added by industry.

It is difficult to be too precise about the effect on GDP because the impact depends on the extent that estimates of industry value-added and output have been used to inform the current price balancing process. What we do know is that the overall impact is not likely to be significant, as total GDP is largely determined by final demand and trade aggregates, and because manufacturing makes up just over 20 per cent of total value-added.

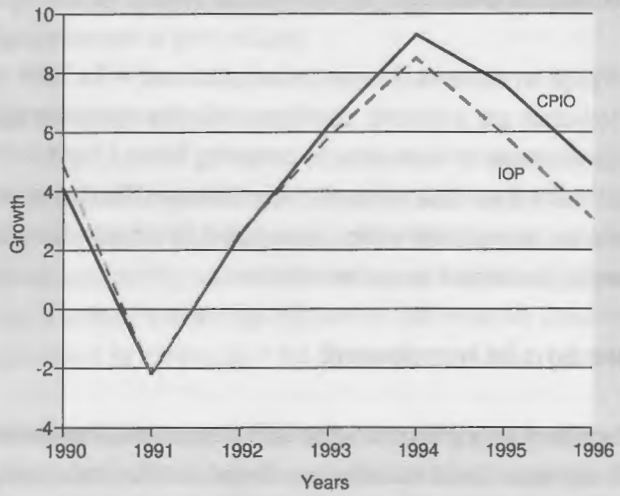
The table and chart below compare the growth rates of the current price data that underpin the IOP for manufacturing (IOP(M)) and current price input-output (CPIO) in *Blue Book* 1998.

Comparison of Current Price Total (Gross) Output
IOP Vs CPIO - BB98

	IOP(M) (CP)	CPIO BB98	Differences
1990	4.9	4.1	0.7
1991	-2.2	-2.2	0.0
1992	2.6	2.5	0.1
1993	5.8	6.2	-0.4
1994	8.5	9.3	-0.8
1995	5.9	7.6	-1.7
1996	3.1	4.9	-1.8

Chart

Growth Rates of Current Price Total (Gross) Output
IOP Vs CPIO



The above show that inconsistencies between the two measures have existed over time but that these were appreciably larger in 1995, 1996 and to a lesser extent 1994. Indeed inconsistencies at the SIC 2 and 4 digit industry level of detail over time are generally larger. This largely reflects the fact that the purpose of the IOP is to produce best estimates of short-term growth, whereas input-output provides best estimates of annual levels; consequently different approaches are used for say the treatment of discontinuities in the series.

Not shown in the above is a comparison for 1997, as input-output tables for 1997 were not available at the time of last year's *Blue Book*. However, we have been able to compare the annual and monthly inquiries for 1997 and these point to a continuation of the discrepancy into 1997.

For the IOP, discontinuities are overcome by linking forward best estimates of growth rates. For the ABI the best estimate of level is produced each year. This may lead to discontinuities between concurrent ABIs but the current price input-output balancing process can correct these.

What is the cause of the inconsistency?

At this stage our investigations are not yet complete. We have investigated a number of areas that could have led to the discrepancy and these are briefly described below. Our investigations are continuing. This work is being presented now because the action we have taken to address the discrepancy impacts on this year's *Blue Book*.

The fact that the discrepancy was most noticiable in the data for 1994-95 onwards suggested that, amongst other areas, the introduction of surveys based on the Inter-Departmental Business Register results, which were the basis of the data set used in *Blue Book* 1998 for the first time, needed to be investigated.

The IDBR was introduced in 1995 to replace the separate registers used for the output and employment inquiries. These had been generating for many years different levels of employment for manufacturing industries (where comparisons could be made). The differences between these sources, both in industrial classification and employment, were largely resolved by 1996. The move to the IDBR, however, required reconciliation of the different estimates and this process resulted in an increased variability during the period of transition. As a consequence the ABI estimates of industry output for manufacturing - grossed using IDBR employment estimates - currently published for 1994-96 are subject to a wider margin of error than is usual. The IOP and the ABI for services have not been similarly affected because of the use of alternative estimation procedures.

