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NATIONAL INCOME AND EXPENDITURE IN THE SECOND QUARTER 1987

This article presents quarterly estimates of national income, expenditure and output to the second 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 21 September 1987; this article incorporates later data than were available at that time. An explanation of concepts used in The UK national accounts, of principles of measurement used, and of relationships between aggregates and sectoral measures is given in the Introduction to the 1987 Blue Book. A detailed description of the 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.

TABLE A NATIONAL ACCOUNTS AGGREGATES

Index numbers: Seasonally Adjusted [1]

1980 = 100

		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
		Average estimate	Based on expenditure data	Based on income data	Average estimate	Based on expenditure data	Based on income data [2]	Based on output data	Average estimate	Based on expenditure data [3]	Based on expenditure data
1980		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1981		110.2†	109.0†	109.6†	99.0†	99.0†	99.6†	98.4	99.6†	110.1†	111.5
1982		120.3	118.0	119.6	100.5	100.1	101.5	100.1†	101.1	117.9	119.9†
1983		130.7	129.2	130.4	103.9	103.7	104.7	103.3	105.1	124.6	126.1
1984		139.9	137.8	140.0	106.5	105.5	107.2	106.7	107.9	130.6	131.5
1985		153.6	151.5	153.4	110.4	109.5	110.9	110.7	111.3	138.3	139.3
1986		164.2	159.8	163.3	113.8	112.4	114.9	114.0	114.6	142.1	144.3
1980	1	95.7†	94.7†	95.8†	101.8†	100.9†	101.9†	102.7†	101.5†	93.9†	93.7†
	2	98.7	97.7	100.0	101.0	99.9	102.2	100.7	99.9	97.8	98.3
	3	101.5	102.7	100.6	99.3	100.5	98.4	99.1	99.5	102.2	102.2
	4	104.1	104.9	103.6	97.9	98.7	97.4	97.6	99.1	106.3	105.9
1981	1	105.8	107.4	104.3	97.9	99.3	96.5	97.8	99.9	108.1	107.9
	2	108.6	107.8	107.5	98.9	99.5	99.3	98.0	99.1	108.3	110.6
	3	111.7	108.8	111.6	99.2	98.0	100.6	98.9	99.4	111.0	112.6
	4	114.7	112.2	115.0	100.1	99.3	101.9	99.0	100.4	113.0	114.9
1982	1	116.3	114.3	114.6	99.9	100.1	100.3	99.1	100.6	114.3	116.7
	2	119.4	117.0	119.8	100.7	99.9	102.3	99.9	100.6	117.1	118.9
	3	121.4	118.2	120.8	100.4	99.3	101.5	100.5	100.9	119.0	121.1
	4	124.3	122.4	123.0	101.2	101.1	101.7	100.8	102.6	121.1	122.9
1983	1	127.6	127.0	126.4	102.9	103.6	103.2	101.8	104.7	122.5	124.2
	2	128.2	125.6	128.6	103.2	102.5	104.9	102.1	103.2	122.6	124.6
	3	132.3	131.0	132.1	104.4	104.1	105.0	104.0	106.4	125.8	127.0
	4	134.9	133.1	134.4	105.0	104.4	105.5	105.2	106.2	127.4	128.8
1984	1	137.0	136.0	136.5	106.1	105.9	106.3	106.0	107.6	128.4	129.4
	2	137.7	135.1	137.8	105.6	104.3	108.3	106.1	106.8	129.6	130.3
	3	140.8	137.7	141.2	106.6	105.1	107.8	106.9	107.6	131.0	132.2
	4	144.1	142.5	144.7	107.7	106.7	108.5	107.8	109.7	133.5	133.9
1985	1	148.4	147.8	148.1	109.4	109.2	109.5	109.5	109.4	135.3	135.8
	2	152.4	150.6	153.0	110.8	109.9	111.6	110.9	111.6	137.0	137.9
	3	155.2	152.3	154.9	110.6	109.6	111.5	110.8	112.5	138.9	140.3
	4	158.5	155.2	157.6	110.6	109.3	111.0	111.5	111.9	142.0	143.3
1986	1	160.5	158.0	160.2	112.6	112.2	113.7	112.0	113.9	140.9	142.7
	2	162.1	158.3	161.1	113.1	112.0	114.0	113.4	113.8	141.4	143.2
	3	165.2	159.0	164.3	114.0	111.7	115.4	114.8	115.0	142.3	144.7
	4	169.1	163.9	167.4	115.3	113.9	116.3	115.9	115.7	144.0	146.4
1987	1	171.8	166.9	171.8	116.7	114.8	118.2	117.0	117.2	145.3	147.2
	2	175.3	169.2	175.2	117.4	114.9	119.0	118.1	118.9	147.2	149.2
		Percentage change, latest quarter on previous quarter [4]									
1987	2	2.0†	1.4†	2.0†	0.6†	0.1†	0.7†	0.9†	1.4†	1.3†	1.4†
		Percentage change, latest quarter on corresponding quarter of previous year [4]									
1987	2	8.1†	6.8†	8.8†	3.7†	2.6†	4.5†	4.1†	4.4†	4.1†	4.2†

