

BUSINESS STATISTICS OFFICE

PA311  
1986

# Business Monitor

## Report on the Census of Production

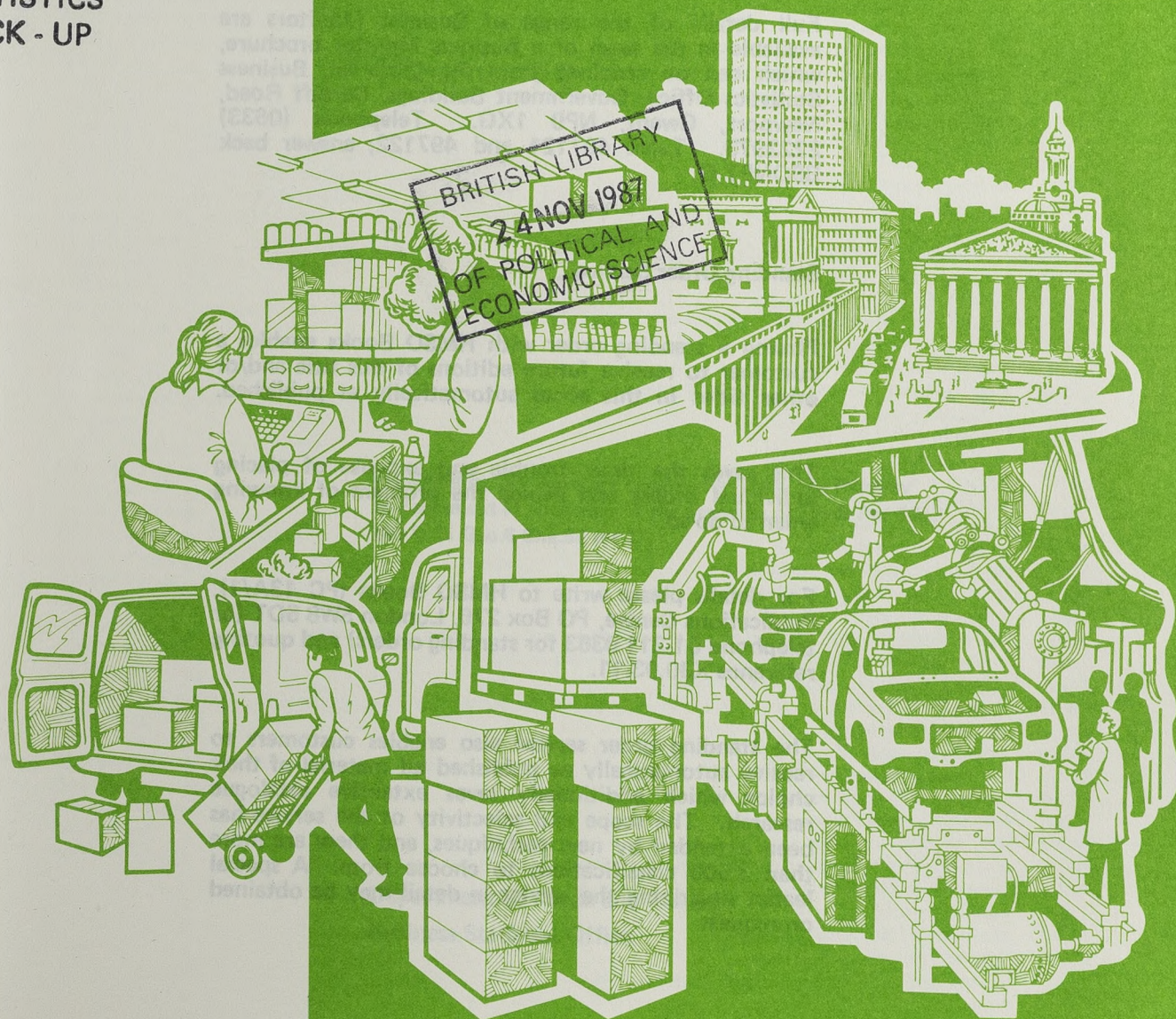
### Foundries

"STATISTICS"  
READING  
ROOM

42 (HA251)

STATISTICS  
BACK - UP

PA260  
Production of man-made fibres



HMSO



A publication of the Government Statistical Service

## BUSINESS MONITORS

### SPECIAL NOTE FOR PURCHASERS

The Business Statistics Office, aided by industry and commerce, provides a great deal of the statistical data required by Government for monitoring the economy.

