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MSO

**Business Statistics Office** 

# **Business Monitor**

Report on the Census of Production

**Fertilizers** 





#### **Special Note for Purchasers**

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. These Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) 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**

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### PA278

## **Business Monitor**

A publication of the Government Statistical Service

Report on the Census of Production 1977

### **Fertilizers**

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

Radio, radar and electronic capital goods
Electrical appliances primarily for domestic use

PA366 PA367 PA368

List	of Industry Reports, etc.		
	LABERLANN COCOTA	DA260 1	1 Floatsia-landian and the state of the stat
	1 Introductory notes	PA309.1	Electrical equipment for motor vehicles, cycles     and aircraft
PA101 PA102		PA369 2	2 Primary and secondary batteries
PA103		PA369 4	Electric lamps, electric light fittings, wiring
PA104		17000.4	accessories, etc.
PA109		PA370	Shipbuilding and marine engineering
PA211			Wheeled tractor manufacturing
PA212		PA381.1	Motor vehicle manufacturing
PA213		PA381.2	2 Trailers, caravans and freight containers
PA214		PA382	Motor cycle, tricycle and pedal cycle manufacturing
PA215		PA383	Aerospace equipment manufacturing and repairing
PA216		PA384	Locomotives, railway track equipment, railway carriages,
PA217			wagons and trams
PA218		PA390	Engineers' small tools and gauges
PA219		PA391	Hand tools and implements
PA221		PA392	Cutlery, spoons, forks and plated tableware, etc.
	1 Margarine	PA393	Bolts, nuts, screws, rivets, etc.
PA229.	2 Starch and miscellaneous foods	PA394 PA395	Wire and wire manufactures
	Brewing and malting Soft drinks	PA396	
PA230	1 Spirit distilling and compounding		Jewellery and precious metals  Metal furniture
PA239	2 British wines, cider and perry		Drop forgings, etc.
	Tobacco	PA399.6	Metal hollow-ware
PA261			Miscellaneous metal manufacture
PA262		PA411	Production of man-made fibres
PA263	Lubricating oils and greases	PA412	Spinning and doubling on the cotton and flax systems
PA271.	1 Inorganic chemicals	PA413	Weaving of cotton, linen and man-made fibres
	2 Organic chemicals	PA414	Woollen and worsted
	3 Miscellaneous chemicals	PA415	Jute
	Pharmaceutical chemicals and preparations	PA416	Rope, twine and net
PA273	Toilet preparations	PA417.1	Hosiery and other knitted goods
PA274	Paint	PA417.2	Warp knitting
PA275 PA276	Soap and detergents	PA418	Lace
FA270	Synthetic resins and plastics materials and synthetic rubber	PA419 PA421	Carpets
PA277	Dyestuffs and pigments		Narrow fabrics Household textiles and handkerchiefs
PA278	Fertilizers	PA422.1	Canvas goods and sacks and other made-up textiles
	1 Polishes	PA423	Textile finishing
PA279.2	2 Formulated adhesives, gelatine, etc.		Asbestos
	B Explosives and fireworks		Miscellaneous textile industries
PA279.4	Formulated pesticides, etc.	PA431	Leather (tanning and dressing) and fellmongery
	Printing ink	PA432	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 PA313	Steel tubes	PA443	Women's and girls' tailored outerwear
PA321	Iron castings, etc.	PA444	Overalls and men's shirts, underwear, etc.
PA322	Aluminium and aluminium alloys Copper, brass and other copper alloys	PA445 PA446	Dresses, lingerie, infants' wear, etc.
PA323	Miscellaneous base metals		Hats, caps and millinery Corsets and miscellaneous dress industries
PA331	Agricultural machinery (except tractors)	PA449.2	
PA332	Metal-working machine tools		Footwear
PA333.1	Pumps		Refractory goods
PA333.2		PA461.2	Building bricks and non-refractory goods
PA333.3	Compressors and fluid power equipment	PA462	Pottery
PA334	Industrial engines	PA463	Glass
PA335	Textile machinery and accessories	PA464	Cement
PA336	Construction and earth-moving equipment		Abrasives
PA337	Mechanical handling equipment	PA469.2	Miscellaneous building materials and mineral products
PA338	Office machinery	PA471	Timber
PA339.1	Mining machinery	PA472	Furniture and upholstery
PA330 3	Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating,	PA473 PA474	Bedding, etc.
1,4000.0	ventilating and air-conditioning equipment	PA474 PA475	Shop and office fitting
PA339.5	Scales and weighing machinery and portable	PA479	Wooden containers and baskets Miscellaneous wood and cork manufactures
	power tools	PA481	Paper and board
PA339.7	Food and drink processing machinery and		Cardboard boxes, cartons and fibre-board packing cases
	packaging and bottling machinery	PA482.2	Packaging products of paper and associated materials
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	PA485	Printing, publishing of newspapers and periodicals
PA349.2	Precision chains and other mechanical engineering	PA489	General printing and publishing
PA351	Photographic and document copying equipment	PA491	Rubber
PA352 PA353	Watches and clocks	PA492	Linoleum, plastics floor-covering, leathercloth, etc.
PA353 PA354	Surgical instruments and appliances	PA493	Brushes and brooms
PA361	Scientific and industrial instruments and systems		Toys, games and children's carriages
PA362	Electrical machinery Insulated wires and cables		Sports equipment
PA363	Telegraph and telephone apparatus and	PA495 PA496	Miscellaneous stationers' goods
	equipment		Plastics products Musical instruments
PA364	Radio and electronic components	PA499.1	Miscellaneous manufacturing industries
PA365.1	Gramophone records and tape recordings	PA500	Construction
PA365.2	Broadcast receiving and sound reproducing	PA601	Gas
	equipment	PA602	Electricity
PA366	Electronic computers	PA603	Water supply
PA367	Madio redes and alant ' '. I t		

