

## An Analysis of the Irish Census of Distribution, 1951

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To me the official Census of Distribution has a special personal interest. On the invitation of the Committee of Section F of the British Association which held its meeting in September, 1937, in Nottingham, I delivered a lecture before the members on the first Irish Census of Distribution, 1933. The major part of this discourse was printed in the *Journal of the Royal Statistical Society*, Vol. C.1, part 1, 1938. It was not until 1950 that the first British Census of Distribution was undertaken.

The 1951 Census was conducted by post from the Central Statistics Office. Questionnaire forms were sent at the end of January, 1952, to nearly 51,000 trading establishments on the register. As a result of replies, almost 7,000 names and addresses were deleted from the register, as they were not primarily engaged in activities covered by the proposed Census. In all, a total of 44,139 enumerated establishments remained on the register, and of these 36,850 or 83.5% submitted a return which was included in the Census. In a subsequent inquiry covering a sample of non-respondents excluded from the Census, it was shown that about one-sixth were outside its scope. The effective rate of response in numbers of establishments was 87.6%, and in terms of turnover 93.4%.

The following questions were required to be answered in the forms by retailers, wholesalers and those engaged in certain services: (1) The return should relate to the calendar year 1951, or if the business year did not conform to this, the return should be completed for a business year most nearly conforming to the calendar year. (2) The usual description of the business, and a list of goods in order of importance of sales are to be given. (3) The number of persons engaged in the business in the week ended April 7th, 1951, divided into males and females, who were further sub-divided into proprietors working in the business, members of the proprietors' family, but not paid a definite salary or wage, and the number of working employees paid a definite salary or wage. In this list, a distinction was to be made between the full and part-time working personnel. (4) The amount of wages, salaries and commission paid to employees, including salaries and commissions drawn by working directors of limited companies for the week ended April 7th, 1951, and the amount of annual wages and salaries. (5) Rent and rates including ground rent, and a statement of the poor law valuation. (6) The separate values of retail and wholesale sales, and of meals and refreshments on the premises. (7) The values of goods purchased including cost of materials. (8) The values of goods on hand for sale at the end of 1950 and 1951.

Special forms had to be filled in by owners of hotels and guest houses, betting establishments, pawnbrokers and manufacturers' agents.

In the 1933 Census, firms engaged in wholesale and retail trading were, in principle, regarded as two establishments, and separate forms were prepared for each; but in the 1951 inquiry an establishment having a mixed business was coded to a wholesale, retail or services description of business according to whichever of these trades predominated in the constitution of its total gross receipts.

In my lecture on the 1933 Census, I made the following suggestions for adoption in any subsequent Census: the number of male and female young and adult, part and whole-time employees, types of statutory control, such as individual proprietorships, partnerships, private and public joint stock companies and co-operative shops, all of which are included in the 1951 Census except the number of young employees as distinct from adults.

#### COMPARISON WITH CANADA, U.S.A. AND GREAT BRITAIN

A brief comparison between the information required in compiling Canadian, United States, British and Irish Censuses of Distribution should prove interesting.

In the Canadian Census for the year 1950, particulars were required to be given by establishments engaged in retail and wholesale trade, but also in services which, *inter alia*, embraced amusement, recreational, educational, repair, cartage, motor-transport and other retail service firms operated for gain. The following information, not required in the Irish, was asked for in the Canadian Census; the total pay-roll of part-time employees; the approximate amount of net sales, divided into cash, credit, instalment, mail-order, sales to other retailers, of goods manufactured on the premises; the total capital (cash, buildings, goods, etc.) employed or invested in the business; the total of all expenses other than wages, salaries, rent and cost of goods purchased for re-sale. The annual sales of appropriate scheduled commodities had to be given by the larger types of business, that is, those with a turnover of over \$25,000. In addition, annual surveys are made, by which returns secured from all the larger stores are used in arriving at the trend of business from year to year.

The latest United States Census of Distribution (called Business) was for the year 1954, and was taken simultaneously with the Census of Manufacturing and Mineral industries. It covered retail, wholesale and selected service trades. The retail trade was defined to include establishments primarily engaged in selling merchandise directly to personal, household and farm users. Retail establishments were divided into two categories: those having paid employees and those with no paid employees. For the former, the method of obtaining the Census information was by means of mail canvass. Report forms were mailed to all business firms included in the active records of the Internal Revenue Service as subject to payment of Federal Insurance Contributions (F.I.C.A.) taxes and which were classified in the records of the Bureau of Old Age and Survivors Insurance. The Internal Revenue Service furnished the requisite information from the 1954 tax returns for the non-employers group. The retail trade of the latter, although made up of a large number of establishments, accounted for less than 10% of the total volume of retail trade. In

addition to those referred to in the Irish Census, the following questions, *inter alia*, were asked: race of owner; total operating expenses other than pay-roll; number of proprietors and firm members devoting a major part of their time to the business; the pay-roll of part-time employees; the number of paid employees classified by types of duties performed, a distinction being made between those having supervisory or administrative responsibilities, office and clerical workers and others engaged in selling and delivery services. All establishments with a turnover of less than \$50,000 were requested to indicate by a check mark on a scheduled list the goods sold in their stores. An elaborate analysis of total sales of individual commodities was required from the larger stores.

As in the Irish, the British census for 1950 was conducted by post. Generally speaking, the particulars required for the British census from retail undertakings were largely the same as those in the Irish, but in some cases in more detail except that there was no query on the sex of employees. The purchase tax is included in the total of purchases. In addition, sales of goods analysed by commodity groups and sales of goods to other traders were required only from retailers with total sales for the year of more than £5,000. An undertaking consisting of a single establishment where both wholesaling and retailing was carried on was classed as wholesale or retail according to its major activity.

