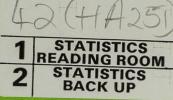
**CENTRAL STATISTICAL OFFICE** 

1991



8[[] 1993

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# Business Monitor Report on the PA371 Census of Production

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Measuring, checking and precision instruments and apparatus

A publication of the Government Statistical Service

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# PA371

# **BUSINESS MONITOR**

A publication of the Government Statistical Service

## **Report on the Census of Production** 1991

## CENTRAL STATISTICAL OFFICE

London: HMSO

Measuring, checking and precision instruments

and apparatus

Presented by the Chancellor of the Exchequer to Parliament in pursuance of the Statistics of Trade Act 1947

(10 & 11 Geo.6 Cha.39 sec 7)

## BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT

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PA322	Metal-working machine tools and engineers' tools	PA442	Leather goods
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-	machinery	PA466	Articles of cork and plaiting materials, brushes and
PA328	Miscellaneous machinery and mechanical equipment	171400	brooms
PA329	Ordnance, small arms and ammunition	PA467	Wooden and upholstered furniture and shop and office
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111000			

PA361 Shipbuilding and repairing

### PA371 MEASURING, CHECKING AND PRECISION INSTRUMENTS AND APPARATUS

The information in this report relates to businesses classified to the Measuring, checking and precision instruments and apparatus industry, Group 371 in the Standard Industrial Classification Revised 1980. The industry Group covers the following Activity Heading:-

#### Measuring, checking and precision instruments and apparatus 3710

Manufacture of scientific and industrial instruments and precision measuring devices, including precision balances, thermometers, fluid flow meters, pressure gauges, altimeters, navigational instruments, drawing and other mathematical instruments and laboratory apparatus for measuring strength, heat, etc. Also included are non-medical respiratory apparatus including diving equipment and models or apparatus for educational or exhibition display purposes. Apparatus using electrical or electronic technology for sensing or measuring is classified to Group 344 and apparatus using optical technology for sensing or measuring to Group 373.

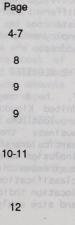
For a full description of the 1980 classification see Standard Industrial Classification Revised 1980, obtainable from Her Majesty's Stationery office, price £4.25.

#### In interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page 4.

ST OF CONTENTS Explanatory notes and definitions Output and costs, 1987-1991 Table 1 Table 2 Capital expenditure, 1987-1991 Table 3 Stocks and work in progress, 1987-1991 Table 4 Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1991

- Table 5 Percentage analysis of twelve-month periods covered by returns received for the 1991 Census by number of returns and total employment
- Table 6 Operating ratios, 1987-1991
- Table 7 Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1991

3



EXPLANATORY NOTES AND DEFINITIONS INTRODUCTION

These notes give basic information to help 1. with the interpretation of tables in this Industry Report. More general information about the Census is given in a separate Business Monitor - Report on the Census of Production, Introductory Notes (PA 1001).

Since 1980, Censuses have been conducted on 2. the Standard Industrial Classification Revised 1980 SIC(80). The Standard Industrial Classification exists to promote uniformity and comparability in the official statistics of the United Kingdom. The SIC(80) is the result of an attempt to align the United Kingdom classification with the General Industrial Classification of Economic Activities within the European Communities (NACE). It is based on activity rather than commodities produced. A full description of SIC(80) is given in Standard Industrial Classification Revised 1980, obtainable from HMSO, price £4.25.

#### REPORTING UNIT

From the earliest censuses of production 3 until that for 1986 the reporting unit to the census was the establishment. This was defined as the smallest unit which could provide the full range of data required for an economic census. Establishments were asked where possible to exclude from their returns to the census any non-production activity.

In 1987, for a number of administrative and 4. statistical reasons, a new system of company-based reporting was introduced. Under the new system the reporting unit to the census is, generally, the company, but there are some exceptions. These arise, for example, for large mixed activity companies which are asked to make separate returns to the census for each of their production activities on an establishment basis. Throughout this monitor this mixture of reporting units are referred to as "businesses". These businesses are no longer asked to exclude non-production activities.

In practice, since most businesses, both before and after the change, reported for the company as a whole, little difference to the main economic series has resulted from the change.

