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Business Monitor 1834

DEPARTMENT OF TRADE AND INDUSTRY BUSINESS STATISTICS OFFICE



Report on the Census of Production 1970

C57 Office machinery

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Enquiries:
Business Statistics Office
Cardiff Road
Newport, Mon
NPT 1XG
Newport 56111 (STD code 0633) ext 2455

Publication of the Government Statistical Service

## **Business Monitor**

DEPARTMENT OF TRADE AND INDUSTRY BUSINESS STATISTICS OFFICE

# Report on the Census of Production 1970

C57 Office machinery

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

Petroleum and natural gas

Bread and flour confectionery

Fruit and vegetable products Animal and poultry foods

Starch and miscellaneous foods

British wines, cider and perry

Mineral oil refining
Lubricating oils and greases
General chemicals (inorganic)

General chemicals (organic)

Spirit distilling and compounding

Coke ovens and manufactured fuel

General chemicals (other than inorganic

Synthetic resins and plastics materials and synthetic rubber

Formulated adhesives, gelatine, etc.

Formulated pesticides and disinfectants

Explosives, fireworks and matches

Photographic chemical materials Iron and steel (general)

Iron castings, etc.
Aluminium and aluminium alloys

Pumps, valves and compressors

Textile machinery and accessories

Mechanical handling equipment

Space heating, ventilating and air-

Food and drink processing machinery

Miscellaneous (non-electrical) machinery

Photographic and document copying equipment

Industrial (including process) plant and

Copper, brass and other copper alloys

Miscellaneous base metals
Agricultural machinery (except tractors)
Metal-working machine tools

Construction and earth moving equipment

Mining machinery
Printing, bookbinding and paper goods

Refrigerating machinery (except domestic

Pharmaceutical chemicals and preparations

Brewing and malting

Vegetable and animal oils and fats

mining and quarrying

Coal mining
Stone and slate quarrying and mining

Chalk, clay, sand and gravel extraction

Metalliferous mining and quarrying

Bacon curing, meat and fish products Milk and milk products

Cocoa, chocolate and sugar confectionery

Salt and miscellaneous non-metalliferous

C1 Introductory Notes
C2 Coal mining
C3 Stone and slate quar

Biscuits

Margarine

Soft drinks

Tobacco

and organic)

Paint

Toilet preparations

Soap and detergents

C35 Dyestuffs and pigments

Fertilizers

Printing ink

Steel tubes

Surgical bandages, etc.

Industrial engines

Office machinery

making machinery

type refrigerators)

steelwork

and systems Electrical machinery

conditioning equipment

Ordnance and small arms

Insulated wires and cables

reproducing equipment

Electronic computers

Watches and clocks

General mechanical engineering

Surgical instruments and appliances

Scientific and industrial instruments

Radio and electronic components

Broadcast receiving and sound

Telegraph and telephone apparatus and

Radio, radar and electronic capital goods

Polishes

Sugar

C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26

C31 C32

C36

C37

C40 C41 C42 C43 C44 C45

C46 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57

C78 Electric appliances primarily for domestic use

Miscellaneous electrical goods Shipbuilding and marine engineering

Wheeled tractor manufacturing

Motor vehicle manufacturing
Motor cycle, tricycle and pedal cycle

manufacturing Aerospace equipment manufacturing C84

and repairing Locomotives and railway track equipment

Railway carriages, wagons and trams Engineers' small tools and gauges C87

Hand tools and implements
Cutlery, spoons, forks and plated tableware, etc.
Bolts, nuts, screws, rivets, etc. C89

Wire and wire manufactures

Cans and metal boxes

Jewellery and precious metals Metal furniture

C90 C91 C92 C93 C94 C95 Drop forgings, etc. Metal hollow-ware

C96 C97 Miscellaneous metal goods

Production of man-made fibres
Spinning and doubling on the cotton

and flax systems

Weaving of cotton, linen and man-made fibres C100

Woollen and worsted

C102 Jute

Rope, twine and net Hosiery and other knitted goods

C105 Lace Carpets

Narrow fabrics
Made-up household textiles and handkerchiefs

Canvas goods and sacks, etc. Textile finishing

Ashestos

C111 Miscellaneous textiles

Leather (tanning and dressing) and

fellmongery Leather goods C114

Waterproof outerwear C116

Men's, and boys' tailored outerwear

Women's and girls' tailored outerwear Overalls and men's shirts, underwear, etc.