The information in this report relates to establishments classified to the Fertilizers industry, minimum list heading 278 in the Standard

Manufacturing or compounding artificial fertilizers.

dustrial Classification (revised 1968). The activities of the industry include: -

PA278 FERTILIZERS

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

#### LIST OF CONTENTS

Table	Title							Page
No	Title 1							ne new test
1	Output	and costs, 197	3–1977					2
2	Capital	expenditure, 1	973–1977					3
3	Stocks a	and work in pro	ogress, 1973-1977					3
4	Analysis	s of establishm	ents by size, 1977					4–5
5		distribution or cost, 1977	of employment, ne	t capital expendi	ture, net output and	d gross value a	dded	6
6			twelve-month periods employing 20 or		eturns received from 977	United		7
7	Percenta	age analysis of	employees, by full	and part-time en	nployment and sex,	1977		7
8	Operation	ng ratios, 1977	outsin for , verterso					8

PA1002 Summary tables

PA278

Output and costs, 1973—1977 All United Kingdom establishments classified to the industry (a)

	Unit	1973	1974	1975	1976	1977
Enterprises	Number	112	120	116	119	121
Establishments	"	143	152	145	146	146
Sales of goods produced	£ thousand	271,365	404,180	499,633	561,332	659,519
Receipts for work done and industrial services rendered	, is in a page 71	(b)	(b)	(b)	3,184	(b)
Capital goods produced for establishments' own use	"	4,123	2,124	3,309	4,699	2,047
Non-industrial services rendered	"	4,794	7,796	7,802	8,569	7,951
Goods merchanted or factored	"	35,605	54,888	55,718	79,436	93,481
Total sales and work done (c)		315,887	468,988	566,463	657,219	762,998
Increase during the year, work in progress and goods on hand for sale	,,	-3,123	14,603	19,964	-2,956	-4,714
Gross output	"	312,764	483,591	586,426	654,263	758,285
Purchases of materials for use in production, and packaging and fuel	"	136,533	233,043	280,541	293,152	337,669
Purchases of goods for merchanting or factoring	"	28,084	43,843	44,719	71,303	82,771
Increase during the year, stocks of materials, stores and fuel		3,125	17,428	-2,631	1,569	684
Cost of industrial services received	"	5,419	9,562	13,075	15,470	16,966
Net output	"	145,853	214,570	245,461	275,907	321,563
Total employment (d)	Thousands	19.1	19.7	19.6	20.1	19.3
Net output per head	£	7,629	10,875	12,525	13,719	16,661
Payments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	2,149	2,845	3,839	3,058	3,908
Rents of industrial and commercial buildings	"	(e)	(e)	(e)	1,502	2,637
Commercial insurance premiums	,,	1,147	1,850	3,035	3,607	4,520
Bank charges	,,	34	408	125	101	170
Other non-industrial services	"	22,156	26,547	29,722	35,806	43,969
icensing of motor vehicles	"	140	150	216	245	303
lates, excluding water rates	"	2,360	3,308	3,764	3,950	4,636
Gross value added at factor cost	.,	117 867	179,463	204,760	227, 638	261,419
Gross value added at factor cost per head	£	6,165	9,095	10,448	11,319	13,545