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.

Gross domestic product at current and constant prices

Provisional estimates of gross domestic product (GDP) at constant factor cost up to the second quarter of 1987 suggest that the level of economic activity was some 3½ to 4 per cent higher than at the same time last year.

Fluctuations in the expenditure based measure of GDP, largely reflecting erratic movements in overseas trade, have made the recent quarterly path of the derived average measure somewhat difficult to interpret. A better guide to growth is given on this occasion by comparing successive half-year periods. On this basis, in the first half of 1987 the average measure of GDP at constant factor cost, GDP(A), was 2 per cent higher than in the previous half-year and just over 3½ per cent higher than in the corresponding period of 1986. (First estimates of growth rates are liable to be revised in the light of further information. See the Notes 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 differing profiles over the last year. The output-based measure, GDP(O), is usually considered the most reliable indicator of change in the short term; this indicates growth of 1 per cent between the first and second quarters of 1987, similar to the increases in the previous two quarters. Between the second quarters of 1986 and 1987, GDP(O) rose by 4 per cent.

The average measure of GDP at current market prices ('money GDP') rose by 2 per cent between the first and second quarters of 1987 to a level 8 per cent higher than in the second quarter of 1986. In the first half of 1987, it stood 7½ per cent higher than a year previously.

The real income of the United Kingdom, as shown by gross national disposable income at constant market prices, increased by 3½ per cent between the first half of 1986 and the first half of 1987.

The implied factor cost GDP deflator ('index of total home costs') increased by 3½ per cent over the year to the first half of 1987.

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. As is usual in this issue of Economic Trends, a longer run of these series (going back to 1977) is provided at Table 17 which, in addition, shows average estimates of GDP on four bases (at current and constant market prices and at current and constant factor cost) expressed both in £ billion and in index number form.

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 1½ per cent in the second quarter of 1987 to a level nearly 7 per cent higher than a year earlier.

At constant 1980 prices the provisional figures suggest little change in GDP(E) between the first and second quarters of 1987, and an increase of 2½ per cent compared with the second quarter of 1986.

At constant prices, consumers' expenditure increased by about 1½ per cent in the second quarter of 1987; its level was around 4 per cent higher than that of a year earlier. Further details are given below. General government final expenditure rose by over ½ per cent in the second quarter of 1987 largely offsetting a fall in the previous quarter; compared with the second quarter of 1986 it was unchanged. 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 half-years of 1986 and 1987, between which periods fixed investment increased by 4½ per cent. Following destocking of £0.3 billion in the first quarter of 1987, stocks were little changed in the second quarter. 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; between the two quarters, exports fell by 1½ per cent whilst imports rose by 4½ 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 nearly 9 per cent between the second quarters of 1986 and 1987. Income from employment in the second quarter increased by 8 per cent compared with the second quarter of 1986. The gross trading surplus of public corporations in the first two quarters was significantly lower than in the same period of 1986 but this comparison was affected by the privatisation of British Gas with effect from 3 December 1986 and of British Airways from 6 February 1987. There was a corresponding effect in the first two quarters on company profits. Before deduction of stock appreciation, the latest estimates indicate a further growth in profits since the first quarter of 1987, following some recovery in the third and fourth quarters 1986 from their low level in the first half of that year. The improvement in company profits during the last year is over and above any effects of privatisations. The combined total of company profits and public corporations gross trading surplus stood nearly one fifth higher in the second quarter of 1987 than at the same time last year.

