## Business Monitor

## 1978

Packaging products of paper and associated materials


HMSO

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# Report on the Census of Production 1978 

Packaging products of paper and associated materials

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 )

[^0]
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|  | Stone and slate quarry ing and $m$ |
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|  | power tools |
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|  | Precision chains and other mechanical engineering |
|  | Photographic and document copying equipment |
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|  |  |
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|  |  |
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PA369.1 Electrical equipment for motor vehicles, cycles
$\begin{array}{ll}\text { PA } 669.2 & \text { and aircratt } \\ \text { PA Primary } \\ \text { PA secondary bateries } \\ \text { Electric lamps electric light fittings, wiring }\end{array}$
A370 accessories, etc. Shipbuilding and marine engineering
PA370 Shipbuilding and marine engineeri
PA380
Wheeled tractor mantucturn
PA
1 Motor vehicle manufacturing
2 Trailers, caravans and freight containers
Motor cycle, tricycle and pecal cycle manufacturing
Aerospace equipment manufacturing and reparing
Aerospace equipment manutacturing and repariring
Locomotives, railway track equipment, wagons and trams
Engineers' small tools and gauges
Hand tools and implements
Cutliery, spoons, forks and plated tableware, etc.
Bolts, nuts screws, rivets etc.
Bolts, , nuts, screws, rivets, etct.
Wire and wire manufactures
Wire and wire manufact
Cans and metal boxes
Cews and metal boxes
Jewellery and precious metals
Metal f foriture
Drop forgings, etc
Metal hollow ware
Miscellaneous metal manufacture
Production of man-made fibres
Soinning and doubling on the c
Spinning and doublinge on the cotton and flax systems
Weaving of cotton, inen and man-made fibres
Woollen and worsted
Jute
Rope, twine and net
1 Hose. twine and and net
2 Warp knitting Warp knitting
Caroets
Narrow
Narrow fabrics
Housenold textiles and handkerchiefs
Canvas goods and sacks and other made-up textiles
Textiee finishing
Asbestos
Miscellaneous textile industries
Leather (tanning and dressing)
Leather Itanning and dressing) and fellmongery
Leather goods
Weatherroroof outerwear
Men's and boosy'terwear
Womed outerwear
Women's and gists' tail red outerwear
Overalls and men's shirts, underwear, etc.
Overalls and men's shirts, underwear, et.
Dresses, lingerie, infants' wear, etc.
Hats, caps and millinery
Corsets and miscellineous
Corsets and
GIoves
Footwear
Footwear
Retractory goods
Refractory goods
Building bricks and non-refractory goods
Pottery
Glass
Cement
1 Cement
Miscellaneous building materials and mineral products
Fumbiture and upholstery
Bedding, etc.
Shop and office fitting
Wooden containers and
Woodend oontice fittring sand baskets
Miscellaneous wood and cork
Miscellaneous wood and cork manufactures
Paper and board
Cardboard booxes, cartons and fibre-board packing cases
Pack kaging products of paper and associated materials
Packaging products of pay
Man ufactured stationery
Wallcovering
Miscellaneous
Miscelianeous manufactures of paper and board
Printing. publishing of newspapers and periodicals
General printing and publishing
Ruber
Linober eum, plastics floor-covering, leathercl oth, etc.
Brushes and brooms
Brushes and b rooms
Toys,
Bames and chi
Toys, games and children's carriages
Sports equipment
Miscell laneous stationers' goods
Plast
Plastics products
Musical instrumen
PA499. 1 Musical instruments
PA499.2 Miscell aneous manufacturing industries
PA4999.2 Miscellaneous manufacturing industries
PA500
Construction
$\begin{array}{ll}\text { PA500 } & \text { Constructio } \\ \text { PA601 } & \text { Gas } \\ \text { PA602 } & \text { Electricity }\end{array}$
PA602
PA603
Electricity
Water supply
PA 1002 Summary tables

The information in this report relates to establishments classified to the Packaging products of paper and associated materials industry, minimum The inforting 482.2 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-
listheding

Manufacturing paper bags, including printed bags, multi-wall paper sacks etc.

In interpreting the data in the tables it is essential to bear
in mind the notes and definitions which commence on page (iii).

