DOES DISTRIBUTFON COST TOO MUCH?

## A TWENTIETH CENTURY FUND INVESTIGATION

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# DOES DISTRIBUTION COST TOO MUCH? 

A Review of the Costs Involved in Current
Marketing Methods and a Program
for Improvement

THE FACTUAL FINDINGS
By PAUL W. STEWART and
J. FREDERIC DEWHURST with the arsistance of LOUISE FIELD

THE PROGRAM BY THE COMMITTEE ON
bistribution

New York
THE TWENTIETH CENTURY FUND
1939

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Under the Dirbction of Raymond Rich Associatis

## FOREWORD

The costs of distribution are paid by the ultimate consumer. Every time we buy a package of cigarettes, a pair of socks or a loaf of bread, we are directly and personally concerned with the expense of getring it from its point of origin to the store counter-and of persuading us to buy it. Because these costs are fully as large as, or larger than, the original costs of production, and because less has been done to make distribution more efficient, curting marketing expense offers a greater opportunity to get lower prices and a higher standard of living for all of us.
Largely because distribution so closely concerns us all, it has stirred up a whirlwind of conflict and controversy. It has become much more than a question of economics or business. The battles of chains and independents, of private enterprise and cooperatives, of super-markets and mail-order houses, have been waged in the field of politics as well as in the market place. The issues have been carried into municipal councils and state legislatures, and into the national Congress.
The country has come to need an accurate over-all picture and appraisal of the distribution system as a whole and a program for making it more efficient-all from the point of view of the general public. We ought to be able to see how the system and its parts actually work and how they can be made to work more successfully.
This has been the goal of the survey reported in this volume. It has been carried through by the Twentieth Century Fund's usual method of dealing with controversial public issues-by a special Committee and research staff. A special staff of investigators gathered the essential facts on the methods and costs of distribution in the United States and reported their findings to the Fund's Committee on Distribution. The Committee, composed of men and women of widely differing interests and points of view, but with special knowledge of the field, used the research report to formu-
late a series of concrete recommendations aimed to improve the methods and reduce the costs of distribution. Chapters 1 to 10 of this book constitute the research report, and Chapter 11 is the program of the Committee.
The Fund is indebted to several other persons than those named on the title page for contributions to this book and for aid in the investigation. The section on transportation costs in Chapter 8 is based directly on a report prepared by Robert J. McFall, who was also responsible for the statistical analysis from which the Flow of Goods Chart and the estimate of total costs of distribution were derived. Edwin C. George wrote most of Chapter 8, while the seccion on super-markets in Chapter 4 was written by Victor H. Pelz, and the sections on consumer credir costs in Chapter 8 by F. R. Hoisington, jr . Research and editorial aid has been given at various stages in the preparation of the report by Jean F. Carroll, Herbert W. Bohlman, Dorothy Van Doren, Charles W. Wood and Carolyn Stetson. In addition, many organizations and individuals in the field of distribution have been generous in contributing advice and information. To all those who have cooperated in the undertaking -and especially to the members of the Committee who contributed generously of their time-the Fund extends its deep appreciation.

Evans Clark<br>Executive Director<br>The Twentieth Century Fund

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## Cbapter 1

## THE CHALLENGE OF DISTRIBUTION

## 1. The Problem

The mea that it costs too much to distribute goods and that modern methods of distribution are wasteful and inefficient has taken root in the public mind. Every day the consumer is exposed to sights and sounds which seem to confirm this impression-the spectacle of four gasoline stations, one on each corner of a crossroads, the constant bombardment of costly radio programs selling everything from cigarettes to pianos, and the frequent complaint of the farmer who gets only four or five cents of the fifteen cents we pay for a quart of milk.
Quite naturally the automobile driver and the cigarette smoker and the housewife begin to wonder if all the costs of placing goods at their disposal are necessary and warranted. And since they themselves have to pay all these costs, they question so great a toll on their purchasing power. Added to this is the general belief that while invention and scientific management have increased the efficiency and lowered the costs of making goods, the cost of distributing them has remained high.

It is the purpose of this volume to describe and measure these costs of distribution and to find out, if possible, the reasons for the spread between the cost of production and the price the consumer pays.

## Efficiency Drive Came First in Production

A presumption that distribution is less efficient than production is raised by the fact that the feld of distribution appears to have been neglected at the very time that the problems of production were being attacked with such vigor and success. For decades the
inventive genius of American business has been chiefly dedicated to the lowering of production costs through mechanization and scientific management and to the elimination of inefficiencies in making goods. The results have astonished the world. It is equally true that the same inventive genius has hardly begun to be applied to the reduction of distribution costs. Originality and inventiveness have not been lacking in distribution but in this field they have been used all too often to persuade people to buy more goods rather than to reduce their price.

As early as the eighties of the last century Frederick W. Taylor commenced his epoch-making experiments in time and motion study and laid the foundations of the scientific management movement. In the years that followed, the work of Taylor and his successors brought revolutionary improvements in production technique which were wridely adopted by American industry during the World War.

The attack on wastes in production culminated in the work of the famous Committee on Waste in Industry appointed by Herbert Hoover in 1921.' The report of this Committee unquestionably made a deep impression on American industrial leadership. The series of concrete findings and recommendarions brought out by the Committee resulted in widespread adoption of improved methods and further lowering of production costs.

Organized efforts to attack mounting distribution costs, however, did not begin on an important scale until about fifteen years ago. It was not until 1924 that the federal government recognized the need for further knowledge of distribution by the establishment of the Domestic Commerce Division in the Department of Commerce. At about the same time a series of domestic distribution conferences were held by the United States Chamber of Commerce. Since then there has been a rapid expansion of interest. The Boston Conference on Distribution, attended by businessmen and educators, has worked for the past decade on the problems that beset distribution. The American Marketing Association has brought about the exchange of ideas and experience on educa-

1. Waste In Indmstry, Commirtee on Elimination of Waste in Industry of the Federated American Engineering Societies, Washington, D.C., 1921.
tional and research problems. Schools of business and research bureaus connected with the universities have made notable contributions. Also many trade associations in the distribution field have done valuable work through exchange of information, conferences and educational programs.

Not until 1929 was the first Census of Distribution taken. Before that time only sample studies were available and wide areas of distribution had never been described and measured. Further data on American distribution were collected by the Census Bureau in 1933 and again in 1935. ${ }^{2}$ From these studies the first picture of quantitative changes in distribution over a period of time is now available. A rising tide of other literature measures the attention which distribution is now attracting from individual businessmen, trade associations, schools of business, and government. departments.

## Changing Aspects of Distribution

While distribution costs are under intensive discussion and debate, new conditions and necessities keep altering the nature of the distributive agencies themselves. Where the movement of goods has met too much friction in one channel, other channels have been opened up to convey goods more effectively to the consumer. The growth in recent years of new agencies of distributionchains, voluntary chains, super-markers, manufacturer-owned distributive agencies, and retailer-controlled sources of supply-and the decline of older forms bear witness to the practical recognition of costly practices that clung to the old established agencies and impeded their efficiency.

