

NATIONAL INCOME AND EXPENDITURE IN THE THIRD QUARTER 1987

Gross domestic product at current and constant prices

Provisional seasonally adjusted estimates of gross domestic product (GDP) at constant factor cost up to the third quarter of 1987 suggest that the level of economic activity was some 5 per cent higher than at the same time last year. However, over 2 per cent of this growth occurred between the second and third quarters of 1987 following steady growth of around 1 per cent in each of the previous three quarters implying that, in the latest quarter, growth may have been erratically high. A better guide to underlying growth rate is probably given by comparing the first three quarters of 1987 with the same quarters of 1986, between which periods growth was 4 per cent. (First estimates of growth rates are in any case liable to be revised in the light of further information. See Note 5 for guidance on the likely range of revisions.)

Provisional estimates for the three alternative measures of GDP at constant factor cost (based on expenditure, income and output) show closer correspondence on growth rates over the latest year than on previous occasions. The output-based measure, GDP(O), is usually considered the most reliable indicator of change in the short term; this indicates growth of 2 per cent between the second and third quarters of 1987, well above the increase between the previous two quarters. Between the third quarters of 1986 and 1987, GDP(O) rose by about 5 per cent.

TABLE A

NATIONAL ACCOUNTS AGGREGATES
INDEX NUMBERS : SEASONALLY ADJUSTED¹

	Gross domestic product							Gross national disposable income at 1980 market prices		Implied gross domestic product deflator	
	At current market prices	At current factor cost		At constant factor cost 1980 prices			At factor cost	At market prices	At factor cost	At market prices	
		Average estimate	Based on expenditure data	Based on income data	Average estimate	Based on expenditure data					Based on income data ²
1980	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1981	110.2	109.3†	109.7†	99.1†	99.2†	99.6	98.4	99.7†	110.1	111.5	
1982	120.5†	118.3	119.9	100.7	100.3	101.6†	100.1	101.3	117.9	120.0†	
1983	131.0	129.6	130.6	104.0	103.9	104.7	103.3	105.2	124.7†	126.3	
1984	140.1	138.5	139.9	106.5	106.5	106.9	106.7	107.8	130.8	131.7	
1985	153.7	152.3	152.8	110.3	110.0	110.4	110.6†	111.2	138.4	139.5	
1986	164.3	160.8	162.1	113.7	113.0	114.0	114.0	114.5	142.2	144.4	
1984	1	137.2	136.6	136.5	106.1	106.3	106.2	105.9†	107.5	128.5	129.6
	2	138.0	135.8	137.7	105.8	104.6	106.0	106.7	106.7	129.6	130.6
	3	141.1	138.5	141.0	106.8	105.4	107.4	106.8	107.5	131.3	132.5
	4	144.3	143.2	144.4	107.7	107.1	108.1	107.8	109.6	133.6	134.1
1985	1	148.6	148.7	147.8	109.4	109.8	109.1	109.4	109.3	135.5	135.9
	2	152.5	151.5	152.3	110.7	110.3	111.0	110.8	111.4	137.3	138.2
	3	155.3	153.0	154.3	110.6	110.1	111.0	110.7	112.4	139.0	140.5
	4	158.5	156.0	156.7	110.6	109.8	110.4	111.4	111.9	142.0	143.5
1986	1	160.5	158.8	159.1	112.5	112.8	113.0	111.8	113.7	140.8	142.8
	2	162.1	159.0	160.2	113.1	112.5	113.3	113.4	113.7	141.4	143.2
	3	165.4	159.8	163.3	113.9	112.2	114.6	114.8	114.9	142.4	144.9
	4	169.4	165.4	166.0	115.2	114.6	115.1	115.9	115.5	144.3	146.7
1987	1	172.2	168.4	169.9	116.3	115.6	116.6	116.9	116.5	145.7	148.0
	2	176.2	170.3	175.3	117.3	115.1	118.4	118.3	118.5	148.0	149.9
	3	182.5	178.1	180.2	119.8	118.0	120.7	120.8	121.3	149.3	151.8
		Percentage change, latest quarter on previous quarter ⁴									
1987	3	3.6†	3.4†	2.8†	2.2†	2.5†	1.9†	2.1†	2.4†	0.9†	1.3†
		Percentage change, latest quarter on corresponding quarter of previous year ⁴									
1987	3	10.3†	10.2†	10.4†	5.2†	5.1†	5.3†	5.2†	5.5†	4.9†	4.8†

