PA484.2

Business Statistics Office

Business Monitor

1978

0 (2(HA2S)

Report on the Census of Production

Miscellaneous manufactures of paper and board





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).

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PA484.2 Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1978

Miscellaneous manufactures of paper and board

Presented by the Secretary of State for Industry to Parliament in pursuance of the Statistics of Trade Act 1947 (10 & 11 Geo.6 Cha.39 sec 7)

Department of Industry
Business Statistics Office

London: Her Majesty's Stationery Office

Introductory notes

Petroleum and natural gas

Milk and milk products

Bread and flour confectionery

Fruit and vegetable products

Vegetable and animal oils and fats

Coke ovens and manufactured fuel

Pharmaceutical chemicals and preparations

Synthetic resins and plastics materials and

Formulated adhesives, gelatine, etc. Explosives and fireworks

Aluminium and aluminium alloys

Copper, brass and other copper alloys

Agricultural machinery (except tractors)

Construction and earth-moving equipment

PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating,

ventilating and air-conditioning equipment

Industrial (including process) plant and steelwork

Photographic and document copying equipment

Animal and poultry foods

PA229.2 Starch and miscellaneous foods

Brewing and malting

PA239.2 British wines, cider and perry

Mineral oil refining

Inorganic chemicals

Toilet preparations

Soap and detergents

Dvestuffs 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

PA339.5 Scales and weighing machinery and portable

Ball, roller, plain and other bearings

PA349.2 Precision chains and other mechanical engineering

PA339.7 Food and drink processing machinery and

packaging and bottling machinery
PA339.9 Miscellaneous (non-electrical) machinery

Ordnance and small arms

Watches and clocks

Mechanical handling equipment

synthetic rubber

PA279.4 Formulated pesticides, etc.

Iron castings, etc.

Industrial engines

Office machinery

PA339.1 Mining machinery

PA279.6 Surgical bandages, etc.

Steel tubes

Fertilizers

Polishes

PA279.5 Printing ink

Lubricating oils and greases

Tobacco

PA271.2 Organic chemicals

Paint

PA271.3 Miscellaneous chemicals

PA232 Soft drinks
PA239.1 Spirit distilling and compounding

Stone and slate quarrying and mining

Chalk, clay, sand and gravel extraction

Miscellaneous mining and quarrying

Bacon curing, meat and fish products

Cocoa, chocolate and sugar confectionery

Coal mining

Grain milling

Biscuits

Sugar

PA229.1 Margarine

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PA333.1 Pumps

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PA271.1

PA369.2 Primary and secondary batteries

PA369.4 Electric lamps, electric light fittings, wiring

accessories etc Shipbuilding and marine engineering Wheeled tractor manufacturing

P4380 Motor vehicle manufacturing PA381 1

PA381.2 Trailers, caravans and freight containers Motor cycle, tricycle and pedal cycle manufacturing PA383 Aerospace equipment manufacturing and repairing

Locomotives, railway track equipment, railway carriages. wagons and trams

PA384

DV300 Engineers' small tools and gauges PA391 Hand tools and implements

PA392 Cutlery, spoons, forks and plated tableware, etc.

PA393 Bolts, nuts, screws, rivets, etc. PA394 Wire and wire manufactures PA395

Cans and metal boxes PA396 Jewellery and precious metals

PA399 1 Metal furniture PA399.5 Drop forgings, etc.

Metal hollow ware PA399.8 Miscellaneous metal manufacture

PA411 Production of man-made fibres

Spinning and doubling on the cotton and flax systems PA/13 Weaving of cotton, linen and man-made fibres

PA414 Woollen and worsted Jute

PA416

PA417.1 Hosiery and other knitted goods PA417.2 Warp knitting

PA418 PA419 Carpets

Narrow fabrics PA422.1 Household textiles and handkerchiefs

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

PA429.1

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 1 Corsets and miscellaneous dress industries

PA449.2 Gloves PA450

PA461.1 Refractory goods

PA461.2 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 Furniture and upholstery

PA473 Bedding, etc. PA474 Shop and office fitting

Wooden containers and baskets

PA479 Miscellaneous wood and cork manufactures PA481 Paper and board

Cardboard boxes, cartons and fibre-board packing cases PA482.2 Packaging products of paper and associated materials PA483