Existing agencies naturally have tried to control or impede the development of these new forms of distribution, particularly in the retail field. A large body of laws has been enacted in recent years to regulate various distributive practices, and particular channels and mechods of distribution have been subjected to taxation as

[^0]well as regulation. Compecition has been restricted and regulated by price-fixing devices supported by law. Even the free flow of goods across state boundaries within the country has been handicapped by legal restrictions and protective measures. Distribution is today more than ever a moving, dynamic process, characterized by ceaseless change and by unending resistance to change.

## What Is Distribution?

Before looking more closely at the problems and costs of distribution, it is necessary to define more precisely the meaning of distribution. Distribution and production together include a vast complex of activities in which businessmen engage in an effort to make and sell goods at a profit. Both production and distribution are essential and often overlapping aspects of a single comprehensive process-that of supplying the consumer with the kind, quality, and quantity of goods he wants, delivered at the time and place he desires and at a price he is willing to pay.

Economists have made the seemingly practical distinction that production is the addition of physical or form utilities to goods whereas distribution is the addition of time and place utilities. Production, then, involves the physical extraction or creation of useful materials and their subsequent processing, fabrication, and transformation, first into semi-finished and then into finished forms. Distribution includes the transportation of goods from the point of original or intermediate production to the place of sale or further fabrication, the storage of goods until they are needed, and finally the merchandising, display, and advertising of goods and their actual sale or transfer into the possession of the ultimate buyer.

Goods are produced, therefore, by millions of workers in forests and fisheries, on the farms, and in mines and factories, and distributed by other millions who operate ships and railroads and motor trucks, warehouses and storage elevators and the hundreds of thousands of wholesale and retail establishments and other agencies needed to deliver these goods to consumers.

It is a common mistake to regard distribution as confined to finished consumers' goods and thus solely the function of the middleman and retailer, who are usually expected to shoulder the
blame for high distribution costs. Distributive operations are a part of every step in the entire process beginning with the production of raw materials and ending with the final sale of the finished article. Actually a large part of the total cost of distribution is borne by producers, manufacturers and wholesalers before the finished product reaches the retailers' shelves.

## Defining Distribution Costs

Every time the finished article-or the materials or parts of which it is made-changes hands, selling and clerical expenses are incurred. These may be small in the earlier stages of distribution, involving little more than transportation charges and brokerage fees and commissions. But in the later stages of the process, especially in the case of specialized fabricated products, selling costs may include compensation and traveling expenses of a corps of salesmen, executives' salaries, office and clerical overhead and selling and promotion expenses. To these expenses must be added the costs of physical handling-crating and packaging, shipping and transportation, and frequently storage and warehousing-which are also incurred whenever a product is sold and delivered to a buyer. Other costs of an indirect nature, such as the financing of goods in transit or storage, including instalment credit, as well as the risks and losses arising from spoilage and obsolescence, are also necessarily a part of the cost of distribution.

No one can study our modern economy, however, without realizing that a sharp separation between the functions of distribution and production has to be more or less arbitrary. Much which passes for production contains elements of distribution, while much even of retail distribution contains elements of production. Grocery stores may prepare and package bulk foods for sale; department stores may make or alter clothes to the order of the customer; a restaurant cooks the food it serves; a dealer in electrical goods alters and installs equipment sold to a customer. Other direct and indirect operations in the distributive process, such as assembling, labeling, and sorting and grading, may be performed by either the producer or distributor and are not definitely assignable to either production or distribution. Some general business costs of manufacturers and producers, such as insurance, taxes, and financing,
cannot be allocated to either production or distribution but are common to both phases of the business.

With these distinctions in mind, we can try to get a perspective of some of the outstanding facts about distribution in relation to production. In order to get some idea of the changes which have taken place in the amount of effort used to distribute goods in contrast with the labor expended in producing them, the proportion of the population engaged in performing the two functions and the volume of production in the decades since 1870 have been studied.

Our economic structure has experienced vast changes during this period. A host of commodities has been introduced into our everyday life which were undreamed of half a century ago. The development of so-called mass production with its many economies has been the outstanding feature of the last two decades. Yet mass production without mass distribution is impossible. Factories cannot operate unless there is some mechanism for continuously passing their products on to the consumer. This implies not only the physical task of transporting goods but the merchandising and promotional efforts involved in what has come to be known as demand creation. All of these activities require the expenditure of effort and money and it is inevitable that some of the savings effected by mass production have to be utilized in the creation of that mass demand which makes the former possible.

## 2. Trends in Production and Distribution

Although actual costs of distribution-or of production-cannot be measured prior to 1929, indirect evidence shows that the spectacular gains in production efficiency have not been duplicated in the field of distribution. The ever-expanding role which distribution has been called upon to play in our economic system is strikingly demonstrated by the increased absorption of our working population in distributive trades and occupations.

At the time of the Census of 1870-less than seven decades ago -more than three-fourths of the nation's labor force was engaged in the production of physical goods, and less than a fourth in dis-
tributive and service activities. Agriculture alone in that year required the services of nearly $7,000,000$ persons, or more than half of the nation's total of less than $13,000,000$ gainful workers. Although the actual number of farmers and farm workers was half again as large in 1930 as in 1870, the proportion of the total working force engaged in agriculture had shrunk from 53 per cent to about 21 per cent. Productive workers in the manufacturing and mechanical industries (which include construction) comprised less than 21 per cent of the 1870 working population, and about 29 per cent of the 1930 labor force, but the increase in the actual number of workers in these industries was much less than in the service and distribution occupations.

## Increasing Proportion of Workers in Distribution

Taken as a whole, the proportion of workers in production of goods had fallen to little more than balf of the total by 1930, while distribution and service activities employed twice as large a proportion as in 1870. The changing distribution of the nation's labor force among various major kinds of activity is shown in Figure 1.

The percentages shown in the chart furnish only a rough indication of changing trends, not a precise measure of the exact proportion of workers engaged in each of the various productive, distributive, and service functions in any one year. Many workers classified by the Census in manufacturing are engaged in shipping, purchasing, and warehousing operations in the factory and could therefore properly be assigned to distribution. On the other hand it is clear that some of the transportation and communication employees are engaged in the distribution of services rather than goods. Moreover, clerical workers, shown as a separate group in the Census, and accounting for more than 8 per cent of the total in 1930, are all obviously engaged either in production, distribution, or service, but probably chiefy in distribution.

In spite of the fact that Census data do not permit precise comparisons, Figure 1 gives a rough measure of divergent employment trends during the sixtr-year period from 1870 to 1930. Moreover, it seems highly probable that the changes during that period reflect


Figure 1. A steadily falling proportion of the nation's workers has been required in the production of goods, while the proportion of workers engaged in distributing them and in elerical and service activities nearly doubled between 1870 and 1930 . (Source; Table A.)
well-established trends which have continued since the time of the last Census. A smaller and smaller proportion of the nation's working force is needed to extract and transform materials into fint ished goods and a steadily growing proportion is engaged in transporting and distributing these goods and in providing personal, professional, and public service.