#### THE IRISH CENSUS

This analysis will be limited to retail trading establishments in accordance with the tabulated figures in the Irish Census of Distribution. On page LIX of the introduction to the Official Census, there is a reference to the exclusion of sales by what may be termed producer-retailers from the tabulated figures: "The retail sales figures do not include sales made directly from the agricultural community to consumers; thus quite a considerable amount of liquid milk sales would not be covered by the Census of Distribution. This would also hold, to a lesser extent, for eggs and perhaps poultry. Moreover, the scope of the Census excluded bakeries, bootmakers, tailors, etc., who in many cases sell their products directly to consumers. Consequently quite a considerable proportion of sales of bread, flour confectionery, etc., are excluded from the sales figure."

The classification of shops presented great difficulties, as retail concerns trading in single well-defined lines of goods are exceptional. As a result the individual headings of the descriptions of business are not mutually exclusive, which may be noted in the headings: "grocery and provisions," "grocery and publichouses," and "publichouses with wines and spirits," while general shops may sell foodstuffs, drapery, drink, tobacco, sweets, hardware, etc.

The tabulated figures of sales etc. for the State, provinces, county boroughs and the borough of Dún Laoghaire are divided into 25 descriptions of business under the headings of food, drink and tobacco 10, drapery and clothing 4, vehicles (including servicing) 2, and other non-food goods 9. A reduction to 14 in the descriptions was made for the data in connection with counties and towns of over 5,000 population; while for the Urban and Rural District level only six separate descriptions were distinguished.

Although references will be made to figures arising from an analysis of the 1933 Census, it must be understood that the 1951 Census was wider and more detailed in scope, and did not exactly apply to the same descriptions of goods.

It would be fundamentally wrong for the purpose of comparison with the resultant figures obtained by similar methods of calculation for other states or districts to divide the population of the State or any district by the number of shops in the corresponding areas. By using this procedure, the Irish Tribunal on Prices (1926-27) found that there was one shop for every 70 persons in the Saorstat, that the relationship between the total population and the numbers of proprietors and managers of dealing businesses in England and Wales was 97 : 1, in Denmark 91 : 1, and Norway 152 : 1. They concluded that there were too many shops in this country, and that undue multiplicity did not create competition or tend to a reduction in prices. These figures were obtained by combining all sizes and classes of shops, giving them equal weight, and dividing the total into the population, a basis which took no account of the type and size of shops, the relative importance and total value of articles sold, the retail consuming capacity, purchasing habits and relative dependence on retail trade of the inhabitants of the countries referred to.

#### *Control of shops*

According to the 1933 Census 92.9% of the total number of shops were single independents, with a turnover equivalent to 79.2% of the total sales in the State, while the remainder, 7.1% were multiple shops, transacting 20.8% of the total trade. 10% of the multiple shops, handling 3.8% of the retail sales, were controlled by non-nationals. No figures are available for non-nationals in the 1951 Census. In the latter, a new classification by legal status was introduced, viz., individual or partnership, private company, public limited company, co-operative society and others. Out of 31,392 establishments included in the Census 93.3% were controlled by either individuals or partnerships, and transacted 60% of the aggregate sales of £207.8 million; the corresponding percentages for private companies were 5.4 and 30.4 respectively, for public limited companies 0.8 and 7.3 and for co-operative societies 0.5 and 2.3 respectively. In the county boroughs of Dublin and Cork, private companies, although much smaller in number than the establishments controlled by individuals and partnerships, have a larger sales output than the latter.

In garages and filling stations, whose sales output of £19.5 million is exceptionally high, between one-tenth and one-eleventh of the total sales in retail undertakings in the country is spread among 816 establishments, of which 151 owned by private companies have a sales turnover of £10.8 million compared with 665 individuals or partnerships transacting sales amounting to £8.7 million. The corresponding figures for drapery and apparel are 260 establishments owned by private companies with a sales output of £13.8 million compared with 2,341 individuals or partnerships selling goods valued at £14.9 million, and 33 owned by public limited companies having sales of about £1½ million. 96% of the shops engaged for the most part in grocery and provisions, having an output of about 73% of the total sales, are run by individuals or partners, while the remainder

are carried on by private and public companies and co-operative societies. Although the number of establishments selling hardware and boots and shoes (owned by individuals or partners) is far in excess of those controlled by private and public companies, the same proportionate excess in each case is not evident when their sales are taken into account.

Shops are classified in the Census according to the chief lines of goods sold, which obscures the fact that most of them, especially in country districts, carry on trade in commodities other than those related to their popular designation. The main business of two-thirds of the shops, according to the tabulated list in the Census, was in food and drink, one-tenth were for the most part engaged in the sale of drapery and clothing goods, while the principal business of about one-ninth or in numbers 3,682 was in tobacco, sweets and newspapers. It is interesting to note in connection with the sale of tobacco and cigarettes and of alcoholic beverages, that for the year ended 31st March, 1952, 38,347 licences were issued to tobacco dealers in the State, and the expenditure on tobacco and cigarettes for 1952 was £30.9 million and on alcoholic beverages was £33.8 million. For the latter, 15,663 licences, including occasional licences, were issued.

#### *Size of shops*

The size of any business establishment can be measured by the numbers engaged, the aggregate sales, the annual salaries and wages bill, and the capital invested in the business. The total sales and certain aspects of their division will be presently examined, and under the heading of the human element in distribution, an analysis of the number engaged and the payment of salaries and wages will be made.

