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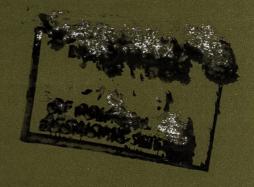
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Business Statistics Office

Business Monitor

Report on the Census of Production

Cement





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Commencing with the 1971 Census, the Census of Production reports are being numbered in a uniform series embracing all industrial inquiries in the Business Monitor series. Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) or O (occasional) or Q (quarterly) or M (monthly): and then by a number indicating the minimum list heading, or sub-division of a minimum list heading, of the Standard Industrial Classification (revised 1968).

The Census of Production (PA) reports are available on standing order (details on application to Her Majesty's Stationery Office, P.O. Box 569, London SE1 9NH. Telephone 01-928 6977), although they are not included in the global subscription arrangements for the Business Monitor series.

Government Statistical Service

A service of statistical information and advice is provided to the Government by specialist staffs employed in the statistics division of individual Departments. Statistics are made generally available through their publications and further information and advice on them can be obtained from the Departments concerned.

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PA464

Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1978

Cement

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

Department of Industry
Business Statistics Office

London: Her Majesty's Stationery Office

List of Industry Reports, etc.

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PA1001		PA369.1	Electrical equipment for motor vehicles, cycles
PA101	Coal mining Stone and slate quarrying and mining	PA369 2	and aircraft Primary and secondary batteries
PA102 PA103	Chalk, clay, sand and gravel extraction		Electric lamps, electric light fittings, wiring
PA104	Petroleum and natural gas		accessories, etc.
PA109	Miscellaneous mining and quarrying	PA370	Shipbuilding and marine engineering
PA211	Grain milling	PA380	
PA212	Bread and flour confectionery		Motor vehicle manufacturing Trailers, caravans and freight containers
PA213 PA214	Biscuits Bacon curing, meat and fish products	PA382	Motor cycle, tricycle and pedal cycle manufacturing
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PA216	Sugar	PA384	Locomotives, railway track equipment, railway carri
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	Inorganic chemicals	PA413	Weaving of cotton, linen and man-made fibres
	Organic chemicals	PA414	Woollen and worsted
	Miscellaneous chemicals	PA415	Jute
PA272	Pharmaceutical chemicals and preparations	PA416	Rope, twine and net
PA273	Toilet preparations		Hosiery and other knitted goods
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PA275 PA276	Soap and detergents Synthetic resins and plastics materials and	PA418 PA419	Lace Carpets
FA270	synthetic rubber	PA421	Narrow fabrics
PA277	Dyestuffs and pigments		Household textiles and handkerchiefs
PA278	Fertilizers		Canvas goods and sacks and other made-up textiles
	Polishes		Textile finishing
	Formulated adhesives, gelatine, etc.		Asbestos
	Explosives and fireworks		Miscellaneous textile industries
