

BOARD OF TRADE

## THE REPORT

 on the CENSUS OF PRODUCTION FOR 1951
## INTRODUCTORY NOTES



Presented by the Board of Trade to Parliament
in pursuance of the Statistics of Trade Act, 1947 ( 10 \& 11 Geo. 6, Ch. 39, Sec. 7)

LONDON : HER MAJESTY'S STATIONERY OFFICE
The Report on the Census of Production for 1951 Introductory Notes

Introduction

1. The census for 1951 was the fourth census of production taken under the Statistics of Trade Act, 1947. others having been thaken for 1948, 1949 and 1950 . It
was the second detailed census of production taken under was the second detailed census of production taken under
this Act, the other full census being for 1948: the this Act, the other ful census being for 1948 ; the
information collected for 1949 and 1950 was less detailjed. (see paragraph 18).
2. The first census of product ion was taken in this
antry for 1907 under the Census of Production Act, 1906. Other censuses mere taken under that Act for 1906. Other censuses were taken under that Act for
3. 1924 and 1930. In addition to the censuses of production, surveys of a similar kind with but a rather more 1 imited industrial coverage were taken for 1933, 1934,1937 and 1938 under the Import Duties Act. 1932 ,
which conferred somewhat different powers from those of which conferred sonewhat dif ferent powers from those of
the Census of Production Act. For the survey of industrial product ion taken in respect of 1935, the powers conferred by both the Census of Production Act and the Import Duties Act were used. A partial census was taken
for 1946 under Defence Regulation $55 A A$,
4. The subjects to be covered for 1951 were decided
after consultation, as provided for in the Act, with the Census of Production Advisory Cormittee. This committee, appointed by the President of the Board of Trade, included members representative of industry, organize Area Covered
5. The censuses for 1907 and 1912 covered the United Kingdom, which then included Southern Ireland: since then, however, Southern Irelond (now the Irish Republic) has not been included. The 1924 census included Northern Irelomd but for 1930 and 1935 the Norther
Ireland Government took their own censuses. The results of these censuses were incorporated in the reports prepared by the Board of Trade, which thus
covered the whole of the United Kingdom. The 1946 overed the whole of the United Kingdom. The 1946
partial census, which was entirely conducted by the partial census, which was ent irely conducted by the
Board of Trade, covered establishments in the United ingdam. The full census taken for 1948 covered Great Britain only, as no census was taken for Northern reland. The Stat istics of Trade (Northern Ireland)
Act, very similar to the 1947 Act which applied to Great Britain only, was passed in 1949 and censuses relating to 1949, 1950 and 1951 were taken, the results of which have been included in the Board of Trade census reports for these years.
Scope of the Census
6. The census for 1951 covered undertakings in the field of industrial production, including building and contract ing, public it uti iities, and mines and quarries; private firms, nationalized undertakings, and government establishnents were included. For certain trades (e..g.
boot and shoe repairing, and motor and cycle repairing). establiskments mainly engaged in repair ing were included
if they worked mainly for the trade but excluded if they worked mainly for the public. As in 1950, 1949 and 1948, the census included textile converting. laundry mork, dyeing and dry-clean ing, wig-making, tea blending
and cof fee roast ting and, for Great Britain only wholesale slaughtering: these trades were excluded from the 1935 census. The scrap metal trade, which for 1948
included establ ishments dealing in ncluded establishments dealing in scrap, was exclude for 1949 and for 1950 and 1951 only firms processing
scrap were included in the census. The building and contracting trades, including the civil engineering departments of transport undertakings, etc., which wer excluded from the 1950 census, were included again for and quarries, and salt mines, i ime pits and salt works trades were not covered in Northern Ireland.

The first census of distribution and other services in Great Britain was taken for 1950. In certain trades a high proportion of firns were within the field of both
censuses because they carried on merchanting or retailing as well as production and the scope of the census of production for that year was modified so as to reduce the number of these firms required to make returns under
both censuses. For this reason the census of producboth censuses. For this reason the census of produc-
tion for certain trades in Great Britain was conf fined to establishments engaged wholly in production or processing, who were asked only for a description of their business and the average number of males and females
employed (including working proprietors). This Iimited information collected for 1950 from firms in the following trades is not therefore comparoble with that given in the census results for other years; wholesale bottling:: fish curing: cattle, dog and poultry food: tea blending and cof fee roasting: ices; bread and
f lour confectionery; manufacturing of milk products): pharmaceutioal and toilet preparations and perfumerv, manufacture (but not the mamufacture of drugs and chemicals): constructional engineer ing; metal scrap and waste processing. hetail
bespoke tailortal census of distribution only. No census of distribution was held for Northern Ireland, and firms engaged in merchanting or retailing as well as production or form.

$$
\begin{aligned}
& \text { Yorm. } \\
& \text { Period covered } \\
& \text { 6. Fi rms }
\end{aligned}
$$