Clearly the addition of form utilities to physical materials is requiring a smaller share of our national human effort, while the addition of time and place utilities, or the transportation, storage, distribution, and selling of these goods, is absorbing a larger share. These divergent trends furnish no indication of relative efficiency in either production or distribution since they take no account of the vast increase in the amount of goods produced and distributed to a greatly increased population and the changing scope of these two economic functions. They merely indicate that in relative terms the work of producing goods absorbs less labor and that of distributing them requires more.
As a matter of fact, the actual number of workers engaged in both production and distribution has shown a great expansion since 1870. In distribution, however, there is no evidence of a slowing down in the rate of growth, while employment in some if not all branches of production appears to have passed its highest point. Agriculture had more than a million fewer workers in 1930 than in 1910; forestry and fishing and mining reached an employment peak in 1920; and there is considerable evidence that the next Census will show a decline in the number of workers in manufacturing and mechanical industries. The actual distribution of gainful workers among various industries and occupations is shown in Table B of the Appendix.

Employment Compared with Goods Produced and Distributed
Comparison of employment and occupational shifts over the sixty-year period from 1870 to 1930 with the growth in the physical volume of goods produced and distributed gives a rough idea of trends in the relative amounts of human effort devoted to the production of goods and to their distribution.

Allocating the number of persons classified as clerical workers
in each Census year to each of the three branches of economic ac-tivity-production, distribution and service-gives a rough approximation of the total number of gainful workers engaged in each branch. Such estimates, together with figures on population, are shown in Table $C$ of the Appendix. It must be emphasized that the actual figures for each year derived in this way do not pretend to be accurate because of basic difficulties in reclassifying Census data. Converted into index numbers, however, by expressing the 1870 value as 100 and the numbers of workers in subsequent Census years as percentages of the 1870 total, these figures furnish a rough measure of employment trends.

These index numbers of employment trends in production and distribution are compared in Figure 2 with index numbers of population growth and with an index of the physical volume of goods


[^1]produced and distributed in the United States in each decennial Census year since 1870. Population little more than trebled during this sixty-year period while the volume of goods produced and distributed in the United States was more chan nine times as great in 1930 as it was in 1870. This nine-fold increase in the physical volume of goods available for consumption, in the face of a threefold growth in the number of consumers, is striking evidence of the amazing advancement that has occurred in material well-being in the United States since 1870.

That the entire process of producing and distributing the goods needed by the population is being carried on today far more efficiently than in 1870-i.e., with much less expenditure of human energy per unit of goods produced and distributed-is also apparent. With an increase from 100 to 910 in the volume of goods, the number of gainful workers engaged in their production and distribution increased only from 100 to 351 . Employment trends in production, however, show striking differences from those in distribution. For every 100 workers engaged in producing goods in 1870 there were 271 in 1930, and these workers were turning out more than nine times the total volume of goods produced in 1870. Employment in distribution, on the other hand, increased from 100 in 1870 to 877 in 1930, or nearly nine times-almost as large an increase as occurred in the volume of goods distributed.

These relationships are shown more clearly in Figure 3, which provides an approximate statistical measure of per capita changes in the production and distribution of commodities during the 1870-1930 period. The volume of goods produced and distributed per capita of the population increased from 100 to 286 , or nearly three times. The average amount of goods handled per worker by workers in production and distribution combined was over two and a half times as great in 1930 as in 1870 . Workers in distribution, however, handled only 4 per cent more goods per capita in 1930 than they did in 1870, while the average amount produced by production workers increased by three and a third times.

On their face these figures would seem to indicate that efficiency in production has increased to a striking extent during the past several decades while labor efficiency in the distribution process
has shown very little improvement. Valid conclusions on the efficiency of the distribution process, however, cannot be based on these statistics alone. As will be shown in the following section the distributive function has experienced vast changes in its scope and nature during the past few decades. Changes in the organization of industry, such as mechanization and mass production, and the geographic concentration of manufacturing, which have resulted in higher per capita output, cannot be adapted to the processes of distribution except on a very limited scale. Still more important, these changes in industrial organization have thrust a much greater burden on the distributive system. In becoming more efficient production has become more restricted in scope, while the range of distributive operations has been greatly widened.

## PER CAPITA VOLUME OF GOODS PRODUCED AND DISTRIBUTED



FIgURE 3. The striking advance in productive efficiency is evidenced by the fact that the output of goods per worker engaged in production was nearly three and a half times as great in 1930 as in 1870 . The volume of goods handled per worker in distribution, on the other hand, showed little change. (Sowre: Table D.)

## 3. The Expanding Rolb of Distribution

A closer view of some of the principal reasons for the varying trends in the per capita production and distribution of goods is in order. Changes in the character of our economic needs and in the system that has grown up to supply these needs are partly responsible. The distributive system today provides a vast range of new and different services, assumes increased costs and risks, distributes a multitude of new and complex products, and performs functions formerly performed in the household by the consumer or in the factory by the producer.

In part these expanded services are a natural and inevitable concomitant of technological progress and an advancing standard of living. To regard these new services as being inherently unproductive and wasteful reflects an attitude as uncritical and superficial as that of the Physiocrats nearly two centuries ago. They believed both manufacturing and trade to be sterile occupations, in contrast to agriculture, which alone was "truly productive" because it created commodities.
Under the non-specialized conditions prevailing in the United States a century or more ago, both the household and the local community were far more nearly self-sufficient than they are today. On the Colonial farm-and the vast majority of the population then lived on farms-the family was both the producing and consuming unit. The small surplus of farmstuffs and raw materials was either bartered for other goods or services within the community or disposed of through local dealers for shipment to distant markets. Most of the factories of that day were little handicraft shops supplying neighborhood needs and using local raw materials.
Under these simple economic conditions the middleman played an insignificant role. Because most products were not really distributed at all in the modern sense, costs of distribution were negligible. With the rapid development of the country, however, the growth of cheap transportation, the increase of commercial manufacturing, the trend of population to the cities, the growth of a banking and currency system, the advancement of the standard of living and expansion of human wants, distributive operations have
become a more and more vital and essential part of economic life.

## Specialized Production

One of the most striking features of the complex economic society of today in contrast with the simpler life of a century ago is the increasing specialization of production. Instead of supplying most of his own needs with his own produce the modern farmer gains his livelihood for the most part through the sale for cash of one or a few commodities. These products may be sold and resold many times, transported hundreds or even thousands of miles, held in storage for weeks or months, and processed and packaged before they are finally delivered into the hands of many millions of consumers.
Mechanization of operations and mass production of specialized articles have become even more characteristic of modern industry than of modern agriculture. The village shoemaker using leather tanned from local hides and catering to the needs of a small community has disappeared. In his place are factories employing thousands of workers, each performing a single operation in the manufacture of a standardized product which can reach its ultimate buyer only through the intricate channels of the modern distributive system. Nor is the need for a complex system of distribution limited to the markering of the finished pair of shoes. Extending back from the shoe factory to the distant cattle ranches, to the cotton and rubber plantations and other sources of raw material, is another series of specialized operations and industries. The products of each require costly distributive services in order to supply the ultimate consumer with a pair of shoes sarisfactory to his feet, his eyes and his pocketbook, and delivered when and where he wants them.