Manufactured stationery PA484.1 Wallcoverings

PA484.2 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 Brushes and brooms

Surgical instruments and appliances Scientific and industrial instruments and systems PA494.1 Toys, games and children's carriages Electrical machinery PA494.3 Sports equipment Insulated wires and cables PA495

Miscellaneous stationers' goods Telegraph and telephone apparatus and PA496 Plastics products PA499 1 Musical instruments

Radio and electronic components PA499.2 Miscellaneous manufacturing industries Gramophone records and tape recordings PA500 Construction

Broadcast receiving and sound reproducing PA601 equipment PA602 Electricity Electronic computers PA603 Water supply

PA367 Radio, radar and electronic capital goods Summary tables PA368 Electrical appliances primarily for domestic use

PA484.2 MISCELLANEOUS MANUFACTURES OF PAPER AND BOARD

PA484.2

The information in this report relates to establishments classified to the Miscellaneous manufactures of paper and board industry, minimum list eading 484.2 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing paper, cardboard or papier mache goods other than paper bags and multi-wall paper sacks, stationery, cardboard boxes, cartons and fibre-board packing cases.

Establishments classified to minimum list heading 484.1 are reported separately in part 484.1, wallcoverings.

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	200	207	210	214	209
Establishments	"	225	236	237	246	235
Sales of goods produced	£ thousand	273,715	309,335	354,632	450,932	465,315
Receipts for work done and industrial services rendered	"	(b)	(b)	73	62	257
Capital goods produced for establishments' own use	vaed or this (ii) or stage or	345	183	335	417	348
Non-industrial services rendered	"	411	424	806	382	314
Goods merchanted or factored		12,987	8,223	10,636	16,941	20,441
Total salas and work done (c)	"	287,458	318,165	366,481	468,735	486,676
Increase during the year, work in progress and goods on hand for sale	"	6,470	3,928	4,007	4,422	691
Gross output		293,928	322,093	370,488	473,158	487,367
Purchases of materials for use in production, and packaging and fuel	"	159,689	172,133	198,751	258,065	247,692
Purchases of goods for merchanting or factoring	"	10,272	6,369	8,615	11,860	14,640
ncrease during the year, stocks of materials, stores and fuel	"	10,180	-433	6,717	3,459	2,000
Cost of industrial services received		3,194	3,398	3,089	4,413	5,446
Net output	"	130,954	139,760	166,750	202,278	221,589
Total employment (d)	Thousands	25.8	23.4	21.5	23.4	22.3
Net output per head	£	5,083	5,974	7,765	8,627	9,958
Payments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	1,827	2,140	1,270	1,635	2,327
Rents of industrial and commercial buildings		(e)	(e)	1,954	2,173	2,685
Commercial insurance premiums	,,	1,322	1,948	2,457	2,889	2,845
Bank charges	"	84	117	192	255	378
Other non-industrial services		20,207	23,094	31,121	34,713	42,437
icensing of motor vehicles		125	118	138	162	187
Rates, excluding water rates	"	2,037	2,665	2,754	3,089	3,248
Gross value added at factor cost	"	105,353	109,678	126,864	157,361	167,483
Gross value added at factor cost per head	£	4,089	4,688	5,908	6,711	7,526

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 91 per cent of employment within the industry.

TABLE 2

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

					£	thousand
	1974	1975	1976	1977	1978	
Land and buildings					stnern H	(6)
New building work	897	1,243	1,059	2,276	2,798	
Land and existing buildings						
Acquisitions	276	766	240	169	423	
Disposals	404	188	505	101	(c)	
Vehicles						
Acquisitions	847	1,174	1,369	1,202	1,626	
Disposals	220	430	397	348	574	
Plant and machinery						
Acquisitions	6,706	9,006	8,473	12,067	16,533	
Disposals	222	596	928	195	290	
Total net capital expenditu	re 7,880	10,975	9,312	15,071	20,517	· ees- 00s

⁽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)

						£ thousand
	1974	1975	1976	1977	19	978
entra espera	67,716 · 362 15564	3 000 200 3	Increase	6.89.2929	epenant est	Value at end of year
Materials, stores and fuel	10,180	-433	6,717	3,459	2,000	42,402
Work in progress	1,702	274	1,218	762	-980	6,440
Goods on hand for sale	4,768	3,654	2,788	3,660	1,671	24,642
Total	16,650	3,495	10,724	7,881	2,691	73,485

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

⁽b) Included in sales of goods produced.