In the 1933 Census, in which the initial division for classification of size was sales less than £100 per annum or about £2 per week, the preponderance of the small-scale retailer was evident from the fact that two-thirds of the shops, with an output only 13.5% of total sales had an annual turnover of less than £1,000, while 48.6% of these had individual total sales of less than £500 per annum, and an aggregate turnover of about 6% of the total trade.

With the increase in the cost of living index from 149 in 1933 to 354 in 1951, or 100 in the former and 238 in the latter year, it was to be expected that the value of sales would be considerably increased. This may be noted in a consideration of the 1951 Census, which showed that 55% of the shops had an annual turnover of less than £2,500, an aggregate of only 7.4% of the total sales, with a salary and wages bill of 4.4% of the amount thus paid in all classes of shops. These shops are for the most part run by proprietors and their families, who are not paid salaries or wages according to the information in the returns. The median-sized business in tobacco, sweets and newspapers, and in motor-vehicles and cycles, has a turnover of between £500 and £1,000. In grocery, public house, wine and spirits, and "other food, drink and tobacco" the median lies between £1,000 and £2,500. For garage and filling stations, the median-sized business has a turnover lying between £5,000 and £10,000. The country general shop has its median between £10,000 and £50,000. All the other businesses have their medians between £2,500 and £5,000, as turnover. On the other hand, 41 individual shops transacted an annual trade

of £ $\frac{1}{4}$  million or more, 33 of these were in Dublin City, and 4 in Cork City. The total trade of these establishments in Dublin City amounted to almost £19 million, and in Cork City to nearly £1 $\frac{1}{2}$  million. Thirteen of these shops were mainly engaged in the sale of drapery goods, of which 10 were located in Dublin City. In the latter there were 4 garages and filling stations and 16 engaged in selling non-food commodities in this group.

### *Sales*

The aggregate retail sales included in the 1933 Census were slightly over £62 $\frac{1}{4}$  million or an annual expenditure of £21 per head of the population, or of 8/- per head per week. If the figures for the sales of 18% of the retail establishments not included in the Census were taken into account the total sales would probably have amounted to between £65 and £70 per annum. The total sales in 1951 of retail firms included in the tabulated returns amounted to £207·8 million. According to estimates made by the Director of Statistics, of sales of non-respondents and through hotels, restaurants and cinemas, an addition of some £20 million should be made, making a grand total of about £227·7 million or almost £77 per head of the population per annum or about 29s. 7d. per head per week. The vast increase in prices between 1933 and 1951, already referred to, in a large measure accounted for the difference in the total sales in these years, also the somewhat wider scope of the 1951 Census, and the larger expenditure on certain items. For instance in 1933 the sales in cycles and automobiles (including garages) amounted to £2·3 million or 3·7% of those returned for all retail firms; in 1951 the sales of motor vehicles and cycles, and in garages and filling stations, totalled £20·7 million, or about one-tenth of the aggregate turnover of all retail establishments. In 1933 the sales of coal amounted to £1·3 million, in 1951 this heading has been extended to include coal, turf and other solid fuel with sales of £8·4 million.

The percentage distribution of all retail sales in the provinces of the Republic of Ireland were Leinster (excluding Dublin City which was 37·7), 21·6, Munster 25·5, Connacht 8·6, and in the three counties in Ulster in the Republic of Ireland 6·6. It is interesting to note that the largest sales per head of the counties were ranged along the counties on the Eastern and part of the Southern coast of the country and in Co. Monaghan: Dublin £115, Louth £80, East Cork £77, Waterford £70, Monaghan and Wicklow £65 each, and Wexford £64; while counties or districts having the lowest sales per head were largely located along the west coast, viz., West Donegal and East Galway £33 each, Roscommon £31, Clare and Leitrim £30 each, South Kerry and West Mayo, £28 each.

Subject to the fact that they were situated in different areas and were of varying sizes, the following businesses had the highest turnover in £ thousand per shop: departmental and variety chain stores and other non-food goods, not enumerated in the tabulated list of nine headings—62, coal, turf and other solid fuel—52, garages and filling stations—24; in the clothing trade: in women's and girls' wear 15, men's and boys' wear 14, drapery 10; in the food trades: dairy products 12, fish and poultry 11; and in other non-food trades which are largely specialised: radio and electrical goods 9, boots and shoes

and jewellery 8 each, and books and stationery 7. The businesses in which sales (in £ thousand) per persons engaged were highest were: coal, turf etc. 4, country general 3, garages and filling stations 3, men's and boys' wear 3.

#### Stock turnover

In my analysis of the 1933 Census I resorted to the normal business device of ascertaining the percentage mark down allowed on sales so as to find out the number of times the average stock at the beginning and end of the year is turned over in different sizes and types of business during the year. It may be noted that the value of stock is based on market or cost price, whichever is the lower, and sales at selling prices. I obtained the necessary mark down percentage figures of sales from a principal in a leading firm of auditors and accountants and a director of a number of retail establishments, and from the managements of certain business firms.

The 1951 Census gives figures of annual purchases, and so enables the gross margin to be ascertained generally and in various classes and sizes of business where data are available. To calculate the gross margin of the trading account of a retail firm, the value of stocks at the beginning of the year is added to purchases, and the result is deducted from the total sales plus the value of stocks at the end of the year. The balance is subtracted from the sales, so as to obtain their cost. The gross margin is the fund from which salaries, wages and other necessary business expenses are paid, leaving the surplus to the proprietors.