6. Firms wete required to make returns for the
calendar year 1951, gut oalendar year 1951, but, if the calendar year was not
their year of account, a return for a business year ending on any date from 6 th April 1951 to Sth April 1952, inclusive, was accopted. A similar concession was made for previous censuses.
'Small Firms' and 'Larger Establishments'
Apart fran the film production, coal, gas,
itity and mineral oil refining trades in which all firms irrespective of size were required to complete
normal form. firms in Great Britain employing 10 or fewer persons were generally required to give information on
about the number of persons employed and the nature of their business. For the textile convert ing trade firms
deliver ing 200,00 square yards deliver ing 200,000 square yards or less of cotton or
cayon cloth during the vear of return had to make statement to this ef fect on the form and no further information was then required of them (for the years 948 to 1950 all firms in this trade irrespective of
ize were required to camplete the normal form) ize were required to camplete hie normal form). small firms was thought to be a relatively high proportion of the total output, small firms were, for 1951 amd 1948. required to complete a simplified form, which
varied fram trade to trade. For 1951 these trades were canvas goods and sacks; tailoring, dressmaking etc. canvas goods and sacks: tailoring, dressmaking etc.-
boot and shoe manufacturing and repairing: laundry cleaning, job-dyeing and carpet beat ing: motor vehicles and cycles (repairing) $\overline{\text { a }}$ bread and flour confectionery;
fish curing soft drinks, British wines and cider: fish curing: soft trinks, British wines and cider:
printing and publishing, bookbinding, engraving, etc. rades: building and contracting: : enoal authorities
trating building and civil engineering). In the building trade a special
fewer persons.
7. The information collected from small firms is show separately in tables $2,8(\mathrm{ii})$. 19, $20($ (ii) and 23(ii) of the report. In the census for Northern from firms employing 10 or fewer persons and the latest vacilable figures are those for the census for 1949 . The information about 'small firms, that is, those in the reports is consequently limited to Great Britain Most of the detailed tables in the reports relate $t$.
stablishments employing on the average more than 10 persons, which are throughout the reports referred to as 'larger establishments
Method of Canvass
8. The in formation that would be required fram firms for 1951 was notified to trade associations in 1950. In all trades, except those for which additional inform-
ation was to be required from snall firms $\alpha$ aspecial form ation was to be required from small firms $\alpha$ special form
was sent to establishments in Great Britain known or was sent to establishments in Groat bratain known or This form required simply a statement of the nature of the business and the number of persons employed in the stabisismenton the average cur ing the 12 mon ths ended
September 30th, 1951: firms that employed not more than 10 persons on the average and satisfactorily completed the form were not required to make any further returns
in connection with the 1951 census in connection with the 1951 census.
9. At the beginning of 1952 a statutory form was the 1951 census register, number ing about 270,000 , some of which had to be removed subsequently as non-effective (e.g. defunct businesses). Three months were allowed
for the completion amd return of the forms for the completion and return of the forms. Reminders
were required in about 165,000 ouses. A final applicawere required in about 165,000 oases. A final appliact-
t ion was made by registered post to about 24,500 estab-
ishments whose returns were still outstanding 3,000 retums were received from firms employing more han 10 persons and 108.000 from small firms (on the
simpli fied statutory form). Abut 35 per cont of the implified statutory form). About 35 per cent. of the large returns were found
and were queried with the firms concermed. The number and were quer ied with the firms concermed. The number
of small firms claiming either on the special form (see arragraph 9 ) or on the statutory form exemption fron naking a detailed return was about 42,000 . Mn adatrion, Fuel and Power.
10. In Northern Ireland about 1,700 returns were received from establishments employing more than 10 persons on the average.
11. The censuses were conducted by correspondence, - local staff or enumerators being employed by the ensus office.
12. As in the census for 1948 to 1950, establish13. As in the census for 1948 to 1950, establish-
ments were classifinjed to trades according to the nature of their output and as far as possible in conformity With the Standard Industrial Classification. For the 951 and the 1948 census certain products, called the production of individual trades, the principal products for a given trade being of a similar nature or
camonly associated in production. An establishment coamonly associated in production. An establishment
was classified to a trade if its production of principal as classified to $\alpha$ trade if its production products of that trade accouthted for a greater propor-
tion of the value of its output than did its production of principal products of any other trade. Its production of principal products of any trade other thom the
one to which it is classified is included in the one to which it is classif ied is included in the
'principal products' table in the report for that trade The report on each trade includes a note on the minimum list headings of the Standard Industrial Classification covered by the report. In Great Britain for 1949 and tion concerning their output and it was not possible to classify establishments to particular trades in this mamner. In the main, therefore, for these two years stablishments were classified to the sane trades as for
13. Fi mos were, however, asked to state if there had been any substantial change in the nature of their out put since their last return and, as a result, a numbe of establishments were re-classified. In Norther reland firms were required to give production partic items of output and this information was of value in classifying establishments to trades
14. The trade classifification differs in mmy cases
from that adopted in the reports for 1935 and 1937 . from that adopted in the reports for 1935 and 1937 .
The retums made for these years were re-classi fied as The returns made for these years were re-classified as
far as possible on the new basis for inclusion in the far as possible on the new basis for inclusion in the
results of the e 1948 census and these figures have been included in the 1951 reports. In sone cases it mas no possible to re-classify the earlier returns, and, where necessary, a reference to the linited comparability is
included in the 1951 reprt.

## -

15. The basic unit for the collection of information was generally the "establishment". In the majority o ases an establishnent comprised the whole of the prem-
ses under the same ownership or management at a particular address (e.g. a mine or factory). Offices, arehouses, laboratories and other ancillary places o usiness which were situated apart from the producing works were not regarded as separate establishnents, and ere included in the retum for the works. The activiies of separate selling or transport organisations. for re excluded fro he return. $\qquad$ 16. Undertakings vith more than one establishment
overed by the census of production were required to make a return for each establishment and to include in each retum an appropriate proportion of the employees, ages, salaries, materials purchased, etc. of any
common service' departments such as central offices resaurch facilities, etc. Where two or more distinct rades were carried on in separate departments of a ingle works, the firm was generally required to treat return for each departiment on the appropriate form. 17. If, owing to their system of accounting, firms ith more tham one establishment were unable to make eparate returns for each establishment, they were generally allowed to make one return covering all
establishments in one trade but were required, in addition, to give certain summary information separately or each establishment. Separate returns were required, owever, for Englamd, Scot land, Wales and Northern than one of these countries.
Subjects on which Information was Obtained in 1951
16. The following sections were included in the 1951 census :-