TABLE 1
Output and cnsts, 1974-1978
All United Kingdom establis

|  | Unit | 1974 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enterorises | Number | 209 | 213 | 224 | 222 | 216 |
| Establishments | " | 237 | 246 | 256 | 256 | 248 |
| Sales of goods produced | f thousand | 322,202 | 300,938 | 375,107 | 431,455 | 460,300 |
| Receipts for work done and industrial services rendered | " | (b) | (b) | 127 | 698 | 831 |
| Capital goods produced for establishments' own use | " | 131 | 252 | 210 | 171 | 263 |
| Non-industrial services rendered | " | 513 | 653 | 822 | 453 | 549 |
| Goods merchanted or factored | " | 10,424 | 7.809 | 12,735 | 14,455 | 14.880 |
| Total salas and work done (c) | " | 333,271 | 309,652 | 389,001 | 447,232 | 476,822 |
| Increase during the vear, work in progress and anods on hand for sale | " | 2,844 | 472 | 4,286 | 3,311 | 1,407 |
| Gross output | . | 336,115 | 310,124 | 393,287 | 450,544 | 478,229 |
| Purchases of materials for use in production, and parkaging and fuel | " | 204,999 | 181.870 | 236,264 | 262,635 | 272.560 |
| Purchases of goods for merchanting or factoring | " | 8.857 | 6.153 | 10.524 | 11,937 | 12,952 |
| Increase during the year, stocks of materials, stores and fuel | . | 12.476 | $-6.305$ | 13,592 | $-1,725$ | 2,220 |
| Cost of industrial services received | " | 6.646 | 4.789 | 6.249 | 8.863 | 10,291 |
| Net outbut | " | 128,089 | 111,007 | 153,842 | 165,383 | 184,645 |
| Total emoloyment (d) | Thousands | 27.2 | 23.6 | 23.4 | 22.6 | 21.9 |
| Net outnut per head | £ | 4,710 | 4.705 | 6.587 | 7,313 | 8,418 |
| Payments for non-industrial services |  |  |  |  |  |  |
| Hire of vehicles, plant and machinery | $£$ thousand | 1,318 | 1,384 | 586 | 943 | 1,390 |
| Rents of industrial and commercial buildings | . | (e) | (e) | 1,317 | 1,442 | 1.543 |
| Commercial insurance premiums | " | 1,297 | 1,621 | 1,766 | 2,092 | 2,325 |
| Bank charges | " | 122 | 253 | 134 | 121 | 128 |
| Other non-industrial services | " | 10.259 | 10,497 | 13,526 | 14.861 | 18.626 |
| Licensing of motor vehicles | " | 68 | 94 | 117 | 131 | 173 |
| Rates, excluding water rates | " | 1.704 | 2.121 | 2,248 | 2,433 | 2,571 |
| Gross value added at factor cost | " | 113,321 | 95,037 | 134,149 | 143,361 | 157,890 |
| Gross value added at factor cost per head | £ | 4,167 | 4,028 | 5,744 | 6,339 | 7,198 |

[^1]TABLE 2
Capitial expenditure, 1974-1978
All United Kingdom establishments classified to the industry (a) (b)

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census,
(b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is
included.

TABLE 3
Stocks and work in progress, 1974-1978
All United Kingdom establishments classified to the industry (a)

|  | 1974 | 1975 | 1976 | 1977 |  | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Increase |  |  |  |  | Value at end of year |
| Materials, stores and fuel | 12,476 | $-6.305$ | 13.592 | -1,725 | 2,220 | 42,359 |
| Work in progress | 596 | -505 | 3,157 | 812 | 1,168 | 10,455 |
| Goods on hand for sale | 2,248 | 977 | 1,128 | 2.499 | 238 | 14,376 |
| Total | 15,320 | -5,833 | 17,878 | 1,586 | 3,627 | 67,189 |

