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**Business Monitor** 

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OF POLITICAL AND
POSAKONIC SCIENCE

Report on the Census of Production

Paper and board



A publication of the Government Statistical Service

HMSO

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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 pries. 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).

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## PA481

# **Business Monitor**

A publication of the Government Statistical Service

Report on the Census of Production 1977

Paper and board

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.

List Oi	mustry reports, etc.		
PA1001	Introductory notes	PA369.1	Electrical equipment for motor vehicles, cycles
PA101	Coal mining	DA200 0	and aircraft
PA102 PA103	Stone and slate quarrying and mining Chalk, clay, sand and gravel extraction	PA309.2	Primary and secondary batteries Electric lamps, electric light fittings, wiring
PA104	Petroleum and natural gas	1 7309.4	accessories, etc.
PA109	Miscellaneous mining and quarrying	PA370	Shipbuilding and marine engineering
PA211	Grain milling	PA380	Wheeled tractor manufacturing
PA212	Bread and flour confectionery	PA381.1	Motor vehicle manufacturing
PA213	Biscuits		Trailers, caravans and freight containers
PA214 PA215	Bacon curing, meat and fish products Milk and milk products	PA382 PA383	Motor cycle, tricycle and pedal cycle manufacturing Aerospace equipment manufacturing and repairing
PA216	Sugar	PA384	Locomotives, railway track equipment, railway carriad
PA217	Cocoa, chocolate and sugar confectionery	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	wagons and trams
PA218	Fruit and vegetable products	PA390	Engineers' small tools and gauges
PA219	Animal and poultry foods	PA391	Hand tools and implements
PA221	Vegetable and animal oils and fats	PA392	Cutlery, spoons, forks and plated tableware, etc.
	Margarine	PA393	Bolts, nuts, screws, rivets, etc.
PA231	Starch and miscellaneous foods Brewing and malting	PA394 PA395	Wire and wire manufactures Cans and metal boxes
PA232		PA396	Jewellery and precious metals
	Spirit distilling and compounding		Metal furniture
	British wines, cider and perry		Drop forgings, etc.
	Tobacco	PA399.6	Metal hollow-ware
PA261	Coke ovens and manufactured fuel		Miscellaneous metal manufacture
PA262	Mineral oil refining	PA411	Production of man-made fibres
PA263	Lubricating oils and greases Inorganic chemicals	PA412 PA413	Spinning and doubling on the cotton and flax systems 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	PA417.1	Hosiery and other knitted goods
PA274	Paint	PA417.2	Warp knitting
PA275	Soap and detergents	PA418	Lace
PA276	Synthetic resins and plastics materials and	PA419	Carpets
PA277	synthetic rubber Dyestuffs and pigments	PA421	Narrow fabrics Household textiles and handkerchiefs
PA278	Fertilizers		Canvas goods and sacks and other made-up textiles
PA279.1		PA423	Textile finishing
PA279.2	Formulated adhesives, gelatine, etc.		Asbestos
PA279.3	Explosives and fireworks	PA429.2	Miscellaneous textile industries
PA279.4	Formulated pesticides, etc.	PA431	Leather (tanning and dressing) and fellmongery
PA279.5	Printing ink	PA432	Leather goods
	Surgical bandages, etc.	PA433	Fur
PA279.7 PA311	Photographic chemical materials Iron and steel (general)	PA441 PA442	Weatherproof outerwear 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	Aluminium and aluminium alloys	PA445	Dresses, lingerie, infants' wear, etc.
PA322	Copper, brass and other copper alloys	PA446	Hats, caps and millinery
PA323	Miscellaneous base metals		Corsets and miscellaneous dress industries
PA331	Agricultural machinery (except tractors)	PA449.2	
PA332 PA333.1	Metal-working machine tools	PA450	Footwear Refrestery goods
PA333.2			Refractory goods  Building bricks and non-refractory goods
	Compressors and fluid power equipment	PA462	
PA334	Industrial engines	PA463	Glass
PA335	Textile machinery and accessories	PA464	Cement
PA336	Construction and earth-moving equipment	PA469.1	Abrasives
PA337	Mechanical handling equipment		Miscellaneous building materials and mineral products
PA338	Office machinery	PA471	Timber
	Mining machinery	PA472	Furniture and upholstery
	Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating,	PA473 PA474	Bedding, etc. Shop and office fitting
1 A333.3	ventilating and air-conditioning equipment	PA475	Wooden containers and baskets
PA339.5	Scales and weighing machinery and portable	PA479	Miscellaneous wood and cork manufactures
	power tools	PA481	Paper and board
PA339.7	Food and drink processing machinery and	PA482.1	
	packaging and bottling machinery		Packaging products of paper and associated materials
	Miscellaneous (non-electrical) machinery	PA483	Manufactured stationery
PA341 PA342	Industrial (including process) plant and steelwork Ordnance and small arms		Wallcoverings Miscellaneous manufactures of paper and board
PA349.1		PA485	Printing, publishing of newspapers and periodicals
	Precision chains and other mechanical engineering	PA489	General printing and publishing
PA351	Photographic and document copying equipment	PA491	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 PA495	Sports equipment Miscellaneous stationers' goods
PA362 PA363	Insulated wires and cables Telegraph and telephone apparatus and	PA495 PA496	Miscellaneous stationers' goods Plastics products
1 4303	Telegraph and telephone apparatus and equipment		Musical instruments
PA364	Radio and electronic components		Miscellaneous manufacturing industries
PA365.1	Gramophone records and tape recordings	PA500	Construction
PA365.2		PA601	Gas
	equipment	PA602	Electricity
PA366	Electronic computers	PA603	Water supply
PA367	Radio, radar and electronic capital goods	PA1002	Surnmary tables
PA368	Electrical appliances primarily for domestic use		