¹ These estimates are given to one decimal place but this does not imply that they can be regarded as accurate to the last digit shown.

² Income data deflated by the implied GDP deflator at factor cost, based on expenditure data.

³ Also known as the index of total home costs.

⁴ These estimates of change are based in some cases on less rounded figures than in the table. Nevertheless, they cannot be regarded as any more accurate than is implied by the general statements made in the text, where figures are given in rounded form.

This article presents quarterly estimates of national income, expenditure and output to the third quarter of 1987. Estimates of the components of GDP at constant prices are given here in terms of average 1980 prices. Provisional summary measures of GDP were first issued on 18 December 1987; this article incorporates later data than were available at that time. A general description of the United Kingdom national accounts is given as the introduction to 'United Kingdom National Accounts', 1987 Edition (the CSO Blue Book) and more detailed information on national income statistics, together with details of sources, methods and definitions used, is given in *United Kingdom National Accounts: Sources and Methods* (HMSO 1985). Subsequent changes are described in the notes to the 1987 Blue Book. All commentary is in terms of seasonally adjusted data.

The average measure of GDP at current market prices ('money GDP') rose by 3½ per cent between the second and third quarters of 1987 to a level around 10½ per cent higher than in the third quarter of 1986. In the first three quarters of 1987, it stood nearly 9 per cent higher than in the same period a year previously.

The real income of the United Kingdom, as shown by gross national disposable income at constant market prices, increased by 5½ per cent between the third quarters of 1986 and 1987.

The implied factor cost GDP deflator ('index of total home costs') rose by 5 per cent over the year to the third quarter of 1987, though some 1 per cent of this was accounted for by a large increase in the prices charged for exports. The implied total domestic expenditure deflator increased by only 4 per cent over the same period.

Estimates of GDP at current and constant prices, of real national disposable income and of the implied GDP deflators are given in index number form in Table A.

Expenditure at current and constant 1980 prices (Table 1)

At current prices, the expenditure measure of gross domestic product at factor cost, GDP(E), rose by 3½ per cent in the third quarter of 1987 to a level just over 10 per cent higher than a year earlier.

At constant 1980 prices the provisional figures suggest a rise in GDP(E) of 2½ per cent between the second and third quarters of 1987 and an increase of 5 per cent compared with the third quarter of 1986.

At constant prices, consumers' expenditure increased by 2½ per cent in the third quarter of 1987; its level was just over 5½ per cent higher than that of a year earlier. Further details are given below. General government final expenditure rose by 1½ per cent in the third quarter of 1987 offsetting an overall fall in the previous three quarters; compared with the third quarter of 1986 it was just over ½ per cent higher.

Quarterly movements of fixed investment have been somewhat irregular; the first two quarters of both 1985 and 1986 were affected by the phased reduction of capital allowances. The best guide to recent underlying growth rates is given by comparing the first three quarters of 1986 and 1987, between which periods fixed investment increased by 3½ per cent. Between the second and third quarters of 1987 fixed investment was unchanged and in the third quarter was 2 per cent higher than a year previously.

Stocks, which fell by £200 million in the first half of 1987, rose sharply by £900 million in the third quarter reflecting increases in retail stocks, manufacturers' work in progress and construction stocks. The recovery in the balance of overseas trade in goods and services seen in the first quarter of 1987 reversed sharply in the second quarter and deteriorated further in the third quarter; between the second and third quarters, exports rose by 3½ per cent whilst imports rose by 6 per cent.