For most businesses, the returned data are 6. appropriate to a single activity heading of SIC(80) and fall within a single geographical region. Where information covers a mixture of activities, the business is classified according to the main activity. Where the business operates at a number of different addresses then, in order to enable regional data to be compiled, separate information on employment and capital expenditure is sought for each address.

#### THE REGISTER

A register of businesses throughout the United Kingdom is held on the CSO computer and provides the basis for CSO inquiries. For each business the register contains identification particulars and information about its eligibility for inclusion in an inquiry, its relationship with other businesses in common ownership, its industrial classification, the nationality of its parent and location indicators for regional analyses. Regional and size analyses of manufacturing units are

published in Business Monitor PA1003 - Size analyses of United Kingdom businesses.

The Annual Census and other CSO inquiries 8. provide a major source of information for checking the register and updating employment data. Where businesses do not make returns to these inquiries, estimates of employment are imputed from VAT turnover. For businesses which have an imputed employment of 11 or more, the estimates are checked by means of register proving forms. For businesses on the register making returns to the Quarterly or Annual Sales Inquiries, industrial classification is reviewed annually and is derived from an analysis of their commodity sales. For other businesses the classification is obtained either from VAT sources or from the register proving forms. Estimates of employment made by the CSO and the Department of Employment differ because they are derived from two separate inquiries and use different procedures and employment definitions.

#### COVERAGE

The Census covers United Kingdom businesses 9. engaged in industrial production, ie mining and quarrying, manufacturing, construction, and gas, electricity and water supply industries (Divisions 1 to 5 of SIC(80)). Businesses in the Channel Islands and the Isle of Man are excluded.

Under the sampling arrangements agreed for 10. the 1991 Census, forms were despatched to all businesses with 100 or more employed and, for most production industries, samples of 1 in 4 and 1 in 2 respectively being taken for businesses in the 20 to 49 and 50 to 99 employment size bands. It was necessary to increase the sample in those industries where there were few businesses in the sample size band or where response in earlier years was poor. About 16,600 forms were despatched in the United Kingdom for the 1991 Census.

#### PFRIOD COVERED

Businesses were asked to make returns for the 11. calendar year 1991 but, where this was not possible, returns for business years ending between 6 April 1991 and 5 April 1992 were accepted. Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year.

#### ESTIMATION

4

All published Census results include 12. estimates for non-responders, unsatisfactory returns and businesses not selected for the Census. Estimates are also made for items not covered in the shorter form sent to smaller businesses.

Within employment size groups in each 13. industry, the "average per head" is calculated for each census variable by dividing the total returns value for each variable by the total returned employment. This value is multiplied by the employment thought to exist in each non-responding or non-selected business to yield an estimated value for that business. Estimates for items not collected on the shorter form are made in a similar way using returned employment.

The accuracy of the totals produced by adding 14. together estimates and returned data is mainly dependent on the level of response. The extent to which businesses making satisfactory returns account for the total employment of any industry is shown as a percentage in footnote (a) to table 1. Thus the accuracy of the data published in an Industry Report where 95 per cent of the employment in the industry is covered by the returns made will, in general, be better than that in an Industry Report where the coverage is only 70 per cent.

Additionally, the extent to which individual headings in an Industry Report are related to employment should be taken into account in assessing the accuracy of estimated data. Thus an estimate of total earnings which bears a close relationship to total employment is likely to be more accurate than an estimate of capital expenditure where the relationship to employment is not so clearly marked.

#### SUPPRESSION OF INFORMATION RELATING TO INDIVIDUAL INDERTAKINGS

Sub-section 9(5)(b) of the Statistics of Trade Act 1947 states that:

The following provisions shall have effect with respect to any report, summary or other communication to the public of information obtained under the foregoing provisions of this Act -

> in compiling any such report, summary or communication the competent authority shall so arrange it as to prevent any particulars published therein from being identified as being particulars relating to any individual person or undertaking except with the previous consent in writing of that person or the person carrying on that undertaking, as the case may be; but this provision shall not prevent the disclosure of the total quantity or value of any articles produced, sold or delivered; so, however, that before disclosing any such total the competent authority shall have regard to any representations made to them by any person who alleges that the disclosure thereof would enable particulars relating to him or to an undertaking carried on by him to be deducted from the total disclosed."