We have also investigated a number of other methodological areas that could be potential causes of discrepancy, including treatment of discontinuities, ratio estimation, sampling errors and grossing, but these investigations have not yet uncovered any systematic bias.

Another area of investigation has been company returns, where we have discovered some appreciable differences between the MPI and ABI. We are still investigating whether this has contributed to a bias in either of the inquiries.

Equally we have also compared both sets of data with a number of other data sources, including: CBI output data; productivity data; and total turnover from the VAT and Business register.

What are the conclusions?

- The period 1994-1996 saw the development and the introduction of the IDBR involving the reconciliation of company data and classification from the separate PAYE and VAT databases. It is acknowledged that this at first led to greater variability in register quality and, as a consequence, the current price input-output numbers for this period are subject to wider margins of error than is usual.

- Some company returns for the MPI and ABI are appreciably different. We are still investigating what contribution this source of difference is likely to have made.

- Methodological differences between the ABI and the MPI do not appear to have made an appreciable difference to the discrepancy in manufacturing.

- The inconsistencies affect the distribution of value-added at the industry level. Correcting the discrepancy is not likely to result in revisions to GDP and total value-added that are greater than normal *Blue Book* revisions.

- There may be other factors and we are continuing to investigate the MPI and the ABI, and consequently the IOP and CPIO estimates of growth in manufacturing.

- As a result of the discrepancy we have decided to introduce footnotes, explaining the discrepancy and referring to this article, to the tables and figures in this year's *Blue Book* directly affected by the discrepancy.

How do we plan to put the inconsistency right?

Our investigations are continuing and at this stage we are not in a position to provide a consistent estimate of manufacturing growth for the affected period. This means that we will not be making changes to the 1996 input-output tables this year and so the 1997 input-output tables will point to a continuation of the discrepancy. We have however managed to reconcile the 1997 annual and monthly enquiry growth rates, and this has led to an upward revision to IoP growth in 1997 of around 0.25 per cent, which will be reflected in next month's *Blue Book*. This should be regarded as our best estimate of manufacturing growth, consistent with the annual and monthly inquiries.

Most of the change needed to close the 1997 discrepancy has been identified in the annual inquiry data, and so, in the input-output balances. Early indications are that this will also be the case for earlier years. Next year's input-output tables will be revised to reflect the position set out by consistent annual and monthly enquiries; and as a consequence be consistent with the IoP.

Equally, although annual inquiry data are not yet available for 1998, we have taken this opportunity to review our estimates of the IoP in 1998, in the light of the changes made in 1997 and this has also led to an upward revision to IoP growth of around 0.25 per cent in 1998. We do not expect any further changes to the 1997 IoP as a result of reconciling the annual and monthly inquiries. However conceptually driven (double-deflated) changes, reflecting eventual constant price input-output benchmarking, may be made in the longer-term; although these are not expected to be significant.

We will continue our investigations and aim to publish an improved data set as soon as possible. A further *Economic Trends* article with more detailed timetable plans is planned for the Autumn. Our plans for next year's *Blue Book* are to fully correct the discrepancy, at the same time as takng on board other substantive changes; as set out in the accompanying *Economic Trends* article. These changes will reflect a different distribution of value-added by industry, but they are not likely to lead to significant revisions to GDP.

We will not be publishing the annual current price input-output supply-use publication for earlier years, but copies of the 1997 balances will be available.

For a description of other *Blue Book* issues, users are referred to the accompanying *Economic Trends* article 'ONS plans for the 1999 and 2000 Blue and Pink Books' *(pages 25-28)*.

Final Conclusion

It is clear that constant price input-output supply-use balancing has an important role to play in improving the quality and coherence of the National Accounts. The introductory work on experimental balances has already demonstrated this. The next step for the ONS is to continue with its long-term system of improvements - that includes developments such as chain-linking and the Index of Services - and with its strategy for the full integration of constant price input-output into the National Accounts compilation process.