Much of this data is published in the form of Business Monitors, giving information about production, sales, employment and investment.

Full details of the range of Business Monitors are available in the form of a Business Monitor brochure, which can be obtained from the Librarian, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent, NP9 1XG. Telephone (0633) 2222973. Telex 497121 and 497122; answer back BSONPT G.

### Standing Order Service

Placing a standing order with HMSO Books enables a customer to receive future editions of this title and/or other titles in this series automatically as published.

This saves the time, trouble and expense of placing individual orders and avoids the problem of knowing when to do so.

For details please write to HMSO Books (PC 13A/1), Publications Centre, PO Box 276, London SW8 5DT (or telephone 01-211 0363 for standing orders) and quoting reference X30.03.11.

The standing order service also enables customers to receive automatically as published all material of their choice which additionally saves extensive catalogue research. The scope and selectivity of the service has been extended by new techniques, and there are more than 3,500 classifications to choose from. A special leaflet describing the service in detail may be obtained on request.

# PA311 BUSINESS MONITOR

A publication of the Government Statistical Service

## Report on the Census of Production 1986

### Foundries

Presented by the Secretary of State for Trade and Industry  
to Parliament in pursuance of the Statistics of Trade Act 1947  
(10 & 11 Geo.6 Cha.39 sec 7)

Department of Trade and Industry  
Business Statistics Office

London: Her Majesty's Stationery Office

**BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT**

The following is the list of Business Monitors making up the complete census report. Shown alongside each title, where appropriate, is an indication of the change in the estimated employment in that industry that has arisen, between 1983 and 1984, from the introduction of a new, more up to date, register of businesses. The change shown reflects the increase or decrease between the old and new registers at a fixed point in time and does not in itself give any indication of the growth or contraction within any industry between 1983 and 1984. Over all manufacturing industry there was an increase between the two registers of 1.3%. Changes for individual industries have arisen not only from the addition of extra, mainly small, units but also from the reclassification of some small units from one industry to another. Since estimates of census variables, based on register employment, are made for small establishments which are not required to complete census forms, the change will affect much of the data contained in the reports. This should be taken into account in interpreting the figures.

	Employment percentage variation	
PA1001	Introductory notes	
PA111	Coal extraction and manufacture of solid fuels	
PA120	Coke ovens	
PA130	Extraction of mineral oil and natural gas	
PA140	Mineral oil processing	
PA161	Production and distribution of electricity	
PA162	Public gas supply	
PA170	Water supply industry	
PA210	Extraction and preparation of metalliferous ores	38
PA221	Iron and steel industry	-1
PA222	Steel tubes	1
PA223	Drawing, cold rolling and cold forming of steel	-2
PA224	Non-ferrous metals industry	0
PA231	Extraction of stone, clay, sand and gravel	-18
PA239	Extraction of miscellaneous minerals (including salt)	-6
PA241	Structural clay products	-1
PA242	Cement, lime and plaster	0
PA243	Building products of concrete, cement or plaster	-9
PA244	Asbestos goods	0
PA245	Working of stone and other non-metallic minerals	-2
PA246	Abrasive products	-6
PA247	Glass and glassware	2
PA248	Refractory and ceramic goods	1
PA251	Basic industrial chemicals	0
PA255	Paints, varnishes and printing ink	1
PA256	Specialised chemical products mainly for industrial and agricultural purposes	1
PA257	Pharmaceutical products	1
PA258	Soap and toilet preparations	0
PA259	Specialised chemical products mainly for household and office use	0
PA260	Production of man made fibres	0
PA311	Foundries	-4
PA312	Forging, pressing and stamping	0
PA313	Bolts, nuts, etc; springs; non-precision chains; metals treatment	0
PA314	Metal doors, windows etc	2
PA316	Hand tools and finished metal goods	-1
PA320	Industrial plant and steelwork	4
PA321	Agricultural machinery and tractors	-1
PA322	Metal-working machine tools and engineers' tools	-1
PA323	Textile machinery	0
PA324	Machinery for the food, chemical and related industries; process engineering contractors	2
PA325	Mining machinery, construction and mechanical handling equipment	3
PA326	Mechanical power transmission equipment	14
PA327	Machinery for printing, paper, wood, leather, rubber, glass and related industries; laundry and dry cleaning machinery	-4
PA328	Miscellaneous machinery and mechanical equipment	0
PA329	Ordnance, small arms and ammunition	0
PA330	Manufacture of office machinery and data processing equipment	7
PA341	Insulated wires and cables	2
PA342	Basic electrical equipment	1
PA343	Electrical equipment for industrial use, and batteries and accumulators	3
PA344	Telecommunication equipment, electrical measuring equipment, electronic capital goods and passive electronic components	2
PA345	Miscellaneous electronic equipment	3
PA346	Domestic-type electric appliances	1
PA347	Electric lamps and other electric lighting equipment	13
PA351	Motor vehicles and their engines	0
PA352	Motor vehicle bodies, trailers and caravans	-3

**BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT (continued)**

	Employment percentage variation	
PA353	Motor vehicle parts	-2
PA361	Shipbuilding and repairing	0
PA362	Railway and tramway vehicles	0
PA363	Cycles and motor cycles	0
PA364	Aerospace equipment manufacturing and repairing	0
PA365	Miscellaneous vehicles	2
PA371	Measuring, checking and precision instruments and apparatus	4
PA372	Medical and surgical equipment and orthopaedic appliances	-8
PA373	Optical precision instruments and photographic equipment	1
PA374	Clocks, watches and other timing devices	0
PA411	Organic oils and fats	1
PA412	Slaughtering of animals and production of meat and by-products	
PA413	Preparation of milk and milk products	-5
PA414	Processing of fruit and vegetables	0
PA415	Fish processing	-4
PA416	Grain milling	-7
PA419	Bread, biscuits and flour confectionery	14
PA420	Sugar and sugar by-products	0
PA421	Ice-cream, cocoa, chocolate and sugar confectionery	-2
PA422	Animal feeding stuffs	-5
PA423	Starch and miscellaneous foods	2
PA424	Spirit distilling and compounding	0
PA426	Wines, cider and perry	2
PA427	Brewing and malting	0
PA428	Soft drinks	-1
PA429	Tobacco industry	0
PA431	Woollen and worsted industry	-2
PA432	Cotton and silk industries	3
PA433	Throwing, texturing, etc. of continuous filament yarn	-3
PA434	Spinning and weaving of flax, hemp and ramie	-3
PA435	Jute and polypropylene yarns and fabrics	0
PA436	Hosiery and other knitted goods	3
PA437	Textile finishing	3
PA438	Carpets and other textile floorcoverings	1
PA439	Miscellaneous textiles	3
PA441	Leather (tanning and dressing) and fellmongery	-5
PA442	Leather goods	8
PA451	Footwear	2
PA453	Clothing, hats and gloves	7
PA455	Household textiles and other made-up textiles	-2
PA456	Fur goods	-27
PA461	Sawmilling, planing, etc. of wood	-17
PA462	Manufacture of semi-finished wood products and further processing and treatment of wood	-4
PA463	Builders carpentry and joinery	-5
PA464	Wooden containers	-6
PA465	Miscellaneous wooden articles	4
PA466	Articles of cork and plaiting materials, brushes and brooms	7
PA467	Wooden and upholstered furniture and shop and office fittings	-1
PA471	Pulp, paper and board	1
PA472	Conversion of paper and board	3
PA475	Printing and publishing	5
PA481	Rubber products	-1
PA483	Processing of plastics	2
PA491	Jewellery and coins	1
PA492	Musical instruments	-5
PA493	Photographic and cinematographic processing laboratories	
PA494	Toys and sports goods	-1
PA495	Miscellaneous manufacturing industries	67
PA500	Construction	
PA1002	Summary tables	







TABLE 4

Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1986

All United Kingdom establishments classified to the industry (a)