Figures which would be likely to disclose particulars relating to an individual undertaking are not published unless the contributor has given written consent for their publication.

#### CHANGES MADE FOR 1991

The 1991 census like that that for 1990 was a slimline one. An additioinal breakdown on capital and current costs associated with pollution prevention and solid waste management was included.

#### YMBOLS LISED

The following symbols are used throughout the series of Business Monitors:

- .. not available
- nil or less than half the final digit shown
- information suppressed to avoid
  - disclosure revised

ROUNDING OF FIGURES

Figures in the tables have been rounded to the nearest final digit where necessary and, in these instances, the sum of the constituent items may not always agree exactly with the total shown.

completed.

CAPITAL EXPENDITURE

22. This represents the value charged to capital account together with any other amounts which ranked as capital items for taxation purposes during the year to which each return related. From 1988 contributors were asked to include the value of assets acquired as lessees under finance leasing arrangements. The value is inclusive of any amounts received or expected to be received in grants and/or allowances from government sources, statutory bodies or local authorities. Capital expenditure during the year in respect of production units where production had not started before the end of the year and the value of CAPITAL GOODS PRODUCED FOR USE WITHIN THE BUSINESS by its own staff are included. The value of any assets acquired in taking over an existing business is excluded. The figures include nondeductible VAT but exclude deductible VAT. No allowance is made for depreciation, amortisation or obsolescence.

a.

23. This represents the value of freeholds and the value or premium payable or receivable for leaseholds acquired or disposed of. The figures for acquisitions include architects' and surveyors' fees, legal fees, stamp duties, agents' commissions and Land Registry fees. The figures for disposals are net of any such professional fees payable.

b.

24. This represents the value of new building and other constructional work such as the extension and reconstruction of old buildings, and the value of any newly constructed buildings acquired. The figures include architects' and surveyors' fees, legal fees, stamp duties, agents' commissions and Land Registry fees.

C.

25. This represents the value of new and secondhand plant and machinery and vehicles acquired or disposed of. The figures for acquisitions are net of any discounts received but include the cost of transport and installation and Customs and Excise car tax. The figures for disposals exclude amounts written off for capital assets which are scrapped.

26. This represents the value of all work of a capital nature carried out during the year by the staff of, and for use in, the businesses covered by the returns.

### EXPLANATION OF TERMS USED IN THE CENSUS REPORT

The notes and definitions given in this section are based on the instructions given to respondents as to the way in which returns were to be

#### ON LAND AND EXISTING BUILDINGS

#### on NEW BUILDING WORK

#### on PLANT AND MACHINERY, VEHICLES

## CAPITAL GOODS PRODUCED FOR USE WITHIN THE BUSINESS

#### COST OF INDUSTRIAL SERVICES RECEIVED

This includes amounts payable to other 27. organisations for work done on materials supplied by the business completing the return, for repairs and maintenance including those in respect of rented buildings, and for contracts which have been sublet. Direct payments to outworkers and amounts charged to capital account are excluded.

#### COST OF NON-INDUSTRIAL SERVICES RECEIVED

Up to 1987 contributors were asked to include 28. annual payments for assets acquired on a finance leasing basis. From 1988 they were asked to include the total value of such assets as capital expenditure during the year in which they were acquired. The cost of non-industrial services received includes commercial insurance premiums, bank charges and amounts payable to other organisations for the hire of vehicles, plant and machinery, for the rent of industrial and commercial buildings, for the services of accountants, auditors, agents, solicitors and surveyors other than in connection with the acquisition or disposal of capital assets, for postal and telecommunications services, for carriage by all forms of transport within the United Kingdom, for advertising, market research etc, for the right to use patents, trade marks, copyrights etc, for manufacturing and quarrying rights and technical knowledge. Interest payments and amounts payable for sea and air freight on goods exported and on materials and fuel imported are excluded.

#### EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC

This includes employers' national insurance 29. contributions under the Social Security Pensions Act 1975, commercial insurance premiums for policies providing pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits, disability benefits or death benefits for employees, including former employees, or their dependants. Also included are contributors to canteens, social centres, children's and holiday homes etc and the cost of supplying luncheon vouchers.

