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Business Statistics Office

Business Monitor

Report on the Census of Production

Miscellaneous (nonelectrical) machinery

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A publication of the Government Statistical Service

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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 Q (quarterly) or M (monthly): and then by a number indicating the minimum list heading, or sub-division of a minimum list heading, of the Standard Industrial Classification (revised 1968).

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

Government Statistical Service

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

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Report on the **Census of Production** 1978

Miscellaneous (nonelectrical) machinery

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





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PA399.6 PA399.8	Metal hollow-ware Miscellaneous metal manufacture
PA411	Production of man-made fibres
PA412	Spinning and doubling on the cotton and flax systems
PA413	Weaving of cotton, linen and man-made fibres
PA414	Woollen and worsted
PA415	Jute
PA416	Rope, twine and net
PA417.1 PA417.2	Hosiery and other knitted goods Warp knitting
PA418	Lace
PA419	Carpets
PA421	Narrow fabrics
PA422.1	Household textiles and handkerchiefs
PA422.2	Canvas goods and sacks and other made-up textiles
PA423 PA429.1	Textile finishing Asbestos
PA429.1	Miscellaneous textile industries
PA431	Leather (tanning and dressing) and fellmongery
PA432	Leather goods
PA433	Fur
PA441	Weatherproof outerwear
PA442	Men's and boys' tailored outerwear
PA443 PA444	Women's and girls' tailored outerwear Overalls and men's shirts, underwear, etc.
PA445	Dresses, lingerie, infants' wear, etc.
PA446	Hats, caps and millinery
PA449.1	Corsets and miscellaneous dress industries
PA449.2	Gloves
PA450	Footwear
PA461.1	Refractory goods
PA461.2 PA462	Building bricks and non-refractory goods Pottery
PA463	Glass
PA464	Cement
PA469.1	Abrasives
PA469.2	Miscellaneous building materials and mineral products
PA471	Timber
PA472 PA473	Furniture and upholstery Bedding, etc.
PA473	Shop and office fitting
PA475	Wooden containers and baskets
PA479	Miscellaneous wood and cork manufactures
PA481	Paper and board
PA482.1	Cardboard boxes, cartons and fibre-board packing cases
PA482.2 PA483	Packaging products of paper and associated materials
PA484.1	Manufactured stationery Wallcoverings
A484.2	Miscellaneous manufactures of paper and board
PA485	Printing, publishing of newspapers and periodicals
PA489	General printing and publishing
PA491	Rubber
PA492	Linoleum, plastics floor-covering, leathercloth, etc.
PA493 PA494.1	Brushes and brooms Toys, games and children's carriages
A494.1	Sports equipment
PA495	Miscellaneous stationers' goods
PA496	Plastics products
A499.1	Musical instruments
PA499.2	Miscellaneous manufacturing industries
A500	Construction
PA601 PA602	Gas Electricity
	Water supply

PA602 Electricity PA603 Water supply PA1002 Summary tables

PA339.9 MISCELLANEOUS (NON-ELECTRICAL) MACHINERY

The information in this report relates to establishments classified to the Miscellaneous (non-electrical) machinery industry, minimum list The information in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Manufacturing boot and shoe machinery, brick making machinery, paper and pulp making machinery, laundry machinery (other than electrical domestic), dry cleaning machinery, rolling mills and other complete machines not reported elsewhere.

> 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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6	Percentage analysis of twelve-month periods covered by returns received from Unit Kingdom establishments, 1978
7	Percentage analysis of employees, by full and part-time employment and sex, 1977
8	Operating ratios 1977–1978