Dresses, lingerie, infants wear, etc.

Hats, caps and millinery

Corsets and miscellaneous dress industries

C123 Gloves

Footwear

Bricks, fireclay and refractory goods

C126 C127 Pottery Glass

Cement

Abrasives

Miscellaneous building materials and mineral

products

Timber Furniture and upholstery

Bedding and soft furnishing

Shop and office fittings
Wooden containers and baskets

C135 C136 Miscellaneous wood and cork manufacturers

Paper and board

Cardboard boxes, cartons and fibre-board C138

packing cases Packaging products of paper and associated materials (other than board)

Manufactured stationery

Wallcovering

Miscellaneous manufactures of paper and board Printing, publishing of newspapers and

periodicals

General printing, publishing, etc.

Rubber

Linoleum, plastics floor covering, C145

leathercloth, etc.

Brushes and brooms
Toys, games and children's carriages

Sports equipment

Miscellaneous stationers' goods

Plastics products

Musical instruments

Miscellaneous manufacturing industries

Gas

Electricity

Water supply

Summary tables

C57 Office machinery

This report on the Office Machinery Industry relates to establishments engaged wholly or mainly in manufacturing office machinery and parts thereof including typewriters, duplicating (including small offset litho) machines, adding machines, calculating and tabulating machines, cash registers, electronic desk calculators and other machinery for office use. Dictating machines and electronic computers are excluded.

The industry corresponds to minimum list heading 338 in the Standard Industrial Classification (revised 1968) which was used for the first time as a basis of classification in the 1968 census, when it was reported as part 57. The definition of the industry is the same for the 1968 and 1970 censuses. The figures given for 1963 have been reclassified as far as possible according to the Standard Industrial Classification (revised

#### METHOD OF CLASSIFICATION

The standard procedure for classifying an establishment to an industry is described in the notes on page (iii). Certain modifications of the standard procedure were necessary, however, for this industry. References in the following paragraphs to returns are to those in the 1968 census of production where detailed product sales were available.

In classifying returns to this industry the value of unspecified work done (other than structural and installation work), including repair work, was not taken into account unless it amounted to 80 per cent or more of the total output of the return in which case, the return was classified to General Mechanical Engineering (part C66). The amount charged for erecting and installing machinery and plant (other than air-conditioning, heating and ventilating plant) was treated as part of the selling value of these items in determining the industrial classification of the returns. The standard classification procedure as outlined in the notes on page (iii) was further modified where a return would have been classified to one of the mechanical engineering industries relating to a specific class of machinery (viz. parts C50 to C66) but where the sales of principal products of the industry concerned (including parts) accounted for less than 20 per cent of the total output: in such cases the return was classified to the General Mechanical Engineering Industry

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

| Table<br>No | Title diam to clicks bornade aurachettatia to children treatdon out 10 edit ac  | Page  |
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|             | Section I - Estimates for all United Kingdom establishments in the industry   |       |
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| 2           | Capital expenditure and stocks, 1963, 1968 and 1970 - Establishments classified to the industry                               | C57.4 |
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| 7           | Percentage analysis of twelve-month periods covered by returns from establishments employing 25 or more persons, 1970         | C57.9 |

