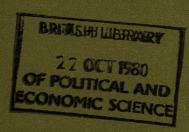
1978

0 43 ( 43 (MASS) **Business Statistics Office** 

# **Business Monitor**

Report on the Census of Production

Insulated wires and cables





#### 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. Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) or O (occasional) or O (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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# PA362

# **Business Monitor**

A publication of the Government Statistical Service

Report on the Census of Production 1978

# Insulated wires and cables

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

Grain milling

Biscuits

Sugar

Petroleum and natural gas Miscellaneous mining and quarrying

Milk and milk products

PA229.1 Margarine PA229.2 Starch and miscellaneous foods

Brewing and malting

Mineral oil refining

Organic chemicals

Toilet preparations

Soap and detergents

Dyestuffs and pigments

PA279.7 Photographic chemical materials

Iron and steel (general)

Miscellaneous base metals

Metal-working machine tools

PA333.3 Compressors and fluid power equipment

Textile machinery and accessories

Mechanical handling equipment

PA339.3 Refrigerating machinery, space-heating,

Ordnance and small arms

Watches and clocks

Electrical machinery

Electronic computers

equipment

equipment

Insulated wires and cables

synthetic rubber

PA279.3 Explosives and fireworks

PA279.6 Surgical bandages, etc.

Steel tubes

Pumps

PA333.2 Valves

PA279.4 Formulated pesticides etc.

Iron castings, etc.

Industrial engines

Office machinery

power tools

Mining machinery

Fertilizers

PA271.3 Miscellaneous chemicals

Paint

PA279.1 Polishes

PA279.5 Printing ink

Soft drinks

Tobacco

Bread and flour confectionery

Fruit and vegetable products
Animal and poultry foods

Vegetable and animal oils and fats

Spirit distilling and compounding

Coke ovens and manufactured fuel

Pharmaceutical chemicals and preparations

Synthetic resins and plastics materials and

Formulated adhesives, gelatine, etc.

Aluminium and aluminium alloys

Copper, brass and other copper alloys

Agricultural machinery (except tractors)

Construction and earth-moving equipment

ventilating and air-conditioning equipment

Scales and weighing machinery and portable

Food and drink processing machinery and

Miscellaneous (non-electrical) machinery

packaging and bottling machinery

Ball, roller, plain and other bearings

Surgical instruments and appliances

Radio and electronic components

Telegraph and telephone apparatus and

Gramophone records and tape recordings

Radio, radar and electronic capital goods

Electrical appliances primarily for domestic use

Broadcast receiving and sound reproducing

Printing, bookbinding and paper goods machinery

Industrial (including process) plant and steelwork

Precision chains and other mechanical engineering

Photographic and document copying equipment

Scientific and industrial instruments and systems

British wines, cider and perry

Lubricating oils and greases Inorganic chemicals

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PA 104

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PA365.2

PA333 1

PA271.2

Coal mining
Stone and slate quarrying and mining

Chalk, clay, sand and gravel extraction

Bacon curing, meat and fish products

Cocoa, chocolate and sugar confectionery

PA369.1	Electrical equipment for motor vehicles, cycles
	and aircraft

	and aircraft
PA369.2	Primary and secondary batteries
PA369.4	Flectric lamps, electric light fittings, wiring

	accessories, etc.
PA370	Shipbuilding and marine engineering
PA380	Wheeled tractor manufacturing

Motor vehicle manufacturing Trailers, caravans and freight containers

Motor cycle, tricycle and pedal cycle manufacturing Aerospace equipment manufacturing and repairing PA382 Locomotives, railway track equipment, railway carriages,

wagons and trams Engineers' small tools and gauges PA390

Hand tools and implements PA392 Cutlery, spoons, forks and plated tableware, etc. PA393 Bolts, nuts, screws, rivets, etc.

Wire and wire manufactures PA395 Cans and metal boxes Jewellery and precious metals PA396

PA 300 5 Drop forgings, etc.