1

8

s value added

TABLE 1

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

	Unit	1974	1975	1976	1977	1978
Enterprises	Number	1,207	1,207	1,299	1,288	1,221
Establishments		1,534	1,527	1,597	1,586	1,507
Sales of goods produced	£ thousand	531,942	653,280	699,065	811,628	877,130
Receipts for work done and industrial services rendered		(b)	(b)	39,003	48,409	67,652
Capital goods produced for establish- ments' own use		462	688	1,069	2,131	1,045
Non-industrial services rendered	"	3,051	2,682	3,728	4,333	5,518
Goods merchanted or factored	"	47,652	66,353	78,364	95,217	113,994
Total sales and work done (c)	"	583,107	723,004	821,230	961,718	1,065,338
ncrease during the year, work in progress and goods on hand for sale		51,233	40,469	15,475	18,816	58,659
Gross output	"	634,340	763,473	836,705	980,534	1,123,998
Purchases of materials for use in pro- duction, and packaging and fuel	"	284,256	331,825	335,971	372,015	429,583
Purchases of goods for merchanting or actoring	"	37,807	50,828	61,388	71,391	84,616
ncrease during the year, stocks of naterials, stores and fuel	"	18,858	527	9,221	12,777	10,962
Cost of industrial services received	"	22,562	22,714	24,379	33,513	37,973
Net output	"	308,572	358,634	424,188	516,392	582,787
Fotal employment (d)	Thousands	86.0	80.1	78.1	77.6	74.3
Net output per head	£	3,586	4,475	5,430	6,656	7,842
ayments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	2,968	3,382	1,489	2,708	4,630
Rents of industrial and commercial buildings	"	(e)	(e)	2,250	3,054	4,351
Commercial insurance premiums	"	3,341	3,652	4,320	5,143	6,101
Bank charges	"	630	767	908	984	1,135
Other non-industrial services	"	21,347	30,160	38,631	50,371	53,787
icensing of motor vehicles		189	251	336	355	432
Rates, excluding water rates	"	4,793	6,308	7,327	7,722	8,013
Gross value added at factor cost		275,304	314,113	368,927	446,055	504,338
Gross value added at factor cost per head	£	3,199	3,919	4,723	5,749	6,787

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 70 per cent of employment within the industry. (a)

(b) Included in sales of goods produced.

(c) Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ339.9.

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

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

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TABLE 2

PA339.9

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

tornes finite reactions in a second	1974	1975	1976
Land and buildings			
New building work	2,439	2,530	2,135
Land and existing buildings			
Acquisitions	1,615	2,824	1,283
Disposals	977	1,180	648
Vehicles			
Acquisitions	2,981	3,298	4,188
Disposals	943	1,036	1,275
Plant and machinery			
Acquisitions	13,903	14,960	14,994
Disposals	977	1,111	1,257
Total net capital expenditure	18,041	20,286	19,420

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

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

TABLE 3

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

		and the second second				£ thousa
	1974	1975	1976	1977		1978
	ALL HELDYS.	nggia.	Increase	1.44 M T T T T A		Value at end of year
Naterials, stores and fuel	18,858	527	9,221	12,777	10,962	98,544
/ork in progress	44,129	31,241	10,584	13,636	52,709	240,692
boods on hand for sale	7,104	9,228	4,891	5,180	5,951	62,644
Total	70,091	40,996	24,696	31,593	69,621	401,880

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

3

	£ thousand
1977	1978
Carl Internation	
5,829	5,159
1,577	2,059
1,298	2,603
6,222	7,593
1,886	2,557
20,535	24,081
1,354	1,721
29,625	32,012

TABLE 4

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

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employme	nt .		Wages and sa	laries (f)	and and a second	
			Total (d)	Opera- tives	Others (e)	Operatives		Others (e)	and the
			(0)		(6)	Total	per head	Total	per head
	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1-10	832	641	4,167)		·				
11—19	226	200) 3,224)						
20—49	185	183) 5,966)	13,566	6,151	49,364	3,639	27,391	4,453
50—99	104	103	7,307)						
100—199	80	77	10,877	6,880	3,982	25,086	3,646	17,539	4,405
200–299	27	27	6,559	3,876	2,683	15,332	3,956	11,845	4,415
300-399	16	16	5,601	3,272	2,329	12,150	3,713	9,245	3,970
400499	10	9	4,548	2,875	1,673	9,929	3,454	7,239	4,327
500-749	20	18	12,054	7,097	4,957	26,102	3,678	21,267	4,290
750—1,499	3	3	3,357	1,972	1,385	7,075	3,588	6,528	4,713
,500 and over	4	4	10,653	6,792	3,861	26,695	3,930	16,873	4,370

Total		1,507	1,221	74,313	46,330	27,021	171,734	3,707	117,926	4,364
(a)	Including e	stimates for	establishmen	ts not making	satisfactory re	turns, non-res	ponse and estat	olishments no	t selected for the	e Census.

4

(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.

Including working proprietors. (d)

(e) Administrative, technical and clerical employees.

