PA231

Business Statistics Office

Business Monitor

Report on the Census of Production

Brewing and malting



977

5/12(HA25)

MSO



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

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.

Enquiries:
Business Statistics Office
Newport, Gwent
NPT 1XG
Newport 56111 (STD code 0633) ext 2455
Telex 497121

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PA231

Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1977

Brewing and malting

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

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PA102 PA103	Stone and slate quarrying and mining Chalk, clay, sand and gravel extraction		Primary and secondary batteries Electric lamps, electric light fittings, wiring
PA104	Petroleum and natural gas		accessories, etc.
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PA211	Grain milling	PA380	Wheeled tractor manufacturing Motor vehicle manufacturing
PA212 PA213	Bread and flour confectionery Biscuits		Trailers, caravans and freight containers
PA214	Bacon curing, meat and fish products	PA382	Motor cycle, tricycle and pedal cycle manufacturing
PA215	Milk and milk products	PA383 PA384	Aerospace equipment manufacturing and repairing Locomotives, railway track equipment, railway carriage
PA216 PA217	Sugar Cocoa, chocolate and sugar confectionery	1 A304	wagons and trams
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PA311 PA312	Iron and steel (general) Steel tubes	PA442 PA443	Men's and boys' tailored outerwear Women's and girls' tailored outerwear
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0,000,0	ventilating and air-conditioning equipment	PA475	Wooden containers and baskets
PA339.5	Scales and weighing machinery and portable	PA479	Miscellaneous wood and cork manufactures
PA330.7	power tools Food and drink processing machinery and	PA481	Paper and board Cardboard boxes, cartons and fibre-board packing case
1 7000.7	packaging and bottling machinery	PA482.2	Packaging products of paper and associated materials
PA339.9	Miscellaneous (non-electrical) machinery	PA483	Manufactured stationery
PA341 PA342	Industrial (including process) plant and steelwork	PA484.1	Wallcoverings Miscellaneous manufactures of paper and board
	Ordnance and small arms 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 Linoleum, plastics floor-covering, leathercloth, etc.
PA352 PA353	Watches and clocks Surgical instruments and appliances	PA492 PA493	Brushes and brooms
PA354	Scientific and industrial instruments and systems	PA494.1	Toys, games and children's carriages
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PA362 PA363	Insulated wires and cables Telegraph and telephone apparatus and	PA495 PA496	Miscellaneous stationers' goods Plastics products
1 7303	Telegraph and telephone apparatus and equipment		Musical instruments
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1 A305.2	Broadcast receiving and sound reproducing equipment	PA601	Electricity
DAGCC	Electronic computers	PA603	Water supply
PA366 PA367	Radio, radar and electronic capital goods	A STATE OF THE PARTY OF THE PAR	Summary tables

PA231 BREWING AND MALTING

The information in this report relates to establishments classified to the Brewing and malting industry, minimum list heading 231 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

The brewing of beer and malting barley. Bottling and canning by brewers is included, but establishments engaged wholly or mainly in bottling or canning drinks purchased from other firms (or in bottling or canning on commission) are excluded.

> 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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equipment
Electronic computers
Radio, radar and electronic capital goods
Electrical appliances primarily for domestic use