A business man, *inter alia*, is specially interested in the number of times the stock is turned over in the year. This can be calculated by dividing the average of the value of stock at the beginning and end of the year into the cost of sales. The value of stock at the beginning and end of the year may be exceptionally high or low due to the nature of the business. In other words, it may not be normal, and so tend to give unreal results for the calculation of stock turnover.

Taking the figures for stock at the beginning and end of the year according to the tabulated figures of the Census, the following data of stock turnover in the year in the case of four classes of business ranged in order of size, when compared, should prove informative. The figures apply to grocery and provisions, drapery and apparel, chemists and hardware in the State and in Dublin City:—

Size	The State				Dublin City			
	Grocery and Provs.	Drapery and Apparel	Chemists	Hard-ware	Grocery and Provs.	Drapery and Apparel	Chemists	Hard-ware
£1,000 and less than £2,500	8.4	2.0	2.2	2.5	14.0	2.6	3.2	2.6
£2,500 „ „ £5,000	11.0	1.9	2.6	2.5	18.0	2.5	3.2	2.8
£5,000 „ „ £10,000	12.1	2.1	2.8	2.5	18.3	2.8	3.1	2.6
£10,000 „ „ £50,000	13.7	2.5	} 2.5	3.4	17.0	3.1	} 2.4	4.0
£50,000 „ „ £100,000	14.4	2.8		3.5	14.2	3.0		3.1
£100,000 „ „ £250,000	} 5.7	3.2	} 3.3	} 3.3	} 4.3	3.7	} 3.0	} 3.0
£¼ million and over ...		4.4				4.7		

The relatively slow movement of stock in grocery and provisions in the combined group of £100,000 to £¼ million and over, (which only applies to seven establishments in the State and to three in Dublin City) compared with the stock turnover in other sizes may be accounted for by the following factors : large scale buying so as to obtain larger than ordinary trade discounts ; the purchasing and sale of commodities other than grocery and provisions, included under this heading, which have a slow stock movement ; and the merging of retail and wholesale sales, according to the procedure of tabulation of the heading of retail, if greater than wholesale. In fact, 31% of the total sales of these seven establishments in the State should be assigned to wholesale sales, if given separately.

### THE HUMAN ELEMENT IN DISTRIBUTION

#### *Individuals engaged*

There were 113,356 persons (54.8% males and 45.2% females) engaged in the retail shops tabulated in the Census, or 8.9% of those employed in occupations according to the Census of Population 1951. This percentage distribution appears to be more or less uniform, within a range of 7% for all towns with a population of over 9,000. For instance, the percentage figures for males were : Dublin 56.2, Cork 50.3, Limerick 50.6, Waterford 50.2, Dún Laoghaire 58.1, Kilkenny 59.0, Drogheda 61.1, Galway 52.6, Dundalk 60.4, Wexford 59.5, Bray 59.4, Tralee, 53.3, Clonmel 54.7, Athlone, 56.3.

The male element preponderated to the extent of 90% in the coal and turf trade, 87% in garage and filling stations, 81% in motor vehicles and men's and boys' wear, 77% in radio and electrical goods, and 78% in fresh meat. On the other hand, females were more extensively employed in women's and girls' wear 88%, tobacco, sweets and newspapers 70%, leather and fancy goods 61%, and drapery 59%.

#### *Family workers*

In 1933, there was a fairly even division of employment between family and non-family labour, 51.8% and 48.2% respectively. In 1951 the percentage figures were : working proprietors 30.3, "unpaid" members of their families 10.5, making a total of 40.8, compared with others engaged 59.2. It is not advisable to compare these sets of percentages as they do not exactly apply to the same descriptions of businesses in the two years. For Dublin City the corresponding division of the percentages were 14.0, 3.2 and 82.8 respectively. Family labour (in percentages of the total employed) is mostly engaged in tobacco, sweets and newspapers 65, grocery 60, public houses 57, while non-family labour is in evidence in the following businesses, in which in the aggregate more than 1,000 persons are engaged (percentages of total engaged) : departmental and variety chain stores 98, coal and turf 94, garage and filling stations 86, women's and girls' wear 84, books and stationery, men's and boys' wear 82, radio and electrical goods and furniture and furnishings 79, boots and shoes 77, hardware and jewellery 76 each. In retail businesses with a turnover of less than £1,000 per annum family labour predominated, after which



it decreased relatively to the total number engaged and in the total per shop until businesses with a turnover of £¼ million more are reached in which family labour is insignificant.

#### *Distribution of retail employment*

21% of the total number engaged in retail trade are employed in grocery establishments, 14% in drapery and clothing, 11% in grocery and public house, and in public houses, 7% in tobacco, sweets etc., 6% in garages and filling stations. The largest employment in Dublin City is given in percentages of the total engaged : drapery and clothing 17·3, grocery 16·7, departmental and chain stores 10·7, grocery and public houses 9·4, tobacco, sweets etc. 6·4, fresh meat 5·6, garages and filling stations 5·5.

#### *Salaries and Wages*

The total salaries and wages paid to employees in retail shops amounted to £15·05 million, which is equivalent to £231 per paid employee, treating two part-time paid employees as equal to one whole-time. 75% of the total pay-roll was paid in businesses with an annual turnover of £10,000 or more, 13·5% in the £5,000 and less than £10,000 class, and 7·2% in the £2,500 and less than £5,000 class. These comparisons are, of course, vitiated by the non-inclusion of data for salaries and wages for proprietors and their families especially in the smaller classes of retail establishments. See appendix marked B.