#### **EMPLOYMENT**

30. This is the average number of ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES AND OPERATIVES on the payroll and the number of WORKING PROPRIETORS employed during the year of return. Full-time and part-time employees are included but outworkers (ie people who worked in their own homes on materials supplied by the business) and casual employees such as jobbers are excluded. The average number of employees returned by individual businesses may have been calculated by, for example, the average of the number of employees on the payroll for the last week of each calendar month.

#### ADMINISTRATIVE, TECHNICAL AND a. CLERICAL EMPLOYEES

This includes directors who received a 31. definite wage, salary or commission, managers, foremen, draughtsmen, editorial and advertising staff, travellers, all office employees and research and design employees except operatives.

#### OPERATIVES b.

This includes all manual wage earners 32. including operatives in power stations, operatives engaged in outside work of erecting, fitting etc. inspectors, maintenance workers and cleaners. Staff engaged in transport (including roundsmen) and employed in warehouses, stores, shops and canteen are included.

#### WORKING PROPRIETORS

These are people who are regarded as self-33. employed for national insurance purposes, members of their families who worked in the business without receiving a definite wage or salary for at least half the normal working hours and directors who worked in the business but did not receive a definite wage, salary or commission. Part-time Directors paid by fee only and directors who received a definite wage, salary or commission are excluded.

#### ENTERPRISE

This is defined as one or more businesses 34. under common ownership or control.

#### GROSS OUTPUT

This is calculated by adjusting the value of TOTAL SALES AND WORK DONE by the changes during the year of WORKING PROGRESS and GOODS ON HAND FOR SALE.

#### GROSS VALUE ADDED AT FACTOR COST

This is calculated by deducting from NET 36 OUTPUT the COST OF NON-INDUSTRIAL SERVICES RECEIVED, RATES and the cost of LICENSING OF MOTOR VEHICLES. This estimate of gross value added approaches more closely than NET OUTPUT the definition of net output or value added in national accounts statistics.

GROSS VALUE ADDED AT FACTOR COST PER HEAD

This is calculated by dividing GROSS VALUE ADDED AT FACTOR COST by total EMPLOYMENT.

#### NET CAPITAL EXPENDITURE

This is calculated by adding to the value of 38. NEW BUILDING WORK acquisitions less disposals of LAND AND EXISTING BUILDINGS, VEHICLES and PLANT AND MACHINERY.

### NET OUTPUT

39. This is calculated by deducting from GROSS OUTPUT the cost of PURCHASES OF MATERIALS FOR USE IN PRODUCTION AND PACKAGING AND FUEL and PURCHASES OF GOODS FOR MERCHANTING OR FACTORING, the COST OF INDUSTRIAL SERVICES RECEIVED and is adjusted for net duties and levies etc where applicable. Purchases are adjusted for changes during the year of STOCKS OF MATERIALS, STORES AND FUEL.

#### NET OUTPUT PER HEAD

6

#### 40. This is calculated by dividing NET OUTPUT by total EMPLOYMENT.

#### NON-INDUSTRIAL SERVICES RENDERED

This includes amounts charged for the hire of vehicles, plant and machinery, for the rent of industrial and commercial buildings, for the right to use patents, trade marks, copyrights etc, for manufacturing and quarrying rights, for technical know-how and for the provision of transport to other organisations. It also includes revenue from staff facilities such as canteens.

#### OPERATING RATIOS

These ratios are calculated using industry 42. totals, ie including the estimates for businesses not responding to or not selected for the Census. Respondents are able to compare the ratios for their own businesses with those for the industry as a whole.

PURCHASES OF MATERIALS FOR USE IN PRODUCTION, AND PACKAGING AND FUEL. PURCHASES OF GOODS FOR MERCHANTING OR FACTORING

These include the cost of raw materials, 13 components, semi-manufactured goods and workshop materials, replacement parts and consumable tools not charged to capital account, packaging materials of all types, stationery and printed matter, fuel, electricity and water, materials of all types used by the business or given out to others, for the production of machinery or other capital items used n the business, and materials used when working on oods supplied by customers. The figures exclude VAT, purchases of machinery and plant, which are ncluded in CAPITAL EXPENDITURE, and amounts payable to transport firms or credited to the business's own ransport departments for delivery of materials. The igures are net of the value of goods or packaging aterials returned to suppliers and trade discounts receivable. Materials purchased duty-paid are cluded at their duty-paid value less drawbacks, ebates etc. Imported goods are included at their ull delivered cost. If the transport from docks or irport of imported goods is not included in the cost goods purchased, the cost is entered at cif plus uty, if applicable. Transfers of goods from other partments of the business not covered by the return are included at the estimated selling value recorded y the other departments.