Size group	Estab-lish-ments	Enter-prises (b)	Employment			Wages and salaries (c)			
			Total including working proprietors	Opera-tives	Admini-strative, technical and clerical	Operatives		Administrative, technical and clerical	
						Total	per head	Total	per head
1-9	366	363	1.5						
10-19	181	178	2.6						
20-49	199	191	6.3	14.0	3.7	111.5	7,944	37.4	10,196
50-99	107	102	7.5						
100-199	72	61	10.2	8.1	2.1	66.6	8,270	22.7	10,670
200-299	24	22	5.7	4.3	1.4	34.8	8,173	13.3	9,361
300-399	17	16	5.9	4.7	1.2	40.9	8,740	13.0	10,700
400-749	9	8	5.2	4.0	1.2	33.7	8,349	10.7	9,020
750-Plus	5	4	5.9	4.2	1.7	40.6	9,758	17.9	10,601
<b>Total</b>	<b>980</b>	<b>886</b>	<b>50.7</b>	<b>39.2</b>	<b>11.3</b>	<b>328.3</b>	<b>8,365</b>	<b>114.9</b>	<b>10,172</b>

- (a) Establishments employing fewer than 20 persons are not required to complete census returns. Because of this, data for these establishments should be regarded merely as the best estimates available and used with caution.
- (b) The count of enterprises shown in each row represents the number of enterprises, irrespective of size, owning the establishments shown in each size group. Because an enterprise may own establishments in more than one size group, the sum of individual enterprise counts may exceed the total for the industry.
- (c) The cost of employers' contributions to the national insurance, pensions and welfare schemes and the running costs of canteens are excluded from the table but were estimated for the industry at £61.9 million.
- (d) Gross value added data relates to establishments employing 1 199.

Total sales and work done	Gross output	Net output	Gross value added at factor cost		Net capital expenditure	Total stocks and work in progress at end of year		
			Total	per head				
							Total	per head
£ million	£ million	£ million	£	£ million	£ million			
482.3	482.3	259.0	14,476	(d)	(d)	17.1	48.9	
289.6	290.6	154.9	15,191	353.2(d)	12,569(d)	9.6	32.9	
153.6	153.5	84.0	14,797	68.7	12,096	6.2	18.7	
165.6	163.8	83.8	14,223	70.4	11,944	7.1	14.9	
155.3	159.1	89.6	17,141	79.0	15,111	5.3	26.0	
219.8	216.7	116.6	19,921	100.8	17,229	6.8	40.9	
<b>1,466.2</b>	<b>1,466.0</b>	<b>787.9</b>	<b>15,529</b>	<b>672.2</b>	<b>13,247</b>	<b>52.1</b>	<b>182.3</b>	

TABLE 5

PA311

Percentage analysis of twelve-month periods covered by returns received for the 1986 Census by number of returns and total employment

Accounting year ended	Percentage of total returns received	Percentage of total employment
1986		
April 6-30	2.8	2.1
May	2.8	1.1
June	5.1	2.2
July	1.9	1.9
August	1.4	0.3
September	10.2	6.7
October	3.2	2.7
November	4.6	10.1
December	36.1	42.3
1987		
January	4.2	3.6
February	3.2	2.3
1 March - 5 April	24.5	24.6

TABLE 6

Operating ratios, 1982-1986

All United Kingdom establishments classified to the industry

	Unit	1982	1983	1984	1985	1986
Gross output per head	£	18,855	21,558	25,300	28,076	28,893
Net output per head	£	10,115	11,463	12,914	14,176	15,529
Gross value added per head	£	8,563	9,697	11,008	12,156	13,248
Gross value added as a percentage of gross output	%	45	45	44	43	46
Ratio of gross output to stocks		7.2	7.0	7.7	7.8	8.0
Wages and salaries as a percentage of gross value added	%	73	70	68	67	66
Ratio of operatives to administrative, technical and clerical employees		3.6	3.7	3.7	3.6	3.5
Wages and salaries per operative	£	6,062	6,567	7,218R	7,917	8,365
Wages and salaries per administrative, technical and clerical employee	£	7,231	7,955	8,590	9,221	10,172
Net capital expenditure per head	£	573	646	772	1,000	1,027
Net capital expenditure as a percentage of gross value added	%	7	7	7	8	8

TABLE 7

PA311

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1986  
All United Kingdom establishments classified to the industry