Businesses paying the largest amount of salaries and wages (as percentages of total for all businesses) were drapery and clothing 18, grocery 12, drapery only 11, garage and filling stations 10, and departmental and chain stores 9. The average annual salary and wage per person paid increased in a progressive scale from £105 in business establishments with a turnover of less than £250 in which family labour is mostly employed and is not included in the payroll, to £321 in firms with an output of £¼ million or more.

#### *Salaries and Wages as percentages of Sales*

The following tables give the necessary percentages in the case of four descriptions of retail shops in the State and in Dublin City according to their size, viz. grocery and provisions, drapery and apparel, chemists and hardware :—

Size	The State				Dublin City			
	Grocery and Provs.	Drapery and Apparel	Chemists	Hardware	Grocery and Provs.	Drapery and Apparel	Chemists	Hardware
£1,000 and less than £2,500	2·6	4·9	8·8	5·0	2·3	6·1	9·0	7·3
£2,500 „ £5,000	3·3	6·0	10·3	8·1	3·3	8·5	11·7	10·7
£5,000 „ £10,000	4·1	6·0	12·7	8·0	4·4	8·1	13·1	9·5
£10,000 „ £50,000	5·5	7·8	16·5	8·7	6·0	8·9	16·8	12·2
£50,000 „ £100,000	6·4	9·2		8·2	7·3	9·3		13·3
£100,000 „ £250,000	} 6·4	9·9		} 7·5	} 6·6	10·0		} 8·2
£¼ million and over ...		9·6				9·5		

The conclusions to be drawn from the above tables are self-evident. Throughout the country and in Dublin City, the percentage of the amounts for salaries and wages of total sales in the case of the four trades mentioned tends to increase with the increasing size of each class of business, except in the largest undertakings, in which there is a decline, especially in hardware. A very important influence affecting this tendency to increase with size can be accounted for by the fact that the smaller-size businesses are worked more or less in accordance with their turnover, by family labour. Proprietors in filling up the census forms did not, for the most part, include payments, salaries or wages, made out of their businesses to themselves or to members of their families. Generally speaking, the percentages for the different trades in Dublin City are higher than those in the State. This is particularly manifest in chemists and hardware shops. Employees in chemists shops are in a special position, as they are expected to serve a period of apprenticeship. Prior to their entry they must have passed a public examination in certain subjects, and in the course and end of their apprenticeship they are subjected to examinations conducted by the Pharmaceutical Society of Ireland. As a result, their numbers are limited and they can command higher wages than assistants in other occupations.

DISTRIBUTION OF EXPENDITURE OF THE £ IN VARIOUS CLASSES OF RETAIL SHOPS

Kind of Business	The State	Dublin City	Cork City	The Cities of Limerick and Waterford and the Borough of Dun Laoghaire	9 Towns population 9,000—21,000
	s. d.	s. d.	s. d.	s. d.	s. d.
Grocery and provisions ...	3 7	3 5	3 6	4 10	2 10
Drapery and clothing ...	3 3	3 9	3 9	3 8	4 4
Vehicles (including servicing) ...	2 0	1 8	3 1	2 0	3 0
Public-houses and grocery	1 10	3	6	10	2 8
Public-houses (including wines and spirits) ...	1 4	1 7	1 9	1 5	10
Fresh meat ...	1 0	1 2	11	1 7	1 6
Departmental and variety chain stores and other non-food goods ...	1 0	2 4	3 0	9	1 11
Coal, turf and other solid fuel ...	11	1 7	3	9	—
Hardware ...	10	8	6	1 0	1 0
Sweets, tobacco, etc. ...	9	10	10	1 1	10
Chemists ...	5	5	5	7	5
Other shops ...	3 1	2 4	1 6	1 6	8
All descriptions ...	20 0	20 0	20 0	20 0	20 0

## SOME SUGGESTIONS AND COMMENTS ON THE CENSUS, 1951

*Suggestions*

Lack of knowledge of the salaries and wages or drawings paid to working proprietors and their families is a hindrance to the full

evaluation of the total paid under this heading. I am sure that the smaller businesses make an allowance for the amounts thus paid, when required to submit returns to the district inspectors of taxes. It is desirable that separate questionnaire forms be filled in by an establishment engaged in wholesale and retail trading, which, I understand, has been required for the Irish Census of Distribution for 1956. By this means the test of major activity to be assigned to either the retail or the wholesale trade in a particular undertaking can be avoided. Whatever method is adopted should be used as a standard for future censuses, so that comparisons may be facilitated. I would recommend that information on the number &c. of young male and female employees, from 14 to 18 years of age, be required from retail undertakings. The relationship of part-time to whole-time employees presents no small difficulty. For instance, new employees may be only engaged in particular establishments in the drapery trade for the Christmas season or during a busy sales period. It might be desirable to procure information on the sales of certain commodities or commodity groups from establishments whose total sales are above a certain figure. The question of the inclusion of the sales of producer-retailer firms directly to the public is worthy of consideration.

The estimates of sales, purchases, changes in stocks, gross margin, annual wages and salaries, total persons engaged and new capital investments by retail firms made for 1952-54 in the volume containing the data for the Census of Distribution, 1951, should provide useful information on the tendencies of these matters in the intermediate years between the dates for the full official censuses and should be continued.