## Morking propr reto

Mages and salaries, etc
Expenditure on plant, machinery and vehicles
Pomer equipment for the United Kingdan and
fuel
consumpt ion
for Great
Br itain
fuel consumpt ion for Great Britain
. Shift working (Great Britain) only
Amount paid for work given out year of return
10. Stocksk at the beginning and end of the year
of return
11. Output in year of retum
12. Transport payments

Sections 1. 2, 3. 8, 9, 10 and l11 were included in censuses for 1948, 1949 and 1950. Sections 4 and were included in the 1948 and 1949 censuses. The infor-
mation obtained in 1948 on Sections 2, 3, 5, 8, 9 and 10 iffers in some respects from that obtained in later years. Detailed informat ion about output was obtained
in 1951 though generally under somewhat fewer headings
han for 1946. The information collected for 1951 in that ion 12 on transort payments differed somemhat fro pawer equipment abtained in Section 6 was collected for the first time since the 1930 census. Information collected in Section 7 (shift working) has not been these Sections are included in the folloring aracerrachs. these Sections are included in the following proagraphs,
For 1935 and 1937 information was collected only about amployment (including working proprietors), materials and fuel purchased and used, amount paid for work given out, and outp
structions for making Returns
19. The following notes outline the general instructions given to firms (except for those referred to in
aragraph 7) on the way in which returns were to be completed, and they should be of use in interpreting the esults published in the reports. Any differences in the instructions given to firms in Ireland are indicated.
20. In many trades it mas found necossary to amend he special circunseral instructions in ordar to fit There these supplementary instructions affect the basis of the figures returned, a note of explanation is inclu-
Working Proprietors
21. In Great Britain, firms other than Iimited Companies were required to state the number of working proprietors engaged in the business in September in the ear of return, as well as members of their families who morked in it without receiving fixed wages or salaries.
If the business was a partnership, all active partners were to be included. Proprietors and menbers of their
fanilies working less than half the normal hours were to fanilies working less then half the normall hours were to
be excluded. In Northem Ireland the instructions were be excludded. In Northem Irelend the instructions were
imi lar except that directors of 1 imited companies. other than those paid by fee only, were included with orking proprietors. ersons Employed
22. Firms were required to classify persons employed y them under the two main headings of (i) administraive, technioal and clerioul employees and (ii) opera-

Administrative, technioal and clerioal employees ncluded, for Great Britain only, directors (ot her tham
hose paid by fee only) and, for Great Britain and hose paid by fee only) and, for Great Britain and
Northern Irelomd, managers, superintendents and works foremen: research, experimental. development, technical and design employees (other than operatives); drcughts men and tracers; and travellers and office (including orks of fice) employees.
peratives included all other classes of employess, that is, broadly speak ing, all manual workers. The figures included those employed in or about the
factory or works; inspectors, viemers and similar workers; operatives employed in trensport work, stores and arehouses (unless employed in a separate selling or tramsport orgamisation); and cleaners. Operatives
engaged in outside wik of erection, fitting, etc. wete also included.
23. All these figures were to exclude canten employ ees, as well as any persons engaged in merchanting or
any other activities not covered by a firm's return, who were shown separately as 'excluded employees'. In Nore shom Ireland the figures for 'excluded employees'
Norclude only canteen and wel fare workers. 24. The particulars required related only to the cards were held by employers), whether full-time or part-time employees.
25. Firms were required to state the numbers emploped in the pay week ended on or about September 22, 1951. dist inguishing males and females ond those under
years of age. In addition fims were required to state years average numbers of operatives and of administrative. techniiarl and clerical employees on the pary-roll during
the year of return: averages might be colculated from the year of return; averages might be calculated from Firms were asked to state the average number of comteen and of other excluded employees (see paragraph 23). 26. In trades where outworkers were employed, the
average numbers of moles and females employed during the year of return were required. Outworkers were def ined
as persons employed by the firm who worked on materials as persons employed by the firm who worked on materials
supplied by the firm but who did not work on the premises; operatives directly employed who worked out of
doors (e.g. maintenance workers) and sub-contractors doors (e.g. maintenance morkers) and sub-
were not to be included as outworkers.
Wages and Salaries
27. Firms were required to state the amounts paid during the year of return to operatives and to adminis-
trative, technioal and clerioal employees. Payments to working propr ietors, whe ther called salaries or not.
were to be excluded; in Northem Irelend this exclusion mere to be excluaded; in Norther Ireland this exchusion extended also to payments to directors of limited
companies. The amounts returned were to include all overt ine payments, bonuses, and corimissions and mere to be stated before deductions for income tax, insuraccess,
contributory pensions, etc. Payments in kind, travelcontributory pensions, etc. Payments in kind, travel-
ling expenses, lodging allowances, etc. were to be ling expenses, lodging allowances, etc. were to be
ignored. Other information asked for covered the employers ' contributions to the National Insurance chemes and payments to outworkers.
28. Similar data on wages and shlaries were collected for 1950, 1949, and 1948. There were no pre-war
figures of comparable scope because the Census of figures of comparable scope because the Census of
Production Act, 1906, excluded wages from the subjects about which quest ions might be asked in $\alpha$ census of product ion. However, in conjunction with the 1935 census, a voluntary enquiry was conducted by the
Ministry of Labour into the total wage bills of firms making census retums. The proportion of firms sending replies which could be directly related to census of production data varied widely in different trades, but
they provided a basis for estimating the approximate they provided a basis for estimating the approximate
relationship between net output and the total wage bill of each trade for 1935. The avarilable data, together of each trade for 1935. The available data, together
with an indioation of the size of the sample and the
extent to which they were representative, were published In many trades these 1935 figures need to be used with acution when comparisons are made with those obtained from post-mar censuses, in view of the subsequent Standard Industrial Classification.
Plant, Machinery and Vehicles
29. For 1951 fims were required to state the total 29. For 1951 firms were required to state the total
value of plant and machinery and of vehicles acquired amd disposed of during the year which were of a capital nature. They were to include of fice machinery, renem-
als of plant, and plant produced by firms for their om als of plant. and plant producod by firms for their om
use, used in connection with the business covered by the use, used in connection with the business covered by the
return. The value of plamt, etc., acauired (nem omd secondhand had to be stated separatalely) was to be the
expenditure charged to oapital accoumt during the year expenditure charged to capital accoumt during the year
of retum less any discoumts received, but including the of retum less my discounts received, but including the
cost of tromsport and installation. No deduction was cost of tremsport and instarlation. No deduction was
to be made for depreciation, amortization or obsolescence. In respect of items imposed of, the procoeds of sales were to be stated, including the estimated
proceeds of insurcance claims for plamt, etc., destroyed or dammged, but excluding mounts written off for items


