

CHAPTER III—GENERAL EXPLANATIONS

EXPLANATION OF TERMS

Number of establishments.—Under this designation are included all establishments canvassed in 1930 that were in existence during the year 1929, even though their operations extended over but a portion of the year covered by the census. It does not include establishments that came into being after the census year nor does it include all establishments which discontinued operations prior to 1930.

Number of employees.—Under this heading are included all paid employees, among them being hired executives, salesmen, and all office, warehouse, and other employees. Proprietors and firm members are not included under *number of employees*, regardless of whether such proprietors and firm members were on the pay roll or whether they received their compensation in the form of net profits. In the majority of cases the establishments reported the *average* number of employees carried on the pay roll during any part of the year. This was especially true of establishments engaged in seasonal trades, such as packers and shippers of fruits and vegetables, tobacco-buying establishments, etc., which operated only two or three months during the year.

Salesmen.¹—In this item are included all persons engaged primarily or entirely in selling goods, regardless of the type of salesman or method of remuneration. It includes house, city, traveling, and resident salesmen who may be missionary salesmen, specialty salesmen, or may handle the general line of merchandise of the house they represent. It also includes an indefinite number of so-called agents who have given part of their time to selling, although an attempt was made to eliminate such employees from the salesmen classification whenever the schedules clearly indicated that to be the case. It does not include those sales representatives who are in business for themselves representing a number of different firms whose goods they sell on a commission or fee basis. Such organizations have

¹ No space was provided on the automobile schedule or on the schedule used for establishments in towns and cities under 10,000 population for a classification of employees under *salesmen, executives, and all other employees*. For this reason the data on salesmen and on executives are incomplete and represent merely the number of salesmen and their salaries, and the number of executives and their salaries for wholesale establishments operating in cities of 10,000 population and over, exclusive of the automobile business. For the same reason, the data under *All other employees*, Table 10, include an unknown number of salesmen and their salaries, and an unknown number of executives and their salaries, employed by establishments in the automobile trade or in wholesale establishments in towns and cities under 10,000 population.

been classified as manufacturers' agents, selling agents, brokers, etc., as the circumstances seemed to justify, in accordance with the definitions given in Chapter II.

Executives.¹—This item includes presidents, vice presidents, general managers, secretaries, treasurers, superintendents, office managers, credit managers, sales managers, buyers, and others who are normally regarded as belonging to this category.

All other employees.¹—This item consists of all paid employees other than salesmen and executives, except as shown in the footnote.

Total expenses (not including cost of merchandise).—Total expenses include all expenses paid during 1929 covering: (1) *salaries and wages*, as defined below; (2) *expenses of salesmen*, exclusive of salaries, wages, commissions, and bonuses; (3) *rent*, if any, paid for premises during the year; (4) *interest*, if any, paid during the year for money borrowed for the business; and (5) *all other expenses* paid during the year. *In this report are presented statistics only for total expenses and salaries and wages.* Detailed analysis of rent and interest, described below, are shown only in the trade series bulletins.

Salaries and wages.—These items represent, respectively, the total compensation of salaried officers and employees and the total compensation of wage earners. In other words, they include all amounts actually paid to hired executives, salesmen, and other employees. The income derived by proprietors and firm members is not included in the figures for these items. Because of the irregularity in reporting the number of employees as indicated in the explanation under *number of employees* and on account of the inclusion of all kinds of business in the totals shown, total salaries and wages should not be used to compute the average wages per employee.

Expenses of salesmen.—This item covers all traveling or other expenses of a miscellaneous nature incurred by salesmen, but not including salaries, wages, commissions, and bonuses.

Rent.—Rent was reported only when the place of business was not owned by the reporting establishment. The amounts shown under this item reflect the sums actually paid during the year for the premises occupied by the reporting establishment. No rent was reported separately when the premises were owned by the reporting establishments. In such cases, however, most of

what ordinarily constitutes rent was no doubt included under *all other expenses*, since owners of real estate used for business purposes must pay taxes, usually charge interest on the investment, and incur other expenses incident to the maintenance of the property in usable condition. All of these items normally make up the bulk of what is paid to an owner of real estate in the form of rent when such property is rented or leased. For this reason the items *rent* and *all other expenses*, respectively, are not comparable between different establishments. Total expenses and other items of expense, however, are comparable as between establishments, since they were reported for each and every place of business.