	Formulated pesticides, etc. Printing ink	PA431 PA432	Leather (tanning and dressing) and fellmongery Leather goods
	Surgical bandages, etc.	PA433	Fur
	Photographic chemical materials	PA441	Weatherproof outerwear
PA311	Iron and steel (general)	PA442	Men's and boys' tailored outerwear
PA312	Steel tubes	PA443	Women's and girls' tailored outerwear
PA313	Iron castings, etc.	PA444	Overalls and men's shirts, underwear, etc.
PA321 PA322	Aluminium and aluminium alloys	PA445 PA446	Dresses, lingerie, infants' wear, etc.
PA323	Copper, brass and other copper alloys Miscellaneous base metals	The second second second second	Hats, caps and millinery Corsets and miscellaneous dress industries
PA331	Agricultural machinery (except tractors)	PA449.2	
PA332	Metal-working machine tools	PA450	
PA333.1	Pumps	PA461.1	Refractory goods
PA333.2			Building bricks and non-refractory goods
PA333.3	Compressors and fluid power equipment	PA462	Pottery
PA334	Industrial engines	PA463	Glass
PA335 PA336	Textile machinery and accessories Construction and earth-moving equipment	PA464	Cement Abrasives
PA337	Mechanical handling equipment		Miscellaneous building materials and mineral produc
PA338	Office machinery	PA471	Timber
PA339.1	Mining machinery	PA472	Furniture and upholstery
PA339.2	Printing, bookbinding and paper goods machinery	PA473	Bedding, etc.
PA339.3	Refrigerating machinery, space-heating,	PA474	Shop and office fitting
DV330 E	ventilating and air-conditioning equipment	PA475	Wooden containers and baskets
FA339.5	Scales and weighing machinery and portable power tools	PA479 PA481	Miscellaneous wood and cork manufactures Paper and board
PA339.7	Food and drink processing machinery and		Cardboard boxes, cartons and fibre-board packing cardboard boxes, cardboard boxes, cartons and fibre-board packing cardboard boxes, car
	packaging and bottling machinery	PA482.2	Packaging products of paper and associated material
PA339.9	Miscellaneous (non-electrical) machinery	PA483	Manufactured stationery
PA341	Industrial (including process) plant and steelwork	PA484.1	Wallcoverings
PA342	Ordnance and small arms	PA484.2	Miscellaneous manufactures of paper and board
PA349.1	Ball, roller, plain and other bearings Precision chains and other mechanical engineering	PA485	Printing, publishing of newspapers and periodicals
PA351	Photographic and document copying equipment	PA489 PA491	General printing and publishing Rubber
PA352	Watches and clocks	PA492	Linoleum, plastics floor-covering, leathercloth, etc.
PA353	Surgical instruments and appliances	PA493	Brushes and brooms
PA354	Scientific and industrial instruments and systems	PA494.1	Toys, games and children's carriages
PA361	Electrical machinery	PA494.3	Sports equipment
PA362	Insulated wires and cables	PA495	Miscellaneous stationers' goods
PA363	Telegraph and telephone apparatus and	PA496	Plastics products
PA364	equipment Radio and electronic components	PA499.1	Musical instruments
PA365.1	Radio and electronic components Gramophone records and tape recordings	PA499.2	Miscellaneous manufacturing industries
	Broadcast receiving and sound reproducing	PA500 PA601	Construction Gas
	equipment	PA602	Electricity
PA366	Electronic computers	PA603	Water supply
PA367	Radio, radar and electronic capital goods		Summary tables
PA368	Electrical appliances primarily for domestic use		
	 - 100 (100 (100 (100 (100 (100 (100 (100		