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

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

| Size <br> group <br> (b) | Estab- <br> lish- <br> ments | Enter- <br> prises <br> (c) |  | Employment |  | Wages and salaries (f) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 1-10 | 92 | 91 | 4901 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11-19 | 33 | 33 | 461) |  |  |  |  |  |  |
| 20-49 | 32 | 32 | $1,042!$ | 3.413 | 967 | 10.507 | 3.079 | 4,134 | 4.275 |
|  |  |  | , |  |  |  |  |  |  |
| 50-99 | 37 | 34 | 2.513) |  |  |  |  |  |  |
| 100-199 | 27 | 24 | 4.048 | 3,161 | 883 | 10.611 | 3,357 | 3,815 | 4.320 |
| 200-299 | 10 | 9 | 2.519 | 1,946 | 573 | 7.507 | 3,858 | 2,453 | 4,281 |
| 300-399 | 5 | 5 | 1.761 | 1,304 | 457 | 5,880 | 4,510 | 2,210 | 4.837 |
| 400-499 | 3 | 3 | 1,368 | 992 | 376 | 4.163 | 4.196 | 1.729 | 4,599 |
| 500 and over | 9 | 7 | 7,733 | 5.709 | 2,024 | 22,917 | 4.014 | 9,212 | 4.551 |


| Total | 248 | 216 | 21,935 | 16,525 | 5,280 | 61,586 | 3,727 | 23,554 | 4,461 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(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) The sum of the figures for the size groups may exceed the total for the industry because some enteror ises control establishments in more than one size group.
d) Including working proprietors.
(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 progresy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | $\begin{aligned} & \text { per } \\ & \text { head } \end{aligned}$ | Total | $\begin{aligned} & \text { per } \\ & \text { head } \end{aligned}$ |  |  |
| £ thousend | £ thousand | £ thousand | £ | £ thousand | £ | £ thousand | f thousand |
| 84,550 | 84,582 | 33,877 | 7.518 | (j) | (j) | 3.213 | 13,040 |
| 91,208 | 91,326 | 34.080 | 8.419 | 58,090(j) | 6,791(j) | 3,738 | 15,167 |
| 54,458 | 54,676 | 24,610 | 9.770 | 21,588 | 8,570 | 1,495 | 7.888 |
| 42,297 | 42,633 | 16,084 | 9.133 | 13,794 | 7,833 | 2,188 | 5.667 |
| 29,338 | 29,306 | 11,559 | 8.449 | 9,481 | 6,931 | 1,348 | 3,965 |
| 174,970 | 175.707 | 64,437 | 8,333 | 54,936 | 7,104 | 3,445 | 21,463 |


| 476,822 | 478,229 | 184,645 | 8,418 | 157,890 | 7,198 | 15,427 | 67,189 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is
estimated for the industry at $£ 13,720$ thousand. The remuneration of outworkers on returns received was $£ 94$ thousand. estimated for the industry at $£ 13,720$ thousand. The remuneration of outworkers on returns received was $£ 94$ thousand.
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. rendered and merchanted goods.

New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.
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 <br> employment (b) |  | Net capital expenditure |  | Net <br> output (d) | Gross value added at (d) (d) | Gross value added factor cost returned 80 per cent or mith 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 | f thousand | f thousand | percentage |
| Standard regions of England |  |  |  |  |  |  |  |
| North | 1.8 | 8.0 | 1.860 | 12.1 | 16.871 | 14,672 | 92.4 |
| Yorkshire and Humberside | 1.4 | 6.4 | 1,071 | 6.9 | 11,396 | 9.631 | 46.4 |
| East Midiands | 1.2 | 5.7 | 1,678 | 10.9 | 10.465 | 9.243 | 89.3 |
| East Anglia | 0.9 | 4.1 | 425 | 2.8 | 7.580 | 6.121 | 65.6 |
| South East | 5.1 | 23.1 | 3,902 | 25.3 | 45,424 | 38.627 | 74.3 |
| South West | 3.5 | 16.2 | 2,851 | 18.4 | 28,835 | 24,393 | 71.9 |
| West Midlands | 0.2 | 0.8 | 74 | 0.5 | 1,470 | 1,232 | - |
| North West | 4.9 | 22.3 | 1,067 | 6.9 | 35,202 | 29.667 | 75.4 |
| England | 19.0 | 86.6 | 12,927 | 83.8 | 157,242 | 133,585 |  |
| Wales | 0.4 | 1.7 | 65 | 0.5 | 3,272 | 2,945 | 91.0 |
| Scotland | 2.2 | 10.2 | 2,259 | 14.6 | 20,345 | 17.879 | 95.9 |
| Great Britain | 21.6 | 98.6 | 15.251 | 98.9 | 180.859 | 154.410 |  |
| Northern Ireland | 0.3 | 1.4 | 175 | 1.1 | 3,786 | 3,480 | 96.9 |
| United Kingdom | 21.9 | 100.0 | 15,427 | 100.0 | 184,645 | 157.890 |  |