Income at current prices (Table 2)

At current prices, the income measure of gross domestic product at factor cost, GDP(I), shows a growth of 10½ per cent between the third quarters of 1986 and 1987. Income from employment in the third quarter increased by nearly 8 per cent compared with the third quarter of 1986. The gross trading surplus of public corporations has been significantly lower during 1987 than in the same quarters of 1986 but this comparison reflects the privatisation of British Gas with effect from 3 December 1986, of British Airways from 6 February 1987, of Royal Ordnance plc from 22 April 1987 and of BAA plc (formerly the British Airports

Authority) from 16 July 1987. There is a corresponding effect on profits of the company sector which have risen in each of the latest four quarters both before and after making allowance for the effects of privatisation. The combined total of company profits and public corporations gross trading surplus was 25 per cent higher in the third quarter of 1987 than at the same time last year.

When deflated by the implied index of total home costs, GDP(I) rose by 2 per cent between the second and third quarters of 1987 and nearly 5½ per cent between the third quarters of 1986 and 1987.

Output at constant 1980 prices (Table 3)

There was an increase of 2 per cent in the output measure of gross domestic product, GDP(O), between the second and third quarters of 1987. GDP(O) was 5 per cent higher in the third quarter of 1987 than in the corresponding period in 1986.

Output of the service industries rose by 2 per cent between the second and third quarters of 1987. This included an increase of 3 per cent in distribution and related activities and an increase of about 2 per cent in transport and communications industries.

The output of production industries, and of manufacturing industries within the aggregate, grew by 2 per cent between the second and third quarters. Construction output increased by 5 per cent over the same period.

Between the third quarters of 1986 and 1987, manufacturing output grew by 7 per cent and construction by 9 per cent. Service sector output was 6 per cent higher; in particular, distribution activity increased by 8 per cent.

Personal income and saving (Table 4)

Real personal disposable income increased by 1 per cent between the second and third quarters of 1987 to reach a level 3½ per cent higher than the third quarter of 1986. Percentage changes in the components of personal income are shown in Table B.

In the year to the third quarter of 1987 total personal income, before deductions, rose by 7 per cent. Within this total, wages and salaries grew by 8½ per cent. The lower increase in total personal income reflects slow growth in both employers contributions and in general government grants to persons.

Personal disposable income increased by 2 per cent between the second and third quarters of 1987. Prices, as measured by the consumers' expenditure deflator, rose by 1 per cent in the same period, and, as a result, RPDPI increased by 1 per cent.

Between the second and third quarters of 1987 consumers' expenditure grew faster than personal disposable income and the saving ratio fell to around 5 per cent. The level of personal saving is the difference between total personal disposable income and consumers' expenditure and hence this balance is subject to a wide margin of error. A better guide to the level of personal saving is probably given by the saving ratio for the first three quarters of 1987. Over this period the saving ratio was around 6½ per cent compared with 7½ per cent in the whole of 1986.

Consumers' expenditure (Table 5)

At current prices, consumers' expenditure grew by 3½ per cent between the second and third quarters of 1987 to reach a level 9 per cent above that in the third quarter of 1986.

The rise of 2½ per cent in consumers' expenditure at constant prices since the second quarter of 1987 took spending to a level just over 5½ per cent above the third quarter of 1986. In the latest quarter, expenditure on most categories of goods and services increased.

Within the total, expenditure at constant prices on durable goods grew over 9 per cent between the third quarters of 1986 and 1987, rising in all the main categories: spending on vehicles grew by 10 per cent, on furniture and floor coverings by 8 per cent, and on other durables by 9 per cent. Expenditure on food rose by 1 per cent between the third quarters of 1986 and 1987 and on alcoholic drink by some 2 per cent over this period. There was no change this year in excise duties on tobacco products and the long-term decline in spending on these has hesitated. Among other goods, spending on clothing and footwear rose 7 per cent between the third quarters of 1986 and 1987, on energy products expenditure by 1 per cent and on total services by 7 per cent.