Interest.—This item included only the amount of interest paid during 1929 for money borrowed to operate the business, whether used for the purchase of goods, for building construction, or for other purposes directly connected with the operation of the business. It does not include interest charges made by the reporting firm on its own invested capital. For the same reasons stated above under *rent* the item *interest* is not comparable between different establishments.

All other expenses.—This includes all items of expense incurred by the reporting firms with the exception of those items specifically enumerated, namely, wages, salaries, commissions, and bonuses; expenses of salesmen; interest paid; and rent paid during the year. Under *all other expenses* are included a large variety of items such as postage; stationery supplies; telephone and telegraph; heat, light, water, and power; advertising; insurance; taxes; losses from bad debts, etc. *Neither capital investment (land, buildings, fixtures, etc.), nor the cost of goods purchased for resale are included under this or any item covered in this report.*

Stocks on hand.—This item covers the cost or replacement value of merchandise on hand December 31, 1929, or on the nearest inventory date. This inventory figure can not be used to compute the rate of stock turnover without first making essential adjustments. To compute the rate of stock turnover properly, it is necessary, first, to have a true average inventory or an inventory carried normally throughout the year, and, second, to reduce the sales and inventory figures to the same basis, namely, to take both of them either at cost or at selling prices. Neither of these conditions obtains in the census figures. The inventory is taken in most cases as of December 31, which may or may not be representative of the average stocks carried during the year in any given line of business. Furthermore, stocks on hand are given approximately at cost prices while net sales are shown at selling prices. To reduce the net sales to a cost basis it would be necessary to know the gross margin or mark-up on the merchandise which is not available in the census figures since no question was asked to secure data on net profits which are necessarily a part of the gross margin.

Returned goods and allowances.—These figures are deductions from gross sales due to goods being returned by customers or allowances and adjustments made as a result of customers' complaints. The causes for such returns and allowances may be defective merchandise, substitutions, errors on the part of customers, errors on the part of order fillers, on approval sales, etc. Before arriving at the net sales figure it is necessary that *returned goods and allowances* be deducted from gross sales invoiced at the time of the original transaction.

Net sales are derived by deducting from gross sales the value of goods returned by, and allowances made to, customers. Purchases made by country buyers of farm products and other buying agencies have been treated as equivalent to net sales and are included in the total under this heading. In the case of brokers and agents operating on a commission basis it was frequently necessary to compute net sales on the basis of average commission rates or fees charged. Where the reporting brokers or agents failed to make these computations themselves the average rates of commission charged by them during the year were supplied to the wholesale census, where the computations were thus effected. This method was necessitated by the fact that many brokers and agents maintain records only of commissions received and do not have actual sales figures.

Credit sales.—By this term is meant all sales made on any other than a strictly cash basis. However, the question on the schedules relating to credit sales was apparently not always so interpreted with complete uniformity. Consequently, the data shown under this heading include only credit sales which were actually reported on the original schedules or which were subsequently adjusted wherever possible as a result of correspondence.

Sales to ultimate consumers (at retail).—This represents sales made to ultimate consumers who buy goods for personal use or for household consumption. While such sales are normally made by retail stores and by some manufacturers who have gone into direct selling by mail or through house-to-house canvassing, wholesalers sell certain amounts to such consumers on a retail basis. Wholesalers who sell substantial quantities to consumers at retail are commonly known as semijobbers.

Sales to industrial consumers.—These are sales made by non-food wholesale establishments to manufacturers, oil-well companies, mine operators, and public utilities. Such sales consist largely of machinery, equipment, supplies, and raw materials not intended for resale in the same form.

Character of organization.—Under this heading the various legal forms of business ownership are classified. The most important types are the individual proprietorship, the partnership, and the corporation. In addition, data are shown for coopera-

tive associations, common law trusts, and other types of business organization.

Marketing units.—Wholesale concerns as well as retailers frequently operate more than a single establishment. These multiunit businesses, commonly called chains, are shown in this volume, grouped according to the number of establishments under a single ownership; such establishments may be located in a single community or State or in several communities throughout the country.

Size groups.—In classifying wholesale establishments according to volume of business, nine size groups have been set up as follows:

GROUP NUMBER	NET SALES
I.....	Under \$25,000.
II.....	\$25,000-\$49,999.
III.....	\$50,000-\$99,999.
IV.....	\$100,000-\$199,999.
V.....	\$200,000-\$299,999.
VI.....	\$300,000-\$399,999.
VII.....	\$400,000-\$499,999.
VIII.....	\$500,000-\$999,999.
IX.....	\$1,000,000 and over.