#### EMUNERATION PAID TO OUTWORKERS

This represents amounts paid to outworkers, ie people who do work in their own homes generally on piece-work basis, whose names appear on the ayroll. Amounts paid to outworkers by subtractors are included in the COST OF INDUSTRIAL SERVICES RECEIVED. Estimates are not made for muneration of outworkers for businesses not completing Census returns.

## SALES OF GOODS PRODUCED

This represents sales of goods during the Vear, whether or not they were produced in the year of the return. It also includes sales of goods made rom materials given out to other firms or to utworkers and sales of waste products and residues. he value of sales is the 'net selling value', ie the ount charged to customers whether values 'ex-works' delivered' less VAT, trade discounts, agents' issions etc and allowances on returned goods. e products attract Excise duty, the value ludes duty if the goods are sold 'duty-paid', but

excludes it if they are sold in bond or exported. The cost of packaging materials less allowances for returnable containers is included. Sales of fixed assets and exceptional receipts are excluded. Transfers of goods produced by a business to departments not covered by the return (including other businesses in the same enterprise group) are treated as sales, valued as if sold to an independent purchaser.

## STOCKS

46. This represents the value of goods on hand for sale, including goods for merchanting or factoring and of materials, stores and fuel held by businesses, whether held in the United Kingdom or abroad. Values include any duty payable but exclude VAT.

#### WAGES AND SALARIES

This represents amounts paid during the year 47 to ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES and to OPERATIVES. All overtime payments, bonuses, commissions, holiday pay and redundancy payments, less any amounts reimbursed for this purpose from government sources, are included. No deduction is made for income tax or employees' national insurance contributions etc. Payments to WORKING PROPRIETORS, payments in kind, travelling expenses, lodging allowances etc and EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC are excluded.

#### WORK DONE AND INDUSTRIAL SERVICES RENDERED

This includes amounts charged for work carried out including that done by sub-contractors on customers' materials and amounts charged for materials supplied in the course of such work. Industrial services such as repairs and maintenance, installation work and technical research and studies rendered to other organisations is also included. For certain industries this heading covers a wide variety of activities, for example, butter packed on commission in the food industries, making up of garments, fur dressing and textile finishing in the textile industries, and preparatory work on typesetting, block making and binding in the printing and publishing industries. Work done is an important part of the activities of the electrical machinery and heavy engineering industries, and includes erection, installation and repair and jobbing work.

#### WORK IN PROGRESS

49.

This represents materials which have been partially processed and are awaiting further processing before being sold or transferred. Progress payments made to sub-contractors are excluded and progress payments received from other organisations are not deducted.

Output and costs, 1987-1991 All United Kingdom businesses classified to the industry (a)