Area	Total employment (a)		Net capital expenditure (b)		Net output (c)		Gross value added at factor cost (c)	
	Thousand	per cent of United Kingdom	£ million	per cent of United Kingdom	£ million	per cent of United Kingdom	£ million	per cent of United Kingdom
Standard regions of England								
North	1.6	3.2	1.4	2.7	24.4	3.1	20.7	3.1
Yorkshire and Humberside	5.9	11.6	7.1	13.6	97.9	12.4	81.7	12.2
East Midlands	10.2	20.0	12.5	24.0	190.6	24.2	165.6	24.6
East Anglia	0.7	1.5	0.9	1.7	10.6	1.3	9.1	1.3
South East	5.9	11.6	5.3	10.1	85.3	10.8	72.2	10.7
South West	1.9	3.8	2.7	5.1	30.9	3.9	24.4	3.6
West Midlands	17.0	33.5	15.6	29.9	243.8	30.9	209.7	31.2
North West	2.7	5.2	2.9	5.7	37.1	4.7	31.8	4.7
England	45.9	90.5	48.4	92.8	720.8	91.5	615.2	91.5
Wales	1.8	3.6	1.3	2.4	24.2	3.1	20.6	3.1
Scotland	2.8	5.5	1.7	3.2	39.0	5.0	33.0	4.9
Great Britain	50.5	99.6	51.3	98.4	784.1	99.5	668.8	99.5
Northern Ireland	0.2	0.4	0.8	1.6	3.8	0.5	3.3	0.5
United Kingdom	50.7	100.0	52.1	100.0	787.9	100.0	672.2	100.0

(a) Average number employed during the year, including full and part-time employees and working proprietors.

(b) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

(c) Where a census return covered addresses in two or more regions, an estimate of the net output attributable to each address was made by assuming that net output was proportionate to employment. An estimate for each region was obtained by aggregating estimates of net output for addresses located in that region. Gross value added at factor cost was treated similarly.



TABLE 8

PA311

Output and costs, 1986  
All United Kingdom establishments classified to each Activity Heading within the industry

	Unit	3111	3112
Enterprises(a)	Number	568	336
Establishments	"	634	346
Sales of goods produced	£ million	1,023.5	395.1
Work done and industrial services rendered	"	7.6	2.2
Capital goods produced for establishments' own use	"	1.7	0.1
Non-industrial services rendered	"	2.4	0.8
Goods merchanted or factored	"	21.9	10.8
<b>Total sales and work done</b>	"	<b>1,057.1</b>	<b>409.1</b>
Increase during the year, work in progress and goods on hand for sale	"	0.2	-0.4
<b>Gross output</b>	"	<b>1,057.3</b>	<b>408.7</b>
Purchases of materials for use in production, packaging and fuel	"	416.1	173.1
Purchases of goods for merchenting or factoring	"	18.4	9.2
Increase during the year, stocks of materials, stores and fuel	"	0.2	-0.9
Cost of industrial services received	"	41.7	19.0
<b>Net output</b>	"	<b>581.4</b>	<b>206.5</b>
Total employment	Thousand	35.7	15.0
<b>Net output per head</b>	£	<b>16,272</b>	<b>13,759</b>
Cost of non-industrial services received			
Hire of vehicles, plant and machinery	£ million	9.5	2.9
Rents of industrial and commercial buildings	"	2.2	1.2
Commercial insurance premiums	"	7.8	2.7
Bank charges	"	0.7	0.3
Other non-industrial services	"	52.4	16.7
Licensing of motor vehicles	"	0.3	0.1
Rates, excluding water rates	"	14.0	4.9
<b>Gross value added at factor cost</b>	"	<b>494.4</b>	<b>177.7</b>
<b>Gross value added at factor cost per head</b>	£	<b>13,839</b>	<b>11,840</b>

(a) The count of enterprises shown in each column represents the number of enterprises owning the establishments shown for each activity heading. Because an enterprise may own establishments in more than one activity heading, the sum of the enterprise counts may exceed the total for the industry.