Proprietors and firm members.—This item includes owners and part-owners of wholesale business enterprises of the single proprietorship and partnership type actively engaged in the operation of the business, irrespective of whether such owners or partners received stipulated amounts of remuneration or merely had drawing accounts and shared in the net earnings of the business. The compensation of these persons has been omitted from the statistics in this report on salaries and wages.

Commodity sales.—The wholesale schedules or returns in the majority of cases show not only the total volume of business transacted by the reporting firms, but also the amount of business done in each of a number of commodities or commodity lines. This makes it possible to determine how much business is done by hardware wholesalers, for example, as well as how much of their sales are in hardware, how much in automotive equipment, how much in electrical goods, and how much in certain other major commodity lines normally handled by hardware firms. Some returns failed to give a breakdown of sales by commodities largely because such information was not available and could not be compiled by the reporting firms without considerable trouble and expense. This fact gives rise to a term known as "commodity coverage" explained below. Some returns show a breakdown by commodities in greater detail than others. For this reason commodities have been classified into major commodity lines and detailed commodity items. In this report are presented data by *major* commodity lines only, being shown for each of the following commodities:

Aluminum ingots, bars, sheets, shapes, tubes, and castings.
 Automobiles, trucks, and tractors, new and used (including passenger automobiles and special purpose vehicles, such as busses, fire apparatus, ambulances, etc.).

Automotive equipment, parts, and accessories.
 Bakery products (cakes, biscuits, crackers, etc.).
 Barbers' equipment and supplies.
 Books, magazines, and newspapers.
 Brick, tile, and terra cotta.
 Building materials not classified elsewhere, such as wall board, roofing paper, etc.
 Building materials (ornamental metal), (including fire escapes, elevator cages, grilles, metal lath, etc.).
 Building stone, slate, and concrete products.
 Cameras and photographic supplies.
 Canned goods (food products), (including canned fruits, vegetables, fish and sea foods, meats, etc.).
 Cement, lime, and plaster.
 Chemicals, industrial and heavy, such as soda ash, sulphur, calcium, coal-tar products, resin, and other synthetic organic chemicals.
 Chemicals, refined, and/or related products (such as explosives, celluloid, spirits of turpentine, bulk disinfectants, insecticides, printers' inks, drying compounds, etc.).
 China, glassware, and crockery.
 Cigars, cigarettes, and tobacco (except leaf).
 Clothing and furnishings, men's and boys' (including men's and boys' suits, overcoats (except fur), work clothing, and all furnishings except shoes).
 Clothing, women's and children's (including women's and misses' coats, suits and dresses, millinery and millinery supplies, and hosiery; children's and infants' wear; and other women's and misses' wearing apparel, except shoes and furs).
 Coal (anthracite and bituminous) and coke.
 Confectionery and soft drinks.
 Copper ingots, bars, sheets, shapes, etc.
 Cotton, raw (including linters).
 Dairy products and eggs.
 Drugs and drug sundries (including druggists' chemicals, pharmaceuticals, proprietary medicines, druggists' rubber goods, and drug sundries not elsewhere classified).
 Dry goods not elsewhere classified.
 Electrical appliances, equipment, and supplies (including storage batteries, motors and generators, electrical fixtures, lighting and power supplies, and household appliances).
 Farm products not elsewhere specified (such as bristles and hair, cut flowers, nursery stock, etc.).
 Feeds, mixed and other.
 Fertilizer and fertilizer materials.
 Fish and sea foods, fresh and processed.
 Food products not elsewhere specified.
 Fruits and vegetables, fresh and dried.
 Furniture, wooden and metal (including household furniture and office and store furniture and fixtures).
 Furs (dressed) and fur clothing.
 Glass, sheet.
 Grain (wheat, corn, oats, etc.).
 Groceries (including sugar, flour, coffee, lard and lard substitutes, cereal preparations, rice, tea, oleomargarine and butter substitutes, extracts and spices, pickles, preserves, etc., but does not include canned goods).
 Hardware (including builders' hardware, heavy hardware, light hardware, tools and cutlery, etc.).
 Hay, straw, and alfalfa.
 Hides, skins, and raw furs.
 Horses and mules.
 House furnishings and supplies (such as carpets, rugs, linoleum, objects d'art, pictures, kitchen ware, etc.).
 Iron and steel and products (except as classified), (including rolled iron and steel products; pig iron; scrap iron and steel; rough castings and forgings; iron and steel pipe and tubes; and wire, wire rope, screening and fencing).