Net output, 1963, 1968 and 1970

TABLE 1

All United Kingdom establishments classified to the industry (a)

| (4) (5) 1970 (6)   | Unit      | 1963            | 1968               | 1970               |
|--|-----------|-----------------|--------------------|--------------------|
| Enterprises 000000 000000  | Number    | 50              | 71                 | 100                |
| Establishments (b)   | п         | 71              | 95                 | 115                |
| Sales of goods produced and work done Services rendered to other organisations (c)           | £'000     | 62,608          | 96,544             | 159,458<br>3,114   |
| Goods merchanted or factored .  Canteen takings  | 11        | 3,021           | 7,885              | 20,860<br>478      |
| Total sales and work done  | II .      | 65,629          | 104,429            | 183,910            |
| Change during the year, goods on hand for sale   | 11        | + 90<br>- 2,457 | + 473<br>+ 4,193   | + 1,975<br>+ 4,860 |
| Gross output   | u s       | 63,261          | 109,096            | 190,745            |
| Cost of purchases  | ıı e      | 25,214          | 45,530             | 97,858             |
| Change during the year, stocks of materials, stores and fuel                                 |           | - 1,602         | + 788              | + 9,812            |
| Payments to other organisations  |           | F. riber to be  | s is districted at | tros line ado      |
| for work done on materials given out   | 11        | 1,023           | 3,593              | 3,828              |
| for transport by road  for transport by rail, water, air and Post Office parcel services (d) | n 8 8     | 246             | 308                | 722                |
| 8,042   \$ 1,078   7,708   |           |                 | - slos tol         | bosil as abso      |
| Total costs  | п         | 28,085          | 49,083             | 92,813             |
| Net output   | H -       | 35,176          | 60,014             | 97,932             |
| Total employment (including working proprietors) (e)   | Thousands | 30.1            | 30.8               | 37.8               |
| Net output per head  | £         | 1,167           | 1,951              | 2,588              |

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

<sup>(</sup>b) See definition of establishments innotes on page (iii).

<sup>(</sup>c) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered.

<sup>(</sup>d) For 1963 and 1968, payments for postal services are excluded.

<sup>(</sup>e) Average number of persons employed during the year.

TABLE 2
Capital expenditure and stocks, 1963, 1968 and 1970

| A11 | United | Kingdom | establishments | classified | to | the  | industry | (a) |  |
|-----|--------|---------|----------------|------------|----|------|----------|-----|--|
| All | united | WINSGOM | establishments | Classifica | UU | CILC | Indubers | ,   |  |

| over Seet on 1 sept tourse for       |             | Transaction and     | 1963                    | 1968             | 1970 (b)          |
|--------------------------------------|-------------|---------------------|-------------------------|------------------|-------------------|
| Capital expenditure                  | 108 100 110 | Treamon Code        | £,000                   | £,000            | £'000             |
| New building work                    |             | 1000 ma 1970        | 453                     | 928              | 1,975             |
| Land and existing buildings          |             |                     | rk done                 | or bus baceboro  | about to saish    |
| Acquisitions                         |             |                     | 348                     | + 313(c)         | + 358(c)          |
| Disposals                            |             |                     | 424                     | + 313(c)         | + 358(c)          |
| Plant and machinery                  |             |                     |                         |                  | Capt deli Nelland |
| Acquisitions                         |             | incompany and emple | 2,330                   | 5,023            | 8,159             |
| Disposals                            |             |                     | 206                     | 168              | 102               |
| Vehicles                             |             |                     | вантуюта г              | l drow . now ad  | Change during     |
| Acquisitions                         |             |                     | 97                      | 280              | 354               |
| Disposals                            |             |                     | 30                      | 65               | 54                |
| Total net capital expenditure        | (c)         |                     | 2,568                   | 6,311            | 10,690            |
| Stocks and work in progress at end o | of year     |                     |                         | ool Kaskungto Ts | Payments to oth   |
| Materials, stores and fuel           |             |                     | 7,182                   | 12,205           | 29 195            |
|                                      |             |                     | Acres de la constantina | salve lies wit   | 28,125            |
| Work in progress                     |             | 15                  | 16,237                  | 23,729           | 40,399            |
| Goods on hand for sale               |             |                     | 6,042                   | 7,574            | 7,733             |
| Total stocks                         |             | 11                  | 29,461                  | 43,508           | 76,257            |

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

<sup>(</sup>b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included for 1970.