PA464 CEMENT

riages,

PA464

The information in this report relates to establishments classified to the Cement industry, minimum list heading 464 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing calcareous (Portland) and aluminous cements. The production of gypseous cements is excluded and is classified to minimum list heading 469.2.

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

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Output and costs, 1974–1978
All United Kingdom establishments classified to the industry (a)

A TOTAL CONTRACTOR OF THE STATE	Unit	1974	1975	1976	. 1977	1978
Enterprises	Number	20	20	21	23	24
Establishments	"	33	31	34	35	34
ales of goods produced	£ thousand	199,580	291,441	319,809	352,075	423,529
Receipts for work done and industrial ervices rendered	that sping his ma	(b)	(b)	(b)	582	(b)
apital goods produced for establishments' own use	"	26	189	261	119	71
Ion-industrial services rendered	"	359	748	915	1,001	(b)
Goods merchanted or factored	"	6,908	(b)	13,573	11,890	(b)
Total sales and work done (c)		206,873	292,378	334,558	365,667	423,600
ncrease during the year, work in rogress and goods on hand for sale	"	4,853	972	1,496	3,013	2,038
Gross output		211,725	293,350	336,054	368,680	425,638
Purchases of materials for use in pro- luction, and packaging and fuel	" " and and	82,769	126,288	127,140	157,530	192,459
urchases of goods for merchanting or actoring	"	6,125	(d)	11,567	9,440	(d)
ncrease during the year, stocks of naterials, stores and fuel	,,	6,128	8,436	3,383	5,532	1,204
Cost of industrial services received	"	3,729	4,110	5,899	6,200	7,409
Net output	"	125,231	171,388	194,830	201,042	226,973
otal employment (e)	Thousands	15.6	15.2	14.8	13.5	13.8
Net output per head	£	8,015	11,296	13,125	14,940	16,421
ayments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	3,326	4,370	3,462	5,780	8,753
Rents of industrial and commercial buildings	"	(f)	(f)	567	(g)	(g)
Commercial insurance premiums	"	567	688	942	1,007	1,183
Bank charges	"	26	35	43	71	78
Other non-industrial services		21,212	36,463	44,355	47,767	57,345
icensing of motor vehicles	"	693	648	777	858	995
Rates, excluding water rates		3,517	3,717	3,929	4,522	4,887
Gross value added at factor cost	"	95,889	125,468	140,755	141,037	153,731
Gross value added at factor cost per head	£	6,137	8,269	9,482	10,481	11,122

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 99 per cent of employment within the industry.

TABLE 2

Capital expenditure, 1974—1978 All United Kingdom establishments classified to the industry (a)(b)

t	+h	01	100	n

					£ the	busand
	1974	1975	1976	1977	1978	MELE
Land and buildings					Steam Steam	10
New building work	4,360	3,203	2,357	3,637	7,613	
Land and existing buildings						
Acquisitions	1,258	213	562	453	(c)	
Disposals	111	329	199	238	(c)	
Vehicles						
Acquisitions	4,544	1,526	2,510	5,065	(d)	
Disposals	483	189	183	399	911	
Plant and machinery						
Acquisitions	13,318	13,854	16,909	22,355	29,250	
Disposals	509	625	996	222	421	
Total net capital expenditure	22,377	17,653	20,958	30,652	35,532	

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

TABLE 3

Stocks and work in progress, 1974–1978
All United Kingdom establishments classified to the industry (a)

0	+1-		
£	TD	α	ICA

						L triousariu
	1974	1975	1976	1977		1978
	288(33/3 USA	3,606 123,080	Increase	535369	39424	Value at end of year
Materials, stores and fuel	6,128	8,436	3,383	5,532	1,204	50,285
Work in progress	3,077	901	479	1,882	2,291	12,236
Goods on hand for sale	1,775	71	1,017	1,131	-253	6,822
Total	10,981	9,408	4,879	8,545	3,241	69,343

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

⁽b) Included in sales of goods produced.

⁽c) Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ464.

⁽d) Included with purchases of materials for use in production, packaging and fuel.

⁽e) Average number employed, including full and part-time employees (see table 7) and working proprietors.

⁽f) For 1974—1975 rents of industrial and commercial buildings were not recorded separately, but included in hire of vehicles, plant and machinery.

⁽g) Included with hire of vehicles, plant and machinery.

⁽b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included.

⁽c) Included in new building work.

⁽d) Included in plant and machinery acquisitions.

Analysis of establishments by size, 1978
All United Kingdom establishments classified to the industry (a)

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employmen	Employment		Wages and sal	Wages and salaries (f)				
			Total	Opera- tives	Others (e)	Operatives	Operatives		Others (e)		
			(d)	tives	(6)	Total	per head	Total	per head		
	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£		
1-10	17	16	84)	142	46	605	4,261	232	5,043		
11–99	6	3	117)								
100 and over	11	7	13,621	10,082	3,539	40,325	4,000	19,732	5,576		

Total	34	24	13,822	10,224	3,585	40,930	4,003	19,964	5,569

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

Total sales and work done (g)	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (h)	Total stocks and work in progress at end of year
		Total	per head	Total	per head		
f thousand	£ thousand	£ thousand	£	£ thousand	£	£ thousand	£ thousand
6,718	6,840	3,035	15,100	(j)	(j)	592	1,116
416,882	418,799	223,938	16,441	153,731(j)	11,122(j)	34,939	68,227

423,600	425,638	226,973	16,421	153,731	11,122	35,532	69,343

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £11,219 thousand.