Jewelry, silverware, clocks, watches, precious stones, and precious metals.
 Junk and scrap.
 Lead pigs, bars, sheets, and pipe.
 Leather and cut stock.
 Livestock (other than horses and mules).
 Logs, poles, posts, hewn ties, pulpwood, and cordwood.
 Luggage, saddlery, harness, and gloves (except dress gloves).
 Lumber, rough, dressed, and finished.
 Machinery, equipment, and supplies (industrial) (including textile machinery; mining, quarrying, and pumping machinery; construction machinery; power plant machinery and equipment (except electrical); machine tools (power driven); belting, hose, packing, and mechanical rubber goods; pipe fittings and valves; and rope, cordage, and twine).
 Machinery, equipment, and supplies (farm and garden).
 Meats and meat products, fresh and cured.
 Musical instruments, accessories, and parts (except radios).
 Nonferrous metals and products not classified elsewhere (including nonferrous alloys and ferroalloying materials).
 Nonmetallic minerals (crude) and their products not listed elsewhere (such as salt, asbestos, chalk, clay, graphite, etc.).
 Notions and dry goods (small wares, such as ribbons, laces, threads, etc.).
 Office and store machines and equipment.
 Oils, animal and vegetable.
 Optical goods.
 Ores, metallic.
 Paints, varnishes, and lacquers.
 Paper (wrapping, book, wall paper, paper board, etc.).
 Paper products (such as paper boxes, bags, cups, dishes, napkins, towels, patterns, etc.).

Petroleum and petroleum products.
 Piece goods, all kinds.
 Plumbing and heating equipment and supplies.
 Radio sets, parts, and accessories.
 Refrigerators, mechanical (household and commercial).
 Rubber, crude.
 Sand, gravel, and crushed stone.
 Secondhand merchandise (all kinds).
 Seeds (field and garden) and bulbs.
 Sheet metal work (such as steel garages, heating and ventilating supplies (metal work); metal roofing, metal storage tanks, etc.).
 Shoes, boots, and other footwear (including rubber).
 Silk, raw.
 Soaps (household and toilet) and toilet preparations.
 Sporting goods (including arms and ammunition).
 Stationery and stationery supplies.
 Surgical, dental, and hospital equipment and supplies.
 Textile products not classified elsewhere (such as imitation leather, knit gloves, bagging, cotton cloth, clippings, waste, garment labels, shoddy, etc.).
 Tin, block.
 Tobacco, leaf.
 Toilet articles.
 Toys and games.
 Wood products (such as millwork, shingles, caskets, wood fibers, moldings, reeds, etc.).
 Wool, raw (in the grease, scoured, or carbonized).
 Yarns (all kinds).
 Zinc bars, plates, shapes, and sheets.
 Miscellaneous commodities.

EXPLANATION OF TABLES

The tables in the United States Summary are similar in contents and numbering with the same tables in the individual State reports for purposes of comparison. Exceptions are made in Tables 5, 6, 7, and 12. The first three of these are shown separately in the State reports. They are combined in the United States Summary only for a more effective presentation. The information contained, however, is comparable. Table 12 in the State reports lists the number of establishments by kind of business (based on the 24 standard trade groups) for all cities within the State having 20,000 or more inhabitants. Such a table would not be feasible in the United States Summary. A different Table 12 (sales made to retailers by other retailers) has been inserted to preserve comparability in numbering between State reports and the United States Summary. All text tables have been given Roman numerals to distinguish them from the comparable State and United States tables.

Table 1, summary of wholesale trade by principal classifications.—This table presents a summary of the wholesale trade by 24 trade groups for all types of wholesale establishments combined, so that a few of the essential items resulting from the census may be seen at a glance. It shows the number of wholesale establishments; number of employees, both male and female; salaries and wages; total operating expenses; stocks on hand at the end of the year (at cost); and net sales.

Table 2, wholesalers only, by kind of business.—This table presents the most essential statistics for a group of wholesale establishments designated by the term "wholesalers only," which excludes brokers, agents, and certain other types of organizations operating in the wholesale field. It shows the number of establishments; the number of employees, male and female; salaries and wages; total expenses; stocks on hand at the end of the year (at cost); net sales; credit sales; sales to ultimate consumers (at retail); and sales to industrial consumers.