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons. Satisfactory returns accounted for 91 per cent of employment within the industry.

Total net capital expenditure

10,500

oital expenditure, 1973—1977 United Kingdom establishments classified to the industry (a)(b)

411 9						E thousand
- Table (a) the state of the st	1973	1974	.1975	1976	1977	950
and and buildings				(5)	etnern	
New building work	2,175	1,489	2,323	2,781	4,203	
Land and existing buildings						
Acquisitions	56	641	930	268	580	
Disposals	853	122	168	503	362	
yehicles						
Acquisitions	1,268	1,548	1,638	2,015	2,823	
Disposals	339	352	374	476	683	
Plant and machinery						
Acquisitions	8,581	19,904	38,461	34,855	42,650	
Disposals	388	387	346	507	461	

Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

42,464

38,433

48,750

22,722

Stocks and work in progress, 1973—1977 All United Kingdom establishments classified to the industry (a)

					£ thousand
1973	1974	1975	1976	19	77
*Siddle	062,417	Increase	16,300	Per marp	Value at end of year
3,125	17,428	<b>-2,631</b>	1,569	684	39,791
-21	1,571	4,688	-4,657	918	7,847
-3,102	13,032	15,276	1,701	-5,631	46,971
2	32,031	17,332	-1,387	-4,030	94,609
	3,125 -21 -3,102	3,125 17,428 -21 1,571 -3,102 13,032	3,125 17,428 -2,631 -21 1,571 4,688 -3,102 13,032 15,276	Increase  3,125 17,428 -2,631 1,569  -21 1,571 4,688 -4,657  -3,102 13,032 15,276 1,701	Increase  3,125 17,428 -2,631 1,569 684  -21 1,571 4,688 -4,657 918  -3,102 13,032 15,276 1,701 -5,631

Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

<sup>(</sup>b) Included in sales of goods produced.

<sup>(</sup>c) Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ278.

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

For 1973—1975 rents of industrial and commercial buildings were not recorded separately, but included in hire of vehicles, plant and machinery.

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

Analysis of establishments by size, 1977 All United Kingdom establishments classified to the industry (a)

Size	Estab-	Enter- prises	Employment		197-	Wages and sa	laries (f)		
(b)	ments	(c)							
				Opera- tives	Others (e)	Operatives		Others (e)	100 x 1
		100	(C)			Total	per head	Total	per head
	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1-10	77	71	383)				8 869		
11-19	26	24	366)						
20-49	16	16	517)	1,104	668	3,386	3,067	2,336	3,497
50-99	9	8	607)						
100-199	7	7	904	603	300	1,809	3,000	1,093	3,642
200-749	7	7	2,814	1,629	1,185	6,134	3,765	4,911	4,144
750 and over	4	3	13,709	8,532	5,177	38,706	4,537	30,246	5,842

Total	146	121	19,300	11,868	7,330	50,035	4,216	38,585	5,264

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

Total sales and work done (g)	Gross outpu	t Net outp	ut	of total result	Gross value added at factor cost	in in its	Net capital expenditure (h)	Total stocks and work in progress at end of year
return of rotal value setting in		Total		per head	Total	per head		
£ thousand	£ thousand	£ thousa	nd	for the second second and the second	£ thousand	former red -	£ thousand	£ thousand
93,486	94,645	23,382		12,483	(j)	(j)	2,372	12,451
36,006	35,910	10,112		11,185	26,894(j)	9,684(j)	619	6,758
132,247	130,865	28,746		10,215	21,695	7,710	4,152	17,385
501,260	496,865	259,324		18,916	212,830	15,525	41,607	58,015

762,998	758,285	321,563	16,661	261,419	13,545	48,750	94,609

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £16,519 thousand.