Industrial and commercial companies (Table 7)

Provisional estimates suggest that, after deducting stock appreciation, profits of industrial and commercial companies rose by 7 per cent between the second and third quarters of 1987.

Between the latest two quarters, gross trading profits (net of stock appreciation) of North Sea oil companies rose by 8 per cent. In

the latest quarter these profits were some 50 per cent higher than at their low point in the third quarter of 1986 but still less than half the level of the peak in the fourth quarter of 1984.

The gross trading profits (net of stock appreciation) of non-North Sea industrial and commercial companies are estimated to have risen by 7 per cent in the third quarter of 1987 to a level around one fifth higher than in the corresponding quarter a year earlier. However, these comparisons are distorted by British Gas, British Airways, Royal Ordnance plc and BAA plc which are included in the industrial and commercial companies figures only since their privatisation on 3 December 1986, 6 February 1987, 22 April 1987 and 16 July 1987 respectively. After making broad allowance for the extra coverage, there was still a significant rise in profits between the third quarters of 1986 and 1987.

In the third quarter of 1987, payments of dividends on ordinary shares were 35 per cent higher than in the previous quarter. These payments have varied markedly from quarter to quarter recently, in the first three quarters of 1987 they were, on average, 36 per cent higher than a year earlier. Payments of other dividends and interest rose by 6 per cent and those of UK taxes on income by 2 per cent between the second and third quarters of 1987.

These preliminary estimates suggest that the broad measure of undistributed income (that is, before deducting stock appreciation or net unremitted profits from and due to related overseas concerns) of UK industrial and commercial companies in the third quarter of 1987 was about £12 billion, slightly higher than in the previous quarter and well above the level of a year earlier.

TABLE B

CHANGES IN PERSONAL INCOME

	Seasonally adjusted					Over same quarter in previous year
	Percentage change					
	Over previous quarter				1987 Q3	
1986 Q4	1987 Q1	Q2	Q3			
Total personal income	2	1½	1	2½	7	
of which: Wages, salaries and forces' pay	2½	1½	3	2	8½	
Employers' contributions	1	0	1½	½	3½	
Current grants from general government	1	0	½	-1	½	
Other income	3	4	-5	8½	10	
UK taxes on income	5	½	-2	6½	9½	
Social security contributions	3	½	4	2	9	
Total personal disposable income	1½	2	1	2	6½	
Consumers' expenditure implied deflator	1	1	0	1	3	
Real personal disposable income	½	1	1	1	3½	

Public corporations (Table 9)

Comparisons of data for public corporations in the first three quarters of 1987 with earlier periods are affected by the privatisation of British Gas, British Airways and the British Airports Authority.

Central government (Table 10)

Total central government receipts rose by over £3½ billion or 11 per cent between the third quarters of 1986 and 1987. This rise was mainly accounted for by increases in taxes on income (up by 16½ per cent over the period), taxes on expenditure (up 8½ per cent) and National Insurance contributions (up 10 per cent). Total current expenditure rose by nearly £2 billion or over 5 per cent between the third quarters of 1986 and 1987. The main increases were in final consumption (up 6½ per cent), current grants to local authorities (up 9 per cent) and debt interest (up 11½ per cent).

Local authorities (Table 11)

Total current receipts by local authorities in the third quarter of 1987 were nearly 9 per cent higher than a year previously. Half of this was attributable to the increase in current grants from central government (up 9 per cent) and over one third to an increase in rate income (also up 9 per cent).

Total current expenditure rose by 6½ per cent between the third quarters of 1986 and 1987, mainly accounted for by an increase in final consumption (up 9 per cent over the period).

Gross domestic fixed capital formation at 1980 prices (Tables 14 and 15)

Comparisons of fixed investment between 1986 and 1987 are affected by businesses' scheduling of investment decisions to take the best advantage of first year capital allowances before their reduction in April 1986. Comparisons over the first three quarters of each year may give the best indication of recent underlying changes. The volume of total fixed investment in the first three quarters of 1987 was 3½ per cent higher than in the same period of 1986.