⁽b) Average number employed, including full and part-time employees (see table 7) and working proprietors.

⁽c) The sum of the figures for the size groups may exceed the total for the industry because some enterprises control establishments in more than one size group.

⁽d) Including working proprietors.

⁽e) Administrative, technical and clerical employees.

Sales of goods produced, capital goods manufactured and buildings constructed by establishments for their own use, work done, industrial and non-industrial services rendered and merchanted goods.

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

⁽j) Gross value added data relates to all establishments.

TABLE 6

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments, 1978

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1978 All United Kingdom establishments classified to the industry (a)

Area	Total employment	(b)	Net capital expenditure (c)	Net output (d)	Gross value added at factor cost (d)	Gross value added at factor cost returned by establishments with 80 per cent or more of their employment in the region as a	
							in the region as a proportion of total gross value added at factor cost in the region	
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentage	
Standard regions of England								
North	9.*3.AU	101510	****	*	* 84	*	was at a same as a	
Yorkshire and Humberside	*	*	*	*				
East Midlands	*	*	*	*		*	*	
East Anglia	*	*	*	*	*	*		
South East	5.7	41.0	18,799	52.9	92,624	58,266	10.5	
South West	*	*	*	*	*	*	*	
West Midlands	*	*	*	*	*	*	*	
North West	*	*	*	*	*	*	*	
England	11.2	81.2	28,758	80.9	181,555	120,624		
Wales	*	*	*		*	*	*	
Scotland	*	*	*	*	*	*	*	
Great Britain	*	*	*	*	*	*		
Northern Ireland	*	*	*	*	*	*	*	
United Kingdom	13.8	100.0	35,532	100.0	226,973	153,731		

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

(b) Average number employed, including full and part-time employees (see table 7) and working proprietors.

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

(d) 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 is treated similarly.

Accounting year ended			Percentage of total returns received	Percentage of total number employed	
	EUT CE	100,00	per cent	per cent	
1978	April (a)		hydronia and hydro		
	May		1	The article art to access the second has a section of a	
	June		The Europe and States that the colony of the	s the file transport from each on the second of many	
	July		<u>-</u>		
	August		d round — par assume	r (manufacilia) terrapido escapación y o leste botalo escapación de la companya del companya de la companya del companya de la companya del la companya de l	
	September		7.7	4.1	
	October			makes = accuracy man makes and accuracy man	
	November		record to the rest where the second to the s	PART THE PROPERTY OF THE PROPERTY OF THE PART OF THE P	
	December		76.9	87.4	
1979	January		to at the person or the	treation to	
	February		Homes = Colombines	and a bridge of a native distribution of a second and a second of the se	
	March (b)		15.4	8.4	

(a) From 6th April.

(b) Including returns made for twelve-month period ended 1st to 5th April 1979.

TABLE 7

Percentage analysis of employees, by full and part-time employment and sex, 1977(a)

Sex	Full-time	Part-time	All employees	
	per cent	per cent	per cent	
Male	90	1	91	
Female	8	1 Transplant of the control of the c	9	

Source: Department of Employment

PA464

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at mid-June, 1977.