New Building Work
30. Firms were required to state the cost incurred 30. Firms were required to state the cost incurred
by them during the year on building and other constructional work (including of fice buildings, canteens and the like used in connection with their businesses), The amount returned was to include expenditure on new
buildings, including the extension or reconstruction of old buildings, the cost of replacing any buildings destroyed by fire or war damage, and the cost of any
newly constructed buildings purchased. The cost of old nemly constructed buildings purchased. The cost of old buildings and dwelling houses for employees, and site values, development charges, legal charges, ect., were
to be excluded. The value was to be that charged to capital account during the year of return excluding all expenditure so charged before the beginning of the year. 31. Simi lar information was obtained for 1948 and
1949 but not for 1950 . For 1948 cuestions were also 1949 but not for 1950 . For 1948 questions were also
asked relating to the value of buildings and lend at the beginning of the year, land and old buildings accyuired and rel inquished during the year, and the amount of rates payable during the year.
Power Equipment and Fuel Consumption
32. Firms in Great Britain were required to give
details of prime movers, electric electric motors, classi fynng the prime movers and showing separately those driving generators and those not driving generators. The electric generators were classified according to the kind of prime mover by hhich they were driven and the electric motors according
to whether they were driven by purchased electricity, by lectricity generated in the firms' omn works or by both eans. Details of fractional horse power electrid
33. For prime movers firms in Great Britain were required to state their maximum cont inuous capacit
expressed in horse-power and to include all expressed in horse-power and to include all equipment
nomally connected to generators whether directly or by belts and gears. If prime movers were used partly for
driving driving generators and partIy for other purposes on estinated apportionment of their orpacity had to be made
between the two. The capacity of generators had to be shown as the ir rated maximum continuous capacity expressed in kilowatts, while the capacity of electric motors was horse-per they sould in tevms of the maximum brak horse-power they could develop continuously. In
recording the particulars of prime movers and electric motors in their works firms were required to show sepa ately those installed on 22nd September, 1951 and those in reserve or idle. Mobile power equipment such as
lifting and handl ing equipment, air compressors and excavators, was included but obsolete equipment not used during the yearr, experimental equipment or equip-
ment used mainly for experimental purposes, of fice ond ment used mainly for exper imental purposes, of fice and
comteen equipment, power equipment for road amd rail amteen equipment, power equipment for road and rail
vehicles etc., motor generators, motor convertors and rotary trans formers were to be excluded. Firms in Northern Ireland were required to state the total total maximum capacity, expressed in kilowatts, of electric generators installed at 22nd September, 1951. dist inguishing those in operation and those in reserve
or idle. They were also required to state the total or 1 die. They were also required to state the total
rated horse-power of all electric motors of $1 \mathrm{~h} . \mathrm{p}$. and over in the establishment at 22 nd September, 1951, dist inguishing between those driven wholly or partly by purchased electricity and those driven wholly by 34. Fins in Britair
34. Firms in Great Britain were also required to
give details of their consumption during the give details of their consumption during the year o
purchased coal and coke, gas, electricity, and petro and other oil fuels (showing separately those used i road vehicles and those used for other purposes).
Fuels transferred from other deportnente of covered by the same return were to be included. For electricity details were required about electricity
generated in the works generated in the works, showing separately whether it
was generated by back-pressure was generated by back-pressure or pass-out generating
sets or by other meams, and total electricity (purchased
and generated) used for all purposes. Partioulars were required of other fuels (with the exception of petro and other oil fuels used in road vehicles) used for all purposes. that is, for electricity generation for othe
purposes, as a processing material (e.g. coal for briquetting or hydrogenation) and for other (non-powe purposes (process heating, space heating, transport, apportioned according to whether they were used for back-pressure or pass-out generating sets or for other specified purposes. Similar information was not
required for Northern Ireland
Shift Work
35. Firms in Great Britain that worked shifts were required to state the number of shifts worked dur ing the
beginning and end of the shifts and the average number of operatives employed on each shift. Firms were also asked to give details of the number of operatives
employed on other than shift work during this week. Materials and Fuel

## Materials and Fuel 36. Firms wer

36. Firms were required, as for 1949 and 1950, to
state in one state in one sum the cost of materials and fuel purrequired about the cost of particalar it itens was not as it was for 1948 . To be included in the potal cost as it was for 1948. To be included in the total cost
were all purchases of materials for use in production were of fuel (including oill, gas and electricity) for all purposes, including heat ing and lighting; all packing materials, including the full cost of returnable cases
and containers when first purchased; workshop materiand containers when first purchased; workshop materi-
als; office materials: water charges; materials for repairs to firms' om buildings, plant and vehicles when
carried out by their carried out by their own workpeople included in the return; and consumoble tools and parts for machinery
purchased during the year as replacements. Naterials, purchased during the year as replacoments. Materials,
components, etc., which were purchased and re-sold in the same state (i.e. merchanted or factored goods) and materials supplied by customers for processing were to
be excluded. For 1951 fi rms in Northem Irelond were be excluded. For 1951 firms in Northern Ireland were
also required to state separately the quantities and also required to state separately the quantities and
value of coal. coke, electricity and all other fuel purchased.
37. Amounts paid to transport organisations,
including firms' om separate tramsport organisations, including firms' om separate transport organisations,
for delivery of materials and fuel are excluded for 1951 but included for other years (see paragraph 51). For all years the cost of materials generally included any duty paid (less rebates etc.). Materials, gas or
electricity transferred from other departments of the electricity transferred from other departments of the
fim not covered by the same retum were to be included at the value recorded as output by the other depar tments. 38. The information obtained for 1935 and 1937 was on a different bas is from that obtcined for post-mar
censuses. In the former pears oqvestions were censuses. In the former years questions were asked not
about materials etc. purchased but about materials etc. about materials etc. purchased but about materials etc.
used, that is, those purchased during the year. adj justed used, that is, those purchased dur
by the firms for stock changes.
38. For 1951 firms were also required to state the quantities of certain specified materials purchased by then and used in the year of retum