The first section of the table indicates what types of organizations are included under *wholesalers only*, and gives summarized information in one line totals for each of the types of establishments covered by the term. The leading type of establishment in this group consists of wholesale merchants of the conventional type, often called service or full-function wholesalers. For many trades or kind of business classifications, wholesale merchants are the only type of organization under *wholesalers only*. This is particularly true of those lines of trade which have little or no exporting or importing and where newer types of wholesalers have not entered the field.

Table 2 is analytical rather than a general summary, since the main body of the table shows in considerable detail statistics for the various kinds of business in which *wholesalers only* operate. *Kind of business*

statistics are given in complete detail for the United States in 88 classifications. Similar information is given in the State reports for the State as a whole and for cities down to and including 100,000 population. This table can not be presented for cities having less than 100,000 inhabitants without disclosing data for individual establishments.

Table 3, wholesale trade, by kind of business.—This table differs from Table 2 in that it includes *all types of wholesale establishments* instead of giving information for *wholesalers only*. Data are presented for practically all of the *343 kind-of-business classifications* in the United States Summary. In the State reports, similar data are shown for the State as a whole and for the larger cities under as many of the kind-of-business classifications as may be shown without revealing the operations of individual establishments. For the other cities with a population down to and including 100,000 inhabitants the *kind of business* is shown in a maximum of *88 classifications* which are major subdivisions of the *24 trade groups*. This procedure was dictated by the necessity of preventing disclosures, and at the same time showing as great detail as possible. For the same reason, *kind of business* statistics in this table are shown only by *24 groups* for cities of 20,000 to 100,000 population and in one line totals for cities of 5,000 to 20,000 population.

Table 3 is an elaboration of Table 1 and differs from it in the following respects: (1) It includes, in addition, statistics on the extent of credit sales, sales to ultimate consumers (at retail), and sales to industrial consumers; and (2) it shows the statistics in complete detail by kind of business instead of presenting them by *24 major trade groups* as in Table 1. It is, thus, possible to measure the importance of specialized trades and to afford business men an opportunity to compare their figures with those for similar enterprises. For example, Table 1 shows totals for the "Chemical, drug, and allied products" trade, whereas Table 3 gives similar data for concerns specializing in chemicals, for those engaged in the general line drug business, and for a number of specialized trades in the drug field included under the general group of "Chemicals, drugs, and allied products."

Table 4, types of distributors.—From Table 4 it is possible to determine the relative importance of *service wholesalers, limited function wholesalers, brokers, agents, assemblers, cooperatives* and *newer types of wholesalers* such as *cash-and-carry houses, drop shippers, and wagon distributors*. This table shows the number of establishments; number of employees, male and female; salaries and wages; total expenses; stocks on hand at the end of the year (at cost); net sales; credit sales; sales to ultimate consumers (at retail); sales to industrial consumers; and the average sales per establishment. This information is given for each type of

wholesale distributing organization. While Table 3 presents statistics by *kind of business* classifications, this table shows data by *types of distributors* referred to in this census as *types of establishments*. It shows the relative importance of each type of wholesale organization. Knowledge of this point, particularly when applied to a given *kind of business* as per Tables 5, 6, and 7, may lead to the adoption of sounder policies on the part of manufacturers and other producers in the selection of channels for the distribution of their goods. It should enable retailers and industrial consumers better to choose their sources of supply. To others it shows the wholesaling mechanism and its constituent parts in the proper perspective, substituting facts for guesses. In other words, it should be an aid to more intelligent competition.

Total expense figures, employees, and salaries and wages given in this table also throw light on the relative efficiency of the various types of wholesale middlemen and other distributing organizations. This table also shows to what extent each type caters to ultimate consumers and to industrial consumers, respectively. The statistics in Table 4 are given in detail for the United States. The State reports give similar information for each State as a whole and for cities of 100,000 population and over. For incorporated towns and cities having 20,000 to 100,000 inhabitants, data are shown only for two main divisions, namely, *wholesalers only* and *all other types of wholesale establishments*.