PA399.6 Metal hollow-ware Miscellaneous metal manufacture PA399.8 PA411 Production of man-made fibres

Spinning and doubling on the cotton and flax systems PA412 Weaving of cotton, linen and man-made fibres

PA414 Woollen and worsted PA415 Jute

PA416 Rope, twine and net PA417 Hosiery and other knitted goods

PA417.2 Warp knitting PA418

Lace PA419 Carpets PA421 Narrow fabrics

PA422 Household textiles and handkerchiefs

PA422.2 Canvas goods and sacks and other made-up textiles PA423 Textile finishing

PA429. Asbestos PA429.2 Miscellaneous textile industries

PA431 Leather (tanning and dressing) and fellmongery PA432 Leather goods

PA433

PA441 Weatherproof outerwear PA442 Men's and boys' tailored outerwear

PA443 Women's and girls' tailored outerwear PA444 Overalls and men's shirts, underwear, etc. PA445 Dresses, lingerie, infants' wear, etc.

PA446 Hats, caps and millinery PA449 Corsets and miscellaneous dress industries

PA449 2 Gloves PA450 Footwear

PA461 PA461

Building bricks and non-refractory goods PA462 Pottery PA463 Glass

PA464 Cement PA469.1 Abrasives

PA469.2 Miscellaneous building materials and mineral products PA471 Timber

Fürniture and upholstery PA472 PA473 Bedding, etc. PA474

Shop and office fitting PA475 Wooden containers and baskets PA479 Miscellaneous wood and cork manufactures

PA481 Paper and board PA482 Cardboard boxes, cartons and fibre-board packing cases

PA482.2 Packaging products of paper and associated materials Manufactured stationery PA484 Wallcoverings

PA484.2 Miscellaneous manufactures of paper and board Printing, publishing of newspapers and periodicals General printing and publishing PA485

PA489 PA491 Rubber

Linoleum, plastics floor-covering, leathercloth, etc. PA493 Brushes and brooms

PA494 Toys, games and children's carriages PA494.3 Sports equipment

Miscellaneous stationers' goods PA496 Plastics products

PA499.1 Musical instruments

Miscellaneous manufacturing industries PA500 Construction

PA601 PA602 Electricity

PA603 Water supply Summary tables PA362 INSULATED WIRES AND CABLES

PA 362

The information in this report relates to establishments classified to the Insulated wires and cables industry, minimum list heading 362 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing insulated electrical instrument wire, cables for telecommunication and for power transmission, and cable jointing materials and accessories (other than insulating materials).

> 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)

	Unit	1974	1975	1976	1977	1978
Enterprises	Number	70	70	68	65	68
Establishments	"	95	97	96	86	85
Sales of goods produced	£ thousand	702,536	653,838	724,228	843,231	724,068
Receipts for work done and industrial services rendered	yand on latte (III)pac revue:	(b)	(b)	11,867	10,335	8,379
Capital goods produced for establishments' own use		645	1,491	1,581	1,021	1,194
Non-industrial services rendered	,,	2,019	2,429	3,635	3,438	4,087
Goods merchanted or factored	"	(b)	(b)	(b)	(b)	54,588
Total sales and work done (c)	"	705,200	657,758	741,312	858,070	792,317
ncrease during the year, work in progress and goods on hand for sale	"	12,342	-6,098	21,554	7,115	17,202
Gross output	"	717,541	651,660	762,866	865,185	809,520
Purchases of materials for use in production, and packaging and fuel	,,	542,361	422,998	500,500	602,138	437,976
Purchases of goods for merchanting or actoring	"	(d)	(d)	(a)	(d)	54,363
ncrease during the year, stocks of naterials. stores and fuel	"	12,076	-7,250	4,161	274	6,008
Cost of industrial services received	"	13,906	15,198	17,396	22,341	22,380
Net output	"	173,350	206,214	249,131	240,979	300,809
Total employment (d)	Thousands	46.3	43.4	41.9	42.3	38.4
Net output per head	£	3,743	4,750	5,944	5,696	7,835
ayments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	1,649	1,753	1,126	1,557	2,184
Rents of industrial and commercial buildings	,,	(f)	(f)	785	872	741
Commercial insurance premiums	"	1,889	2,296	2,420	2,796	2,960
Bank charges	"	153	431	540	818	913
Other non-industrial services	"	13,489	14,387	17,697	21,048	21,408
icensing of motor vehicles	"	159	181	203	302	290
lates, excluding water rates		3,678	4,478	5,233	5,258	5,026
Gross value added at factor cost		152,333	182,689	221,126	208,329	267,286
Gross value added at factor cost per head	£	3,289	4,208	5,276	4,924	6,962

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 98 per cent of employment within the industry.