#### *Vehicles (including servicing)*

The huge sum of £19½ million was expended in 1951 on sales in garages and filling stations, or 9·4% of the total sales in retail undertakings in the State. This figure taken with the amount spent under the heading of motor vehicles and cycles reaches the enormous total of £20·7 million or about 1/10th of the sales in all retail establishments. Of this amount, the sales in £ million were, in Leinster 11·9 (including Dublin City 6·5), Munster 5·9 (including Cork City, 1·9), Connacht 1·5, Ulster (part of the State) 1·4. Excluding the sales in the Cities of Dublin and Cork, the sales in the remainder of the State amounted to £12·2 million. To proceed further with the estimates already referred to: it was estimated that the total sales for motor vehicles and cycles, garages and filling stations in 1954 amounted to £24·3 million, an increase of 17% on those for 1951. It was further estimated by the Central Statistics Office that these sales in 1955 amounted to almost £26 million or about 11% of all retail services in the State. There was an increase of about 30% in the number of private cars, of about 50% in motor goods vehicles and between three and four times the number of motor cycles in 1955 compared with 1951. Another striking tendency has been the enormous number of private cars, over 108,000, of not more than 10 H.P., which formed 80% of the total number of private cars under current licence in 1956. These tendencies in the vast increase in private passenger and commercial goods transport with their severe effects on the financial strength

and operating capacity of the railways have led *inter alia* to the serious consideration that there should be a radical change in their organisation and working.

I congratulate the former Directors of Statistics, Mr. S. Lyon, Dr. R. C. Geary, and the present Director, Dr. M. D. McCarthy, and their staff, especially Mr. Linehan, for their excellent work in connection with the Censuses of Distribution for the years 1933 and 1951.

## APPENDIX A

## IMPORTANCE OF DUBLIN CITY IN RETAIL TRADE.

## POPULATION IN 1951

Total	Males %	Females %	% of population of State	% increase 1936-51
521,322	46.8	53.2	17.6	10.2

## NO. OF PERSONS ENGAGED IN RETAIL SHOPS

Total	% of total in the State	Males %	Females %	Proprietors %	Members of family %	Others employed %
31,163	27.5	57	43	14.0	3.2	82.8

## SALARY AND WAGE-EARNERS AND SALARIES AND WAGES PAID IN RETAIL SHOPS

Total No. of Salary and Wage earners	% of total in the State	Total Salaries and Wages	% of total Salaries and Wages in the State
25,804	38.4	£ million 7.1	47.3

Kind of Business	No. of shops	Percentage of total no. of shops in the State (nearest percentage)	Sales £ million	Percentage of total sales in the State (nearest percentage)
Grocery and provisions	1,279	14	13.2	35
Tobacco, sweets and newspapers .. ..	657	18	1.0	43
Public house .. ..	495	11	6.2	46
Fresh meat .. ..	315	25	4.7	45
Drapery .. ..	252	12	6.7	31
Chemist .. ..	245	26	1.6	39
Fruit and Vegetables	180	45	1.0	72
Hardware .. ..	153	23	2.5	30
Women's and girls' wear .. ..	125	37	4.4	83

PERCENTAGE DISTRIBUTION BY LEGAL STATUS OF NUMBER OF ESTABLISHMENTS  
AND OF TOTAL SALES OF ALL TYPES OF BUSINESS

Legal status	No. of establishments	Sales
	%	%
Individual or partnership .. ..	83.0	43.1
Private company .. ..	14.4	43.6
Public limited company .. ..	2.6	13.1
Co-operative society and others ..	0.1	0.2

## APPENDIX B

PROPRIETORS AND MEMBERS OF FAMILY AND PAID EMPLOYEES AS PER CENT.  
OF TOTAL PERSONS ENGAGED (BY SIZE OF BUSINESS) IN THE STATE.

Size	Proprietors and members of family	Paid employees
	%	%
Less than £2,500 .. ..	83.8	16.2
£2,500 but less than £5,000 .. ..	54.3	45.7
£5,000 but less than £10,000 .. ..	36.0	64.0
£10,000 but less than £50,000 .. ..	14.3	85.7
£50,000 but less than £100,000 .. ..	2.5	97.5
£100,000 but less than £250,000 .. ..	0.4	99.6
£½ million or over .. ..	0.1	99.9

PROPRIETORS AND MEMBERS OF FAMILY AS PER CENT. OF PERSONS ENGAGED

Size	Grocery and Provisions	Drapery and Apparel	Chemists	Hardware
£1,000 but less than £2,500 .. ..	83.0	70.4	54.0	73.4
£2,500 but less than £5,000 .. ..	66.4	48.6	35.8	44.7
£5,000 but less than £10,000 .. ..	46.9	35.7	22.2	28.6
£10,000 but less than £50,000 .. ..	17.5	13.6	} 4.9	11.1
£50,000 but less than £100,000 .. ..	2.5	1.4		2.6
£100,000 but less than £250,000 .. ..	} 0.5	0.1		
£½ million and over .. ..		0.2		

## DISCUSSION

Proposing a vote of thanks to Professor B. F. Shields for his paper entitled "An Analysis of the Irish Census of Distribution 1951" *Mr. James Mansfield* complimented Professor Shields on his objective and factual analysis of the statistics as returned by the Irish Census of Distribution 1951. He stated that the speaker's paper was of special importance as it dealt with a sphere of the country's economic activity, viz., distribution, to which very little attention is given. He expressed the hope that the paper would help to focus attention on the present unsatisfactory position of retailing in Ireland.

Mr. Mansfield then elaborated on the role performed by distribution which he defined as the various business activities directing the flow of goods from producer to consumer. He stated that retailing could be considered as one of the principal activities of distribution as was shown by the fact that in 1951 a total of 113,356 persons were engaged in retail shops. He then went on to deal with retail grocery, provision and allied trades as represented by grocery shops, grocery with liquor and grocery general shops, which accounted for 42,600 of all those engaged in retailing.