## Work Given Out

40. For 1951 as for 1950 and 1999 firms giving out materials for processing etc. to other firms or to any
of their establislments for which separate retums were made were required to state, in one sum, the camount paid for the work given out during the year. Separate particulars for different types of work done on materials given out, which were obtained for sane trades for 1948 ,
were not required for 1951. Payments mode to individual outworkers in respect of work done by them were excluded from this heading.
Stocks and Work in Progress
41. Firms were required to state separately the
sale and of materials and fuel at the beginning and end of the year of return.
42. The value of work in progress at the two dates was also required. Firms were instructed not to
include any progress payments made by them to subinclude any progress payments made by them to sub-
contractors working on their own materials, nor to make my deductions on account of progress parments received from customers.
43. Differences may arise between the values of stocks of procucts ond hand or ard the and work in propress
recorded
at and in some trades may be substantial. These differences are due to various causes, e.g. starting-up or
closing dom of establishments, changes in the classificlosing down of establishments, changes in the classi ifi
cation of establ ishments, changes in the periods covere by individuall firms' returns, trans fers by firms between materials and work in progress, and the replacement of
provisional estimates by final figures taken from provisional est in thes by final figures

## audited accounts.

44. Before the war, firms were required to adjust
individual items of their sales of finished products and purchases of fuel and materials for changes in stock see paragraphs 39 and 48), and separate informatio elating to stocks was not then asked for.

Output in the Year of Return
45. For 1951 and 1948, firms were required to give most cases, by quantity; the net amount charged for packing materials, but not their weight, was to be included. For 1950 and 1949 no detailed breakdomm o
sales by quant ity ad value was required, but only the sales by quantity amd value was required, but only the
total net selling value of goods and waste products of total net selling value of goods and waste products o
the ir own product ion sold and amount charged for work done during the year. For all years 'sales ' meant sales during the year of goods made in the establishnen
covered by the return, whether produced in the year or covered by the return, whether produced in the year or
not. Sales of waste products and of goods made for the firm by outworkers or by other firms from materials given out to them were included; sales of merchanted
goods were excluded except for 1950 when the value of goods were excluded except for 1950 when the value of
such sales had to be stated separately. For industrie such as building, shipbuilding, and cinematograph film production, however, in which the productive processes are complex and extend over long periods, a return of he value of work done in the was required. 46. For all post-war censuses the value of sales was
the net selling value, and this was def ined as the amount charged to customers, whether on an ex-works or del ivered basis and net of any trade discounts, agents comissions, allowances for returnable cases, purchas
tax, etc. Where goods were charged on a delivered tax, etc. Where goods were charged on a delivere
basis to customers overseas, firms were asked to give the f.o.b. value. Gross output for 1951 included pay-
nents to other firms and undertakings, and to firms' om
sespreste separate transport organisations for all transport
services (see paragraph 51 ). 47. Where separate retw
47. Where separate returns were mode for dif feren
departments of the same firm, and goods produced in on department were used in amother department, the value of
the goods was required to be included in the output of
the first (producing) department, and in the materials the first (producing) department, and in the materials
of the second (using) department, on the common basis o the charge that would have been made to an independent
purchaser buying simi lar quamtities, with due allownce purchaser buying similar quant ities, with due allownce
or transport costs. Goods transferred to a separate elling orgamisation under the same control were to be valued on the same basis.
48. The method of valuation for 1951 and other post- 1 var censuses differed fram that used in pre-mar censuses.
In 1935 and 1937 firms were asked to state the net selling value of each class of goods made in the year of eturn for sale. The amounts stated covered the
eliveries (as packed for sale) of each class of goods eliveries (as packed for sale) of each class of goods
in the year, plus the book value of stock at the end of in the year, plus the book value of stock at the end of
he year and less the book value of stock at the beginning. Net selling value was defined as the actual ing. Net selling value was defined as the actual ransport firms, railway companies etc. for carriage outwards, and allowances for returnable cases. etc
Charges made for delivery when carried out by the firms m staff were not deducted. Where separate return ere made for different departments of the same firm $t$ rans fers of goods between them were included
values which were entered in the firms' books.
49. In post-mar censuses firms working on conmission for the trade on materials given out to them by other
ms were required to include the net amount charged by hem to customers. Where the work was done for mamufacturing firms covered by the census, the value of the oods is included in the final selling value recorded by
these firms. For 1935 and 1937 the value to be recorded for such work was described as the total mount received for the work, less discounts and payments
to transport firms, railway commomies eta. for carriage. o tronsport firms, railmay companies eta. for carriage. 50. For 1951, as for 1947. in a number of trades sales, the total quantities of the more important intermediate products made in the ir works, whe ther they ere sold (or added to stock) as such, or were made into nore finished goods in these works, or were
other firms from materials given out by them. Transport Payments
51. For 1951 firms in Great Britain were required to state the total amount paid out for transport during the ear., whe ther for outwards transport on finished goods old or inwards transport on materials and fuel purhased, showing separately the amount paid out to other
firms and undertakings, and the amount paid (or credit ed) to firms' own separate tramsport organisations. The amount paid, which also covered payments for hired artage, was to include payments for inmards and out ards carriage by all forms of tronsport inland, that ir. etc. Payments made for sea freight on goods sol to customers overseas and on mater ials and fuel purchasd from overseas suppliers were excluded. For 1951 firms in Northern Ireland were required to state the
total amount paid for inwards and outwords tramsport am vere asked to give, if they were able to. separate
igures for inmards and outwards transport. Firms in orthern Ireland were not required to distinguish between amounts paid to other firms and the amount paid
(or credited) to firms' own separate transport orgomiscoor credited) to finms omn separate tronsport orgonisa-
tion. For 1950 and earlier years any amounts paid out oo other firms for inwards tramsport were included in the cost of materials and fuel; separate information tas then only collected about payments made to other
irms or credited to firms' own separate tramsport rgamisation for trensport outwards on finished goods sold. The change in the method of stating tramsport axyments meant that for 1951 there was a corresponding paragraphs $52-54$ ).
Calculations made from Census Returns
Gross Output
52. The 'gross output' of a trade is the total value of goods mode mot other work done during the year. For , as for other post-war censuses, this is derived b value of stocks of finished goods and work in progress at the beginning of the year and adding the value at the nd of the year. For the 1950 and earlier post-war censuses a deduction was then made for ary parments made organisat ions for transport outwards (see paragraph 46 to offset a simil lar sum included in the recorded value of goods sold, but for 1951 payments for transport out ards were not obtained separately and gross output
ncludes transport payments to other firms amd undertakings.
53. For 1935 and 1937. in valuing their output, firms lad already made allowance for changes in stokks betwee the beginning and the end of the year and for payments
hade to other firms for transport outwards; it was unnecessary, therefore, to make any adjustments for these $i$ tems.