The privatisation of British Gas, British Airways, BAA plc and Royal Ordnance plc also affects comparisons of fixed investment between 1986 and 1987 by the private and public corporations sectors. Fixed investment by the two sectors combined increased by 4 per cent between the first three quarters of 1986 and the corresponding period in 1987, whilst general government fixed investment fell by 2 per cent over the same period.

Fixed investment in dwellings in the first three quarters of 1987 was nearly 5½ per cent higher than a year previously. Over the same period, investment in other new buildings and works rose by 2 per cent, while investment in vehicles, ships and aircraft rose by 7½ per cent and that in plant and machinery rose by 2½ per cent.

Analysed by industry and comparing the first three quarters of 1987 with the same three quarters of 1986, Table 15 shows significant increases in fixed investment by the financial and business services industries (up 7 per cent), the distribution, hotels and catering industries (up 8½ per cent) and the manufacturing industries (up 5½ per cent), which were partially offset by a decline in fixed investment by the oil and natural gas extraction industries (down 25 per cent).

Value of physical increase in stocks and work in progress at 1980 prices (Table 16)

Stocks rose by £900 million between the ends of the second and third quarters of 1987 following a fall of £200 million over the first half of 1987. In the third quarter stocks increased in all main industry groups apart from the energy and water supply industries where stocks were broadly unchanged.

Revisions to previously published estimates

There have been a number of significant revisions to the estimates published in the October 1987 issue of Economic Trends and in the 1987 Blue Book, as follows:

- New information from the Survey of Personal Incomes conducted by the Board of Inland Revenue has altered the assessment of self employment income from 1981 onwards, leading to significant downward revisions to GDP(I) from 1984.

- As part of a continuing programme of investigations and improvements, more complete, though still provisional, assessments of personal sector spending on residential and nursing home care for the elderly and on board and lodging by others living outside households have been derived leading to upward revisions to consumers' expenditure and GDP(E).

- Newly available data from the Family Expenditure Survey in respect of 1986 has led to upward revisions in some components of consumers' expenditure and therefore in GDP(E).

These revisions to estimates of income and expenditure have necessitated a review of the net evasion allowance (net undeclared income) made at the time of this year's Blue Book. The assessment now stands at 1¼ per cent of GDP(E) from 1981 onwards.

NOTES

GDP estimates

1. Although estimates of gross domestic product (GDP) based on expenditure, income and output should in principle give the same result, in practice there are often variations between them. The output measure is usually the best indicator of quarter to quarter movements; for comparisons over periods of more than a year the average of the three measures is preferred. Investigations continue into the discrepancies between growth in the three measures. The problems of consistency, particularly in terms of timing, between the different types of administrative and statistical records used in compilation have an important bearing on reconciliation of the largely independent estimates of GDP.

Caution in interpretation

2. In the interpretation of quarterly and annual national accounts estimates, special attention needs to be paid to the higher margins of error attaching to series estimated at constant prices when the rate of inflation is changing significantly. Rapidly changing exchange rates may also affect the valuation of international transactions and the measurement of profits derived from them.

Appendix tables

3. The tables in the Appendix give series of quarterly figures back to 1984. Where an obelus appears this indicates that the data are new or have been revised with the period so marked the earliest to have been revised. If the obelus appears against the first figure in a column, this implies that earlier data may also have been revised. Such earlier data can be obtained from the CSO Databank, which contains all of the series given in the Appendix tables.

The CSO Databank

4. The data in these tables can be obtained in computer readable form via the CSO Databank service which provides macro-economic time series data on magnetic tape. Each series on the Databank is allocated a four letter identifier which appears in the Appendix tables at the head of each column of data. The Databank enables users, host bureaux and end users, to have a longer run of the data than can be included in the tables. In addition, the latest figures are available via Databank some weeks before they appear in Economic Trends.