## Specialized Areas of Production

Specialized machine production usually is most advantageous in large plants. The manufacture of many articles formerly produced in almost every locality has now become highly concentrated in a few favorable areas, usually because of accessibility to supplies of raw materials or skilled labor. More recently, it is true, the de-
velopment of moror-truck transportation and electric power has freed industries from their dependence on railroads and nearby coal supplies. Together with the westward movement of the population, these developments have brought about a wider dispersion of manufacturing plants, particularly among industries making the lighter kinds of simple products for home consumption.
But in many industries concentration in a particular area per-sists-sometimes through inertia-long after the original reason for it has disappeared. Clock and watch manufacture, for example, is still concentrated in Connecticut and Massachusetts, the original centers of production. New York alone produces 70 per cent of all women's and children's clorhing, while over half of men's wear comes from New York and Pennsylvania. Three states account for over 78 per cent of all carpet and rug production, four for 80 per cent of hat manufacture, while one state, New York, produces 87 per cent of all fur goods.

Among many of the new fabricated products there is also a high degree of geographic concentration. Michigan manufactures more than half of the automobiles and Ohio over two-thirds of the rubber tires. Three states account for over half of the radios and phonographs, three others for half of the refrigerators, and four states for 83 per cent of household washing and ironing machines. ${ }^{3}$
Regional concentration bas become pronounced even in agriculture. The intensive study by agricultural colleges and experiment stations of the culture of specific products has encouraged their production within limited areas. Specialized agricultural machinery and the development of refrigeration, storage and transportation have made such concentration possible. Even perishable commodities, like milk and vegetables, which formerly had to be produced near the consuming market, are now being produced in specialized favored areas.
While specialized quantity production in highly concentrated areas has resulted in lower costs and increased efficiency in production, it has at the same time made distribution more complicated and costly. Concentration of production requires the transportation
3. Distribution Services and Cosis, Chamber of Commerce of the United States, Washington, 1939, p. 10.
of raw marerials to producing centers and of finished products back to dispersed and distant markets. This transfer takes time, requires intermediate handling and financing, and involves risks and costs not present in simpler types of economy.

Another distributive cost comes from the concentration of population in the producing centers. High urban land values and rents, excessive terminal and delivery costs, the very congestion of living and working conditions, magnify the difficulties and costs of dis-tribution-not only in supplying raw materials to the specialized factories of the city and delivering their finished products, but in supplying the necessities of life to the population.

## Factories Displace Homes as Producing Units

Distribution-as well as factory production-bulks larger today also because so many things that used to be done at horne are now done in factories. Spinning and weaving are no longer carried on in the home. The ready-made clothing industry has largely taken the place of home sewing. Even canning and preserving fruits and vegetables and baking bread, cakes and pies, which were a normal and necessary part of the housewife's duty a generation ago, have now been largely transferred from the home to the factory.

All these things can now be done in the factory more efficiently and more cheaply than in the household. But this change has created new problems and new risks in distribution. Instead of selling the housewife staples like flour and sugar to be processed in the home into bread and pastry, or standard piece-goods to be manufactured into household goods and dresses, the retail distributor today must carry in his stock a wide variety of finished products from which the housewife can make her selection. Most of these products formerly produced in the home must be sold in small quantities, for they are perishable either because of actual physical deterioration or of rapid style obsolescence. The risks and cosss of distributing them are far greater than those of merchandising the staples the family used to buy. As the commercial producer has expanded his function, so the distributor has had to assume new responsibilities. Standardized goods must be sold in large quantities, but in small units, to millions of consumers. With the growth
of city populations and the crowding of families into smaller and smaller apartments with little or no storage space, the packaging of foodstuffs and other commodities has become a new and important phase of distribution.
The emphasis on the hygienic preparation of food has contributed still further to the success of the packaging industry. Every kitchen cupboard, however small, is today stacked with cartons of rice, sugar, coffee, and macaroni elaborately encased in air-proof wrappings to preserve freshness and flavor, and each likely to weigh a pound or less. Beside the paper cartons stand a row of canned goods-for the same reasons.

The improvement of refrigerating methods has been responsible for other changes in the marketing of foodstuffs. California fruits and vegetables now travel across the continent to eastern markets at all seasons of the year. Refrigerated ships bring fruits from Sourh America to New York in January. Fresh meat available every day has become such a commonplace that nobody marvels at it, although the steer is raised hundreds and perhaps thousands of miles from the dinner table on which the roast appears. The consumer now demands variety in his food, and the retailer must furnish out-of-season goods or go out of business. Needless to say, the merchant's tasks and risks are correspondingly increased.

## Increased Selling Activities and Sales Pioneering

Along with a rising standard of living and the development of mass production, the creation of demand-selling the consumerhas become an increasingly important factor in distribution. The producer must persuade the consumer that his goods are necessary and important. The consumer, ready enough to be convinced so far as his means allow, has steadily improved his standard of living. The burdens of the housewife have been lightened by ready-to-wear cloches and ready-to-serve foods which supply her family with greater variety and quantity than she could possibly have provided by her own efforts. But she has had to be informed about these new products before she was ready to buy them.
Unless we consider not only the volume but the nature of these new things, any true conception of modern distribution becomes
impossible. They are things which people want, but it does not follow that they are things which the consuming public has demanded on its own initiative. Nor does it follow that producers have produced merely what they wanted to produce and then cajoled the consuming public into buying them. The automobile, moving pictures, radio, electric appliances, modern heating and plumbing-these things were not only beyond the reach of the masses in 1870 but beyond anybody's reach. There is little question today that they supply a demand; but no one could be absolutely certain in advance just what the demand would ultimately be.

Somebody had to guess. Somebody had to use imagination. Somebody had to back up this imagination with scientific research, not merely to discover just what would be wanted, but how, if possible, the wants could be supplied. The task of distributors, therefore, is not merely to fill an existing demand as in the case of bread or shoes or soap, but to create new demands for new products. It is a process which is necessarily costly and necessarily accompanied by experiments which do not succeed, by efforts which do not materialize, and even by the temporary production and distribution of much which upon more mature thought we wonder why we ever bought.

But not all costly advertising and promotion can be defended on the grounds that it is necessary to educate the consumer to new products. The consumer needs no education as to the qualities of cigaretres, toothpaste, canned goods, gasoline, and a multitude of other standard commodities. Such products he would buy, whether urged to do so or not, which means that the money spent in promoting their sale must be charged off as one of the costs of competition. When it takes this form, however, competition in distribution is often likely to result in higher, rather than lower, costs and prices.

The apparent inefficiency and wastefulness in distributive operations is due in part to the multitude of small units and the overcrowding of the field in recent years. Because it is so easy and takes so little capital to get started, distribution, like agriculture, has become a residual occupation. When workers are forced out of highly organized industry through incompetence, old age, or by
the introduction of labor-saving machinery, they may turn to house-to-house canvassing or operating a roadside stand or a gasoline station or-at their most abject stages-to passing out advertising cards or carrying a sandwich board. Insofar as this labor on the average is less efficient and less productive than that engaged in the large-scale and more highly organized occupations, it adds to the wastefulness of distribution.