<sup>(</sup>c) Acquisitions <u>less</u> disposals.

TABLE 3

Analysis of establishment by size, 1970

All United Kingdom establishments classified to the industry (a)

| Size              |                 | Estab-           | Total  | Employ     | ees           | Wages and  | salaries      | Wages and s |            | Total                         |                 | 100           | Net                | Capital                     | Total<br>stocks and<br>work in |
|-------------------|-----------------|------------------|--------|------------|---------------|------------|---------------|-------------|------------|-------------------------------|-----------------|---------------|--------------------|-----------------------------|--------------------------------|
| group<br>(b)      | Enterprises (c) | lishments<br>(d) |        | Operatives | Others<br>(e) | Operatives | Others<br>(e) | Operatives  | Others (e) | sales and<br>work done<br>(f) | Gross<br>output | Net<br>output | output<br>per head | expenditure<br>(net)<br>(g) | progress at<br>end of year     |
|                   | Numbe r         | Number           | Number | Number     | Number        | £,000      | £,000         | £           | £          | £,000                         | £,000           | £'000         | £                  | £,000                       | £,000                          |
| 1-10              | 36              | 36               | 241    | 1          |               |            |               |             |            |                               |                 |               |                    |                             | 1 35                           |
| 11-24             | 19              | 19               | 287    |            |               |            |               |             |            |                               |                 |               |                    | 5                           |                                |
| 25-49             | 8               | 8                | 288    | 1,143      | 394           | 1,214      | 526           | 1,062       | 1,335      | 5,209                         | 5,277           | 3,084         | 1,991              | 90                          | 931                            |
| 50-99             | 10              | 10               | 733    | J          |               |            |               |             |            | S 1                           |                 |               |                    | 1 12                        |                                |
| 100-199           | 13              | 15               | 1,715  | 1,133      | 582           | 1,175      | 797           | 1,037       | 1,369      | 5,751                         | 5,988           | 3,422         | 1,995              | 355                         | 1,537                          |
| 200-749           | 10              | 11               | 3,219  | 2,005      | 1,209         | 2,045      | 1,629         | 1,020       | 1,347      | 16,852                        | 17,562          | 6,419         | 1,994              | 2,562                       | 7,396                          |
| 750-1,499         | 8               | . 9              | 7,763  | 5,228      | 2,535         | 5,545      | 3,337         | 1,061       | 1,316      | 20,303                        | 21,352          | 12,138        | 1,564              | 979                         | 7,787                          |
| 1,500-2,499       | 3               | 3                | 7,240  | 4,488      | 2,751         | 6,300      | 5,429         | 1,404       | 1,973      | 65,501                        | 66,752          | 22,691        | 3,134              | 3,245                       | 20,241                         |
| 2,500 and<br>over | 4               | 4                | 16,351 | 11,464     | 4,887         | 13,057     | 7,554         | 1,139       | 1,546      | 70,293                        | 73,815          | 50,179        | 3,069              | 3,459                       | 38,366                         |
| Total             | 100             | 115              | 37,837 | 25,461     | 12,358        | 29,335     | 19,272        | 1,152       | 1,559      | 183,910                       | 190,745         | 97,932        | 2,588              | 10,690                      | 76,257                         |

- (a) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.
- (b) Average number employed during the year (including working proprietors) by the establishment.
- (c) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

- (d) See definition of establishments in notes on page (iii).
- (e) Administrative, technical and clerical employees.
- (f) Including sales of goods merchanted or factored and canteen takings.

  Also includes services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).
- (g) Acquisitions less disposals.

TABLE 5

All United Kingdom establishments classified to the industry

| Ages                 | Males    | Females  | All employees |
|----------------------|----------|----------|---------------|
| tent the first first | per cent | per cent | per cent      |
| Under 18             | 2        | 1        | 3             |
| 18 and over          | 68       | 29       | 97            |
| All ages             | 70       | 30       | 100.0         |

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1970.