(f)

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

<sup>(</sup>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.

<sup>(</sup>d) Including working proprietors.

<sup>(</sup>e) Administrative, technical and clerical employees.

<sup>(</sup>g) Sales of goods produced, capital goods manufactured, buildings constructed by establishments for their own use, work done, industrial and non-industrial services rendered and merchanted goods.

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

<sup>(</sup>j) Gross value added data relate to establishments employing 1-199.

PA278 TABLE 6

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1977 All United Kingdom establishments classified to the industry (a)

Area	Total employment (b)				Net output (d)			Gross value added at factor cost returned by establishments with 80 per cent or more of their employment in the region as a proportion of total gross value added at	
							factor cos region	st in the	
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentag	e	
Standard regions of England									
North	25,52	9.	•	Co. SBAGE	.3.55	23.64	64,645		
Yorkshire and Humberside	2.4	12.6	3,219	6.6	31,039	24,859	2.6		
East Midlands	0.6	2.9	599	1.2	6,743	4,775	42.0		
East Anglia	1.5	7.9	1,349	2.8	21,787	18,091	14.8		
South East	1.2	6.2	620	1.3	12,788	9,654	59.3		
South West	1.7	8.8	2,639	5.4	29,569	24,404	3.6		
West Midlands			*						
North West	1.8	9.5	4,132	8.5	36,406	27,309	51.1		
England	16.3	84.7	43,061	88.3	292,239	239,995	_		
Wales			*	*		*			
Scotland	1.9	9.8	3,745	7.7	18,698	14,125	67.4		
Great Britain	*	•	*	*	*	*			
Northern Ireland	*	•		*			*		
United Kingdom	19.3	100.0	48,750	100.0	321,563	261,419		/	

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

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

(c) 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. percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1977

Accounting year ended		Percentage of total re	turns received	Percentage of total number employed		
	39,289	per cent		per cent	many at material septembers in	
1977	April (a)	0.0		0.0		
	May	3.2		0.2		
	June BAS SI	16.1		4.6		
	July	0.0		0.0		
	August	0.0		0.0		
	September	16.1		4.2		
	October	6.4		0.5		
	November	0.0		0.0		
	December	54.8		90.5		
1978	January	0.0		0.0		
	February	0.0		0.0		
	March (b)	3.2		0.1	Manufaction ashess has be	

(a) From 6th April.

(b) Including returns made for twelve-month period ended 1st to 5th April 1978.

#### TABLE 7

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

Sex	Full-time	Part-time	All employees
100000000000000000000000000000000000000	per cent	per cent	per cent
Male	85	1 1000000000000000000000000000000000000	86
Female	12	2	14

Source: Department of Employment

The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at mid-June, 1976 because 1977 information is not yet available.

PA278

Notes

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

beyotames selfrega sectrate aggressings.		P INC. OF	n properties	Unit	1977	abije lesy leux.
Gross output per head				res£ red	39,289	
Net output per head				£	16,661	
Gross value added per head				£	13,545	
Gross value added as a percentage of gross output				%	34	
Ratio of gross output to stocks					8.0	
Wages and salaries as a percentage of gross value added	d			%	34	
Ratio of operatives to administrative, technical and cleemployees	erical				1.6	
Wages and salaries per operative				0.0 <b>£</b>	4,216	
Wages and salaries per administrative, technical and cleemployee	erical			£	5,264	
Net capital expenditure per head				£	2,526	
Net capital expenditure as a percentage of gross value	added			%	19	

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments employing fewer than 20 persons.

Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd.597332 K6 Cdf 227 12/79 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, 1977.

#### SENERAL INFORMATION

#### Changes made for 1977

The Census for 1977 is in line with similar inquiries being conducted in other member countries of the European Economic communities. There was a small number of changes in the scope of the industry reports compared with 1976.