Apart from the number employed, the importance of food retailing is shown by the substantial turnover or gross sales in such shops which amounted to £75 million. This turnover represented 67% of the gross turnover of £112 million of all food, drink and tobacco premises. Furthermore, it was handled by fourteen thousand shops or 58% of all food, drink and tobacco shops which numbered 24,000. While the turnover handled by the grocery and associated shops was large, the major portion of it was handled by a relatively small number of shops. Those shops which had a turnover of between £5,000 and £10,000 per year or between £100 and £200 per week, numbered 1,892 or 14% of all such grocery and associated shops, and handled a turnover of £13.2 million or 18% of the total turnover. The most important class of shops were those with an annual sale of £10,000 or over. Though the number of those shops was only 1,855 or 13% of all shops in the grocery and associated class they handled £46.7 million or 62% of the total sales of all such shops.

A special examination of the census statistics showed that only 9% of the shops in the purely grocery class (9,387) were responsible for 55% of the total turnover in that class. Taking shops in this class of annual sales of under £5,000 per annum the average sales of such shops was only £1,320. The net profit on this turnover calculated at 3% would only show a total of £39 10s. 0d. for a year's work. Taking all of those shops which had an annual turnover of £5,000 the average sales per shop worked out at £14,858 per annum, which, calculating at 3% would give an annual net profit of £445 10s. 0d. The average sales per shop of the total 9,387 shops in the grocery class worked out at £4,030 per year, which, calculating at 3%, gives a net profit of only £120 per annum or approximately about £2 per week for such shops.

These statistics not only highlight the excessive number of outlets in the retail food trade but also show that a very large number of such outlets are entirely uneconomic. It is unreasonable to think that any shop which had sales of less than £1,320 per annum could be considered an economic outlet. These uneconomic units siphon off some of the trade and therefore cause the loss of such trade to the more progressive and economically operated shops.

In other countries the numbers of outlets is kept within limits and the standards are maintained and improved by having either some control on the number of outlets, or assisting those who operate retail shops to run them more successfully. With regard to control, some countries require that before a person is permitted to open a retail shop he must show that he has reached a particular educational standard, that he has a technical knowledge of the trade and that he has some financial backing. Furthermore, in most countries throughout

Europe and also in the United States assistance is given to the retailers in the matter of advice on merchandising, on lay-out and on the general running of their premises to ensure that they might operate in an economic and successful manner. The question of having some control or regulation on entrance to the trade in Ireland is one which requires examination in view of the excessive number of shops. There is manifestly a need for an advisory or technical service to enable traders to run their premises more successfully. The retail grocers' association has made a start on this work but lack of funds is restricting them.

In conclusion, Mr. Mansfield referred to the limitations in the census of distribution. He mentioned the type of statistical information which was available in regard to distribution on the continent and which in many cases was collected through the trade associations. He pointed out that such information particularly in regard to turnover, rate of gross and net profit, overheads, labour costs, etc. was entirely lacking in regard to the trade in Ireland. Were it available it would provide a picture of how the trade was developing and would enable retailers to compare the business in their own shops with the general picture in the trade. In conclusion he stressed the value and need of advisory services for the retail distributive food trade.

*Mr. T. P. Linehan* : Mr. Chairman, Ladies and Gentlemen, I am more than pleased to have the opportunity of associating myself with the vote of thanks to Professor Shields for his paper concerning the 1951 Census of Distribution. On behalf of the Central Statistics Office I may say that we are indeed gratified by his favourable reaction to the Census and Report on it. We are, however, even more gratified by seeing some notice taken of the Report. Our persistent complaint is that the use made of published statistics generally is only a minute fraction of what one would expect, particularly by the business community who are the suppliers of the data at no little inconvenience to themselves. In reply to Mr. Mansfield's general remarks on the subject of availability of data on the Distribution sector I can assure him that the Central Statistics Office is only too willing to assist in every way possible his association or any other association in providing data for which there is a demand. By and large there has been no demand from the Distribution sector for statistical data. In fact we have found ourselves in the position of having to create a demand ourselves!

Before making some observations on the paper I would like to mention briefly the framework of the distribution inquiries which are being carried out. A full Census was taken in respect of 1933. The next full Census was that of 1951, while a third full Census has been taken in respect of 1956 and we are at present in the throes of scrutiny, coding, compilations, etc. for this Census. In respect of each of the four years 1952-55 a sample Census was taken covering all the large concerns (over £10,000 sales),  $\frac{1}{4}$  of the medium-sized businesses (£5,000—£10,000) and one in twenty of the small concerns. Provincial and national estimates based on these samples have already been published for the main descriptions of business. The method of estimation does not permit any allowance to be made for births and deaths of shops. This has probably had a diminishing effect

on the aggregates particularly in the Dublin area. Hence the necessity for the 1956 full Census to provide further bench-mark data. It is hoped that the first results of this recent Census will be included in the September 1958 issue of the Irish Trade Journal and Statistical Bulletin.

A sample Census is being taken in respect of each of the four years 1957-60—in fact the 1957 form is being issued this month—and it is proposed to have another full Census in 1961. We would hope to continue with this pattern of quinquennial censuses with sample inquiries for the intervening years. The 1956 form contains some additional queries in comparison with the 1951 form. In particular, data were obtained on changes in fixed capital assets during the year and (following international recommendations) of the total value of accounts outstanding at the end of the year. The form for the present series of sample inquiries has, however, been reduced quite substantially in content.