TABLE 2 Capital expenditure, 1974–1978
All United Kingdom establishments classified to the industry (a)(b)

All offices					£ thousand
The series (12 con cortist)	1974	1975	1976	1977	1978
Land and buildings			Light was to be	101	graves (chi
New building work	3,003	1,567	1,115	3,138	3,137
Land and existing buildings					
Acquisitions	274	1,227	684	331	759
Disposals	22	141	310	934	219
Vehicles					
Acquisitions	1,005	1,465	1,366	2,060	1,987
Disposals	265	328	302	454	301
Plant and machinery					
Acquisitions	17,701	19,358	17,565	20,280	27,294
Disposals	647	346	200	507	357
Total net capital expenditu	re 21,049	22,801	19,917	23,914	32,301

<sup>(</sup>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)

	1974	1975	1976	1977		1978
	800 E 300,9866,800	7.202,13	Increase	98,08 <sub>1,00</sub>	50 (MAN) 58	Value at end of year
Materials, stores and fuel	12,076	<b>-7,250</b>	4,161	274	6,008	43,134
Work in progress	2,715	-3,950	8,794	6,017	10,376	55,097
Goods on hand for sale	9,627	-2,147	12,759	1,097	6,827	64,629
Total	24,417	-13,348	25,715	7,389	23,211	162,860

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

Included in sales of goods produced.

Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ362. (c)

Included in purchases of materials for use in production and packaging and fuel.

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

For 1974 and 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.

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

Size group (b)	Estab lish- ment	prises	Employmen	Employment		Wages and sa	Wages and salaries (f)			
			Total (d)	Opera- tives	Others (e)	Operatives	Operatives		Others (e)	
			(u)	tivas	(0)	Total	per head	Total	per head	
	Numl	ber Number	Number	Number	Number	£ thousand	£	£ thousand	£	
1–10	23	22	112)							
11–19	16	16	250)							
20-49	9	9	278)	521	243	1,699	3,261	1,006	4,140	
50-99	3	3	164)					yearthasy 17.30		
100-199	13	11`	2,002	1,460	539	5,623	3,851	2,427	4,503	
200-299	5	5	1,171	835	334	2,468	2,955	1,414	4,234	
300-999	8	6	4,347	3,173	1,174	11,719	3,693	5,123	4,364	
1,000—1,499	4	3	5,408	3,517	1,891	15,308	4,353	8,312	4,396	
1,500 and over	4	4	24,661	17,451	7,210	69,812	4,000	35,129	4,872	

Total	85	68	38,393	26,957	11,391	106,629	3,956	53,411	4,689

<sup>(</sup>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	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	£	£ thousand	£	£ thousand	£ thousand
16,517	16,729	7,127	8,864	(j)	(j)	542	3,243
and the same of							
52,733	53,719	19,936	9,958	23,546(j)	8,391(j)	2,350	10,393
17,948	18,414	8,589	7,335	7,707	6,581	890	3,613
99,432	98,888	35,815	8,239	31,922	7,343	4,698	21,090
115,496	119,348	46,239	8,550	39,237	7,255	5,477	24,493
490,191	502,422	183,104	7,425	164,874	6,686	18,344	100,027

(f)	The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £ 24.488 thousand
-----	--

267,286

6,962

32,301

162,860

7,835

300,809

792,317



<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 and 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.