## PA481 PAPER AND BOARD

PA481

The information in this report relates to establishments classified to the Paper and board industry, minimum list heading 481 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing all types of paper and board, including newsprint, printing and writing paper, wrapping paper, cigarette paper, cardboard and building board; and paper coating. Paper sensitizing is excluded and is classified to minimum list heading 279.7 (part PA279.7).

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 No	Title						Page
1	Output and costs, 1973	-1977					2
2	Capital expenditure, 19	73–1977					3
3	Stocks and work in prog	gress, 1973—197	7				3
4	Analysis of establishme	nts by size, 1977					4–5
5	Regional distribution of at factor cost, 1977	employment, no	et capital expend	iture, net outpu	t and gross valu	ue added	6
6	Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1977						
7	Percentage analysis of e	mployees, by fu	II and part-time e	mployment and	sex, 1977		7
8	Operating ratios, 1977						8

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

	Unit	1973	1974	1975	1976	1977
Enterprises	Number	167	195	190	202	198
Establishments		246	276	271	281	278
Sales of goods produced	£ thousand	646,279	948,491	923,110	1,180,644	1,311,738
Receipts for work done and industrial ervices rendered	seed extrica	(b)	(b)	(b)	2,697	1,649
Capital goods produced for establish- nents' own use	,,	749	967	944	944	1,412
Ion-industrial services rendered		1,717	1,632	2,313	3,056	2,506
Goods merchanted or factored	"	27,265	31,013	35,145	36,506	23,037
Total sales and work done (c)		676,011	982,103	961,512	1,223,847	1,340,342
ncrease during the year, work in rogress and goods on hand for sale	"	-2,678	15,362	12,181	14,230	14,291
Gross output	,,	673,333	997,465	973,694	1,238,078	1,354,633
urchases of materials for use in pro- uction, and packaging and fuel	"	392,620	634,067	606,223	807,452	853,177
durchases of goods for merchanting or actoring	"	22,056	26,934	29,543	31,846	20,793
ncrease during the year, stocks of naterials, stores and fuel	,,	10,424	46,874	642	25,849	-8,167
Cost of industrial services received	"	13,806	20,413	19,276	22,519	27,010
Net output	"	255,274	362,924	319,294	402,111	445,487
otal employment (d)	Thousands	60.9	63.1	58.6	57.2	55.9
Net output per head	£	4,191	5,747	5,449	7,034	7,973
ayments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	1,943	2,632	3,938	3,154	4,070
Rents of industrial and commercial buildings	"	(e)	(e)	(e)	2,271	1,986
Commercial insurance premiums	"	4,287	5,512	7,107	8,060	9,495
Bank charges	,,	219	233	244	240	314
Other non-industrial services	"	22,487	27,830	27,851	35,317	40,914
icensing of motor vehicles	"	228	222	238	283	249
ates, excluding water rates		5,359	6,879	8,619	9,220	9,715
Gross value added at factor cost	"	220,751	319,617	271,297	343,565	378,743
Gross value added at factor cost per head	£	3,624	5,061	4,630	6,010	6,778

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons. Satisfactory returns accounted for 94 per cent of employment within the industry.