Operating ratios, 1977–1978
All United Kingdom establishments classified to the industry (a)

	Unit Control of the C	1977	1978
Gross output per head	the £	27,397	30,794
Net output per head	£	14,940	16,421
Gross value added per head	£	10,481	11,122
Gross value added as a percentage of gross output	%	38	36
Ratio of gross output to stocks		5.5	6.1
Wages and salaries as a percentage of gross value added	%	38	40
Ratio of operatives to administrative, technical and clerical employees		2.8	2.9
Nages and salaries per administrative, technical and clerical	708 52.0 57721		To a visuality of
employee 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	£	4,563	5,569
Wages and salaries per operative	£	3,730	4,003
Net capital expenditure per head	£	2,278	2,571
Net capital expenditure as a percentage of gross value added	%	22	23

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd.699517 K6 Cdf 334 7/80 These notes give the main information needed for interpreting the figures in the industry Business Monitors: more detailed information about the census is given in a separate Business Monitor PA 1001 (Introductory Notes) of the Report on the Census of Production, 1978.

GENERAL INFORMATION

hanges made for 1978

The Census for 1978 is in line with similar inquiries being conducted in other member countries of the European Economic Communities.

The census differed from earlier censuses in three respects. Sampling was introduced for establishments employing 20 to 49 and a sample of smaller units was selected. A new question on the leasing of capital assets was included for 1978 only. This will provide register information for use in related inquiries into leasing.

appression of information relating to individual undertakings ction 9(5)(b) of the Statistics of Trade Act 1947 states The following provisions shall have effect with respect to any port, summary or other communication to the public of formation 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 deduced from the total disclosed". a figure involved disclosure the contributor concerned was etimes asked to give permission for its publication. In the ority of cases permission was given. When it was refused and nere contributors were not approached the figure has been ppressed, either by combining it with other figures, or as in the

Symbols used

The following symbols are used throughout the PA series of dusiness Monitors:

- . not available
- nil or less than half the final digit shown

onal tables, by omitting the figure altogether.

- figures cannot be shown owing to the risk of disclosing information about individual enterprises.
- R revised

Rounding of figures

Figures in the tables have, where necessary, been rounded to the nearest final digit. Where figures have been so rounded, the sum of the constituent items may not always agree exactly with the lotal shown

Industrial classification

The United Kingdom Standard Industrial Classification (SIC) was rest issued in 1948 and was subsequently revised in 1958 and 968. It exists to promote uniformity and comparability in the fficial statistics of the United Kingdom. The general principles obligated are those of the International Standard Industrial lassification of all Economic Activities of the United Nations latistical Office but the United Kingdom SIC reflects the granisation and structure of industry and trade as it exists in the nited Kingdom. The SIC is a classification by activity and is of a commodity classification. However, an index of all commodity eadings for which sales data are provided in the Quarterly Business Ionitors, is published in Business Monitor PQ 1000.

Statistical unit

The statistical unit for the purpose of the Census is the establishment which is defined in the SIC as the smallest unit which can provide the information normally required for an economic census, for

example, employment, expenses, turnover, capital formation. Usually the principal activities carried on in an establishment fall within a single heading of the classification (eg steel making or sugar refining). Typically the establishment embraces all the activities carried on at a single address eg a mine or a factory, including those which are ancillary to the principal activities. Frequently distinct activities characteristic of different industries are carried on at one address, but normally these are not classified separately and the whole establishment is classified according to the main activity. If, however, the required range of data can be provided for each activity, each is taken to constitute a separate establishment. Sometimes activities which are conducted as a single business are carried on at a number of addresses. Where this is so, businesses are asked to provide the full range of information in respect of each address, whether or not the activities are different. Their activities may, however, be integrated to such an extent that they constitute a single establishment. In the latter case the establishment is defined to cover the combined activities at these addresses (termed local units). Separate figures are obtained of employment and net capital expenditure at each unit in order to compile regional tables. Efforts are made by the Business Statistics Office (BSO) to ensure, by negotiating with respondents, that the return from an establishment does not cover local units in more than one of the countries of the United Kingdom.

Establishments are asked to exclude from their returns particulars relating to any department not engaged in production eg merchanting, transport, warehousing, for which they keep a separate set of accounts. Transfers of goods produced to such departments are treated as sales and respondents are asked to value them as far as possible as if sold to an independent purchaser. Where separate accounts are not kept they are asked to include details of all these activities in their return.