Tables 5, 6, and 7, types of distributors, by kind of business.—Tables 5, 6, and 7 present the *types of wholesale establishments* by the various *kinds of business*. They are shown separately for the States and certain cities in the State reports, but are combined in the United States Summary. Table 5 shows the *number of establishments*; Table 6, the *net sales*; and Table 7, *total expenses*. From these tables it is possible to determine the number of different *types of wholesale distributors* operating in a given *kind of business* and their net sales and expenses, and conversely, the different *kinds of business* in which a particular *type of wholesale middleman* or other organization functions. Table 5 presents the kind of business in *88 classifications*. For Tables 6 and 7 in the State reports only *24 classifications* can be used without disclosing data for individual establishments. Table 5 is of peculiar value because it shows not only the number of wholesale organizations existing in a given community or State, but it gives this number by *kinds of business* and *types of organization* within each *kind of business*. The importance of these statistics is enhanced by those shown in Table 6 which indicate how significant each *type of organization* is in every *kind of business* in which it is found, while Table 7 throws light on the relative costs of doing business on the part of each *type of wholesale establishment* in every *kind of business*.

Table 8, form of business organization.—Table 8 presents wholesale trade statistics by the *character of the business unit*. Similar information is shown in the State reports for the State as a whole and for cities of 500,000 population and over. The *number of establishments, employees, salaries and wages, total expenses, and net sales* are shown for *individual proprietorships, partnerships, corporations, cooperatives, and for all others*. From this table the significance of the corporate form as compared with the earlier individual and partnership types of organizations can be ascertained, also the importance of the cooperative form of organization. Relative efficiency as shown by total expenses is indicated and it is also possible to compare wages paid by the different types of business organizations, and the extent to which each type of organization affords a field for employment.

The statistics in this table are significant only in a general way. Their chief value is in indicating the extent to which the principal forms of business organization are emphasized in the wholesale field, the relatively large scale of operations on the part of corporations and the opportunities for proprietorships and partnerships, which may be regarded as synonymous with small scale enterprises. Substantial variations for any one form of business organization are, no doubt, to be found in different lines of trade and divergent methods of operation within a single trade. These differences between lines of trade and methods of operation even within a single trade may explain many variations in salaries and expense ratios as between the different forms of business organization.

Table 9, wholesale chains.—In Table 9 are presented statistics for multiple-unit organizations operating in the wholesale field. Establishments have been grouped in this table on the basis of the number of wholesale outlets under a single ownership. The *number of establishments, the net sales, and total expenses* are shown for each of the *24 major trade groups* in columns indicating the number of wholesale establishments under a common ownership. Thus it is possible to determine for a given trade, such as the grocery business, the number of establishments in each area which represent *single unit* businesses, the number of establishments which represent wholesale concerns operating *2 establishments, 3 to 5 establishments, 6 to 25, 26 to 100, and over 100 establishments*. A comparison of the net sales and the ratio of total expenses to net sales as between single-unit establishments and multiple-unit establishments shows the relative importance and differences in operating costs of each group. Similar information is presented in the State reports for the State as a whole and for cities with 500,000 inhabitants or more.

Table 10, employment, by kind of business.—Table 10 gives an analysis of employment in the wholesale field, broken down by *kind of business. Proprietors and firm members, and total paid employees, divided*

into *male and female* and into *executives, salesmen, and all other employees* are shown, together with *salaries and wages* for the last three divisions. The number of employees on the 15th of April, July, October, and December indicate the extent of *seasonal fluctuations* in employment. The table reveals the significance of wholesale trade as a source of employment to both men and women. It further indicates the relative position of the different kinds of business as sources of employment. Similar information is shown in the State reports, for the State as a whole, and for cities of 500,000 population and over, the information being given for as many of the 88 major kind-of-business classifications as possible, without disclosing data for individual establishments.

Table 11, size of establishments.—This table presents the *number of establishments, the net sales, and the total expenses* of operation for *wholesale merchants* by *size of establishment* based upon net sales. This information is given for the United States by *88 classifications*. In the State reports, it is shown for each State, and for cities of 500,000 population and over, by each of the *24 trade groups*. This table permits the comparison of small and large sized establishments in a given trade as to operating costs. It further indicates the differences existing between trade groups as to *average size of establishment and operating costs*, and may point out the *optimum size* for each kind of business. For the purposes of this tabulation only wholesale merchants (including jobbers), importers, and supply and machinery distributors have been included, in order to lend homogeneity to the statistics.

Table 12, number of establishments for cities, by kind of business.—This table as presented in the State reports shows the number of establishments by kind of business (based on the 24 standard trade groups) for all cities having 20,000 or more inhabitants. Complete information for these cities could not be shown in Table 3 without disclosing data for individual establishments. Table 12, therefore, is designed to give as much summary information as is possible.