## 4. Opportunities and Handicaps

Because of its expanding role distribution has taken an increasingly large portion of the consumer's dollar over the past half century. But the divergent trends between production and distribution costs do not in themselves prove that distribution costs are too high. That this is sometimes true, however, is suggested by the subsequent chapters of this book.
To lower these costs is a great challenge to American ingenuity and courage. The effort to reduce the cost and increase the efficiency of distribution cannot be compared with the amount of effort that has gone into production. But the opportunity for cost reduction in distribution is great. The spread between cost of production and final selling price to the consumer of most commodities is larger than the total cost of production. A correspondingly larger area exists, therefore, in which possible economies may be sought.
While the potentialities of cost reduction in distribution may possibly be greater than in production, the difficulties to be surmounted are undoubtedly greater. Mechanization is an example. The processes of manufacture are far more susceptible to machine technique than those of selling. Shoes today are made with a minimum of hand labor but it is difficult to imagine mechanical devices supplanting shoe salesmen withour a revolutionary change in the attitude of the customer.
Furthermore, the production manager can standardize and regulate both the use of materials and the conduct of labor far more exactly than can the executive of a retail store. The flow of work and the functions of labor can be specialized to a far greater de-
gree in the factory than behind and over the counter. Because the retail salesman is dealing not with materials, as is the factory worker, but with men and women, each situation is a new one, and difficult to plan in advance.
Another difficulty is often more apparent than real-the displacement of labor. A lowering of the cost of distribution ordinarily would involve a reduction in the amount of labor required to distribute a given quantity of goods. But this should not mean more than temporary unemployment. Lower prices resulting from lower operating costs would release purchasing power and expand the market for goods, and this in turn would lead to greater production and increased employment.

Throughout this book it has been assumed that the important purpose of the various elements of the economic system-distributors, producers, capital, and labor-is not to serve their own individual ends except as a means of getting things to people and satisfying human wants. From this standpoint, lower prices, which mean increased purchasing power for the consumer, are the major objective. Obviously these lower prices must be achieved by improved methods and lower costs-not by cutting wages. There must be a constant introduction of better ways of producing and distributing more and more of the things demanded by consumers. The preservation of the status of any particular group of distributors is of secondary importance.
In the chapters that follow an attempt is made to picture the essential elements of the problem of distribution and its costs, which present such a challenge to American business genius, and to indicate some of the ways in which an attack on the problem can best be made.

## Cbapter 2

The consumer who knows little about the processes of distribution is likely to blame the retailer or the middleman for what may seem to him an exorbitant price he has to pay. If he is told that it costs more to sell a certain article than it does to manufacture it, or that the retailer makes a profit of fifty cents on something for which he has to pay a dollar, he may easily conclude that he is the victim of profiteering and waste.

This is not meant to imply that retail prices, even in a highly comperitive market, are never exorbitant. The veriest tyro in the retail field, however, soon learns that he may make no profit at all and may even lose the capital he has invested in the business, although he takes a seemingly huge profit on every sale he makes.

It is in the price he has to pay that the average consumer comes in contact with the system of distribution; and the spread berween the cost of production and the retail price of consumer goods surely has significance. A study of the costs of distribution, therefore, can well begin right there. The figures, however, will have little real significance, if it is assumed that the price spread represents nothing bur the dealer's profits or that a small spread necessarily indicates efficiency in distribution. In many lines of trade, 30 or 40 per cent of the price received by the retailer is paid out for wages, salaries, rent, and other operating expenses; and most of the remainder represents the cost of goods sold, so that the retailer retains as profit only a few cents out of what the consumer pays.
It is also important to remember that the mark-up or price spread of a particular article at any one time may be much more, or much less, than the actual cost of distributing that product. An exclusive gown shop, for instance, might be able to sell a
"Paris model" to early buyers at two or three times the normal profir, and at the end of the season be compelled to accept less than actual cost for an identical product. A drugstore, on the other hand, might find it profitable to sell a nationally advertised article as a "loss leader" at less than cost, making up the difference on increased patronage for other products.

## Lack of Uniformity in Price Spreads

Entirely aside from these extreme examples, there are infinite variations in the percentage mark-up or price spread for similar articles in the same line of trade, for identical articles sold through different types of outlers, for different qualities of the same kind of product, for branded and advertised commodities as distinct from unbranded items, and for exactly the same article sold in different markets or at different times to meet varying competitive conditions. In short the main feature of mark-ups and price spreads is a lack of uniformity among different lines of trade, kinds of goods, and individual products.
This is not surprising in view of the way in which manufacture and distribution are carried on. The typical manufacturer may produce and sell dozens or scores of individual products. The typical wholesale dealer or retail merchant usually carries hundreds or thousands of separate items. Each of them is interested primarily in netring a profit on the operations of his establishment as a whole, and only secondarily in profits or losses on specific items. Hence his mark-up on any particular article is the result of a variety of factors and influences of which the actual cost of distribution is only one.
Even if the cost of distributing a specific product could be accurately figured-which is usually impossible with present accounting practices-other considerations might dictate a price higher or lower than one which would just yield an average profit on the operation. Traditional pricing policies in the trade, consumer price habits, formal or informal resale price agreements, a desire to increase the volume of sales or to invade a new price range, obsolescence factors, market prices established by competitors, and a variety of other considerations may be fully as important as actual costs in derermining the mark-up and price of a particular product.

## The Facts Are Hard to Get

It is hard to get facts on price spreads because manufacturers, wholesalers, and retailers-even if they have figures-are reluctant to give them out. This secrecy is largely due to the public's habit of looking upon large mark-ups in themselves as evidence of large profits, even though the distributor may be making only a reasonable profit, or even showing a loss on his operations as a whole. One of the large manufacturers of food products some years ago gave out full information on operations and sales, showing gross profits and average mark-ups, which were in fact closely comparable with those of his competitors. The company's retail customers, however, egged on by the company's comperitors, hectored the salesmen of the company about what they considered excessive profits. The company was forced to abandon this innovation. It now conceals the figures until its competitors will agree to publish their own.
In other cases, undoubrediy, secrecy clothes a guilty conscience: a realization that prices are unjustifiably high because of excessive profits or inordinate advertising expense. Sometimes, even when mark-ups are so small that they could not possibly be criticised, rigid secrecy is maintained out of fear that the figures would be distorted, misinterpreted or misused by competitors.
In spite of the limitations on the meaning of such information and of the reluctance of distributors to furnish it, a strenuous effort has been made in connection with this study to get confidential figures on actual price spreads for a representative group of products. In addition, published data have been examined carefully to supplement this confidential information.

## 1. Unprocessed Food Products

A relatively simple example of the inevitable expenses incurred in transporting and distributing goods is furnished by the case of raw foodstufts. These reach the consumer in virtually the same form as they leave the farm, yet they must be transported perhaps hundreds of miles, handled several times en route, and possibly pass through three or four changes of ownership before they reach the consumer.