Particulars relating to head offices mainly engaged in the administration of the production units within the scope of the census were included. Where more than one return was made the information in respect of the head office was apportioned among them.

For certain purposes in the annual censuses of production (especially the enterprise analyses of Business Monitor PA 1002) related establishments are combined. An enterprise group is defined as a business consisting of either a single establishment or two or more establishments under common ownership or control. Bringing together establishments into enterprise groups is also necessary for the purpose of ensuring that there will be no disclosure of the activities of any one enterprise group. Information about the relationship of establishments, the changing structure of groups of companies and about common ownership links is obtained from many sources, including the Stock Exchange Year Book, company reports, press reports and information supplied by individual establishments.

THE REGISTER

The register permits a questionnaire to be sent direct to the reporting establishment on which the latter can include information relating to all the manufacturing (or local) units which it comprises. The inquiries provide a major source of information for keeping the register continuously up-to-date and act as a check on its detail and structure. For the establishments on the register making returns to the quarterly inquiries, the industrial classification is derived from an analysis of their sales of commodities and is reviewed annually. Employment data are entered on the register from returns to the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual censuses of employment. New additions to the register are obtained from various sources including the Department of Employment and HM Customs and Excise. The 1973 Finance Act allows the latter to pass lists of businesses registered for VAT to the BSO. Where necessary details are sought directly from new businesses. Units which cease to trade are removed from the live register

Coverage

In recent censuses returns have been required from all establishments employing 20 or more. For the 1978 Census in 68 selected manufacturing industries coverage of establishments in the 20 to 49 employment size band has been reduced to a 1 in 2 sample. This change has relieved some 5,800 firms of the need to complete a census return. The Census has included for the first time a small sample (around 10 per cent) of units employing 11 to 19 to meet an EEC requirement to collect a limited range of data from smaller units every 5 years.

Regions

The regions defined in Table 5 take account of the boundary changes arising out of the Local Government Act 1972 and the Local Government Act (Scotland) 1973. These changes came into effect in April 1974 in England and Wales and May 1975 in Scotland.

TERMS USED IN THE CENSUS REPORT

Average number employed

Establishments were required to state the average number of persons on the payroll during the year of return. Separate figures were required for:

- (a) administrative, technical and clerical employees
- (b) all other employees (operatives)

Averages could be calculated from the figures relating to the last week of each calendar month. Establishments were also required to state the number of working proprietors where appropriate and these are included in total employment figures. Full-time and part-time employees are included but outworkers (ie persons employed by establishments who worked in their own homes etc on materials supplied by the establishment) are excluded. The figures include persons engaged on merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

Working proprietors

These include all persons regarded as "self-employed" for national insurance purposes and members of their families who worked in the business without receiving a wage or salary; but such persons who worked less than half the normal number of working hours are excluded. Directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading; directors paid by fee only are not included.

Employees

Administrative, technical and clerical employees include directors in receipt of a definite wage, salary or commission, managers and works foremen; research and design employees (other than operatives); draughtsmen, editorial staff, advertising staff, travellers and all office employees.

Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include operatives employed in power stations, transport (including roundsmen), warehouses, stores, shops and canteens, inspectors, maintenance workers and cleaners. Operatives engaged in outside work of erecting, fitting etc are also included, but outworkers are excluded.

Capital expenditure

Capital expenditure during the year in respect of manufacturing units where production had not started before the end of the year is included. Establishments were asked not to deduct from the value of capital expenditure amounts received or expected to be received in grants or allowances from the Government or any statutory body or local authority. Establishments with 100 or more employees were asked to include a total net capital expenditure figure for each calendar year and to state whether any of the investment shown in cost of new building work, vehicles or plant and machinery included goods for letting out on hire or leasing.