s is included. Sales of fixed			ants charged for the htre of		inuoms asbulant	41. This includes amount	
ana e recor praco energia exercicação, a practicação e objectos e exercicação e	Unit	1987	1988	1989	1990	1991	
Enterprise groups	Number	1, 499	1, 511	1, 592	1, 454	1, 398	
Businesses	п	1, 551	1, 564	1, 640	1, 502	1, 443	
Sales of goods produced	£ million	1, 306. 5	1, 445. 2	1, 627. 9	1, 722. 6	1, 706. 1	
Work done and industrial services rendered	This represe	53.6	66. 7	93. 4	86. 5	82.6	
Capital goods produced for use within the business	in and a contract in a contract of the contract in the top as the contract of	3. 3	4. 0	1. 8	2.4	2. 2	
Non-industrial services rendered	н	3. 3	4. 3	3. 0	3.8	5. 5	
Goods merchanted or factored	8.0648.065	188. 1	208.3	192.6	198. 2	168.3	
Total sales and work done	de ontigno e trif	1, 554. 7	1, 728. 5	1, 918. 8	2, 013. 5	1, 964. 6	
Increase during the year, work in progress and goods on hand for sale		12. 2	13. 5	3. 1	-1. 3	-7.8	
Gross output	in a substantia	1, 566. 9	1, 741. 9	1, 921. 9	2, 012. 2	1, 956. 8	
Purchases of materials for use in pro- duction, packaging and fuel		522. 9	571.6	690. 0	703. 3	634.9	
Purchases of goods for merchanting or factoring	"	126. 7	143. 7	122. 4	139. 3	112.4	
Increase during the year, stocks of materials, stores and fuel	Tanan data :	4.6	18. 1	5. 8	3. 4	-5. 9	
Cost of industrial services received	anta Madalan at Ind Mater	37.6	53.6	56.6	54. 7	50. 9	
Net output	н	884. 2	991. 2	1, 058. 7	1, 118. 3	1, 152. 8	
Total employment	Thousand	43. 9	45. 3	46.3	45. 2	41.3	
Net output per head	£	20, 163	21, 872	22, 878	24, 734	27, 942	
Cost of non-industrial services received							
Hire of vehicles, plant and machinery	£ million	9. 3	9. 1	11. 2	14. 5	14. 6	
Rents of industrial and commercial buildings	ialioni phina divutas erid	12. 8	15. 2	21.3	23. 4	25. 3	
Commercial insurance premiums		9.6	11.0	11. 2	11.5	11.4	
Bank charges	" estable	2. 2	2. 2	2. 7	2. 9	3. 1	
Other non-industrial services	н	121.7	136.0	161.5	165. 9	180.8	
Licensing of motor vehicles	all an anna a' fh	0.5	0. 5	0.5	0. 5	0.4	
Rates, excluding water rates	Herryett	12.7	14. 1	16. 1	15. 9	15.4	
Gross value added at factor cost	н	715.5	803. 1	834. 2	883. 7	901.9	
Gross value added at factor cost per head	£	16, 315	17, 722	18, 027	19, 546	21, 859	

(a) Satisfactory returns accounted for 67 per cent of employment within the industry in 1991.

8

TABLE 2 PA371

Capital expenditure, 1987-1991 (a) All United Kingdom businesses classified to the industry

	al animalan has an all			and the second se		The second s
	1987	1988	1989	1990	1991	
			leator past		(d)(d)	
and and buildings						
New building work	. 10. 1	9. 5	11.8	17.0	7.5	
Land and existing building	IS					
Acquisitions	2.9	8.6		9. 0	8.5	
		0.0				
Disposals	baed 2.6	11.0	7.0	2.5	1.0	
Net	10. 4	7. 1	12. 1	23. 5	15.0	
lant and machinery						
Acquisitions	51.6	59.8	58.9	60. 3	57.4	
Disposals	3. 6	6. 1	8. 1	4. 1	4.0	
Net	48. 1	53.6	50. 7	56. 1		
Vehicles						
Acquisitions	888.8	13. 7	15.3	13. 2	10.3	
Disposals	385.11 108.0.154.0	6.3	4. 1	4. 7	4.4	
Net 817 8 8 8 9 8 9 8	6.5	7.4	11.2	8.4	5. 9	
Total net capital expend	iture 65.0	68. 2	74.0	88. 1	74.2	

(a) From 1988 contributors were asked to include as capital expenditure the value of assets acquired under finance leasing arrangements. The total value of these assets is estimated to be £6 million for 1991.

#### TABLE 3

Stocks and work in progress, 1987-1991 All United Kingdom businesses classified to the industry

						£ million
	1987	1988	1989	1990	1991	Value at end of 1991
			Increase during	year		
Materials, stores and fuel	4.6	18. 1	5.8	3. 4	-5.9	168. 7
Work in progress	8. 1	6.4	-6. 2	2. 9	-1. 7	139. 6
Goods on hand for sale	4.0	7. 1	9. 3	-4. 2	-6. 1	94. 9
Total	16. 7	31.5	8. 9	2. 1	-13. 7	403. 2
hemes and the running 3 million.	and welfare so e industry at £7	ice, pensioni mated for th	national Insurar	tributions to the	nplovers' cor	(c) The cost of en

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#### TABLE 4

Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1991

All United Kingdom businesses classified to the industry (a)