TABLE 2

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

					£ thousand
	1973	1974	1975	1976	1977
Land and buildings					tanka (cara di
New building work	3,076	5,019	5,096	4,400	4,962
Land and existing buildings					
Acquisitions	549	1,124	849	372	521
Disposals	1,817	4,129	646	1,519	1,047
Vehicles					
Acquisitions	1,609	2,090	1,929	2,049	2,880
Disposals	333	414	365	718	693
Plant and machinery					
Acquisitions	20,672	37,754	38,224	34,657	47,430
Disposals	516	1,464	724	1,061	1,230
Total net capital expenditure	23,239	39,981	44,363	38,180	52,824

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

TABLE 3

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

All Officed Kingdom establishments	Oldoninod to the m					£ thousan
	1973	1974	1975	1976	1977	
	a, c A Transact	N. S.	Increase	38.775	San Transfer	Value at end of year
Materials, stores and fuel	10,424	46,874	642	25,849	<b>–</b> 8,167	127,822
Work in progress	362	2,884	1,144	3,705	3,797	19,581
Goods on hand for sale	-3,040	12,478	11,037	10,526	10,494	70,450
Total	7,746	62,236	12,824	40,080	6,124	217,854

<sup>(</sup>a) 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 PQ481.

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

<sup>(</sup>e) For 1973—1975 rents of industrial and commercial buildings were not recorded separately, but included in hire of vehicles, plant and machinery.

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

217,854

52,824

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

Size group (b)	Estab- lish- ments	ish- prises	Employmen	Employment		Wages and salaries (f)			
			Total (d)	Opera- tives	Others (e)	Operatives		Others (e)	Others (e)
			(a)	11703	(6)	Total	per head	Total	per head
	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1-10	78	75	419)						
11–19	29	29	430)						
20-49	36	35	1,212)	2,686	785	8,999	3,350	3,108	3,959
50-99	21	19	1,481)						
100-199	38	29	5,677	4,322	1,355	14,199	3,285	5,263	3,884
200-299	23	18	5,562	4,169	1,393	14,968	3,590	5,470	3,927
300-399	18	13	6,180	4,770	1,410	16,190	3,394	5,330	3,780
400-499	12	12	5,454	4,092	1,362	14,833	3,625	5,396	3,962
500-749	7	6	4,271	3,262	1,009	11,693	3,585	3,756	3,722
750–999	3	3	2,710	2,118	592	8,183	3,864	2,314	3,909
,000–1,499	10	7	12,432	9,860	2,572	36,468	3,699	11,059	4,300
1,500 and over	3	3	10,049	8,005	2,044	30,186	3,771	8,452	4,135

Total	278	198	55,877	43,284	12,522	155,719	3,598	50,147	4,005

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

4

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			
£ thousand	£ thousand	£ thousand	f to See or too be being a see	£ thousand	£	£ thousand	£ thousand	
86,382	87,218	31,501	8,894	(j)	(j)	2,825	10,576	
150,393	152,236	49,853	8,782	69,751(j)	7,566(j)	4,678	19,713	
151,805	153,098	45,939	8,259	38,995	7,011	4,503	23,787	
138,666	141,167	48,225	7,803	41,808	6,765	6,393	24,324	
120,384	122,368	45,275	8,301	39,913	7,318	4,949	20,813	
85,392	86,252	31,920	7,474	26,854	6,288	3,627	14,988	
68,998	68,704	28,255	10,426	24,488	9,036	2,903	11,776	
269,900	273,946	87,029	7,000	73,077	5,878	12,627	52,271	
268,422	269,644	77,489	7,711	63,857	6,355	10,318	39,606	

(f)	The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteen estimated for the industry at £34,309 thousand.	s, is
(")	estimated for the industry at £34,309 thousand.	