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TABLE 2

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

	Unit	1973	1974	1975	1976	1977
Enterprises	Number	129	123	125	127	129
Establishments	esi (ii osencernice)	223	218	215	214	210
Sales of goods produced	£ thousand	1,018,349	1,083,984	1,416,119	1,824,661	2,070,484
Receipts for work done and industrial services rendered	(iii) apral ito son	(b)	(b)	(b)	2,548	2,443
Capital goods produced for establishments' own use	,,	1,489	1,978	1,738	2,356	1,838
Non-industrial services rendered	"	5,511	6,981	10,237	8,692	10,116
Goods merchanted or factored	"	366,440	398,794	498,006	538,645	671,415
Total sales and work done (c)	"	1,391,789	1,491,737	1,926,100	2,376,902	2,756,294
ncrease during the year, work in progress and goods on hand for sale	"	5,184	19,262	24,511	31,610	12,694
Gross output	"	1,396,973	1,510,999	1,950,611	2,408,512	2,768,988
Purchases of materials for use in production, and packaging and fuel	"	222,059	332,830	374,561	472,107	560,582
Purchases of goods for merchanting or actoring	,,	272,889	305,950	382,368	422,532	537,709
ncrease during the year, stocks of naterials, stores and fuel	"	9,320	24,612	16,395	23,762	13,566
Cost of industrial services received	"	16,262	20,971	20,780	31,652	38,650
Excise payments, etc. (net)	"	406,737	406,315	575,999	757,489	860,356
Net output	,,	488,346	469,544	613,298	748,495	785,257
Total employment (d)	Thousands	71.6	68.0	66.2	62.0	61.8
Net output per head	£	6,822	6,905	9,261	12,079	12,705
Payments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	6,210	3,928	4,284	3,270	6,026
Rents of industrial and commercial buildings	"	(e)	(e)	(e)	2,187	2,70
Commercial insurance premiums		3,020	4,469	5,156	5,960	6,98
Bank charges	"	290	543	522	635	624
Other non-industrial services		26,301	24,686	27,355	28,805	40,02
Licensing of motor vehicles		1,553	1,615	1,626	1,719	2,20
Rates, excluding water rates	"	5,844	7,052	9,750	12,307	12,69
Gross value added at factor cost		445,127	427,251	564,606	693,611	713,99
Gross value added at factor cost per head	£	6,218	6,283	8,526	11,194	11,55

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons. Satisfactory returns accounted for 89 per cent of employment within the industry.

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

1973				
	1974	1975	1976	1977
		Vactor coav	(a)	n smere sometimes
41,508	43,394	24,376	20,984	30,905
9,395	11,241	5,252	3,147	4,862
10,068	10,017	9,659	10,061	8,055
6,986	9,245	8,646	12,007	18,241
1,621	1,612	1,018	2,172	2,546
61,371	73,205	63,243	67,169	104,459
1,077	2,050	2,502	1,628	1,373
106,494	123,406	88,339	89,448	146,493
	9,395 10,068 6,986 1,621 61,371 1,077	9,395 11,241 10,068 10,017 6,986 9,245 1,621 1,612 61,371 73,205 1,077 2,050	9,395 11,241 5,252 10,068 10,017 9,659 6,986 9,245 8,646 1,621 1,612 1,018 61,371 73,205 63,243 1,077 2,050 2,502	9,395 11,241 5,252 3,147 10,068 10,017 9,659 10,061 6,986 9,245 8,646 12,007 1,621 1,612 1,018 2,172 61,371 73,205 63,243 67,169 1,077 2,050 2,502 1,628

⁽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)

	1973	1974	1975	1976		1977
	70°EFWnas	800(00)	Increase	13 11.000 ES1	160,000	Value at end of year
Materials, stores and fuel	9,320	24,612	16,395	23,762	13,566	120,969
Vork in progress	-1,814	5,694	13,665	11,974	6,752	59,222
oods on hand for sale	6,998	13,568	10,846	19,636	5,942	86,569
Total	14,504	43,873	40,905	55,372	26,260	266,760

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

⁽b) Included in sales of goods produced.

⁽c) Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ231.

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

⁽e) 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.

266 760

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

Size group	Estab- lish-	Enter- prises	Employment	t		Wages and sal	aries (f)		
(b)	ments	(c)	Total	Opera-	Others	Operatives		Others (e)	
			(d)	tives	(e)	Total	per head	Total	per head
-	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1-10	53	40	319)						
11-19	24	23	352)			0000		0.450	
20-49	21	20	659)	2,321	908	7,180	3,093	3,459	3,810
50-99	27	27	1,951)						
100-199	27	23	4,058	2,828	1,230	8,754	3,096	4,636	3,769
200-299	16	15	3,952	2,745	1,207	9,146	3,332	4,607	3,817
300-399	8	8	2,720	1,852	864	6,689	3,612	3,107	3,596
400-499	6	6	2,527	1,584	943	5,509	3,478	3,564	3,779
500-749	8	6	4,720	2,949	1,771	10,735	3,640	6,330	3,574
750–999	4	4	3,379	2,371	1,008	8,209	3,462	3,702	3,673
1,000-1,999	8	5	10,960	6,496	4,464	24,283	3,738	16,369	3,667
2,000-2,999	4	4	8,824	5,599	3,225	25,816	4,611	14,461	4,484
3,000 and over	4	4	17,384	12,215	5,169	52,492	4,297	19,453	3,763