PA362

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		
						(4)		nployment	
							gross value	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	e	
Standard regions of England									
North	*	*	*	*	•	*	*		
Yorkshire and Humberside	0.7	1.9	245	0.8	4,984	4,335	50.9		
East Midlands	1.6	4.2	1,564	4.8	11,869	10,956	92.8		
East Anglia	999 _ 3	1882	2017	_272.7	1.1 <u>19</u> 0.8	Library Pt.	S.B.b.s_		
South East	10.9	28.3	10,151	31.4	100,968	88,557	63.6		
South West	0.1	0.2	69	0.2	653	578	28.1		
West Midlands	TAS II-	0.1	20	0.1	388	348	. S187n		
North West	19.0	49.4	14,176	43.9	126,286	113,956	94.2		
England	***	*	*	*	*	*			
Wales	2.9	7.5	3,798	11.8	31,856	27,298	86.0		
Scotland	0.9	2.2	1,137	3.5	6,839	5,978	75.8		
Great Britain	*	*	*	*	*	*			
Northern Ireland		*	*		*	*	*		
United Kingdom	38.4	100.0	32,301	100.0	300,809	267,286	/		

(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.

(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.

TABLE 6

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

Accounting year ended		Percentage of total returns received	Percentage of total number employed		
	20,449 21,016	per cent	per cent had a second		
1978	April (a)	-	n produced district of this last be provided for each of the provided for the second of the second o		
	May	an armid_qualities with - points only	and the second of the second o		
	June	2.5	0.5		
	July	2.5	0.5		
	August	CANALISTON FOR MARCH	in a 1 m 3 km2 sen centre Newscastanianum je et broken konden papi Tanan konden sen konden kon		
	September	10.0	1.4		
	October				
	November	5.0	3.2		
	December	45.0	62.3		
1979	January		the first of the same based on the same designation of the		
	February	TO STATE OF THE ST	rindra taras escriba e la casa templación (no escribio de por escala de la composición de la composición de la Composición de la composición de la co		
	March (b)	35.0	32.0		

(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)

Full-time	Part-time	All employees	All employees	
per cent	per cent	per cent		
70	1	71		
25	4	29		
	per cent	per cent per cent 70 1	per cent per cent per cent  70 1 71	

Source: Department of Employment

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

Operating ratios, 1977–1978

Operating ratios, 1977–1978

All United Kingdom establishments classified to the industry (a)

			Unit	1977	1978
Gross output per head			£	20,449	21,085
				5,696	7,835
let output per head			£	5,090	7,000
Gross value added per head			£	4,924	6,962
Gross value added as a percentage of g	gross output		%	24	33
Ratio of gross output to stocks				5.7	5.0
Nages and salaries as a percentage of g	gross value added		%	73	60
Ratio of operatives to administrative, employees	technical and clerical			2.2	2.4
Nages and salaries per administrative, employee	technical and clerical		£	3,984	4,689
Wages and salaries per operative			£	3,444	3,956
house than 19.0					
Net capital expenditure per head			£	565	841
Net capital expenditure as a percentag	e of gross value added		%	11	12

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

Notes

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

# Changes 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.

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 -

information obtained under the foregoing provisions of this Actin 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.

#### Symbols used

ne following symbols are used throughout the PA series of usiness 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.

#### tatistical 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 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.

#### 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

customers; and of food, etc for any canteen covered by the establishment's return. Transfers of goods to the establishment from 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 payable to transport firms or credited to the firm's own transport department for delivery of materials are excluded, as are all nurchases of machinery and plant charged to capital account. irchases of goods for merchanting or factoring have been ollected separately since 1973. The values shown exclude VAT. hey include, in addition to the actual purchase price, the value f packaging material charged to the establishment. The value of eturned goods or packaging material returned to suppliers and any ade discounts are excluded. Materials purchased duty-paid are icluded at their duty-paid value, less any drawback, rebate, etc. the cost of transport is included only if it is included with the urchase price in the firm's accounts. Imported goods are included their full delivered cost. If in the firm's accounts the transport nmdocks or airport is not included in the cost of goods purchased, he cost is entered at cif plus duty (if applicable). Leasing, enting and hire purchase charges are excluded.

#### Sales of goods produced

ales 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 ork and machinery or other capital items produced by establishents for hiring out or leasing are regarded as sales, the value 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 hen the goods were manufactured. Goods produced in one stablishment and transferred either to ancillary departments not gaged in production for which there are separate accounts, or to other establishment of the same firm not covered by the return, e 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 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, 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 patture carried and during

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. 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 ratio

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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