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	£	£ thousand	£	£ thousand	£ thousand
294,660	303,154	157,075	7,601	(j)	(j)	12,175	62,488
180,388	185,376	90,005	8,275	211,564(j)	6,708(j)	5,534	49,625
94,061	97,555	49,269	7,512	41,581	6,340	3,453	31,958
97,607	101,063	48,530	8,664	42,039	7,506	2,144	30,588
60,582	64,027	34,989	7,693	30,744	6,760	1,416	23,584
193,102	195,741	101,085	8,386	87,115	7,227	3,006	64,852
38,427	46,768	22,054	6,570	17,765	5,292	1,286	23,540
106,511	130,315	79,779	7,489	73,529	6,902	2,996	115,244

1,065,338	1,123,998	582,787	7,842	504,338	6,787

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £50,515 thousand. (f)

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. (g)

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

5

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

PA339.9

6,787

32,012

401,880

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)

	Total	a the suger of the second second	Net capital		Net	0	
Area	employmen	t (b)				Gross value added at factor cost (d)	Gross value added at factor cost returned by establishments with 80 per cent or more of their employment in the region as a 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	2.2	3.0	1,206	3.8	20,432	17,399	58.6
Yorkshire and Humberside	9.3	12.5	4,638	14.5	76,091	65,411	70.2
East Midlands	7.8	10.4	3,012	9.4	56,844	48,740	72.7
East Anglia	1.5	2.1	929	2.9	12,124	10,793	72.6
South East	16.8	22.6	8,683	27.1	140,108	120,753	54.9
South West	5.4	7.2	1,898	5.9	44,382	38,056	76.0
West Midlands	7.9	10.6	2,017	6.3	61,560	52,129	52.0
North West	12.7	17.2	5,440	17.0	100,581	87,477	58.4
England	63.7	85.7	27,823	86.9	512,122	440,758	
Wales	2.5	3.4	1,366	4.3	20,985	18,769	61.8
Scotland	6.9	9.3	2,119	6.6	39,752	36,202	77.1
Great Britain	73.1	98.4	31,307	97.8	572,859	495,729	
Northern Ireland	1.2	1.6	704	2.2	9,928	8,610	40.9
United Kingdom	74.3	100.0	32,012	100.0	582,787	504,338	/

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

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

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. (d)

6

TABLE 6

PA339.9

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	
		per cent	per cent	
978	April (a)	2.0	0.5	
	Мау	1.2	0.3	
	June	4.1	5.9	
	July	4.9	4.1	
	August	1.6	0.8	
	September	7.8	8.3	
	October	3.3	3.9	
	November	3.7	2.9	
	December	49.0	55.5	
979	January	1.6	0.3	
	February	0.4	0.2	
	March (b)	20.4	17.4	

From 6th April. (a)

(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) Other machinery industries, minimum list heading 339

Sex	Full-time	•	Part-time	
	per cent		per cent	
Male	82		1	
Female	13		4	

The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom in minimum list heading 339 at mid-June, 1977. In the 1977 Census of Production the employment of the Miscellaneous (non-electrical) machinery industry represented 36 per cent of the employment of minimum list heading 339 as a whole. (a)

per c	ent			
83				
17				

Source: Department of Employment

TABLE 8

Operating ratios, 1977-1978

All United Kingdom establishments classified to the industry (a)

	Unit	1977	1978
Gross output per head	£	12,638	15,125
Net output per head	£	6,656	7,842
Gross value added per head	£	5,749	6,787
Gross value added as a percentage of gross output	%	45	45
Ratio of gross output to stocks		2.8	2.8
Nages and salaries as a percentage of gross value added	%	59	57
Ratio of operatives to administrative, technical and clerical mployees		1.8	1.7
Vages and salaries per administrative, technical and clerical mployee	£	3,742	4,364
Vages and salaries per operative	£	3,251	3,707
let capital expenditure per head	£	382	431
Net capital expenditure as a percentage of gross value addec	1 %	7	6

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

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PA339.9

These notes give the main information needed for interpreting he 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 ensus of Production, 1978.