Notes

1 With the exception of the electricity industry, the net to gross ratio for any industry is equivalent to the ratio of value-added to total output for that industry.

2 See *Input-Output Methodological Guide* - 1997 edition.

3 The goods-to-gross output ratio is similar in concept to the more familiar net-to-gross ratio although it is not as well defined. Goods-to-gross output ratios are loosely defined as the ratio of the sum of core inputs to gross output for any particular industry. For example the goods to gross output ratio for the sugar industry (input-output group 15) can be defined as the ratio of the sum of intermediate expenditure on agricultural products (input-output group 1) and sugar products (input-output group 15) to the gross output of the sugar industry; although some caution is needed in the ratio's interpretation. For example the goods-to-gross output ratio as defined above may differ from previous years if intra-industry sales of sugar change. The same caution is also needed when interpreting net-to-gross ratios.

Financial Market Data for International Financial Stability

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Introduction

The international financial crises that have been a feature of the mid-to-late 1990s, like others before, have given prominence to the need for good quality and timely economic and financial data. A view has emerged that better data provision allows investors to make better informed investment decisions, as well as highlighting potential problems at an early stage so reducing the likelihood of sudden shocks and hence dislocation of capital flows with a consequential impact on the real economy.[1] In 1993, new international standards for the measurement of national accounts and the balance of payments were published, followed by the development of the IMF's data dissemination standards in the mid-1990s. However, as the 1990s come to an end, the continued explosion of capital flows, the associated growth of new instruments, and the recent international financial crises creates a new challenge for those responsible for data provision both at the national and international level.

The Bank of England's Centre for Central Banking Studies (CCBS) decided that these issues, summarised as financial market data for international financial stability, deserved investigation as part of its Academic Workshop series. A one-week Workshop was held in early January 1999 bringing together users, producers and standard setters for the purpose of exploring the issues described above in an open and constructive manner. A small project team remained behind at the CCBS to research the issues in more depth and produce a report that covered user demands for data, the difficulties faced by producers in meeting these demands and possible ways forward[2]. They drew upon the conference proceedings, a questionnaire on data compilation methods and coverage that was completed by 18 countries and relevant published material.

Two main themes emerge from the research. First, it appears that users are requesting a broader range and a higher quality of data than hitherto. These requests are emerging not just from policy makers interested in developments in their own economy but also from market participants involved in international investment activity, who require information on developments in "foreign" economies. This international interest raises the question as to whether there is a positive externality for economies adopting good data standards and whether it can be identified in some way or other. The answer helps to determine the extent to which the costs borne by data producers and suppliers in producing a broad range of better quality data can be justified.

Second, the new pressures emerging are not just for the adoption of best practice and the provision of more disaggregated macro-data, but also for data that goes beyond best practice and existing frameworks – a new body of data, as one experienced statistician described it at the Workshop. This is the challenge for the international community, particularly those responsible for economic and financial statistics: whether to create new macro-data frameworks for activity that challenges existing frameworks such as on derivatives and repurchase agreements – and for data that has traditionally been collected for micro examination, such as supervisory data.

Main Findings

Data demands of users

User needs can be divided between those data that might be described as the traditional economic data series and those data that provide information on risk exposures of an economy and the economic sectors within. The first category – traditional economic data series – includes series such as **GDP data, balance of payments data, monetary aggregates, exchange rates and interest rates, consumer prices**, and, notably, institutional sector information such as **flow of funds data**. Users regarded all these data series as fundamental to understanding the condition of an economy, and as a generalisation these series are integral to the IMF's Special Data Dissemination Standard (SDDS). Continuing efforts by countries to disseminate these traditional economic data

in a timely manner and provide some indicators of quality are encouraged.