⁽c) Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ484.2.

⁽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.

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

⁽c) Included in land and existing buildings acquisitions.

PA484 2

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

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employment	Employment			Wages and salaries (f)			
				Total Opera- (d) tives	Others (e)	Operatives		Others (e)		
			(0)			Total	per head	Total	per head	
	Number	Number	Number 1	Number	Number	£ thousand	£	£ thousand	£	
. 1–10	111	109	558)							
11–19	36	35	526)							
20-49	25	24	818)	2,435	713	6,674	2,741	3,293	4,619	
50-99	20	17	1,412)							
100-199	16 .	15	2,116	1,623	490	4,356	2,684	2,021	4,125	
200–299	12	11	2,816	2,027	788	6,162	3,040	3,342	4,241	
300-499	6	6	2,567	1,950	617	5,863	3,007	2,406	3,900	
500-749	4	4	2,429	1,809	620	7,305	4,038	2,597	4,189	
750 and over	5	5	9,011	6,441	2,570	27,355	4,247	13,708	5,334	

Total	235	209	22,253	16,285	5,798	57,714	3,544	27,367	4,720

⁽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	Net output	depending that requi	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		
f thousand	£ thousand	£ thousand	£ to some star	£ thousand	E mediad land land land land land land land la	£ thousand	£ thousand
						0.017	As well as the same before
61,069	61,613	24,536	7,404	(j)	(j)	2,017	8,723
33,635	33,777	13,715	6,482	30,884(j)	5,688(j)	1,670	5,005
47,953	48,139	21,316	7,570	16,521	5,867	1,609	6,299
41,399	41,665	17,861	6,958	14,400	5,610	2,048	6,949
49,126	49,334	22,711	9,350	19,902	8,193	1,040	7,031
253,494	252,839	121,450	13,478	85,776	9,519	12,132	39,478

486,676	487,367	221,589	9,958	167,483	7,526	20,517	73,485
The state of the s							

⁽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 £13,623 thousand. The remuneration of outworkers on returns received was £186 thousand.

⁽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.

⁽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.

⁽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.

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	Net capital expenditure (c)		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	
priestion 1	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentage	
Standard regions of England								
North	3.8	16.9	6,902	33.6	47,600	34,173	32.4	
Yorkshire and Humberside	2.1	9.3	1,044	5.1	17,180	14,535	79.2	
East Midlands	0.1	0.6	40	0.2	* 41	A 100 *	TYPE:	
East Anglia	1.3	5.7	526	2.6	* 818	*	cenet coes	
South East	8.3	37.4	7,357	35.9	90,522	63,381	32.9	
South West	0.1	0.6	147	0.7	1,775	1,446	33.7	
West Midlands	0.5	2.1	925	4.5	3,088	2,542	52.9	
North West	3.1	14.1	2,105	10.3	21,731	17,514	81.1	
England	19.3	86.7	19,045	92.8	197,171	147,365		
Wales	1.9	8.5	985	4.8	16,103	13,270	88.6	
Scotland	*	*	*	*	*	*		
Great Britain	*	*	*	*		*		
Northern Ireland	•	*	*	*		*	*	
United Kingdom	22.3	100.0	20,517	100.0	221,589	167,483		

(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

Accoun	ting year ended	Percentage of total returns received	Percentage of total number employed	
	0010	per cent	per cent	2 3 3 3 3
1978	April (a)	1.4	0.6	
	May	1.4	0.3	
	June	1,4	0.3	
	July	5.5	3,3	
	August	a mater inquire more appropriate that the control of	as para tem - i tion on imposi com il appet	
	September	6.8	5.7	
	October	4.1	2.8	
	November	4.1	1.0	
	December	48.0	69.9	
1979	January	8.2	6.6	
	February	conducted, with 2_ commences and		
	March (b)	19.2	9.3	

(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)
Other manufactures of paper and Board industries, minimum list heading 484

Sex	Full-time	Part-time	All employees		
	per cent	per cent	per cent		
Male	59	1	60		
Female	32	8	40		

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom in minimum list heading 484 at mid-June, 1977. In the 1977 Census of Production the employment of the Miscellaneous manufactures of paper and board industry represented 77 per cent of the employment of minimum list heading 484 as a whole.