Regional distribution of employment, net capital expenditure and net output, 1970 All United Kingdom establishments classified to the industry

| Area                        |                    | e number<br>ved (a)      |        | apital<br>ture (b)       | establishme          | and employment in ents with more than byment in the region   | 80 per cent of  |
|-----------------------------|--------------------|--------------------------|--------|--------------------------|----------------------|--|---|
|                             | 1080.89            | 518.S                    |        |                          | Estimated net output | Average number employed as a percentage of total average number employed in the industry in the region | Net output as<br>percentage of<br>total of the<br>industry in the<br>United Kingdom |
| 201                         | 7,790              | 8,002                    |        |                          |                      |  |   |
|                             | Thousands          | per cent<br>of<br>United | £,000  | per cent<br>of<br>United | £'000                | enab dana bas  | W.S.  |
|                             | 5860 F             | Kingdom                  |        | Kingdom                  | and for sale         | f as about, they in h  | Change daring th  |
| Standard Regions of England | coldbi.a +         | 2,442                    |        | FI (SE)                  | невтро               | rg di Aron , seet in pr  | Change during th  |
| North                       | ##987 <b>*</b> T01 | *                        | *      | *                        | *                    | *  | *   |
| Yorkshire and<br>Humberside | 188,14             | 830,85                   | *      | *                        | *                    | *  | Cost of perbluses   |
| East Midlands               | *                  | *                        | *      | *                        | .*                   | *  | *   |
| East Anglia                 |                    | -                        | -      | -                        | -                    | nicolitanicamen  | Programme to other  |
| South East                  | 17.2               | 45.5                     | 3,750  | 35.1                     | 28,371               | 75.8   | 29.0  |
| South West                  | 1.1                | 3.0                      | 131    | 1.2                      | 1,988                | 93.7   | 2.0   |
| West Midlands               | 1.6                | 4.1                      | 174    | 1.6                      | 2,418                | 96.9   | 2.5   |
| North West                  | 0.6                | 1.5                      | *      | *                        | 392                  | 48.0   | 0.4   |
| England                     | 23.6               | 62.3                     | 4,741  | 44.4                     | 34,788               | 72.2   | 35.5  |
| Wales<br>Scotland           | 48,490             | - 808,71                 | *      | *                        | - *                  | *  | *   |
| Great Britain               | *                  | *                        | *      | .*                       | *                    | .*   | *   |
| Northern Ireland            | . *<br>5. 02       | * 0.08                   | *      | *                        | *                    | elistos garberoni)   | isseed low lesoT  |
| Unallocated (d)             |                    |                          | -      | -                        | 15,932               | Towns and  | 16.1  |
| United Kingdom              | 37.8               | 100.0                    | 10,690 | 100.0                    | 97,932               |  | 100.0   |

- (a) Including working proprietors.
- (b) New building work plus acquisitions <u>less</u> disposals of land and existing buildings, plant and machinery and vehicles: including capital expenditure at establishments not yet in production.
- (c) Where a census return covered addresses in two or more regions an estimate was made of the net output attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate was made by assuming that net output at each address covered by a return was proportionate to employment at the address. The establishment's residual net output was included in unallocated net output.
- (d) Includes estimates of net output for establishments not making satisfactory returns and establishments employing less than 25 employees, and unallocated net output of establishments covering addresses in two or more regions.

Analysis of net output of returns received from United Kingdom establishments employing 25 or more persons, 1963, 1968 and 1970