Freure 4. Distributing most taw foodstuffs costs more than growing them. Four cents out of every five paid by consumers for such bulky perishables as cabbage, carrots, and celery goes to distributors, and only one cent to farmers. Distribution costs are relatively less for products like chickens and eggs. (Sowrco: Table E.)

A glance at Figure 4 shows the disparity between the prices received by the farmer and the price che consumer pays for various raw foodstuffs. This spread includes not only the retailer's costs and profirs, but the entire expenses of transportation and of the various middlemen handling the products, as well as losses due to spoilage and waste. These average price spreads for a group of common farm products show that for relatively perishable products such as vegetables and fruits, distribution costs far exceed the original cost of growing them. For example, the farmer got seventenths of a cent per pound for cabbages in 1935, but the housewife had to pay four cents a pound at the comer grocery. Carrots cost her an average of five and a half cents a bunch, of which the farmer received only one cent, and the spread was almost as large in the case of celery and onions. In other words, it costs three or four times as much to distribute these vegetables as to grow them.

The housewife may wonder why she has to pay over five times the production cost for cabbage, when she buys eggs, for instance, for less than twice what the farmer gets for them. The answer lies in the fact that cabbage and similar vegetables are both bulky and perishable and must often be transported long distances from the section in which they are grown. Eggs, on the other hand, are not only less bulky and perishable, but they are usually produced nearer to the place where they are sold, thus saving transportation and handling expense.

## Spoilage Losses

The loss and consequent cost from spoilage alone are very considerable in the case of perishable vegetables and fruits. Losses occur all along the line of transportation, and damage claims against the railroads on these products run into millions of dollars annually. All these ultimately affect the level of freight rates which in turn are reflected in the price spread. For instance, the Federal Trade Commission found that loss and damage claims paid by the railroads in 1935 on shipments of fresh fruits and vegetables amounted to 2.6 per cent of the freight receipts from such shipments and represented a much larger proportion of the carriers' net revenue. Added to this spoilage cost are the losses occurring
when perishable products reach the retail stores. Table 1 shows the spoilage losses for certain fruits and vegetables. ${ }^{1}$

TABLE 1
Spoilagr Losses for Frumts and Vegetables (Expressed as Percentage of Total Expected Retail Proceeds)

|  | Average | Range |
| :--- | :--- | :--- |
| Fresh fruits |  |  |
| Peaches | 24.3 | 15 to 30 |
| Grapes | 15.0 | 10 to 20 |
| Grapefruit | 9.0 | 5 to 18 |
| Apples | 7.5 | 5 to 15 |
| Oranges | 7.3 | 5 to 11 |
| Fresh vegetables |  |  |
| Cabbage | 24.0 | 10 to 35 |
| Letruce | 13.5 | 10 to 18 |
| Onions | 5.0 | 3 to |
| Potatoes | 2.5 | 2 to 4 |

To get back to cabbages again, this large spoilage loss helps to explain why the consumer has to pay four cents for cabbage which costs less than one cent to produce. Other reasons are indicated in Figure 5, which shows the costs of distributing fruits and vegetables grown in specialized producing areas and shipped for the most part to distant markets. These spreads are naturally higher than those shown in Figure 4, which were general averages covering products of both local areas and special producing districts.

The effect of distance is shown in the relatively high transportation costs for the second list of products. For example, 27.5 cents of the consumer's dollar is for transportation costs in the case of Florida cabbage, compared with 35.9 cents in the case of cabbage from Texas, to approximately the same great northeastern markets. ${ }^{2}$ Transportation costs were high in the case of some other products, such as Florida oranges, grapefruit, and tomatoes, be-

1. Based on Agriculturyal Income Inquiry, Federal Trade Commission, June 10, 1937, Part II, p. 20 and an analysis made by months over a two-year period (19351936) by a chain srore company and included in an unpublished report of the Federal Trade Commission.
2. Agricnltwral Inrome Inquiry, Federal Trade Commission, June 10, 1937, Part II, Chap. IV.
cause of the bulkiness of these products in relation to their value, and probably because of a larger spoilage bill.
Packing and loading costs constitute another large item in distribution costs. They range from as low as seven to eight cents for Florida tomatoes and Idaho potatoes to as high as twenty cents for Florida grapefruit and oranges.

The intermediate handlers' costs show a considerable variation, but are a relatively small item in all cases. Retail margins also vary widely-from twenty-three cents to more than forty-five centsand are particularly high for tomatoes, onions, and cabbage, where spoilage losses are large.

Broadly speaking, the consumer's dollar spent for products from these specialty areas can be divided roughly into three fairly equal parts-one-third for the producer (except in the case of such products as cabbage, onions, and lettuce, in which the farmer's share is less), one-third for transportation and intermediary handling, and the remaining third for the retailer's margin. In connection with the latter it should be remembered that the retail margin as shown in Figure 5 does not measure the average realized margin on these products. Retailers inevitably incur large spoilage losses on fresh fruits and vegetables, and margins must be large enough to compensate for such losses and for mark-downs to avoid them. Average margins actually realized by the retailers are often as much as a third less than the retail margins shown in the chart.

## 2. Processed Food Products

Products raised by the farmer and processed before they reach the consumer go through a much more complex procedure than raw foodstuffs. In this case price spreads cover costs of processing and packaging as well as costs of distribution. Since processing is a part of production racher than distribution, its cost should be subtracted from the total spread in order to get an accurate measure of distribution costs.
An example of the entire spread in this kind of commodity between the raw material and the finished product on the kitchen shelf is soda crackers. The farmer receives 1.6 cents for the wheat,


Ftause 5. The physical transportation of farm products to urban consuming centers often costs more than producing them; and an even larger share of the consumer's dollar is paid to defray the cost of retail distribution. Distribution costs are especially high for perishables shipped to distant markets. (Sowrce: Table F.)
which, when processed and made into soda crackers, finally sells for 17.2 cents a pound at the grocery store-over ten times as much as the farmer received. ${ }^{3}$ Bread and cereals all sell ac retail prices which are from 143 to 975 per cent higher than the farm value of the wheat or rye of which they are made. Canned goods, on the whole, show even larger spreads-most of them from 500 to 700 per cent. But meat-pork, lamb, and beef for exampleshow spreads of only 70,78 , and 121 per cent respectively. Detailed breakdowns of the constituents of the total spread between the farmer and consumer are available for only a few commodities, some examples of which are shown below.

## a. MEATS

The relatively small price spread of meats is due to the relative simplicity of the processing and to a highly organized and efficient system for slaughtering, processing, and distributing meat products to retail dealers. In addition, the price of meat to the consumer is less than it would otherwise be because the packer covers some of his costs through the sale of inedible by-products.