Net Output
54. The net output of $\alpha$ trade is defined, as 54. The net output of a trade is defined, as in
previous censuses, as the amount teft after deducting from the value of gross output the aggregate of the
cost of materials and fuel used and the amount paid for ost of materials and fuel used and the amount paid for made. This residual figure represents the value added to materials by the process of production and constit tes the fund fram which wages, salaries, rents, rates and taxes, advertising and other selling expenses, an depreciation and profits.
55. Normally any customs or excise duty on materials purchased was included in the cost of materials. imilarly, finished goods sold were valued as they were sold, duty-paid or duty-free; the net amount of duty
paid is deducted in arriving at net output. The paid is deducted in arriving at net output. The
amounts of duty payable on withdrawal from bond, or on goods produced of subsidies, allowances and levies goods produced of subsidies. allowances and
receivable or payabble for part icular branches of pro-
duction duction were, where of substantial importance, reguire
to be stated separately.
56. The figures for net output per person employed re derived by dividing the net output by the average umber of persons employed (full-time and part--time) including operatives, administrative, technical and
clerical employees and working proprietors, but excluding outworkers
List of Trade Reports
57. A separate report will be published for each
trade. A list of these trades will he fould in Appendix A. These are broadly the same as the trad covered in previous post-mar censuses (see paragraph 5 ) but a separate report will be issued for the plastics aterials trade for 1951 (Volume 2. Trade R): this led with the chemicals general) trade (Volume 2. Trade E). Each page of
(a) the number of the volume into which the
(b) aetter indicating the trade within each
(c) the page of the trade report
.g. $4 / \mathrm{A} / 9$ will indicate page 9 of the first trade eport in vilume 4. Reports will be published later summarising the census results for the main industries
us $a$ whole. Information about power equipment and fuel consumption is not given in the separate trade reports
but will be published with the sumnarised census results.

Disclosure of Information
58. The reports have been prepared in conformity ith the disclosure provisions of the Statistics o Trade Act, 1947. In many cases where publication of a
igure would involve disclosure of information relating figure would involve disclosure of information relating
to om ind ividual firm, the figure has been combined with others of $a$ similar nature.

Comparisons with Previous Years

59. The tables included in the reports contain detailed amalysis of the results of the 1951 census. Comparisons are given in these tables with the results
of previous post-war censuses and with the 1935 census of previous post-war censuses and with the 1933 census
and the 1937 Import Duties Act inquiry. The scope o and the 1937 Import Duties Act inquiry. The scope of
the 1937 inquiry was more restricted than that of the the 1937 inquiry was more restricted than that of the
main censuses. Where the 1937 figures are not substantially comparable with those for other years, an explanatory note is given in the reports concomed; sone of the more inportant cases the 1935 figures ar
shown on two bases, one the full census totals and the show on two bases, one the full census totals and the
other relating only to the section of the trade covered by the 1937 inquiry. Comparisons are also made with he 1946 partial census data where possible to do so. In certain trades described as 'overlap' trades where
because merchanting or retailing is carried on as wel as production, there is a higgh proportion of firms with in the field of both the census of production and the ensus of distribution, the scope of the census of
production for 1950 was modified (see paragraph 5) production for 1950 was modi fied (see paragraph 5 ) so
that the information collected from firms for that year that the information collected from firms for that year
does not compare with information collected in other censuses of production. An explanatory note is guve
in the reports concemed.
ymbols Used
60. The following symbols are used throughout the
for not available
for nil or negligible (less than half the
final digit shown)
61. The figures in the tables have, where necessary. been rounded off to the nearest integer. There may. therefore, be an apparent slight discrepancy betwe

Contents of the Tables
62. In the following paragraphs are given the
umbering and contents of each of the tables in the reports. The numbering of these tables is standardised throughout all the esparate trade reports, an indication eing given in the report of any tables which are not broadly the information for the United Kingdon (or Great ritain) collected in the 1951 Census, with correspondng figures for earlier years as available. Tables 9:- 26 on the other hand. analyse by countries (Englamd, for 1951 only. In order to avoid unnecessary duplication in certain cases where the data available relate only to 1951 (e.g. payments for transport services
figures are shom only in the country tobles.