(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 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 by assuming that net output was proportionate to employment. An estimate for each region was ob
net output for addresses located in that region. Gross value added at factor cost is treated similarly.

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


Source: Department of Employment

The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom in minimum list heading
482 at midd-June, 1977 . In the 1977 Census of Production the employment of the Packaging products of paper and associated
materials industry represented 26 per cent of the employment of minimum list heading 482 as a whole.

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

|  | Unit | 1977 | 1978 |
| :---: | :---: | :---: | :---: |
| Gross output per head | £ | 19,922 | 21.802 |
| Net output per head | £ | 7.313 | 8,418 |
| Gross value added per head | £ | 6,339 | 7.198 |
| Gross value added as a percentage of gross output | \% | 32 | 33 |
| Ratio of gross output to stocks | - | 7.4 | 7.1 |
| Wages and salaries as a percentage of gross value added | \% | 52 | 54 |
| Ratio of operatives to administrative, technical and clerical employees |  | 3.2 | 3.1 |
| Wages and salaries per administrative, technical and clerical employee | £ | 3,872 | 4.461 |
| Wages and salaries per operative | £ | 3,153 | 3.727 |
| Net capital expenditure per head | £ | 763 | 703 |
| Net capital expenditure as a percentage of gross value added | \% | 12 | 10 |

These notes give the main information needed for interpreting These figures in the industry Business Monitors: more detailed
the
fitmation about the census is given in a separate Business information PA 1001 (Introductory Notes) of the Report on the Monitor
Census of Production, 1978.
general information
Changes made for 1978 Changes made for 1978 is in line with similar inquiries being
The Census for Tconducted in other member countries of the European Economic Communities. The census differed from earlier censuses in thre respects,
Sampling was introduced for erstablishments emploving 20 to 49 Samp in sample of smaller units was selected. A new question on
and the leasing of capital assets was included for 1978 only. This will
provide reqister information for use in related inquiries into leasing.
suppression of information relating to individual undertakings suppression of information relating to individual undertakings
Section $9(5)$ (b) of the Statistics of Trade Act 1947 tstates.
SThe tollowing provisions shall have effect with respect to any "The following provisions shall have effect with respect to any
report, summary or other communication to the public of report, summary or other communication to the public of
intormation obtained under the foregoing provisions of this Act.
in compiling any such report, summary or communication the in compiling any such report, summary or communication the
competent authority shall so arrange it as to prevent any competent authority shall so arrange it as to prevent any
particulars published therein from being identified as being particlarss publishea thererin 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 person carrying on that undertaking, as the case may be; but
this provision shall not prevent the disclosure of the total thuantity or value of any articles prod cced, sold or of delivered; so,
qo however, that before disclosing any such total the competent
authority shall have regard to any representations made to authority shall have regard to any representations made to
them by any person who alleges that the disclosure thereof
Weuld Weum enable particulars relating to him or to an undertaking
would en
carried on by him to carried on by him to be deduced from the total disclosed" ${ }^{\text {It }}$ : It a figure involved disclosure the contributor concerned was
sometimes asked to give permission for its publication. In the maiority of cases permission was given. When it was refused and
where contributors were not approached the figure has been where contributors were not approached the figure has been
suppressed, either by combining it with other figures, or as in the cegional tables, by omitting the figure altogether.
Symbols used
Ine following symbols are used throughout the PA series of
Business Monitors:

- not available
- $\begin{aligned} & \text { nif or less than half the final digit shown } \\ & \text { fintesernat be shown owing to the risk of disclosing }\end{aligned}$
int intormation about ind ividual enterprises.