(a) New building work

This represents the cost incurred during the year of new building and other constructional work to be used in connection with the business covered by the return. The value is that charged to capital account during the year of return; it includes expenditure on new buildings and on the extension or reconstruction of old buildings, the value of works of a capital nature carried out by the establishment's own staff and the cost of any newly constructed buildings purchased. Figures shown include legal charges, stamp duties, agents' commissions, etc.

(b) Land and existing buildings

The items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of assets acquired in taking over an existing business), and the amounts receivable for freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

(c) Plant, machinery and vehicles

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc which firms produced for their own use in connection with the business covered by the return. The value of plant, etc acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. Deductible value added tax is excluded but non-deductible value added tax on motor cars acquired is included. No deduction is made for depreciation, amortization or obsolescence. The proceeds of items disposed of during the year exclude amounts written-off for items scrapped.

Cost of industrial services

This includes amounts payable to other firms for work done on materials supplied by the establishment, payments for repairs and maintenance (including those in respect of rented buildings) and amounts paid to other firms for contracts which have been sublet. Payments to outworkers are excluded.

Cost of non-industrial services

This includes rents of industrial and commercial buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport (within the United Kingdom), advertising etc. Amounts payable on royalties for the right to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" are also included.

Gross output

In the calculation of gross output the value of total sales and work done is increased by the rise (or reduced by the fall) during the year in the value of work in progress and goods on hand for sale

Net output

Net output, a customary census measure, is calculated by deducting from gross output the cost of purchases (reduced by the rise, or increased by the fall, during the year of stocks of materials etc) and the cost of industrial services received, and where applicable, duties etc.

Net output per head

The figures of net output per head are derived by dividing the net output by the average number of persons employed (full and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

Gross value added at factor cost

Gross value added at factor cost is calculated by deducting from net output the cost of non-industrial services eg rent of buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport (within the United Kingdom) and advertising, rates (excluding water rates) and the cost of licensing motor vehicles. This estimate of gross value added approaches more closely than census net output to the definition of net output or value added in national accounts statistics.

Gross value added at factor cost per head

The figures of gross value added at factor cost per head are derived by dividing the gross value added by the average number of persons employed (full and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

Purchase

Purchases include the cost of raw materials, components, semi-manufactured goods and workshop materials; of replacement parts and consumable tools not charged to capital account; of packaging materials of all types; of stationery and printed matter; of fuel, electricity and water; of materials to be used by the establishment or given out to other establishments for the production of machinery or other capital items for the establishment's own use; of materials for use by the establishment when working on goods supplied by

istomers; and of food, etc for any canteen covered by the establishment's return. Transfers of goods to the establishment m another department of the same firm not covered by the establishment's return are included at a cost corresponding to the estimated selling value recorded by the other department. Amounts avable to transport firms or credited to the firm's own transport epartment for delivery of materials are excluded, as are all rchases of machinery and plant charged to capital account. rchases of goods for merchanting or factoring have been llected separately since 1973. The values shown exclude VAT. ey include, in addition to the actual purchase price, the value packaging material charged to the establishment. The value of rned goods or packaging material returned to suppliers and any rade discounts are excluded. Materials purchased duty-paid are bluded at their duty-paid value, less any drawback, repate, etc. he cost of transport is included only if it is included with the irchase price in the firm's accounts. Imported goods are included their full delivered cost. If in the firm's accounts the transport mdocks or airport is not included in the cost of goods purchased, the cost is entered at cif plus duty (if applicable). Leasing, ting and hire purchase charges are excluded.