|  | Unit        | M            | 1963    | 1968     | 1970      |
|--|-------------|--------------|---------|----------|-----------|
| Enterprises  | Number      | q (r)        | 35      | 39       | 37 .      |
| Establishments (a)   | 1 11        | A control of | 56      | 61       | 41        |
| Sales of goods produced and work done                        | £'000       | h            | 62,214  | 95,380   | 135,761   |
| Services rendered to other organisations (b)                 | 11          |              |         | 3        | 2,610     |
| Goods merchanted or factored                                 | 11          | ]            | 3,002   | 7,790    | 17,423    |
| Canteen takings  | 11          |              |         | in the l | 412       |
| Total sales and work done                                    | toso read ( |              | 65,216  | 103,170  | 156,206   |
| Change during the year, goods on hand for sale               | Actions #   | +            | 89      | + 468    | + 1,593   |
| Change during the year, work in progress                     | 11          | -            | 2,442   | + 4,142  | + 4,207   |
| Gross output   | . 11        |              | 62,862  | 107,780  | 162,006   |
| Cost of purchases  | 11          |              | 25,055  | 44,981   | 82,304    |
| Change during the year, stocks of materials, stores and fuel | п           | -            | - 1,592 | + 778    | + 7,966   |
| Payments to other organisations                              |             |              |         |          | BLABIN SE |
| for work done on materials given out                         | 2.1         | 8            | 1,017   | 3,549    | 3,235     |
| for transport by road  | 9.3 11 3    | 1            | 10 [    | 434      | 618       |
| for transport by rail, water, air and                        |             | }            | 244 {   |          | ren West  |
| Post Office parcel services (c)                              | 5.50        |              | -6.28 - | 304      | 166       |
| Total costs  |             |              | 27,905  | 48,490   | 78,357    |
| Net output   | п           |              | 34,954  | 59,290   | 83,650    |
| Total employment (including working proprietors) (d)         | Thousands   |              | 30.0    | 30.4     | 32.0      |
| Net output per head  | £           |              | 1,167   | 1,951    | 2,612     |

<sup>(</sup>a) See definition of establishments in notes on page (iii).

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 25 or more persons.

| usatio<br>168 co<br>recor | Accounting year ended                 | Percentage of total returns received | Percentage of total numbers employed |
|---------------------------|---------------------------------------|--------------------------------------|--------------------------------------|
| arthi<br>ayrrer           | ass or sales by commodities as of mes | per cent                             | per cent                             |
| 1970                      | April (a)                             | 2.4                                  | 0.5                                  |
|                           | May                                   | 0.0                                  | 0.0                                  |
|                           | June                                  | 7.3                                  | 15.6                                 |
|                           | July                                  | 2.4                                  | 0.3                                  |
|                           | August                                | 0.0                                  | 0.0                                  |
|                           | September                             | 7.3                                  | 1.8                                  |
|                           | October                               | 4.9                                  | 0.4                                  |
|                           | November                              | 12.2                                 | 34.9                                 |
|                           | December                              | 36.6                                 | 22.8                                 |
| 1971                      | January                               | 4.9                                  | 8.9                                  |
|                           | February                              | 0.0                                  | 0.0                                  |
| treation.                 | March (b)                             | 22.0                                 | 14.8                                 |
|                           | asilies on the base of the permana    | 100.0                                | 100.0                                |

<sup>(</sup>a) From 6th April.

TABLE 7

<sup>(</sup>b) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered.

<sup>(</sup>c) For 1963 and 1968, payments for postal services are excluded.

<sup>(</sup>d) Average number of persons employed during the year.

<sup>(</sup>b) Including returns made for twelve-month period ending 1st to 5th April 1971.

## Notes

These notes give the main information needed for interpreting the figures in the industry reports, (more detailed information about the census is given in a separate booklet—"Introductory Notes", Part C1 of the Report on the Census of Production for 1970).

#### GENERAL INFORMATION

## Changes compared with 1968

The questions asked in the 1970 census were similar to those in the 1968 census with certain exceptions. In particular the 1970 census returns did not ask for details of:—

- (i) purchases or sales by commodities
- (ii) payments of rates
- (iii) payments for repairs and maintenance
- (iv) costs of operating road goods vehicles.

The amounts payable to other organisations for transport of goods however, did include the cost of the Post Office parcel services.

Other changes concern the treatment of firms employing less than 25 persons and the rules used for classifying establishments to industry. Any such changes are explained in the following paragraphs, or in the introductions to the industry reports, or by footnotes to the tables.