On the average the consumer pays about twice as much for dressed meat at the retail counter as the farmer receives from the dealer in payment for the meat in the live animal. About half of the amount charged the consumer, therefore, goes to pay for all the processing and distribution after the farmer sells the live animal. The retailer keeps about half of this sum for his expenses and profirs or 5.4 cents out of the average total retail price of 21.5 cents. Of this 5.4 cents price spread at the retail stage, 2.9 cents is paid out by the retailer for wages and salaries; store rent and other store expenses account for 1.8 cents while profits amount to 0.7 cent. ${ }^{4}$ Details are shown in Table 2.

The figure shown in the table for the selling price of the farmer is the amount returned to him for each pound of meat products sold at retail. This amount is much larger than the average amount received by the farmer for each pound of livestock since the
3. R. O. Been, Jr. and F. V. Waugh, "Price Spreads Between the Farmer and the Consumer," U.S. Bureau of Agricultural Economics, July 1936, p. 9.
4. Bernard P. Tobin and Howard Greer, What Becomes of the Consumer's Meat Dollar?, University of Chicago, 1936, p. 6.

TABLE 2
Average Prices and Price Spreads of Meat Products, 1925-1934

| Selling Agency | Selling Price Per Pounds |  | Price Spread Per Pound |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cents | Per Cent of Price to Consumer | Cens | Per Cent of Cost | Per Cent of Price to Consumer |
| Farmer | 10.9 | 50.7 |  |  |  |
| Livestock dealer | 11.8 | 54.9 | 0.9 | 8.3 | 4.2 |
| Mear packer | 15.1 | 70.2 | 3.3 | 28.0 | 15.3 |
| Wholesaler | 16.1 | 74.9 | 1.0 | 6.6 | 4.7 |
| Retailer | 21.5 | 100.0 | 5.4 | 33.5 | 25.1 |

a. The selling price of each agency is of course the cost for the succeeding agency.
weight of edible meat products obtained from the animal is much less than the weight of the live animal. The packer of course receives a considerable return from inedible by-products, which are not included in the distribution of retail value per pound shown in the table.
The 0.9 cent spread between the farm price and that received by the livestock dealer covers the marketing of livestock and the operations incident to getting the animal from the farm to central livestock yards in the packing centers. This includes transportation as the most important single element, and also pardage and feed charges and fees to the commission firms.
The meat packer's margin of 3.3 cents covers the entire cost of processing, beginning with the receipt of the livestock and ending with the packing, loading, and shipping of the dressed meat.
The wholesaler's function involves transporing the product from the packing plant through the wholesale agencies and selling and local delivery to the retail store. Wholesaling is sometimes done by sales branches of the packing establishments and in other cases is the function of independent wholesalers. Transportation is the largest single item of expense in the wholesaling of meat products.

## b. cerbal products

Bakery products, such as bread and soda crackers, have very large price spreads reflecting heavy costs for processing and pack-
aging at one end, and for advertising, delivery, and other distributive operations at the other end. Macaroni and breakfast cereals, such as rolled oats and corn flakes, involve less costly processing, but relatively large expenditures for advertising and selling. For such products as flour and corn meal simple processing and inexpensive distribution result in a smaller price spread between farmer and consumer.

Take bread as an illustration. The Federal Trade Commission found that the distribution of the consumer's bread dollar in $1935^{5}$ followed fairly closely the figures for 1923-1925, with the farmer receiving about the same amount as his share, the transportation agencies and the bakers getting less, and the millers, whear middlemen, and retailers receiving more for their services than they did ten years previousiy.
For each average dollar spent by consumers for bread:

| The farmer received | 13.4 cents in 1923-1925 | 13.3 cents in 1935 |
| :---: | :---: | :---: |
| The wheat middleman | .8* | 1.2* |
| The miller | 4.8 | 7.2 |
| Transportation and terminal marketing agencies | 6.3 * | 3.6* |
| The wholesale baker | 59.8* | 55.4* |
| The retail grocer | 14.9* | 19.3* |
| Making the full dollar the consumer paid | 100.0 | 100.0 |

The items starred are, in whole or in part, costs of distribution. The rest, including more than half of the wholesale baker's portion, are costs of production and processing. In the 1923-1925 study a detailed analysis was made of the wholesale baker's margin which showed that 30.7 cents went for manufacturing costs and for ingredients other than flour, and the remainder for selling, general administrative expense and profit. Adding the starred items for that period (but including only part of the wholesale baker's mar-gin-his selling expenses and part of his overhead and profit) we get a total of about 44 cents for distribution costs. In other words, about 44 cents out of every dollar spent for bread is paid for discribution, and 56 cents for production.

In the case of corn flakes and rolled oats manufacturing costs

[^2] I, p. 131.
absorb only about 12 cents of the consumer's dollar. About 50 cents goes for transportation and selling expenses, over twice the amount ( 22 cents) the farmer receives. ${ }^{6}$


The price spread between farmer and consumer for most canned fruits and vegetables is large. Their preparation and canning is a highly seasonal industry subject to the risks of variation in the quantity and quality of crops. In addition the cost of containers and cases is high in relation to raw materials. Transportation and storage costs are also heavy because of the bulkiness and weight of these products and the necessity of holding them for long periods.

A study of the marketing of Maryland canned tomatoes shows that the farmer gets less than a fifth of the consumer's dollar for the raw tomatoes, while the canner receives for his share nearly half the consumer's dollar. Distribution charges, including brokerage, wholesaling, and retailing margins, which of course cover transportation costs, account for more than a third of the retail price. Thus the consumer pays over five times what the farmer gets for the raw product and more than twice what the canner receives for the canned tomatoes.

For each dollar spent by the consumer for canned tomatoes: ${ }^{7}$


## d. MILK

Because of the local nature of the milk business, national figures on costs would be rather meaningless averages. Sources of supply, local regulations, distribution methods and cost accounting practices vary so widely from market to market that it is a question whether any set of figures can even be considered as typical. However, various studies of costs by localities throw light on some parts

[^3]

FIGURE 6. The stable level of average milk prices in Chicago during the twenties was followed by a sharp decitine after 1930 . With the recovery from the low point of the depression, 1935 prices were not far above the 1917 level. The producers received less than 42 per cent of he retail price in 1935, however, as compared with 51 per cent in 1917. (Source: Table G.)
of a very complex business and illustrate something of the nature of the milk distribution problem.

A recent study of the Federal Trade Commission in the Chicago sales area shows a rising trend in prices after 1917. During the depression years after 1929 retail prices dropped considerably, as did the prices paid to the farmers; but in the Chicago area this was greatly aggravated by a local competitive situation. The data presented in Figure 6 should therefore be interpreted with caution. They show that while the dealer's spread in cents per quart decreased substantially in the depression, his share of the milk dollar at first increased and then fell again during the early recovery years.

This general tendency toward rising distribution costs and declining prices paid to farmers, is borne out by a report of costs in the milk business in Milwaukee. ${ }^{8}$ This revealed that beginning with 1923, when the farmer received 58.1 cents of the consumer's milk dollar, his share shrank consistently down to 1934, when he received 46.8 cents. During this same period the retail price of 'milk declined from 10.5 cents to 9.5 cents but the distributor's gross margin increased from 4.4 cents to 5 cents.