When deflated by the implied index of total home costs GDP(I) rose by about ½ per cent between the first two quarters of 1987 and 4½ per cent between the second quarters of 1986 and 1987.

Output at constant 1980 prices (Table 3)

The output measure of gross domestic product, GDP(O), rose by 1 per cent between the first two quarters of 1987. In the second quarter, GDP(O) stood some 4 per cent above its level of a year earlier.

Manufacturing output grew by 2 per cent between the first and second quarters of 1987; however output of the production industries increased by only about ½ per cent between the two quarters, reflecting the fall in energy and water supply. Construction output fell by 3½ per cent from its high first quarter level.

Output of the service industries grew by 1½ per cent between the first and second quarters, including increases of 2 to 2½ per cent in distribution activity and in transport and communication output (both of which had shown little change in the first quarter).

Between the second quarter of 1986 and 1987, manufacturing output grew by nearly 5½ per cent and construction by 4 per cent. Service sector output was some 5 per cent higher; in particular, distribution activity increased by 6½ per cent.

Personal income and saving (Table 4)

Real personal disposable income (RPDI) increased by under ½ per cent between the first and second quarters of 1987 to reach a level which was 3½ per cent higher than the second quarter of 1986. Percentage changes in the components of personal income are shown in Table B.

Total personal income, before deductions, rose by around ½ per cent between the first and second quarters of 1987 following an increase of nearly 2 per cent between the fourth quarter of 1986 and the first quarter of 1987. Within the total, wages and salaries rose by 2½ per cent between the latest quarters and by 8½ per cent in the year to the latest quarter. The erratic quarter to quarter fluctuations in personal income are largely attributable to changes in dividend and interest receipts which had been particularly buoyant in the first quarter but fell in the second, reflecting a reduction in dividends on ordinary shares and lower interest rates.

Personal disposable income thus increased by ½ per cent between the first and second quarters of 1987. Prices, as measured by the consumers' expenditure deflator, rose marginally in the same period and, as a result, RPDI increased by under ½ per cent. In the first half of 1987, however, RPDI was 2 per cent higher than in the second half of 1986 and some 4 per cent higher than at the same time in 1986.

Between the first and second quarters of 1987 consumers' expenditure at current prices rose by more than personal disposable income and the saving ratio fell to around 8½ per cent. Measured over the first half of 1987, it was ½ per cent higher than in the second half of 1986 and much the same as in the first half of 1986.

TABLE B

CHANGES IN PERSONAL INCOME

Seasonally adjusted

	Percentage change				
	Over previous quarter				Over same quarter in previous year
	1986		1987		
	Q3	Q4	Q1	Q2	1987 Q2
Total personal income	1 ½	2	2	½	6
of which: Wages, salaries and forces' pay	2	2 ½	1 ½	2 ½	8 ½
Employers' contributions	0	1	0	1	2 ½
Current grants from general government	1 ½	1	1 ½	– ½	3 ½
Other income	1 ½	3	3 ½	–5	3
UK taxes on income	1	5	½	– ½	5 ½
Social security contributions	1 ½	2 ½	1	3	8
Total personal disposable income	1 ½	1 ½	2	½	6
Consumers' expenditure implied deflator	1	1	½	0	2 ½
Real personal disposable income	1	1	1 ½	½	3 ½

Consumers' expenditure (Table 5)

At current prices, consumers' expenditure grew by nearly 2 per cent between the first two quarters of 1987 to reach a level 6½ per cent above that in the second quarter of 1986.