Pounding of figures
Rounding of tigures
Figures in the tables have, where necessary, been rounded to the
nearest nerrest final digit. Where figures have been so rounded, the sum
of the constituent items may not always agree exactly with the ot the const
total shown.

Industrial classification
The United Kingdom Standard Industrial Classification (SIC) was
tirst issued in 1948 and was subsequently revised in 1958 and first issued in 1948 and was subsequently revised in 1958 and
9658. It exists to promote uniformity and comparability in the
officit 998. It exists to promote uniformity and comparability in the
official statistics of the United Kingdom. The general principles
followid followed are those of the International Standaral Industrial
Classitication of Classitication of all Economic Activities of the United Nations
Statisical Office but the United Kingdom SIC reflects the Statistical Otfice but the United Kingdom SIC reflects the
Pranisation and structure of industry and trade as it exists in the Uniteanistion kind structure of industry and trade as it exists in the
nota commodit. is a class fication by activity and is lead a commodity classification. However, an index of all commodity peadings for which sales data are provided in the Quarterly Business
lonitors, is published in Business Monitor PQ 1000 .
Statistical units
Thestatistical unit for the purpose of the Census is the establishment he information normally required for an economic can provide
example, employment, expenses, turnover, capital formation. Usually the principal activitites carries on in an establishment fall within a
single heading of the classification (eg steel making or sugar single heading of the classification (eg steel making or sugar
refining). Typically the establishment embraces all the activities carried on at a single address es a mine or a f factorre, incluting those
which are ancillary to the rinciaal 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 however, the required range of data can be provided for each
activity, each is taken to constitute a separate establishment.
Sometimes activities which are cond Sometimes activities which are conducted as a single business are
carried on at a 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 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 Itermed 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 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 relating to any department not engaged in productioneg merchant ing,
transport, transport, warehousing, for which they keep a separate set of
accounts. Transfers of goods produced accounts. Transfers of goods produced to such departments are
treated as sales and respondents are asked to value them as far as 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 activities in their return.
Particulars relating to head offices mainly engaged in the admin-
istration of the productio istration 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 apportionad amon in respect of the head office was apportioned among them.
For certain purposes in was
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 establi shments under common more establishments under common ownership or control. Bringing theether establismments into enterprise groups is also necessary for
the purpose of ensuring that there will be no disclosure of the
activities of any activities of any one enterprise group. Information about the
relationship of establishments, the chang ing structure of groups of relationship of establishments, the changing structure of groups of many sources, including the Stock Exchange Year Book, company reports, press reports and information supplied by individual
establ ishments. establishments.

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 locall units which it comprises.
The inquiries provide a maior source of information for keeoing 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 Empual 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 Deoartment of Emoloyment from the annual censusses of employment. New ofditions to the
register are obtained from various sources including the Department 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 allows the latter to pass lists of businesses registered for VAT to the
BSO. Where necessary details are sought directly from new businesses. Units which cease to trade are removed from the live
register. Coverage
In recent censuses returns have been required from all establishments emploving 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 emploving 11 to 19 to meet an EEC requirement to collect a limited range of data from smaller
units every 5 years.

Regions
The region
changes changes arising out of the Local Government Act the boundary 1972 and the
Local Government Act IScoland) Local Goverrment 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
(a) administrative, technical and
(b)
all other employees (operatives)

Averages could be calculated from the figures relating to the last
week of each calendar month. Establishments were also requr week of each calendar month. Establishments were also required
to state the number of working proprietors where appropriate to state the number of working proprietors where appropriate
and these are included in total employment figures. Full-time and and these are included in total employment tipures. Full-time and
part-time emplovees are included but outworkers lie persons
employed by establishments employed by establishments who worked in their own homes etc on
materials supplied by the establishment) are excluded. The figures materials supplied by the establishment) are excluded. The figures
include persons engaged on merchanting or factoring and cantee include persons engaged on merchanting or factoring and canteen
workers where particulars in respect of these activities could not be

Working proprietors
These include all persons regarded as "selfemploved" for national
insurance purposess and members of their families who workes in insurance purposes and members of their families who worked in
the business without receiving a wage or salary; 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. heading: directors paid by