Table 1. Summary: Larger establishments
This table gives, for all larger establishments cluded in the trade, the aggregates of the principal et output per person employed. (For the method of alculating these see paragraphs 54 to 56 above). Comparisons are generally made between 1951 and 1950 .
1949, 1937 and 1935 (United Kingdom) amd 1949 and 1948 Great Britain) only, where information is available. ith 1946 (United Kingdan).
Table 2. Sumary: Small firns For those trades in which small firms were required ocomplete a shortened form, this table gives a summary of the information, as far as it mas collected, similar
to that for larger establishments contained in Table 1 . As, however, small firms were not required to give information relating to stodks of materials or finished products at the beginning and end of the year, the igure for gross output relates to sales and work done
and that for materials and fuel to purchases during the year. These figures, and those (where available) for net output and net output per person employed, are not, for larger establicismarts. For the reaciving trades for larger establishments. For the renaining trades,
in which the only figures small firms were required to give were the average number of males and females mployed dur ing the year or in the case of the textile convert ing trade the yardage of cloth delivered, the
table is conf ined to this information. Comparisons are table is conf ined to this infornation. Comparisons a
generally made between 1951, 1950 and 1948 (Grea Britain) and 1949 (United Kingdom and Great Britain).

Table 3. Estimated average employment: All firm This table gives an estimate of employment in all establishments in the trade. To the average employment in the larger establishments, given in Table 1, and the
small firms. given in Table 2, is added an est inate of small firms, given in Table 2, is added an estimace of
average employment in firms not making sat isfactory returns. It is not pract icable to obtain in the census as complete a coverage for snall firms as for the larger establishments, partly because of uncvoidable imperfecand partly because of the difficulty of securing returns and partly because of the difficulty of securing returns
in all cases, and this should be borne in mind in reading the tables relat ing to snall firms. Comparisons are generally made between 1951. 1950 and 1949 (United
Kingdom excluding small firms in Northerm Ireland for 1951 and 1950) and 1949 and 1948 (Great Britain).
Table 4. Analys is by size. 1 1951: Larger estabSome of the principal results for 1951 shown in
Table 1 are analysed according to size of the estab-
lishment. 1 ishment.
Table 5. Analys is by standard region, 1951: Larger The analysis here is according to standard regions, of which are given in Appendix B.

## Tabe 6. Analysis according to specialisation within the trade, 1951 : Larger

 within the trade. 1951 : Largerestablishments in the United Kingdom This table shows the extent to which the larger stablishments specialise in the production of certain rincipal products or groups of products. For the or be those establish shments of whose total output by value, 50 per cent. or more is accounted for by the groups of products specified. Details relating to on-specialist producers (i.e. establishments whose output of any one of these to 50 per cent. of their total output) are shom in the residual heading. The degree of specialisation indiouted by the relationship between the value of haracteristic products sold and gross output.
Table 7. Total make of intermediate products
Larger establ ishments
This table shows the total quantities of certain roducts which were made, whether for sale, or for further processing in the same establishment, or
on commission for other firms. Separate figures are given for the quantities made in the trade covered in the report and those made in other trades. Compar ison
is made between 1951 '(United Kingdonf) and 1948 (Great Britain).
Table 8 or $8(\mathrm{i})$. $\qquad$
This table shows the total sales by value, and
ost cases by quantity. of products regarded as

Itarcieristic of the trade. It includes, therefore the sales of these products returned by establishments classif fied to other trades. Compar ison is made
between 1951 (United Kingdon) and 1948 (Great Britain). Table 8 (ii). Total sales by small firms in

This table shows, for the trades for which the information was collected from snall firms, details of the ir sales, and the value of
is mode between 1951 and 1948 .
 This table shows separately the amounts included in
Table 8 or 8 (i) which were returned by establishments classif ied to other trades. Compari ison is made between
1951 (United Kingdon) and 1948 (Great Britain).

Table 10. Sales (or production) in the trade of
This table shows the sales (or production). by establ ishments in the trade of products other than those regarded as character istic products of the trade. 1948 (Great Britain)

## 

This table campares, in most cases, the total sales
quantity in 1951, 1948 and 1937 of products regarded by quantity in 1951, 1948 and 1937 of products regarded imports of these products as shown in the Annual Statement of Trade of the United Kingdom. The census figures relate to United Kingdom for 1951 and 1937 (or for 1935) but for 1948 to Great Britain only, and include sales of these products recorded by establishments classified to other trades, but exclude sales by firms employing 10 persons or fewer; these figures are not, therefore, strictly comparable with the export and
import figures, which cover the United Kingdom for all years and include all recorded imports and exports. In some cases, total quantities made or total sales by
value are given instead of total sales by quantity.