The rise of over 1½ per cent in consumers' expenditure at constant prices since the first quarter of 1987 took spending to a level over 4 per cent above the second quarter of 1986. In the latest quarter, expenditure on most categories of goods and services increased but that on energy products fell.

Within the total, expenditure at constant prices on durable goods showed a 6 per cent growth between the second quarters of 1986 and 1987, rising in all the main categories: spending on vehicles grew 4 per cent, on furniture and floor coverings it increased by 6 per cent, and on other durables it showed a rise of 9 per cent. Spending on food fell by 1 per cent between the second quarters of 1986 and 1987; there was a 3 per cent increase in spending on alcoholic drink over this period and spending on tobacco continued its broad decline. Among other goods, spending on clothing and footwear rose 6 per cent between the second quarters of 1986 and 1987, on energy products expenditure fell 2 per cent and on total services spending rose by 6 per cent.

Industrial and commercial companies (Table 7)

Provisional estimates suggest that, after deducting stock appreciation, profits of industrial and commercial companies in the second quarter of 1987 were little changed from their first quarter level.

In the latest quarter, North Sea oil companies' profits (net of stock appreciation and seasonally adjusted) were 40 per cent higher than at their low point in the second and third quarters of 1986. However, their second quarter 1987 profits were 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 in the second quarter of 1987 were higher than in the corresponding quarter a year earlier. However, this comparison is distorted by British Gas and British Airways which are included in the industrial and commercial companies figures only since their privatisation on 3 December 1986 and 6 February 1987 respectively.

In the second quarter of 1987, payments of dividends on ordinary shares were below the very high level of the previous quarter. In the first half of 1987 these payments were 26 per cent higher than a year earlier. Between the second quarters of 1986 and 1987 payments of UK taxes on income rose by 3 per cent. Within this, payments of petroleum revenue tax by North Sea oil companies (net of refunds of advance petroleum revenue tax) fell by 56 per cent, whilst payments of other taxes rose by 31 per cent.

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 second quarter of 1987 was over 40 per cent higher than a year earlier.

Public corporations (Table 9)

Comparisons of data for public corporations in the first half of 1987 with earlier periods are affected by the privatisation of British Gas and British Airways.

Central government (Table 10)

Total central government receipts rose by over £2½ billion or nearly 6½ per cent between the second quarters of 1986 and 1987. This rise was mainly accounted for by increases in taxes on income (up by 6 per cent over the period), taxes on expenditure (up 7½ per cent) and National Insurance contributions (up nearly 9 per cent).

Total current expenditure rose by over £1½ billion or 4½ per cent between the second quarters of 1986 and 1987. The main increases were in final consumption (up 4½ per cent), current grants to local authorities (up 8 per cent) and debt interest (up 9 per cent).

Local authorities (Table 11)

Total current receipts by local authorities in the second quarter of 1987 were nearly 7 per cent higher than a year previously. Over a half of this was attributable to the increase in current grants from central government and about one quarter to an increase in rate income (up 5 per cent).

Total current expenditure rose by 7 per cent between the second quarters of 1986 and 1987, most of this accounted for by an increase in final consumption (up 7½ per cent over the period)

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

Comparisons of fixed investment in the second quarter of 1987 with the same quarter of 1986 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 half-yearly periods give a better indication of underlying changes. Total fixed investment in the first half of 1987 was about 4½ per cent higher than in the first half of 1986.

The privatisation of British Gas and British Airways has further affected comparisons of fixed investment in the first half of 1987 by the private and public corporations sector with earlier periods. Fixed investment by the two sectors combined increased by 5 per cent between the first half of 1986 and the first half of 1987, while the increase in general government fixed investment was only 2 per cent.