For the first time in the industry monitors a table has been included on operating ratios, calculated from census measures of contract, investment, manpower and labour costs.

Specific changes are explained in the introductions to the industry reports or by footnotes to the tables.

suppression of information relating to individual undertakings section 9(5)(b) of the Statistics of Trade Act 1947 states - The following provisions shall have effect with respect to any eport, summary or other communication to the public of a 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 netimes asked to give permission for its publication. In the ajority of cases permission was given. When it was refused and here contributors were not approached the figure has been uppressed, either by combining it with other figures, or as in the egional tables, by omitting the figure altogether.

#### ymbols used

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

- . not available
- nil or less than half the final digit shown
- \* figures cannot be shown owing to the risk of disclosing information about individual enterprises.
- R revised

#### lounding 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 total shown.

#### ndustrial classification

The United Kingdom Standard Industrial Classification (SIC) was first issued in 1948 and was subsequently revised in 1958 and 1968. It exists to promote uniformity and comparability in the official statistics of the United Kingdom. The general principles followed are those of the International Standard Industrial Classification of all Economic Activities of the United Nations Statistical Office but the United Kingdom SIC reflects the Organisation and structure of industry and trade as it exists in the United Kingdom. The SIC is a classification by activity and is not a commodity classification. However, an index of all commodity headings for which sales data are provided in the Quarterly Business Monitors, 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 separate 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 or addresses in more than one of the countries of the United Kingdom.

Further information about the statistical unit appeared in an article "The statistical unit in business inquiries" in Statistical News No 13 May 1971.

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. For these purposes an enterprise group may be 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 Companies Registration Office and the Department of Employment, The 1973 Finance Act allows HM Customs and Excise to pass to the BSO lists of businesses registered for VAT. Information from all these sources is used to improve the register, and where necessary, details are sought directly from new businesses. Units which cease to trade are removed from the live register.

Increasing use of the information obtained from the Department of Employment, HM Customs and Excise and BSO inquiries has led to improvements on the register, which in turn enabled the BSO to produce better estimates, particularly of numbers of smaller establishments and enterprises.

#### Coverage

A return was required in the 1977 Census from each establishment with 20 or more employees. Each establishment is classified to an industry, as defined in the SIC, whose principal products form the major part of the establishment's sales.

#### 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 number of persons on the payroll on average during the year of return, whether full-time or part-time employees. 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. 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.

#### (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.

#### Purchases

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

etomers; and of food, etc for any canteen covered by the stablishment'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 mated 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. chases of goods for merchanting or factoring have been ected separately since 1973. The values shown exclude VAT. hey include, in addition to the actual purchase price, the value packaging material charged to the establishment. The value of irned goods or packaging material returned to suppliers and any de discounts are excluded. Materials purchased duty-paid are juded at their duty-paid value, less any drawback, rebate, etc. he cost of transport is included only if it is included with the hase price in the firm's accounts, Imported goods are included their full delivered cost. If in the firm's accounts the transport ndocks or airport is not included in the cost of goods purchased, he cost is entered at cif plus duty (if applicable). Leasing, ing and hire purchase charges are excluded.

#### Sales of goods produced

ales for the purposes of the annual censuses means deliveries on le of goods made by establishments in the United Kingdom ered 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 ork and machinery or other capital items produced by establishents 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. sales in the period of the inquiry are included irrespective of hen the goods were manufactured. Goods produced in one establishment and transferred either to ancillary departments not engaged in production for which there are separate accounts, or to ther establishment of the same firm not covered by the return, retreated as sales by the producing establishment and valued as ar as possible as if they had been sold to an independent purchaser. ods transferred to wholesale or retail selling organisations, for hich separate accounts are kept are valued on the same basis.

The value shown for sales in the "net selling value" defined as the amount (excluding VAT) charged to customers whether on an exworks 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, fur 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 jobbing 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, installation 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 year 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, together with a margin of overhead costs and profits. Progress payments made to sub-contractors 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, commissions and holiday pay, 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 excluded.

#### 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 (and/or earnings related basic contributions under the Social Security Pensions Act, 1975) and 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 the industry, including exempted 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 practise with regard to stock valuation, may affect comparability in some respects.

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