#### Industrial classification

Establishments were classified to industries on the basis of major activity in conformity with the third edition of the Standard Industrial Classification (Revised 1968). Normally an establishment was classified to an industry if its sales of the principal products of that industry accounted for a greater proportion of its total sales than in its sales of the principal products of any other industry. Classification of an establishment in this census was based on the establishment's return to the Census of Production, 1968.

Establishments added to the register subsequent to the 1968 census were classified on the basis of the description of the business given by the respondent.

#### Coverage

Detailed census returns were generally sought only from establishments employing on average 25 or more persons, but in industries where firms employing less than 25 persons account for a relatively high proportion of total employment and output the exemption limit was lowered to 11. Census returns were also sent to establishments whose employment was not known to the Business Statistics Office at the time of despatch; if their employment was below the exemption limit for their industry establishments were asked to supply figures only of total employment and total sales.

#### TERMS USED IN THE CENSUS REPORT

### Average number employed

Establishments were required to state the number of persons on the payroll (i.e. whose national insurance cards were held by them) on the average during the year of return, whether full time or part time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) all other employees (operatives). Averages could be calculated from figures relating to the last week of each calendar month. Establishments were also required to state the number of working proprietors where appropriate and these are included in total employment figures. Outworkers (i.e. persons employed by establishments who worked in their own homes etc. on materials supplied by the establishments) 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 fixed 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 managing and other directors in receipt of a definite wage, salary or commission, managers, superintendents and works foremen; research, experimental development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees.

Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work (including roundsmen), stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers, and cleaners. Operators engaged in outside work of erecting, fitting etc. are also included, but outworkers are excluded.

#### Capital expenditure

#### (a) New building work

This represents the cost incurred during the year of new building and other constructional work (including office buildings, canteens and the like used in connection with the business covered by the return, but not dwelling houses for employees). The value is that charged to capital account during the year of return; it includes expenditure on new buildings or 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 any 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 of premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and the amounts receivable for any 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 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. 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.

Capital expenditure during the year in respect of manufacturing establishments where production had not started before the end of the year is excluded from the figures for both 1963 and 1968 but is included in the figures for 1970.

#### Enterprise

The term enterprise is used in this report to mean one or more establishments under common ownership or control. An enterprise normally consists of a single establishment, more than one establishment owned by the same firm, or a number of establishments owned by a parent company and its subsidiary companies. Information about the relationship between constituent companies of enterprises was obtained mainly from published sources such as the Stock Exchange Year Book supplemented by information from company reports and information supplied by establishments. The information available is not complete but covers the largest and most important groups of industrial establishments and is believed sufficient to provide a worthwhile basis for analysis.

#### Establishment

The definition of the establishment differed between the Censuses for 1963, 1968 and 1970. The definitions used were as follows:—
1963: the establishment was normally the premises under the same ownership or management at a particular address.

1968: the establishment was defined, in accordance with Standard Industrial Classification (Revised 1968), as being the smallest unit which could provide the information normally required for an economic census, for example, employment, expenses, turnover and capital formation. Sometimes activities which are conducted as a single business are carried on at a number of addresses. In 1968 where the activities of such a business were closely integrated and the addresses, termed local units, were in close proximity the establishment was defined to cover the combined activities and a single return was accepted. When the activities were closely integrated but the addresses were not in close proximity a combined return was accepted but the individual addresses were treated—in the count of establishments in an industry, for instance—as separate establishments.

1970: the practice of treating as multi-unit establishments those businesses with closely integrated activities at a number of addresses in close proximity was extended to all those businesses where the local units were at more than one geographical location and detailed census information was not available for each unit. Separate figures were obtained, however, of employment and capital expenditure at each unit. The effect of this change is to reduce somewhat the number of establishments as compared with

Gross output measures the total value of production (including work done) by establishments during the year. It is calculated

Value of sales and work done

Plus/Less: Increase/decrease in value of stocks of goods on hand for sale

Plus/Less: Increase/decrease in value of work in progress

= Gross output.