Size group	Busin- esses	Enterprise groups (b)	Employment		Wages and	salaries (c)		
			Total Ope including tive working proprietors	era- Administr- es ative,tech- nical and clerical		2.5 1. spr	Administr technical clerical	
			propriotore		Total	per head	Total	per head
	Number	Number	Thousand Tho	usand Thousand	£ million	£	£ million	fam famme
1-9	901	897	2. 4)					
10-19	149	148		0.4 7.8	111. 1	10, 654	133. 3	16, 982
20-49 50-99	213 101	210 99	6.8) ) 7.3)					
100-199	42	42		3. 1 2. 6	29. 1	9, 495	44. 0	16, 747
200-299	13	13	3. 4	1.9 1.5	21.0	11, 235	24. 6	16, 422
300-399	8	8	2. 7	1.6 1.2	17.4	11, 187	21.5	18, 174
400-499	7	7	3. 1	1.5	17. 2	11, 282	26. 3	17, 052
500-749	4	4	2.3	1.4 0.9	17.6	12, 506	15. 7	17, 109
750-Plus	5	5	5. 5	4.0 1.5	46. 9	11, 822	29.7	19, 861

Total 1, 443 1, 398	41.3 23.8	17.	1 260.3	3 10, 930	) 295. 1	17, 243	1
						Slock and w	
						TARLE 3	

(a) Businesses employing fewer than 20 persons are not required to complete census returns. Because of this, data for these businesses should be regarded merely as the best estimates available and used with caution.

(b) The count of enterprise groups shown in each row represents the number of enterprise groups, irrespective of size, owning the businesses shown in each size group. Because an enterprise group may own businesses in more than one size group, the sum of individual enterprise group 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 £73 million. The remuneration of outworkers on returns received - also excluded from the table - was £270 thousand.

(d) Net capital expenditure includes the value of assets acquired under finance leasing arrangements - see Table 2.

(e) Gross value added data relate to businesses employing 1-199.

rotal sales and work Jone	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (d)	Total stocks and work in progress at end of year
							May (n)
		Total	per head	Total	per head		
million	£ million	£ million	£	£ million	£	£ million	£ million
Medisine and				4, 0 <sup></sup> 3913 A.I		2.2	radmesaQ 2.2
822. 2	813. 8	461.6	24, 816	(e)	(e)	28. 0	164. 1
252. <b>2</b>	253. 3	150. 5	26, 453	469. 4(e)	19, 317(e)	13. 1	48.5
174. 4	179.4	108. 2	32, 066	87. 7	26, 002	6. 1	48. 5
141. 7	140. 6	84. 1	30, 692	67. 0	24, 457	6. 2	28.6
182. 7	181. 7	108.4	35, 264	87. 7	28, 532	6. 2	31. 0
91.4	91.4	55.6	23, 950	44. 2	19, 036	3. 0	28. 0
300. 0	296.6	184. 4	33, 793	145. 9	26, 732	11.6	6 3.48A 51. 1 5891 20151 2015
1, 964. <b>6</b>	1, 956. 8	1, 152. 8	27, 942	901. 9			403. 2
1 Sigiran Notes o	bi£Bod by a	og næstanning me ogre\$åting estin	valle of net o	upBSior apd@sse	a located in that	egaineorecpers tragion. Grass	rages and sarafies a

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#### TABLE 5

Percentage analysis of twelve-month periods covered by returns received for the 1991 Census by number of returns and total employment

Accounting year ended			entage of total i lived	returns	Percentage of total employment				
1991 April 6-30	UTD(ISQXS <sup>2</sup> (b)		3. 5		output	1.5	and work done		
May			2.9			2. 1			
June			8. 7			5.3			
July			0.6			0. 1			
August			2.3			0. 7			
September			9. 8			12. 1			
October			2.3			4.8			
November			4.0			5. 2			
December			39. 3			44. 4			
1992 January February			2.3 1.2			0.4			
1 March - 5	April		23. 1			21.8			
8 25	1.21	(a) Tiel of	1016 085	2.696.85	29. b. pat. 9, 495	e eac 46.0	61230		
Phil Balka	6.1								
TABLE 6									