Fixed investment in dwellings in the first half of 1987 was 4½ per cent higher than a year previously. Over the same period, investment in other new buildings and works rose by 5½ per cent, the same as the rise in vehicles, ships and aircraft, and investment in plant and machinery rose by 3½ per cent.

Analysed by industry and comparing the first half of 1987 with the first half of 1986, Table 15 shows significant increases in fixed investment by the financial and business services industries (up 10 per cent), the distribution, hotels and catering industries (up 8½ per cent) and the manufacturing industries (up 6½ per cent), which were partially offset by a decline in fixed investment by the oil and natural gas extraction industries (down 19 per cent).

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

Stocks were little changed between the ends of the first and second quarters of 1987. Increases in stocks of the distributive trades were largely offset by falls in the stocks of the energy and water supply industries.

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 1977. 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.

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.

TABLE C

	Percentage changes (at annual rate)[1]	
	Change between the second quarters of 1986 and 1987	Range based on past experience
Constant prices		
GDP - average measure at constant factor cost	3¾	3½-5¼
Current prices		
GDP - average measure at current market prices [2]	8	8¼-10½

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.

Financial year data

6. Table D gives estimates of the expenditure measure of gross domestic product and gross national product for the last ten financial years.

TABLE D

Gross domestic product and gross national product for financial years[1] £ million

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
GROSS DOMESTIC PRODUCT (expenditure estimate)										
At current market prices	151 459	172 806	206 699	237 587	259 550	283 123	305 487	326 441	358 687	380 123
At current factor cost	134 004	152 649	179 381	205 973	221 120	241 773	261 979	280 812	307 636	323 252
At constant market prices [2]	224 434	231 315	236 733	229 515	228 355	232 367	239 698	245 339	254 219	261 531
At constant factor cost [2]	195 160	199 987	204 663	198 932	198 258	201 543	207 849	212 254	220 114	225 672
GROSS NATIONAL PRODUCT (expenditure estimate)										
At current market prices	151 686	174 006	207 359	237 646	260 273	284 920	307 975	330 810	361 532	385 400
At current factor cost	134 231	153 849	180 041	206 032	221 843	243 570	264 467	285 181	310 481	328 529
At constant market prices [2]	224 612	232 698	237 446	229 567	229 013	233 886	241 673	248 494	256 294	265 425
At constant factor cost [2]	195 362	201 370	205 376	198 984	198 916	203 062	209 824	215 409	222 189	229 566

1 Based on unadjusted data. Fully comparable series are not available for the average measure of GDP because one of its components, the output based measure, is only compiled on a seasonally adjusted basis constrained to calendar years. The sums over four seasonally adjusted quarters of GDP(A) are as follows:

£ million

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
At current market prices	150 835	173 107	207 526	236 420	260 154	283 972	306 992	329 263	361 248	385 257
At constant factor cost [2]	194 244	199 986	205 677	197 739	198 739	202 282	209 022	214 313	221 952	229 190

2 At 1980 prices.

ADDENDUM

UNITED KINGDOM NATIONAL ACCOUNTS — 1987 EDITION

The following corrections to series should be noted.

Table 10.12: Public sector: transactions in financial assets and liabilities

Under 'Transactions in Financial Assets (Net)'

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Net lending to the private sector: General government (DDEP)	197	53	-25	516	806	701	1001	-151	-97	-288	-283
Total net lending (DDER)	1267	208	642	763	595	1056	834	-617	-2427	-2281	-4059
Total financial assets (DDET)	2495	694	2381	6040	1910	6088	-20	2151	-72	-909	-5447

Table 14.1: Change in the book value of stocks by industry

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total(DHHY)	7582	6919	6032	10999	3775	3180	2981	5728	5376	3760	2882

Table 9.6: Taxes on income, social security contributions and taxes on capital: allocation by sector, type of income and property

One of the published Databank identifiers is incorrect; the correction is as follows:

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Taxes on income: companies (DAAB)	2052	2917	3525	3948	5219	5577	6466	6959	7923	9429	9585