Total	210	129	61,805	40,960	20,789	158,813	3,877	79,689	3,833

⁽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 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	£ consormed to the cons	£ thousand	£	£ thousand	£ thousand
154,113	155,153	40,370	12,304	(j)	(j)	6,902	19,820
250,127	252,582	62,744	15,462	94,846(j)	.12,924(j)	15,286	26,762
252,060	253,652	69,190	17,508	65,387	16,545	13,912	18,123
164,291	165,305	56,400	20,735	49,708	18,275	8,000	14,456
109,306	109,852	30,712	12,154	26,988	10,680	5,604	19,266
200,994	201,995	57,753	12,236	51,455	10,901	7,831	26,468
231,617	231,475	69,551	20,583	66,933	19,808	9,626	11,646
359,830	361,995	120,047	10,953	110,971	10,125	16,349	28,733
355,244	357,226	117,355	13,300	102,154	11,577	14,014	24,282
678,712	679,753	161,134	9,269	145,552	8,373	48,969	77,205

_		
(f)	The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, estimated for the industry at £38,623 thousand.	is

⁽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.

12,705

785,257

2,756,294

2,768,988

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

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

⁽d) Including working proprietors.

⁽e) Administrative, technical and clerical employees.

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

⁽j) Gross value added data relate to establishments employing 1-199.

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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 added at factor cost (d)	80 per cer	shments with
							of their er in the regi proportion	on as a
							gross value factor cos region	e added at
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentag	е
Standard regions of England								
North	4.6	7.5	11,398	7.8	64,306	60,084	46.9	
Yorkshire and Humberside	6.8	11.0	15,828	10.8	77,918	72,447	50.6	
East Midlands	2.8	4.6	8,862	6.0	57,797	49,821	70.9	
East Anglia	3.1	5.0	5,744	3.9	30,514	26,123	61.6	
South East	17.3	28.0	32,112	21.9	209,758	187,522	74.8	
South West	3.9	6.3	6,479	4.4	57,401	54,003	87.7	
West Midlands	6.8	10.9	25,413	17.4	66,273	59,613	14.2	
North West	7.7	12.4	20,046	13.7	126,979	117,857	71.3	
England	53.0	85.8	125,882	85.9	690,947	627,471	/	
Wales	*	Array *	****	*	25. 8 56.53	*	vasi 4************************************	
Scotland	6.0	9.7	15,938	10.9	66,565	60,969	33.8	
Great Britain	*	*	*	*	*	*	/	
Northern Ireland	*	*	*	*	*	*	*	
United Kingdom	61.8	100.0	146,493	100.0	785,257	713,994	/	

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

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. (c)

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

Percentage of total returns received	Percentage of total number employed	
per cent	per cent	uo 1897
4.0	3.2	
4.0	9.2	
2.0	1.3	
1.0	0.1	
0.0	0.0	
31.0	31.8	
15.0	27.4	
0.0	0.0	
13.0	6.4	
4.0	1.1	
9.0	12.6	
17.0	6.8	
	per cent 4.0 4.0 2.0 1.0 0.0 31.0 15.0 0.0 13.0 4.0 9.0	per cent per cent 4.0 3.2 4.0 9.2 2.0 1.3 1.0 0.1 0.0 0.0 31.0 31.8 15.0 27.4 0.0 0.0 13.0 6.4 4.0 1.1 9.0 12.6

(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	80	1 11 7 7 7 1 1 1 1 1	81
Female	16	3	19

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.