Such a table for the United States Summary would be impracticable. Another table "Sales Made By Retailers To Other Retailers, By States" has been substituted. This table shows the amount of merchandise sold by retailers to other retailers on the wholesale basis, or the extent to which retailers engage in semijobbing.¹ This information is given by States and is based on the retail distribution kind of business classification. Coordination between the wholesale and retail kinds of business is, however, possible with the proper interpretations.

Table 13, commodity sales.—Wholesale distribution by commodities is designed primarily to satisfy the wants of two major groups in our economic society.

¹ The extent to which wholesalers engaged in semijobbing is shown on Tables 2 and 3 by kind of business, and Table 4 by type of wholesale establishments under the column headed "Sales to ultimate consumers (at retail)."

One of these consists of wholesale merchants and others engaged in wholesale distribution. A second and equally important group comprises producers and manufacturers. In addition to these two groups, commodity information has considerable significance for professional economists and consultants in market research, for advertising and research agencies, and similar groups.

The chief objective in presenting commodity statistics is to afford a picture of the wholesale channels through which commodities flow on their way from producer to consumer. The wholesaler can thus ascertain what lines of commodities are carried by other wholesalers and in what proportions these commodities enter into the sales of the wholesale group. Such information affords a basis for comparing his own distribution of sales with that for the group as a whole in which he operates and likewise for competing groups. Thus, for example, a wholesale merchant may be interested in determining not only the commodity lines carried by wholesale merchants in his own community and in other communities, but he may also find it of importance to study the lines carried by *manufacturers' sales branches, chain store warehouses, and other types of wholesale establishments* which are in competition with him. Further, an electrical wholesaler wishes to know to what extent wholesalers in other lines of merchandise handle electrical goods, and specifically, what types of electrical merchandise are so handled.

Manufacturers may glean from these statistics the total volume of sales of the particular commodities which they are producing. This information affords a basis for comparing their volume of output with the total for the country thereby giving them a concrete idea of the relative share of the market which they may reasonably hope to secure. This is not all, however, since the manufacturer is likewise interested in knowing who sells the commodity which he is producing. The commodity information presented by the wholesale census makes it possible to work out a more scientific method of distribution, since it provides facts on commodity outlets with respect both to the *trade groups* which handle the various commodities and the *types of wholesale establishments* which operate in those trade groups. It is thus possible for the manufacturer of electrical goods, for example, to determine the extent to which wholesale establishments which specialize in electrical goods handle such things as radios, electrical refrigerators, storage batteries, and the like. The analysis will further show which other trades handle these commodities but do not specialize in them. Thus, the automotive trade, the hardware trade, and the general merchandise trade may each market substantial quantities of electrical commodities although the electrical wholesale trade itself may account for the bulk of the business. Moreover, within a given trade group,

such as the electrical trade, it is possible to determine with greater accuracy than ever before the extent to which manufacturers maintain their own wholesale establishments and the volume of commodity sales which such establishments handle. Comparison can thus be made between *manufacturers' wholesale sales outlets, wholesale merchants, and such other types of establishments as chain store warehouses, cash-and-carry wholesalers, agents, brokers, and the like.* The relative importance of each of these types as sales outlets in each trade group may thus be determined. Many other purposes will occur to economists and statisticians engaged in market research and analysis which may be served by the commodity tabulations.

The commodity statistics are based upon facts submitted to the Census of Distribution on the schedules, which provided for an analysis of sales by commodities. In order to allow for the different degrees of detail which occur in the records of individual merchants, the commodity breakdown provided for information by *major commodity lines*, on the one hand, and *detailed commodity sales* under major lines, on the other. Thus, for example, the food products schedule provided for commodity information on canned goods as a major line, and under canned goods had provision for a further breakdown into canned fruits, canned vegetables, canned fish and sea foods, canned meats, and other canned goods not listed elsewhere. Excellent reports on the *major commodity lines* were furnished by most wholesale establishments, and in addition, many firms gave a considerable amount of *detailed commodity information.*

Provision was made on the schedules for *92 major commodity lines* and *162 detailed commodity items*, or a total of 254 combined major and detailed commodity classifications. Commodity statistics presented in this report for the United States are limited to the 92 major commodity lines listed on pages 51-52. The statistics in Table 13 are first summarized to show (1) the 24 trade groups or principal kind of business classifications; (2) the net sales by such trade groups; (3) the volume of commodity coverage by trade groups, i. e. the amount of business in a trade group which was reported by commodities; and (4) the per cent of commodity coverage for each of the trade groups, or the proportion of total sales which was reported by commodities in each of the groups, expressed in percentages.