## Employees

Administrative, technical and clerical employees include directors
in receipt of a definite wage, salary or commission, managers and in receipt of a definite wage, salary or commission, managers and works foremen: research and design employees lother that
operatives); draughtsmen, editorial staff, advertising staft, travellers
and all office employees and all office employees.
Operatives include all other classes of employees, that is, broadly Operatives include all other classes of employees, that is, broadly
speaking, all manual wage earners. They include operatives employed speaking, all manual wage earners. They include operatives employed
in power stations, transport lincluding rundsmen), warehouses
reres, stores, shops and canteens, inspectors, maintenance workers and
cleaners. Operatives engaged in outside work of erecting, fitting
etc

Capital expenditure
Capital expend iture
units where productioning the year in respect of manufacturing is included. Estaclishments were asked not to deduct from year 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 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 rew building work
The cost incurred during the vear of new building
and other constructional and other constructional work to be used in connection with the
business covered by the return. The value is that chared to 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 sheff and the cost of any newly constructed
buildings purchased. Figures shown include legal charges, stamp duties, agents' commissions, etc
(b) Land and existing buildings
he items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired
lexcluding the value of assets accuired 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
(c) Plant, machinery and vehicles
The items shown are

The items shown are the value of plant and machinery and
vehicles acauired, both new and second-hand, and the amoun
 and machinery acquired includes plant, etc which firms prodiculy
for their own use in connection with the business covered by return. The value of plant, etc acquired is the expenditure charga
to capital account during the year of return less any o capital account during the year of return less any discout
received, but including the cost of transport and instalation received, but including the cost of transport and installation
Deductible value added tax is excluded but non-deductible vali ddaed tax on motor cars acauired is included. No deduction made for depreciation, amortization or obsolescence. The proceed
of items disposed of during the year exclude amounts writen of tems disposed of
for items scrapped.

Cost of industrial services
his includes amounts payable to other firms for work done naterials supplied by the establishment, payments for repairs and maintenance lincluding 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, hie
of plant, machinery and vehicles rivers), commercial insurance premiums, bank charges hired w paid for protessional services, post office services, transpor paid for protessional services, post office services, transpor (with
the United Kingdom), advertising etc. Amounts payable on rovalies or the right to use patents, trademarks, copyrights etc, ma ufacturing and quarrying rights and technical "know-how" a
also included.
Gross output
Gross output
In the calculation of gross output the value of total sales and work
In the calculation of gross output the value of total sales and work
done is increased by the rise lor reduced by the falls during the
year in the value of work in progress and goods on hand to sale. Net outpu
Vet output, a customary census measure, is calculated by deductin
rom gross output the cost of purchases (reduced by the rise from gross output the cost of purchases (reduced by the rise, ncreased by the fall, during the year of stocks of materials et
and the cost of industrial services received, and where applicabli duties etc.
Vet output per head
The figures of net output per head are derived by dividing the net output by the average number of persons emplo ved (ffull an
part-time) on all activities covered by the returns, including part-time) on all activities covered by the returns, includin operatives, ad ministrative, technical and cleric
working prooprietors, but excluding outworkers.
Gross value added at factor cost
Gross value added at factor cost is calculated by deducting fro hire of plane cost of non-industrial services eg rent of buildings with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transoor
(within water rates) and the cost of licensing advertor vehichicles. This estumate of gross value added approaches more closelvely. than census ne
output to the definition of net oup accounts statistics
Gross value added at factor cost per head
The figures of gross value
The figures of gross value added at factor cost per head are derive
by dividing the gross value added by
persons employed (full and part-time) on all activivities coveree
by the returns. includin
by the returns, including operatives, administrative, technical an
clerical employees and working proprietors, but excluding out clerical en
workers.
Purchases
Purchases
Purchases include the cost of raw materials, components, sem:
manufactured goods and workshoo materials, manufactured goods and workshop materials; of replacement parn
and consumable tools not charged to capital account; of packagin
materials of all materials of all types; of stationery and printed matter; of fuel
electricity and water: of materials $t$ an or given out to other establishments for the production of machiner or other capital items for the establishment's own use; of materias
for use by the establishment when working on
customers; and of food, etc for any canteen covered by the customers; and return. Transfers of goods to the establ ishment estabis another department of the same firm not covered by the tion istishment's return are included at a cost corresponding to the
estimated selling value recorded by the other department. Amounts eesimated selling value recorded by the other department. Amounts
payable to transport firms or creaited to the firm's own transport payable to transportivery of materials are excluded, as are all
department for del
purchases of machinery and plant charged to capital account.
$\qquad$ ad plant charged to capital account.
merchanting or factoring have been
1973. The values shown colected separataty since 1973. The values shown exclude VAT.
Ther include, in adition the actual purchase orice, the value
of packaging material charged to the establishment. of packaging material charged to the establishment. The value of
returned goods or packaging material returned to suppliers and returned goous or packacing material riturned to suppliers and any
trade discounts are excluded. Materials purchased duty-paid are rindelded at their duty-paid value, less any drawback, rebate. etc.
inctur
The cost of transport is included only if it is included with the The cost of trice in the firm's accounts. Imported goods ars included
purchase poll at thir full delivered cost. If in the firm's accounts the transpor
and from docks or airport is not included in the cost of goods purchased,
the cost is entered at cif plus duty (if applicable). Leasing,