Table 12. Usage of certain specified purchased $\begin{gathered}\text { materials, 1951: } \\ \text { Larger establishments }\end{gathered}$
This table shows the quantities of certain materials
Table 13. Employment in September: Larger This table is divided into four parts:-
Table (i) shows the number of operatives. Table (ii) the emplovees and Table (iii) total employees, in one week employees and lable (iies total employees. in one week dist inguishing employees under 18 years of age. Table (iv) gives details by sex of the number of working
also given of 'excluded employees' in a special note. Definitions of operatives, and of administrative, ical and clerical employees are given above in paragraph 21. Compar isons are mode between 1951, 1950
1949, 1937 and 1935 (United Kingdom) and 1949 and 1948 (Great Britain).
Tcble 14. Average employment: Large
This table shows the average number of operatives and of administrative, technioal and cler ioall mplloyees
employed in the year. Outworkers are not included in employed in the year. Outworkers are not included in
the table but are shom separately at the foot of the table, males and fenales being distinguished separately. Compar isons are made between 1951, 1950, 1949, 1937 and 1935 (United Kingdom) and 1949 and 1948 (Great Britain

Table 15. Shift working. $\begin{gathered}\text { in } \\ \text { indeat } \\ \text { Great } \\ \text { Gritain }\end{gathered}$ Larger establishments This table shows, for one week in September, the total number of man-shi fts worked and the total number
of shift-hours worked for specified shift systens. The number of returss showing each specified shift system is retums showing shift working and of operatives employed in shift work, compared with the total number of returns and the total number of operatives employed. Table 16. Wages and salari ies atd employers' National

This table shows the wages and salaries paid dur ing tive. technioul and clerical employees. It also shows employers' contributions to all national insurance
schemes. The amounts paid to outworkers are schemes. The amounts paid to outworkers are not
included in the table but are shom separately at the foot of the table.
(Unitedparisons are made between 1951, 1950 and 1949: (an) and 1949 amd 1948 (Great Britain)
Table 17. Plant machinery and vihicles ad

This table shows the value of new and second-hand plant. machinery and vehicles acquired and the amounts received for plamt, machinery and vehicles disposed of
during the year. For definitions of these items see during the year.
paragraph 29 above.

This table also shows capital expenditure on new building and other constructional work of a capital nature (exiluing site values and development charges) of these items
Country Tables
The following tables give separately for the The following tables give separately for the
countries shom some of the main results for 1951 given can tries shom some of the main results for 1951 given
in the preceding tables. Certain information additional to that in the previous tables is also included. It should be noted that all the information given in the councry relates solely to establishments in the trade reported on.

Table 18. Summary: Larger establishments.
This table analyses by country the information given in Table 1
Table 19. Summary: Small firms in Great Britain
This table analyses by country the informatio
given in Table 2.
Table 20 or $20(\mathrm{i})$. Sales in the trade: Larger
This table shows details of the sales by establishThis table shows details of the sales by establish
ments in the trade of products, shether principal products or not, as well as the value of work done It does not include sales of principal products b other trades (see Ta
Table 20(ii). Sales in the trade: Snall firms
This table shows. for those trades for which the information mas collected from small firms, details of

Table 21.
$\begin{aligned} & \text { mater ials and fuel: } \\ & \text { Larger establi ishments }\end{aligned}$

This table shows total stocks by value, of products on hand for sale and of materials and fuel as well as the total value of work in progress at the beginning and

Table 22. Employment in Steptember: Larger
This table analyses by country the information given in Table 13.

## Table 23 or $23($ i). Average emplo ment:: Larger

This table analyses by country the information given in Table 14.
Table 23(ii). Employment: Snaxll firms
This table shows, for those trades for which the information was collected from small firms. details of their average employment classified between males and
females and distinguishing employees under 18 years of age.
Table 24. Wages and salar ies and emplovers' Larger establishments
This table analyses by country the information given in Table 16.
Table 25. Plant, machinery and vehicles

This table analyses by country the information
Table 26. Payments for transport services for
and fuwel purchssed:
Larger establishiments
This table gives details by country of the amount paid to other firms and undertakings for transpart services and also, the amount paid or credited to firms
own separate transport organisations. Firms in Northern Ireland were not. however, required to manalyse Northents for trassport services in this way and the total payments have been included throughout the reports
aquinst the heading 'Amounts paid to other firms or undertakings

## APPENDIX A

## LIST OF TRADE REPORTS

II. Mining and Quar rying V. Aon Minos
 V. Solt Mines. Brine Pits and Salt Wo III. Treat thent of Non-Metalli ferous Mining III. Treatment of Non-Motalli ferous Minin F. Brick and Firectcy


M. Monu fing Folt thed fuel
voune 2
IV. Cheni icals and Alitod Trades
$\forall \mathrm{A}$. Coke Ovens and By-products



4. Paint cod va

 volime 3

VIII. Metal Goods not olseorhore
$V$ H. Scrap Motal Processing
viI. vehicles



voume 4
vi. Engineering. Shipbuilding and Electrical Goods
A. Shipbuilding and Ship Repairing
B. Marine Engineering


Enineering Shiphilding and Ele
VI. Engineering. Sh

viII. Motal Goods not elseonhere specif fied (Part) $V$ A. Tool and Implenent
B. Cutlory
C. Chain. Nail 1 , Screr and Miscellanoous V. Foraingi, Wire Man factures

 x. Proci sion Ins trumen ts. Jove llery. etc.
H. Soient ficic. Surgical and Photographic V. Soinntifice surgic.

x. Textiles (Part)


 F. Lixnen and soft Hemp
F. S. Jnee and Soft hemp
H. Hope Twine amd Not
H. Hobiory ind other Knitted Goods

 | abrics |
| :---: |
| coode sad Sacks |

ax. Dis tributive Trades (Part
N. N. Textile Convorting
. Made Madoup Hounshold Toxtile


[^0]

## CROWN COPYRIGHT RESERVED

## PRINIED AND PUBLISHED BY HER MAJESTY'S STATIONRRY OFFICE

To be purchased from
York House, Kingsway, London, w.c. 2423 Oxford Street, LONDON, w. 1
P.O. BOX 569, LONDON, S.E. 1

13a Castle Street, kDinburgh, 21 St. Andrew's Crescent, CARDiff
39 King Street, manchester, 2 Tower Lane, bristol, 1
2. Edmund Street, birmingham, 380 Chichester Street, belfast
or from any Bookseller
1954
Price is 6 d net
printed in great britain


[^0]:    X. Toxtiles (Part)
    
    XI. Lea ther, Loo ther Goode and Fur
    V. Leat thor (Tomn ing and Dreassing) V. Follinongery