PA484.2

Operating ratios, 1977–1978 All United Kingdom establishments classified to the industry (a)

		Unit	. 1977	1978
Gross output per head		page £	20,179	21,901
Net output per head		£	8,627	9,958
Gross value added per head		£	6,711	7,526
Gross value added as a percentage of gross output		%	33	34
Ratio of gross output to stocks			6.3	6.6
Wages and salaries as a percentage of gross value added		%	48	51
Ratio of operatives to administrative, technical and clerical employees			2.9	2.8
Wages and salaries per administrative, technical and clerica employee	l	£	4,011	4,720
Wages and salaries per operative		£	3,028	3,544
Net capital expenditure per head		£	643	922
Net capital expenditure as a percentage of gross value adde	ed	has tall se arrior	10	12

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

Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd. 699517 K6 Cdf 327 7/80

hese notes give the main information needed for interpreting figures in the industry Business Monitors: more detailed formation about the census is given in a separate Business onitor PA 1001 (Introductory Notes) of the Report on the nsus of Production, 1978.

ENERAL INFORMATION

anges made for 1978

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

e census differed from earlier censuses in three respects. noling was introduced for establishments employing 20 to 49 d a sample of smaller units was selected. A new question on e leasing of capital assets was included for 1978 only. This will wide register information for use in related inquiries into leasing.

poression of information relating to individual undertakings ion 9(5)(b) of the Statistics of Trade Act 1947 states the following provisions shall have effect with respect to any ort, summary or other communication to the public of ormation 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, nowever, that before disclosing any such total the competent authority shall have regard to any representations made to hem 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 fority of cases permission was given. When it was refused and ere contributors were not approached the figure has been poressed either by combining it with other figures, or as in the onal tables, by omitting the figure altogether.

e following symbols are used throughout the PA series of iness Monitors:

not available

nil or less than half the final digit shown

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

evised

gures in the tables have, where necessary, been rounded to the rest final digit. Where figures have been so rounded, the sum the constituent items may not always agree exactly with the

ustrial classification

United Kingdom Standard Industrial Classification (SIC) was issued in 1948 and was subsequently revised in 1958 and 68. It exists to promote uniformity and comparability in the cial statistics of the United Kingdom. The general principles owed are those of the International Standard Industrial ssification of all Economic Activities of the United Nations tistical Office but the United Kingdom SIC reflects the nisation and structure of industry and trade as it exists in the ted Kingdom. The SIC is a classification by activity and is a commodity classification. However, an index of all commodity dings for which sales data are provided in the Quarterly Business nitors, is published in Business Monitor PQ 1000.

istical units

estatistical unit for the purpose of the Census is the establishment

h 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 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

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.

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.

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

stomers; and of food, etc for any canteen covered by the stablishment's return. Transfers of goods to the establishment m another department of the same firm not covered by the stablishment's return are included at a cost corresponding to the stimated selling value recorded by the other department, Amounts hayable to transport firms or credited to the firm's own transport partment for delivery of materials are excluded, as are all urchases of machinery and plant charged to capital account. urchases of goods for merchanting or factoring have been llected separately since 1973. The values shown exclude VAT. ey include, in addition to the actual purchase price, the value f packaging material charged to the establishment. The value of urned goods or packaging material returned to suppliers and any rade discounts are excluded. Materials purchased duty-paid are huded at their duty-paid value, less any drawback, rebate, etc. ne cost of transport is included only if it is included with the rchase price in the firm's accounts. Imported goods are included their full delivered cost. If in the firm's accounts the transport amdocks or airport is not included in the cost of goods purchased, he cost is entered at cif plus duty (if applicable). Leasing, nting and hire purchase charges are excluded.

cales of goods produced

ales for the purposes of the annual censuses means deliveries on gle of goods made by establishments in the United Kingdom overed by the inquiry. Sales of goods made for these establishments y outworkers or by other establishments from materials given out them and sales of waste products are included. New building york and machinery or other capital items produced by establishnents 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. all sales in the period of the inquiry are included irrespective of then the goods were manufactured. Goods produced in one establishment and transferred either to ancillary departments not ngaged in production for which there are separate accounts, or to other establishment of the same firm not covered by the return, re treated as sales by the producing establishment and valued as er as possible as if they had been sold to an independent purchaser. ods transferred to wholesale or retail selling organisations, for high 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 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 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.

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