Among the second category of data – risk exposure information – users regard information on **debt** as essential including debt by sector of debtor and creditor, by currency, and by remaining maturity as well as forward looking data such as future debt interest payments. Information on assets is also essential. In particular, users require detailed information on the authorities' **foreign currency reserve assets** – including information on the composition of assets and future potential drains such as forward commitments etc. – and on indicators of the quality and composition of private sector assets, particularly of the banking sector given its important role in the money transmission process. Important **banking sector indicators** include information on capital adequacy ratios and non-performing loans. Finally, there is a growing demand for information on the build-up of positions in new instruments such as **derivative and repurchase agreements** because of the risks these positions can pose to the stability of both institutions and economies. Evidence is growing of the use of these instruments to create "hidden" risk exposures that only become apparent when a crisis emerges – such as taking foreign currency exposure through the use of forward foreign exchange contracts.

Despite the continued importance of banks, financial intermediation is increasingly shifting from banks to capital markets and users stressed the growing importance of information on security market activity. Such data requirements include **gross securities issues and redemptions, secondary market turnover data, security yields**, including yield spreads over benchmark issues. Users consider these data necessary not only to monitor short-term trends and developments, but also to help understand the dynamics of the market and the factors that determine market activity. There is also a systemic concern: a sudden drying up of activity in capital markets could be regarded as akin to a bank run.

Finally, users favoured **increased transparency** on behalf of government agencies responsible for providing economic and financial data. In particular users require information that would allow them to judge the quality and credibility of published data.

Comparison of data needs with present international data frameworks

The project team compared user demands with present international data frameworks and identified the gaps. The findings are set out in the report. The project team discovered that it is a time-consuming task to discover all the sources of information on data produced at the international level, while users at the Workshop questioned whether they had efficiently harnessed the volumes of information available. Consequently, the project team recommends that a directory of sources of economic and financial data available from international organisations be developed, with appropriate metadata, and published in one central location. The most obvious, but not only, site would be the IMF's Dissemination Standards Bulletin Board.

The issues facing data producers

Data producers feel under pressure to provide more timely and better quality data, which is not surprising given the importance users attribute to these two issues. The questionnaire results also suggest that data producers are primarily focussed on implementing international standards as best they can, and indeed in this regard there is considerable work to be undertaken in many countries. Data producers are also concerned about the increasing demands coming from different international agencies and feel it is important that these agencies co-operate in their efforts and harmonise requirements as much as possible.

In meeting user demands, in addition to budgetary pressures, producers see the reluctance of data suppliers to provide more information as being a major constraint, although regular meetings between data suppliers and producers to discuss such issues appear to be the exception rather than the norm. The role of policy makers is also highly important. During the Workshop, many data producers noted that once policy makers became interested in a particular statistical issue, hitherto obstacles to progress are suddenly swept away. The project team considers that it is essential that data providers and users—both public and private sector—meet on a regular basis to exchange ideas and thoughts and so understand each other's positions better. Given the increasingly important role of transparency and accountability in determining economic credibility, it is particularly important that those responsible for producing economic statistics meet private sector representatives.

Also, the wider variety of data demands is creating increasing pressure for data producers in different national institutions to communicate, co-ordinate and co-operate. The project team supports and encourages this co-operation. Finally, many of the experienced statisticians that addressed the Workshop also highlighted the need for international co-operation to help compilers in different countries share best practices and fill gaps in data. Speakers particularly focussed on the measurement of debtor and creditor positions in securities, where the international nature of capital markets and the growth of bearer securities make it difficult for any national compiler to keep track of developments.

Notes

1 See for instance, the G22 Working Group Report on *Transparency and Accountability*, October 1998, Chapter 1, page 1, and the *Guide to Data Dissemination Standards*, IMF, May 1996, page 1.

2 The project team comprised of Robert Hamilton (Bank of England), Fiona Mackie (Australian Bureau of Statistics) and Aditya Narain (Reserve Bank of India). Copies of the project team's report are available from the Bank of England's Centre for Central Banking Studies.