TABLE C

	Percentage changes (at annual rate) ⁽¹⁾	
	Change between the third quarters of 1986 and 1987	Range based on past experience
Constant prices		
GDP - average measure at constant factor cost	5¼	5-6¾
Current prices		
GDP - average measure at current market prices ⁽²⁾	10¼	10½-13

(1) Figures for growth rates based on individual quarters vary from quarter to quarter and do not represent the underlying rate of growth.

(2) The range shown is based on the analysis of revisions applicable to GDP at current factor cost. It is unlikely that the revisions performance of GDP at current market prices differed significantly from that at factor cost.

Details of the service offered and the Schedule of charges may be obtained from the Databank Manager, CSO Branch 9, Room 52A/4, Government Offices, Great George Street, London SW1P 3AQ (Telephone: 01-270-6386 or 6387). CSO does not offer direct on-line access for these data, but a list of host bureaux offering such a facility is available on request from CSO.

Revisions

5. Estimates of GDP are subject to revision as more information becomes available. Early estimates are particularly uncertain. An analysis of revisions experience, published in the August 1987 issue of Economic Trends showed that revisions to growth rates of GDP data published for 1971 to 1981 were, on balance, upwards though not uniformly so.

If past revisions experience were to continue - and this is by no means certain since compilation methods are regularly reviewed and modified as necessary - the analysis suggests a range within which the eventually revised value of the growth rate is likely to lie. Table C shows the first estimates of the growth rates of current and constant price GDP (average measure), together with the ranges within which the revised value might be expected to lie on two thirds of occasions some five years after the first publication, that is, if future revisions are similar to the past.

APPENDIX CONTENTS *

	Table	Page
SUMMARY TABLES		
Expenditure on the gross domestic product:		
At current prices — unadjusted and seasonally adjusted	1	78
At 1980 prices — unadjusted and seasonally adjusted	1	79
Factor incomes in the gross national product:		
Unadjusted and seasonally adjusted	2	80
Index numbers of output at constant factor cost:		
Seasonally adjusted	3	81
SECTOR AND COMPONENT TABLES		
Personal income, expenditure and saving:		
Unadjusted and seasonally adjusted	4	82
Consumer's expenditure:		
At current prices — unadjusted	5	83
At 1980 prices — unadjusted and seasonally adjusted	5	83
Appropriation account of companies and financial institutions:		
Unadjusted and seasonally adjusted	6	84
Appropriation account of industrial and commercial companies:		
Unadjusted and seasonally adjusted	7	85
Appropriation account of financial companies and institutions:		
Unadjusted and seasonally adjusted	8	86
Appropriation account on public corporations:		
Unadjusted and seasonally adjusted	9	87
Current account of central government:		
10 Receipts — unadjusted and seasonally adjusted	89	
Expenditure — unadjusted and seasonally adjusted	10	89
Current account of local authorities:		
Receipts — unadjusted and seasonally adjusted	11	90
Expenditure — unadjusted and seasonally adjusted	11	91
International transactions:		
United Kingdom credits — unadjusted and seasonally adjusted	12	92
United Kingdom debits — unadjusted and seasonally adjusted	12	93
Summary capital account:		
Receipts — unadjusted and seasonally adjusted	13	94
Expenditure — unadjusted and seasonally adjusted	13	95
Gross domestic fixed capital formation by sector and by type of asset:		
At current prices — unadjusted	14	96
At 1980 prices — unadjusted and seasonally adjusted	14	96
Gross domestic fixed capital formation by industry group:		
At current prices — unadjusted	15	97
At 1980 prices — unadjusted and seasonally adjusted	15	97
Value of physical increase in stocks and work in progress:		
At current prices — unadjusted	16	98
At 1980 prices — unadjusted and seasonally adjusted	16	98
National Accounts aggregates:		
Gross domestic product (average estimates)	17	99

*The tables show annual figures from 1980 and quarterly figures from 1984.