Operating ratios, 1987-1991

All United Kingdom businesses classified to the industry

	Unit	1987	1988	1989	1990	1991
Gross output per head	£	35, 729	38, 439	41, 531	44, 507	47, 429
Net output per head	£	20, 163	21,872	22, 878	24, 734	27, 942
Gross value added per head	£	16, 315	17, 722	18, 027	19, 546	21,859
Gross value added as a percentage of gross output	%	46	46	43	44	46
Ratio of gross output to stocks		4. 2	4.1	4. 5	4. 5	4.9
Wages and salaries as a percentage of gross value added	%	58	58	63	63	62
Ratio of operatives to administrative, technical and clerical employees		1.3	1.3	1.4	1.3	1.4
Wages and salaries per operative	£	8, 027	8, 603	9, 390	10, 033	10, 930
Wages and salaries per administrative, technical and clerical employee	£	11,625	12, 606	14, 255	15, 740	17, 243
Net capital expenditure per head (a)	£	1, 483	1, 505	1,600	1, 948	1, 798
Net capital expenditure as a percentage of gross value added (a)	%	9	9	9	10	8
	%	9	9	9	10	

(a) From 1988 contributors were asked to include as capital expenditure the value of assets acquired under finance leasing arrangements - see Table 2.

#### TABLE 7

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Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1991 All United Kingdom businesses classified to the industry

Area	Total employn (a)	employment		Net capital expenditure (b)		Net output (c)		Gross value added at factor cost (c)	
	Thousan	d 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	2. 1	5. 1	6. 7	9. 1	64. 5	5.6	54.0	6.0	
Yorkshire and Humberside	the second pro-					in many			
Such S	1. 1	2.6	1.4	1.9	25.9	2. 2	19.8	2. 2	
East Midlands	2.4	5.7	5. 2	7.0	58.8	5. 1	47.5	5.3	
East Anglia	1. 9	4.5	2.8	3.8	50.4	4.4	38.1	4. 2	
South East	18.4	44.6	30.4	40.9	527.9	45.8	409.3	45.4	
South West	4. 1	9.8	5.3	7. 2	99. 5	8.6	78. 7	8. 7	
West Midlands	2. 9	6.9	4.0	5.4	79. 2	6.9	61.8	6. 9	
North West	4.5	10.9	11.8	15. 9	145. 2	12.6	112.0	12. 4	
England	37. 2	90. 1	67. 7	91. 2	1, 051. 5	91. 2	821. 2	91. 1	
Wales	1.5	3.6	2.5	3. 4	33. 4	2.9	26. 1	2.9	
Scotland	2.4	5.8	3. 7	5.0	62.3	5.4	50. 2	5.6	
Great Britain	41.0	99. 5	73. 9	99. 6	1, 147. 2	99. 5	897.5	99. 5	
Northern Ireland	0. 2	0.5	0.3	0.4	5.6	0.5	4. 3	0.5	
United Kingdom	41.3	100. 0	74. 2	100. 0	1, 152. 8	100. 0	901.9	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. The value also includes assets acquired under finance leasing arrangements - see Table 2.

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.

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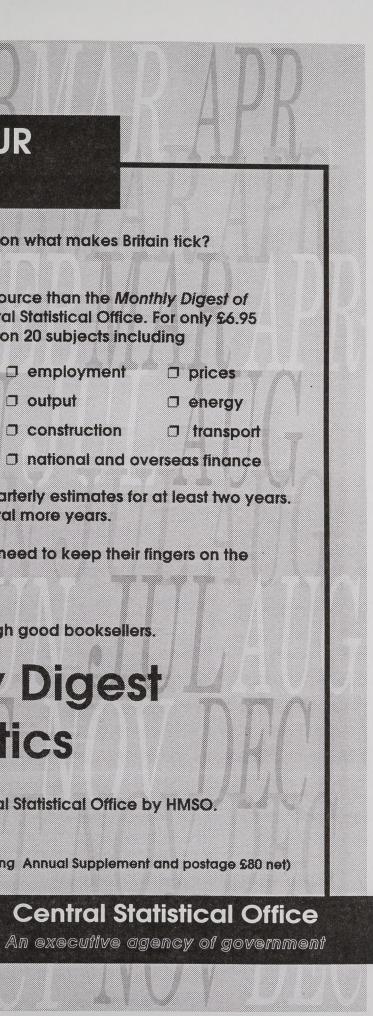
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