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

no congress sections design to sections of		Unit	1977
Gross output per head		£	44,802
let output per head		£	12,705
Gross value added per head		£	11,552
51 033 Value dadda ps. maa			
Gross value added as a percentage of gross output		%	26
1055 value added as a percentage of gross output			
Ratio of gross output to stocks			10.4
lages and salaries as a percentage of gross value added		%	33
wages and salaries as a percentage of gross value added		0.0	
atio of operatives to administrative, technical and cleric	al		
employees			2.0
ages and salaries per operative		£	3,877
Nages and salaries per administrative, technical and cleric	al	£	3,833
mployee		10070	0,000
let capital expenditure per head		£	2,370
let capital expenditure as a percentage of gross value add	(878) Inga rise of sir bubbs	%	20

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

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 unitor PA 1001 (Introductory Notes) of the Report on the census of Production, 1977.

ENERAL INFORMATION

anges made for 1977

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

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

ecific changes are explained in the introductions to the industry boots or by footnotes to the tables.

ession of information relating to individual undertakings on 9(5)(b) of the Statistics of Trade Act 1947 states following provisions shall have effect with respect to any ort summary or other communication to the public of nation obtained under the foregoing provisions of this Act compiling any such report, summary or communication the nnetent authority shall so arrange it as to prevent any particulars published therein from being identified as being articulars relating to any individual person or undertaking cept with the previous consent in writing of that person or the erson carrying on that undertaking, as the case may be; but his provision shall not prevent the disclosure of the total pantity or value of any articles produced, sold or delivered; so, wever, that before disclosing any such total the competent thority shall have regard to any representations made to em by any person who alleges that the disclosure thereof yould enable particulars relating to him or to an undertaking rried on by him to be deduced from the total disclosed" figure involved disclosure the contributor concerned was mes asked to give permission for its publication. In the rity of cases permission was given. When it was refused and contributors were not approached the figure has been ssed, either by combining it with other figures, or as in the onal tables, by omitting the figure altogether.

mbols used

he following symbols are used throughout the PA series of business Monitors:

ot available

or less than half the final digit shown

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

Rounding of figures

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

lustrial classification

The United Kingdom Standard Industrial Classification (SIC) was stated in 1948 and was subsequently revised in 1958 and 1968. It exists to promote uniformity and comparability in the efficial statistics of the United Kingdom. The general principles allowed are those of the International Standard Industrial assification of all Economic Activities of the United Nations statistical Office but the United Kingdom SIC reflects the genisation and structure of industry and trade as it exists in the nited Kingdom. The SIC is a classification by activity and is a commodity classification. However, an index of all commodity eadings for which sales data are provided in the Quarterly Business solutions, is published in Business Monitor PQ 1000.

istical units

estatistical unit for the purpose of the Census is the establishment lich is defined in the SIC as the smallest unit which can provide 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 expenditur

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 outpu

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

Net output per head

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

Gross value added at factor cost

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

Gross value added at factor cost per head

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

Purchase:

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

omers, and of food, etc for any canteen covered by the ustomers, tablishment's return. Transfers of goods to the establishment m another department of the same firm not covered by the anlishment's return are included at a cost corresponding to the imated selling value recorded by the other department. Amounts wahle to transport firms or credited to the firm's own transport artment for delivery of materials are excluded, as are all chases of machinery and plant charged to capital account. chases of goods for merchanting or factoring have been lected 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 rned goods or packaging material returned to suppliers and any ade discounts are excluded. Materials purchased duty-paid are hided 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 heir full delivered cost. If in the firm's accounts the transport ndocks or airport is not included in the cost of goods purchased, cost is entered at cif plus duty (if applicable). Leasing. ing and hire purchase charges are excluded.

Sales of goods produced

les for the purposes of the annual censuses means deliveries on ale of goods made by establishments in the United Kingdom red by the inquiry. Sales of goods made for these establishments outworkers or by other establishments from materials given out them and sales of waste products are included. New building work and machinery or other capital items produced by establishents for hiring out or leasing are regarded as sales, the value luded in the return being that adopted in the establishments' ital asset accounts. Forward sales and canteen takings are excluded. sales in the period of the inquiry are included irrespective of 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. treated as sales by the producing establishment and valued as ar as possible as if they had been sold to an independent purchaser. oods 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.

eceipts for work done and industrial services rendered

Figures for work done represent the amount charged for work earlied 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.

ndustrial services rendered include repairs and maintenance, instaation work, and technical research and studies for other rganisations.

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.

lon-industrial services rendered

his 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 light to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" and revenue from such staff facilities as canteens.

oods 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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