378,743

6,778

7,973

445,487

1,354,633

1,340,342

<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.

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 capital expenditure (c)		Net output (d)	Gross value d) added at factor cost (d)	Gross value added at factor cost returned by establishments witl 80 per cent or more of their employment 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	1.9	3.5	2,775	5.2	21,456	19,219	99.2	
Yorkshire and Humberside	2.2	4.0	1,588	3.0	18,102	15,072	90.1	
East Midlands	1.0	1.8	776	1.5	8,670	7,514	39.6	
East Anglia	0.1	0.1	25	0.1	373	312	0.0	
South East	19.9	35.5	18,046	34.2	164,727	138,412	94.2	
South West	4.7	8.4	5,088	9.6	32,888	28,883	91.9	
West Midlands	1.7	3.0	441	0.8	12,093	10,710	93.5	
North West	13.5	24.2	11,297	21.4	95,714	80,800	80.3	
England	45.0	80.6	40,036	75.8	354,024	300,922		
Wales	*	*	*	*		*	*	
Scotland	8.6	15.3	11,627	22.0	70,654	59,072	98.5	
Great Britain	*	*	*	*	*	*		
Northern Ireland	*	*	*	*	*	*	*	
United Kingdom	55.9	100.0	52,824	100.0	445,487	378,743		

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

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.

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.

TABLE 6

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

Accoun	ting year ended	Percentage of total returns received	Percentage of total number employed
		per cent	per cent
977	April (a)	0.0	0.0
	May	0.7	0.3
	June	1.4	0.4
	July	1.4	0.2
	August	0.0	0.0
	September	2.7	0.8
	October	16.3	19.6
	November	2.0	1.8
	December	49.7	44.7
978	January	4.8	6.5
	February	0.0	0.0
	March (b)	21.1	25.7

(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		
	per cent	per cent	per cent		
Male	82	1	83		
Female	13	4	17		

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.

TABLE 8

Net capital expenditure per head

Net capital expenditure as a percentage of gross value added

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

	Unit	1977
Gross output per head	£	24,243
Net output per head	£	7,973
Gross value added per head	£	6,778
Gross value added as a percentage of gross output	%	28
Ratio of gross output to stocks		6.2
Wages and salaries as a percentage of gross value added	%	54
Ratio of operatives to administrative, technical and clerical employees  Wages and salaries per operative		
		3.5
	£	3,598
Wages and salaries per administrative, technical and clerical		
employee	£	4,005

Notes

PA481

945

14

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.

## GENERAL 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 output, 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 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 deduced from the total disclosed".

If a figure involved disclosure the contributor concerned was sometimes asked to give permission for its publication. In the majority of cases permission was given. When it was refused and where contributors were not approached the figure has been suppressed, either by combining it with other figures, or as in the regional 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

## 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 total shown.

#### Industrial 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 units

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.

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

#### 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, semimanufactured 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 stablishment's return. Transfers of goods to the establishment om another department of the same firm not covered by the stablishment's return are included at a cost corresponding to the timated 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 ected separately since 1973. The values shown exclude VAT. ney include, in addition to the actual purchase price, the value packaging material charged to the establishment. The value of med goods or packaging material returned to suppliers and any rade discounts are excluded. Materials purchased duty-paid are uded at their duty-paid value, less any drawback, rebate, etc. ne cost of transport is included only if it is included with the chase price in the firm's accounts. Imported goods are included their full delivered cost. If in the firm's accounts the transport amdocks or airport is not included in the cost of goods purchased, he cost is entered at cif plus duty (if applicable). Leasing, nting and hire purchase charges are excluded.

#### Sales of goods produced

ales for the purposes of the annual censuses means deliveries on 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 ork and machinery or other capital items produced by establishents for hiring out or leasing are regarded as sales, the value ocluded in the return being that adopted in the establishments' anital asset accounts. Forward sales and canteen takings are excluded. all sales in the period of the inquiry are included irrespective of hen 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 ther establishment of the same firm not covered by the return re treated as sales by the producing establishment and valued as r 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 in 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 obbing work. Other activities within this heading include exploration work, research and development, glass cutting and dressing and blaning 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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