Net output represents the value added to materials by the process of production (including the margin on selling any merchanted or factored goods). It is calculated as follows:-

Gross output

Less: Purchases adjusted for change in value of stocks of fuel and raw materials

Less: Payments for work given to other establishments

Less: Payments for transport

Less: Net amount of any duties, subsidies, allowances and levies payable

Net output.

#### Net output per person employed

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

#### Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packaging materials including the cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to establishment's own buildings, plants and vehicles when carried out by their own work people included in the returns; of consumable tools; and of parts for machinery purchased during the year as replacements. Water charges are also included. In general, purchases of goods for merchanting or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded, as are all purchases charged to capital account.

The values shown include any duty paid (less rebate, etc.) but exclude trade discounts allowed. The cost of transport is included only if included in the cost of materials as invoiced: amounts paid to transport organisations, including an establishment's own separate transport organisations for delivery of materials and fuel are, therefore, excluded. Materials purchased overseas are included at the c.i.f. cost plus any duty payable if the cost of transport from the docks was not included in the invoiced price, but at their full delivery cost if invoiced "carriage paid home". Materials and fuel transferred from another department of the establishment not covered by the same return are included at the estimated selling value recorded by the other department.

Sales are in respect of goods made by the business covered by the return, goods made for it by outworkers or by other establishments from materials given out to them (sometimes described as goods made on commission) and waste products. Any machinery or other capital items produced for use in the business covered by the return are included, the value being that adopted in the establishment's asset accounts. Goods sold without being subjected to any manufacturing process (i.e. merchanted or factored) and canteen takings are included.

The value shown for sales is the net selling value, defined as the amount charged to customers whether on an ex-works or delivered basis excluding any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc.; the net amount charged for packaging materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value.

Goods produced in one establishment and transferred to another establishment of the same firm not covered by the return were 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 were kept were valued on the same

To the extent that sales of finished products of one establishment constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication. In some industries, e.g. motor vehicle manufacturing, and woollen and worsted, this duplication is substantial; and aggregates of the figures for a number of industries contain significantly greater amounts of duplication. For work done on commission, sub-contract work, etc., the value shown is the total amount charged for the work, including the value of any materials bought and used in such work.

This represents the amounts charged for hiring out plant, machinery and other goods, providing transport, or for any technical or other services rendered to other organisations. It includes amounts credited for similar services rendered to other establishments of the same enterprise not covered by the return.

#### Standard Industrial Classification

Industry classification is based on the Standard Industrial Classification (Revised 1968). It is published by H M Stationery Office together with a separate index in the form of an alphabetical list of industries.

#### Stocks and work in progress

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the end of the year of return, including any stocks of goods held for merchanting or factoring. Values of the change during the year are also shown. The values include duty in the case of dutiable goods held out of bond.

The value of work in progress at the end of, and the change during, the year are also usually shown. This excludes any progress payments made to sub-contractors, and no deduction is made on account of progress payments received.

#### Transport payments

These represent the total amount paid or credited during the year for both outwards transport of finished goods sold and inwards transport of materials and fuel purchased. They include payment to other establishments, and to any separate transport organisation of the same establishment not covered by the return, but exclude the value of transport services provided by the business covered by the return. The items included are payments for hired cartage and for inwards and outwards carriage by all forms of inland transport, i.e. railways, road haulage, canals, coastwise shipping, air, etc. Payments made for sea and air freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

## 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 any payments in kind, travelling expenses, lodging allowances, etc. and employers' contributions to national insurances and pension schemes is excluded.

The figures shown represent the total amount paid for work done by other establishments (whether part of the same enterprise or not) on materials supplied to them. They do not include payments to individual outworkers or payments for business and

The following symbols are used throughout the report:

- .. not available
- nil or negligible (less than half the last significant figure)
- \* figures cannot be shown owing to risk of disclosing information about individual enterprises.

#### ROUNDING OF FIGURES

Figures in the tables have, where necessary, been rounded to the nearest final digit; there may, therefore, be apparent slight discrepancies between the sums of the constituent items and the totals shown.

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