Following the brief summary which shows the percentage of commodity coverage for each of the trade groups, the detailed commodity statistics are presented. The first item in this table is the total net sales by all trades for the United States or for a given State. Under this item is given the volume of sales which was not reported on a commodity basis. These sales are subtracted from total net sales, leaving a remainder which is known as "reported commodity sales." This

part of the table lists in alphabetical order the 92 *major commodity lines*, or as many of them as appear in a given State. These commodity lines appear in bold-face type, followed by an explanation in italics of the per cent of reported commodity sales; that is, the per cent which the total sales of the particular commodity constitute of the reported commodity sales appearing at the head of the table. This affords a basis for determining at a glance the relative importance of a particular commodity.

Under each commodity line are shown: (1) The total sales of that commodity; (2) the trade groups which reported that commodity; (3) under each trade group, the types of wholesale establishments, together with the volume of sales of that commodity reported by each type. Thus, the commodity "confectionery and soft drinks," for example, is shown in the Delaware report to constitute 1.1 per cent of reported commodity sales with a sales volume of \$1,233,000. This commodity line is handled by the "Chemical, drug and allied products" trade, the "Food products" trade, the "Grocery and food specialty" trade, and the "Tobacco and tobacco products" trade. Under the "Chemical, drug and allied products" trade, *wholesale merchants* are reported to have sold \$25,000 worth of confectionery and soft drinks. Under the "Food products" trade, *manufacturers' sales branches* reported sales of \$468,000 worth of confectionery and soft drinks; in the "Grocery" trade, *wholesale merchants* reported sales amounting to \$461,000; in the "Tobacco and tobacco products" trade, *cash-and-carry wholesalers* accounted for \$26,000, and *wholesale merchants* for \$253,000 of the sales of the *commodity line* known as *confectionery and soft drinks*. It is thus possible to determine quickly and easily the wholesale trade channels through which confectionery and soft drinks are sold.

In this connection, the term "commodity coverage" is of sufficient importance to merit special explanation. In the first place, not all of the wholesale schedules gave complete information on sales by commodities. Had all reports been broken down on this basis, the sales analyzed by commodities and total net sales would have been the same. Since the records in some establishments were such that no accurate breakdown could be secured by commodities, total *commodity sales* in any given trade are usually less than total *net*

sales in that trade. The term "commodity coverage" is used by the Census of Distribution to express this fact. This expression simply means the extent to which *commodity sales* compare with *net sales* or the proportion of net sales that is broken down by commodities. Thus, if the *net sales* for a given trade are \$100,000,000 while *commodity sales* in that trade total \$90,000,000, the commodity coverage is 90 per cent.²

The percentage of commodity coverage has peculiar significance for those who are interested in the construction of an estimate of total commodity sales. To illustrate, it may be desirable to determine the total volume of canned goods which was sold in the United States. Canned goods are sold in the "Grocery" trade and in several other kinds of business. In the "Grocery" trade the commodity coverage is 83.3 per cent and the total net sales are \$9,537,323,000, which means that the commodity sales in the "Grocery" trade accounted for \$7,942,524,000. Of this amount \$1,136,401,000 was reported in canned goods. Since the "Grocery" trade in general had a commodity coverage of 83.3 per cent, it is reasonable to assume that the \$1,136,401,000 of canned goods reported constitutes 83.3 per cent of the total volume of canned goods sold in the "Grocery" trade. It is thus possible to estimate the total volume of canned goods sold in that trade and, in like manner, the total volume of canned goods sold in the "Food products (not elsewhere specified)" trade, the "General merchandise" trade, and in other trades, thus arriving at an approximation of the total volume of canned goods sold through all trades in the entire United States. This figure would require considerable adjustment, however, due to the fact that there are a number of types of wholesale establishments included which sell to other wholesalers. Deduction of sales by *agents, brokers* and *other types* which are known to sell largely to the wholesale trade is essential, if duplication is to be eliminated. Furthermore, it is necessary to point out that the percentage of commodity coverage is not shown separately for each type of establishment but only for the trade group, and must therefore be computed before an accurate estimate can be made. For an approximation, however, it may be assumed that the general commodity coverage for the entire United States of 89.1 per cent applies to each type.

² Actual over-all commodity coverage for the United States was 89.1 per cent, as shown in Table 13.