GENERAL INFORMATION

Changes made for 1978

the Census for 1978 is in line with similar inquiries being anducted in other member countries of the European Economic ommunities

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 oction 9(5)(b) of the Statistics of Trade Act 1947 states The following provisions shall have effect with respect to any port, summary or other communication to the public of formation obtained under the foregoing provisions of this Act in compiling any such report, summary or communication the competent authority shall so arrange it as to prevent any particulars published therein from being identified as being particulars relating to any individual person or undertaking except with the previous consent in writing of that person or the person carrying on that undertaking, as the case may be; but this provision shall not prevent the disclosure of the total quantity or value of any articles produced, sold or delivered; so, however, that before disclosing any such total the competent authority shall have regard to any representations made to them by any person who alleges that the disclosure thereof would enable particulars relating to him or to an undertaking carried on by him to be deduced from the total disclosed" a figure involved disclosure the contributor concerned was etimes asked to give permission for its publication. In the jority of cases permission was given. When it was refused and where contributors were not approached the figure has been uppressed, either by combining it with other figures, or as in the gional tables, by omitting the figure altogether.

vmbols used

he following symbols are used throughout the PA series of isiness 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.
- revised

Rounding of figures igures in the tables have, where necessary, been rounded to the earest final digit. Where figures have been so rounded, the sum the constituent items may not always agree exactly with the otal shown

ndustrial classification

e United Kingdom Standard Industrial Classification (SIC) was issued in 1948 and was subsequently revised in 1958 and 968. It exists to promote uniformity and comparability in the fficial statistics of the United Kingdom. The general principles llowed 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 ganisation and structure of industry and trade as it exists in the nited Kingdom. The SIC is a classification by activity and is not a commodity classification. However, an index of all commodity eadings for which sales data are provided in the Quarterly Business Monitors, is published in Business Monitor PQ 1000.

statistical units

he statistical unit for the purpose of the Census is the establishment hich is defined in the SIC as the smallest unit which can provide he 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.

activities in their return. 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

units every 5 years.

Establishments are asked to exclude from their returns particulars relating to any department not engaged in production equimerchanting. 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

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

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

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 amoun received for items disposed of during the year. The value of plan 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 discount 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 i made for depreciation, amortization or obsolescence. The proceed of items disposed of during the year exclude amounts written-of for items scrapped.

Cost of industrial services

This includes amounts payable to other firms for work done or 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 bee 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 amount 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 guarrying rights and technical "know-how" ar 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, o 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, transpor (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 out workers

Purchases

(iv)

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 b

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 purchases of machinery and plant charged to capital account. Purchases of goods for merchanting or factoring have been collected separately since 1973. The values shown exclude VAT. They include, in addition to the actual purchase price, the value of packaging material charged to the establishment. The value of returned goods or packaging material returned to suppliers and any trade discounts are excluded. Materials purchased duty-paid are ncluded at their duty-paid value, less any drawback, rebate, etc. The cost of transport is included only if it is included with the purchase price in the firm's accounts. Imported goods are included at their full delivered cost. If in the firm's accounts the transport from docks or airport is not included in the cost of goods purchased, the cost is entered at cif plus duty (if applicable). Leasing, enting and hire purchase charges are excluded.

sales of goods produced

Sales for the purposes of the annual censuses means deliveries on sale of goods made by establishments in the United Kingdom covered by the inquiry. Sales of goods made for these establishments by outworkers or by other establishments from materials given out to them and sales of waste products are included. New building work and machinery or other capital items produced by establishments for hiring out or leasing are regarded as sales, the value included in the return being that adopted in the establishments' capital asset accounts. Forward sales and canteen takings are excluded. All sales in the period of the inquiry are included irrespective of when the goods were manufactured. Goods produced in one establishment and transferred either to ancillary departments not engaged in production for which there are separate accounts, or to another establishment of the same firm not covered by the return. are treated as sales by the producing establishment and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations, for which 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' missions 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 mmission; within the textile industries - making up of garments, fur dressing and textile finishing; within printing and publishing preparatory work on type-setting, block making and binding. Work done is also significant in the electrical machinery and heavy engineering industries, covering erection, installation and repair and jobbing work. Other activities within this heading include exploration work, research and development, glass cutting and dressing and planing of timber.

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

Capital goods produced for establishments' own use

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

Non-industrial services rendered This includes rents received for commercial and industrial buildings, amounts charged for hiring out plant, machinery and vehicles and other goods and amounts charged to other organisations for the provision of transport. It also includes amounts received for the right to use patents, trademarks, copyrights etc, manufacturing and guarrying 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

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

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

Operating ratios

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

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.

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