Sales of goods produced

sales for the purposes of the annual censuses means deliveries on ale of goods made by establishments in the United Kingdom vered by the inquiry. Sales of goods made for these establishments outworkers or by other establishments from materials given out them and sales of waste products are included. New building work and machinery or other capital items produced by establishnents for hiring out or leasing are regarded as sales, the value cluded in the return being that adopted in the establishments' apital asset accounts. Forward sales and canteen takings are excluded. Il sales in the period of the inquiry are included irrespective of when the goods were manufactured. Goods produced in one stablishment and transferred either to ancillary departments not ngaged in production for which there are separate accounts, or to ner establishment of the same firm not covered by the return, e treated as sales by the producing establishment and valued as as possible as if they had been sold to an independent purchaser. ods transferred to wholesale or retail selling organisations, for ch separate accounts are kept are valued on the same basis.

The value shown for sales is the "net selling value" defined as the amount (excluding VAT) charged to customers whether on an ex-works or delivered basis, after any trade discounts and agents' commissions have been deducted. The cost of packing materials less allowance for returnable cases is included. In industries where products attract Excise Duty the value stated is usually inclusive of duty if sold duty-paid and exclusive of duty if sold in bond or exported.

Receipts for work done and industrial services rendered

Figures for work done represent the amount charged for work carried out on materials supplied by a customer and include repair work. Within certain industries this heading covers a wide variety of activities, for example, within the food sector - butter packed on commission; within the textile industries - making up of garments, for dressing and textile finishing; within printing and publishing - preparatory work on type-setting, block making and binding. Work done is also significant in the electrical machinery and heavy engineering industries, covering erection, installation and repair and lobbing work. Other activities within this heading include exploration work, research and development, glass cutting and dressing and planing of timber.

Industrial services rendered include repairs and maintenance, instalation work, and technical research and studies for other organisations.

Capital goods produced for establishments' own use

This includes all work of a capital nature carried out during the vear by the establishments' own staff for their own use.

Non-industrial services rendered

This includes rents received for commercial and industrial buildings, amounts charged for hiring out plant, machinery and vehicles and other goods and amounts charged to other organisations for the provision of transport. It also includes amounts received for the right to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" and revenue from such staff facilities as canteens.

Goods merchanted or factored

Merchanted goods are those (excluding canteen sales) sold without having been subjected to any manufacturing process by the seller

Stocks and work in progress

Values are given of stocks of goods on hand for sale and of materials, stores and fuel, at the end of the year of return and of the change during the year, including any stocks of goods held for merchanting or factoring. Work in progress is defined as materials which have been partially processed by the establishment but which are not usually sold or transferred to another establishment without further processing. The values include the cost of materials consumed and labour used. Progress payments made to subcontractors are excluded and progress payments received from other organisations are not deducted.

Wages and salaries

These are amounts paid during the year to operatives and to administrative, technical and clerical employees. Payments to working proprietors, whether called salaries or not, are excluded. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurances, contributory pensions etc. The value of redundancy payments less any amounts reimbursed from Government sources is included. The value of any payments in kind, travelling expenses etc is included.

Remuneration paid to outworkers

The remuneration paid to outworkers (ie persons employed by the establishment who do their work in their own homes) is generally on a piece-work basis. Only amounts paid to outworkers whose names appear on the establishment's payroll are included. Amounts paid to outworkers by sub-contractors are excluded.

Employers' insurance and welfare contributions

This item includes employers' contributions to national insurance under the Social Security Pensions Act, 1975 as well as commercial insurance premiums to provide pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits, disability or death benefits for employees or former employees or their dependants. Contributions to the running costs of canteens, social centres, children's and holiday homes, etc for employees, former employees and their dependants are also included.

Operating ratios

The operating ratios shown were obtained by dividing the estimate of the industry total for the quantity shown in the numerator by the corresponding estimate for the quantity shown in the denominator. These estimates cover all establishments classified to each industry, including not selected establishments and non-respondents. Within an industry, it is possible to compare ratios for an individual firm with the ratios shown for the relevant industry. However, it is important to bear in mind that various factors may affect the results — for example, differences in definitions, treatment of depreciation (which is not identified in the census data) and varying practice with regard to stock valuation, may affect comparability in some respects.

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