Concerning the 1951 Census itself one of the most interesting features was the subsequent non-respondent inquiry in which forms were issued to a sample numbering 1,200 from the names on the registers from whom returns had not been received. Every effort was made to obtain some information in respect of these 1,200 establishments to permit estimates to be made of the coverage achieved in the Census proper.

In terms of sales about 7% was not included in the Census compilations. Better coverage was achieved for the larger concerns than for the smaller, the omissions, again in terms of sales, being 5% for the large concerns, 10% for the medium concerns and about 15% for the small concerns.

The figure for the Dublin area was only 2½% while it was about 10% for the remainder of the country. The very good coverage achieved in the Dublin area was a result of the special efforts made by personal canvassing, telephone calls, etc. to improve the coverage in that area.

The greatest difficulty encountered in the compilation of the results was in classifying by description of business. A miscellany of products is handled by individual shops. It may well be that we have tried to distinguish too many descriptions of business. We deliberately did not ask for quantitative information on the sales of various commodity groups as our experience indicated that response rate, particularly from the smaller shops which are legion, would be substantially reduced. We have in mind, however, the possibility of experimenting on these lines for the large concerns during the sample census.

There are a number of points arising from the paper itself which I would like to deal with. The figures given for retail sales per head of the population on page 5 cannot be taken as measuring the relative standards of living for the country districts. As already mentioned, better coverage was achieved in the Dublin area than elsewhere. It must also be kept in mind that the value of farm produce (food and fuel) consumed on farms without process of sale amounted in 1951 to £34.6 million at agricultural prices or to £50.1 million at retail prices i.e. to one-quarter of actual retail sales. An adjustment to each county area, allocating this £50.1 million in proportion to the



agricultural population would very much reduce the gap between the various areas.

Professor Shields's reference to the question of stock turns raises an interesting point. Is there a correlation of some kind between the level of stocks and the inventory date? Are stocks abnormally low or high at the end of the accounting year? If such is the case then theoretically we should have stock figures more frequently than annually but what proportion of retail concerns stock-take more than once a year? Perhaps stocks are allowed to run low before stock-taking to minimise the labour involved.

Professor Shields refers regretfully to the fact that no allowance has been made in the totals for wages and salaries for the remuneration of proprietors and members of the family working in the business who are not paid any definite wage or salary and Mr. Mansfield has supported him on this point. This is indeed true, but I feel that we are not justified in imputing the average rate paid to employees to these proprietors and members of the family. Quite frequently a small shop is run by a family merely as a sideline, the members combining together to render service behind the counter whenever necessary. The position is analogous in some respects to the small farm and we have a similar problem in our Farm Survey results where we have not imputed an average wage to the farmer and his family. Under-employment is the bogey here and possibly also in the small shop. In fact the very small shop is not a shop and the very small farm is not a farm.

The precession of salaries and wages as a per cent of sales with size of turnover shown in the paper is the net result of three main influences. On the one hand the proportion of labour receiving remuneration increases with the size of business. Furthermore, the remuneration per paid employee generally increases also with size of business. As an offsetting factor, however, sales per person engaged increase with size of business.

In his general comments on the 1951 Census Professor Shields has indeed let us off very lightly. We welcome any constructive criticism and indeed flourish on it. In the 1956 Census we are trying as far as practicable to obtain separate forms for retail and wholesale activity of mixed businesses. Where a concern which is basically retail has wholesale sales of £50,000 or more we are obtaining a separate wholesale form. Where a concern which is basically wholesale has retail sales of £10,000 or more we are asking for a separate retail form.

Professor Shields will, I am sure, be pleased to know that in the 1956 Census provision was made to determine the number of persons under eighteen years of age at work in distribution. At the same time I might call his attention to the data given in Volume II Part 2 of the 1951 Census of Population—Ages and Conjugal Conditions Classified by Occupations. Here he will find a considerable amount of valuable information relating to the age structure and conjugal condition of those at work in Distribution. Moreover Vol. III, Part 2 of the same census contains particulars of the numbers in the principal occupations within each description of business.

Sales of vehicles and fuel therefor certainly have increased "out of all knowledge" between 1933 and 1951. A point to be kept in

mind is that these sales are influenced not only by increases in the standard of living and the growth of private motoring but also by the fact that a large portion of the business reflects expenditure by commercial concerns as distinct from most of the other groups where the sales relate almost entirely on consumer expenditure.

As a further inducement to those who have not yet expended 8/- on a Census Report I might mention that, in addition to the section on retail trade, it deals also with wholesale establishments, hotels and guest houses, restaurants, cinemas and theatres, bookmakers, pawnbrokers and hairdressing establishments.

In conclusion may I again offer my congratulations to Professor Shields for his paper and to say that I look forward to hearing him reading the paper on the 1956 Census Report in the not too distant future.

*Professor Shields*, in reply to the vote of thanks, thanked the different speakers for their generous appreciation of his paper, and stated that it was a great personal satisfaction to listen to University College, Dublin graduates speaking with practical knowledge of the subject of retail distribution. He was impressed by the informative and realistic approach by Miss Beirne and Messrs. Mansfield and Moran to business problems involved in the operation of retail firms in this country. He expressed thanks to Mr. Meenan, the President of the Society, for his kind references to the merits of the lecture, to Mr. Linehan and Mr. Broderick from the Central Office of Statistics for their clear explanation of the many difficulties in the compilation of a Census of Distribution, and to Dr. McCarthy, Director of Statistics, for reading and checking the figures in the paper.