TABLE 9

PA311

Capital expenditure, 1986  
All United Kingdom establishments classified to each Activity Heading within the industry

	3111	3112
Land and buildings		
New building work	2.0	0.7
Land and existing buildings		
Acquisitions	1.1	0.4
Disposals	2.2	0.1
<b>Net</b>	<b>0.9</b>	<b>1.0</b>
Plant and machinery		
Acquisitions	36.8	12.8
Disposals	1.8	0.8
<b>Net</b>	<b>35.0</b>	<b>12.0</b>
Vehicles		
Acquisitions	3.3	2.1
Disposals	1.4	0.7
<b>Net</b>	<b>1.9</b>	<b>1.4</b>
<b>Total net capital expenditure</b>	<b>37.7</b>	<b>14.4</b>

TABLE 10

Stocks and work in progress, 1986  
All United Kingdom establishments classified to each Activity Heading within the industry

	3111	3112
10a Increase during year		
Materials, stores and fuel	0.2	-0.9
Work in progress	-3.9	-0.3
Goods on hand for sale	4.1	-0.1
<b>Total</b>	<b>0.4</b>	<b>-1.3</b>
10b Value at end of year		
Materials, stores and fuel	42.2	14.5
Work in progress	55.5	19.9
Goods on hand for sale	43.3	6.9
<b>Total</b>	<b>141.0</b>	<b>41.3</b>

Telephone Newport (0633) 222973

Printed in the United Kingdom by  
The Stationery Office at Cardiff  
DL 0239230 C4 C01 246 1 1987

TABLE 11

PA311

Operating ratios, 1986

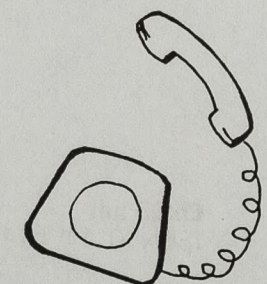
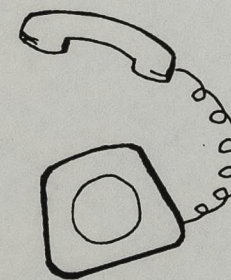
All United Kingdom establishments classified to each Activity Heading within the industry

	Unit	3111	3112
Gross output per head	£	29,592	27,228
Net output per head	£	16,272	13,759
Gross value added per head	£	13,839	11,840
Gross value added as a percentage of gross output	%	47	44
Ratio of gross output to stocks		7.5	9.9
Wages and salaries as a percentage of gross value added	%	65	69
Ratio of operatives to administrative, technical and clerical employees		3.4	3.8
Wages and salaries per operative	£	8,656	7,688
Wages and salaries per administrative, technical and clerical employee	£	10,196	10,110
Net capital expenditure per head	£	1,055	960
Net capital expenditure as a percentage of gross value added	%	8	8

# KEEP IN STEP WITH BUSINESS TRENDS !

FREE COPIES OF THE NEW BUSINESS MONITOR BROCHURE CAN BE OBTAINED FROM:

THE LIBRARY  
 BUSINESS STATISTICS OFFICE  
 CARDIFF ROAD  
 NEWPORT  
 GWENT  
 NP9 1XG



Telephone Newport (0633) 222973



HMSO publications are available from:

**HMSO Publications Centre**

(Mail and telephone orders only)  
PO Box 276, London SW8 5DT  
Telephone orders (01) 622 3316 (queuing system in operation)  
General enquiries (01) 211 5656 (queuing system in operation)

**HMSO Bookshops**

49 High Holborn, London, WC1V 6HB (01) 211 5656 (Counter service only)  
258 Broad Street, Birmingham, B1 2HE (021) 643 3757  
Southey House, 33 Wine Street, Bristol, BS1 2BQ (0272) 24306/24307  
9-21 Princess Street, Manchester, M60 8AS (061) 834 7201  
80 Chichester Street, Belfast, BT1 4JY (0232) 234488  
71-73 Lothian Road, Edinburgh, EH3 9AZ (031 228 4181)

**HMSO's Accredited Agents**  
(see Yellow Pages)

*And through good booksellers*

*'Brief extracts from this publication may be reproduced provided the source is fully acknowledged. Proposals for reproduction of larger extracts should be addressed to the Librarian, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent NP9 1XG.'*

© Crown copyright 1987  
First published 1987

**£5.95 net**  
ISBN 0 11 514714 4