## renting and hire purchas

Sales for the purposes of the annual censuses means deliveries on sales of goods made by establishments in the United Kingdom
sale of
covered by the inquiry. Sales of goods made for these establishments covered by the inquiry. Sales of goods made for these establishments
by outworkers or by other establishments from materials given out by outworkers or by ot her 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 establish
ments for hiring out or leasing are regarded as sales, the value includded in the return being that adopted in the establishments
capital capitalasset accounts Forward sales and canteen takings are excluded An sales in the period of the inquiry are included irrespective of establishment and transferred either to ancillary departments not
engaged in ergaged in production for which there are separate accounts, or to
another establishmen
are are treated as sales by the producing establishment and valued as far $3 s$ possible as if they had been sold to an independent purchaser.
coods transferred to wholesale or retail selling organisations, to coud transterred
which separate accounts are kept are valued on the same basis.
The value shown tor sales is the "net selling value" 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, atter any trade discounts and agents am-works or delivered basis, after any cuade discounts and ogents
cemmissions have been deducted. The cost of packing materials
coess
eld less allowance for returnable cases is included. In industries where
products attract Excise Duty the value stated is unsed of duty it sold duty-paid and exclusive of duty if sold in bond
or exported. or exported.
Figures tor work done and ind ustrial services rendered
caried out on materials supplied by a cumstomer and indlude work work. Within certain industries this heading covers a wide variepty o Within certain industries this head ing covers a wide variety of within the textile industries - making up of garments, ng and textile finishing; within printing and publishing
ry work on type-setting, block making and binding. Work iratory work on type-setting, block making and binding. Work
is sligo signiticant in the electrical machinery and heavy engineering industries, covering erection, installation and repair and
iobbing work. Other activities within this head ing include exploration wobing 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, insta

## llation work, organisations.

and teechnical research and studies for other
incudses all work oo at a capital nature carried out during the
by the estab lishments' own staff tor their own use.
the estab lishments ${ }^{\prime}$ own staff for their own use.

This ind ustrial services rendered
amounts charged for hiring out plant, machinery and vehicles and other goods and amounts charged to other organisations tor the provision of transport. It also includes amounts received for the 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 stoks of 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 estabishment without consumed and labour used. Progress payments made to subcontractors are excluded and progress payments received from other

Wages and salarie
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 Government sources is in inded. The value of any payments in kind, travelling expenses etc is included.

## The remuntion 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 insurance oremiums 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 cantens their dependants. Contributions to the running costs of canteens social centres, children's and holiday homes, etc for e.
former employees and their dependants are also included.

## Operating ratios

The operating ratios shown were obtained by dividing the est imate of
the industry total for the industry total for the quantity shown in the numerator by the
correspond ing estimate for the quantity shown in the deno These estimates cover all establishments classified to each ind ustry, includ ing 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 depreceiation (which
is not identified in the census data) and varying poractice with regard is not identified in the census data) and varying practice with regard
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[^0]:    Department of Industry
    Business Statistics Office

[^1]:    (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 PQ482.2.
    (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