What usually happens in this complex interrelation of producer, distributor and consumer when retail milk prices rise or fall? The Federal Trade Commission came to this conclusion:
A drop in prices charged consumers has usually been accompanied by a reduction in prices paid by distributors to producers; similarly, an increase in the price paid to producers has been followed immediately, in almost every instance, by an increase in the prices charged to consumers, and, in many instances, the latter increase has been greater than that allowed producers. . . . Generally speaking, from the facts ascertained during this investigation in a limited number of milksheds, while the full extent of the decreases in prices paid to producers has not always been passed on to the consumers, the full amount of increases in prices paid to producers has usually been added to the prices charged consumers. 9

The handling of milk by large city distributors not only involves distributive expenses such as teaming and hauling costs, freight
8. "Milk Parade," Consumers' Guide, August 23, 1937, p. 21.
9. "Summary Report on Conditions with Respect to the Sale and Distribution of Milk and Milk Products,' Federal Trade Commission, January 5, 1937, p. 32.
charges, delivery expense, and advertising and selling costs, but also rather extensive processing. Delivery expense alone accounts for a large part of what the consumer has to pay for a quart of milk, as can be seen from Table 3. The table also shows how much various expense items increased during a fifteen-year period ending in 1931.

TABLE 3
Breakdown of Sblling Price of Grade B Milya

|  | $\begin{gathered} \text { New York Distributors } \\ 1915-1916 \end{gathered}$ |  | Sheffield Farms <br> Compray-1931 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Cents Per Quart | Per Cent of Selling Price | Cents Per Quart | Per Cent of Selling Price |
| Selling price | 9.000 | 100.0 | 14.260 | 100.0 |
| Cost of milk | 3.797 | 42.2 | 5.680 | 39.8 |
| Distributor's spread | 5.203 | 57.8 | 8.580 | 60.2 |
| Total operating costs | 4.839 | 53.8 | 8.280 | 58.1 |
| Delivery costs | 2.384 | 26.5 | 5.030 | 35.3 |
| Other operating costs | 2.455 | 27.3 | 3.250 | 22.8 |
| Counrry charges | 0.297 | 3.3 | -• | ... |
| Teaming and hauling | 0.294 | 3.3 | ... | ... |
| Pasteurization | 0.370 | 4.1 | - | . |
| Bottles and caps | 0.241 | 2.7 | , | $\ldots$ |
| Freight | 0.934 | 10.4 | ... | $\ldots$ |
| Administrative expense | e 0.319 | 3.5 | ... | . . |
| Profit | 0.364 | 4.0 | 0.300 | 2.1 |

a. Report of the Joint Legisiative Committee to Investigate the Milk Industry, State of New York, April 10, 1935, p. 191.

An increase of a little more than five cents a quart, or 58 per cent, occurred in the retail selling price of milk over the period shown in the table. Almost two cents of this increase is accounted for by higher costs of raw milk to the distributor. The distributor's spread, or the total of his operating costs and profits, accounted for a little more than three cents of the entire increase but the profit per quart actually decreased during this period. Percentage profirs were only half as large in 1931 as they were fifteen years before.
Delivery expenses, which doubled during the period, accounted for most of the increase in the distributor's costs and for more than
half of the total increase in the price of milk to the consumer. In 1931 the consumer paid five cents a quart or more than a third of the total price to have milk delivered at his door. Whether this increase in delivery expense reflects wasteful methods, or results from such factors as the increased congestion of city life, smaller units of daily purchase, greater requirements in delivery service or higher wages to employees, cannot be known without further stady.

## Delivery and Selling Complexities

Delivery and selling expenses vary widely. The Federal Trade Commission found in their study of four large cities ${ }^{10}$ that out of an average gross margin of 42 per cent, delivery costs comprised about 26 per cent of net sales in Baltimore and Boston, 31 per cent in Cincinnati, and 34 per cent in St. Louis. This item also varies to a marked degree from distributor to distributor. The Commission's study showed that average costs of seyen milk distributors in these same areas for delivering a quart bottle varied from as low as 2.64 cents to as high as 4.78 cents. A large part of this variation. was found to be due to different methods of paying the route men, which in turn grew out of varying regulations of the route men's unions.
An interesting comparison was made by the Commission between the costs of delivery of milk and cream in bulk, in quart bottles, and in pint and half-pint sizes. It was found that delivery in small bottles was relatively very expensive, since small packages involve as much time, effort, and expense as larger units. Expressed in terms of quarts, the cost of delivering milk products in bulk was about 1.61 cents, in quart bottles 4.69 cents, in pint bottles 7.12 cents, and in half-pint bottles 13.66 cents per quart. ${ }^{11}$

Consumers must bear part at least of the responsibility for the high cost of delivery, since they demand doorstep delivery and other special services. In a Milwaukee study, it was found that 78 per cent of the families had their milk delivered regularly while

[^4]only 12 per cent invariably bought it at the neighborhood store. ${ }^{12}$ Delivery through retail stores may save one cent a quart, or possibly more, in handling expenses as compared with home delivery, but in many cities consumers who buy milk at stores and deliver it themselves are still taxed for the cost of a delivery service they do not get.

An even cheaper method of distribution has been tried out in New York City to meet the needs of the city's poorer population. Delivery was made direct to consumers from a dealer's wholesale truck within a two-hour period each morning. Sales were for cash and bottles had to be retumed or a deposit forfeited. While the actual expense of this method has not been reported, dealers were eager for a chance to sell this milk for eight cents a quart when regular retail delivered price was thirteen cents and the store price, twelve cents.
Home delivery is further complicated and made more expensive by the duplication of territory by various milk companies in every city. In a study of 1,020 city blocks in Milwaukee in 1934 it was found that in every block but one, at least two companies made deliveries. In 800 of these blocks, five milk companies went in and out during the day; in 147 blocks, seven companies competed with each other; in one block seventeen companies made deliveries; while two apartment houses were found in which nine different companies delivered milk daily. ${ }^{13}$ This duplication also extends back to the hauling process, where comperition causes similar wastes in collecting milk from the farmers.

## e. CANDY

One of the large manufacturers of candy bars has furnished confidential information on costs and price spreads for his product in 1936. These products are usually sold by the producers through wholesalers to independent retailers or directly to chain stores and other large retail distributors.

The direct factory cost (exclusive of the manufacturer's adminis-

[^5]trative and selling expense) of producing the standard unit of twenty-four five-cent bars was reported as approximately 49 cents. This unit is quoted to the wholesaler at a nominal price of 64 cents, with discounts and freight allowances which reduce the average price to abour 61 cents. Chain stores are quoted at the same price but are often successful in getting extra allowances which bring the net price down to 60 cents.

Wholesalers have no standard or usual resale price. Some of them sell these products to retailers in western markets for as low as 64 cents-the quoted manufacturer's selling price-making their own profit on other items. From this level, the wholesaler's price to the retailer ranges upward to as high as 78 cents, depending upon competitive conditions in various territories. Independent retailers sell these products to the consumer at five cents, or $\$ 1.20$ for the unit of twenty-four bars. In this case the price spread, covering the selling and administrative expense and profits of the manufacturer and wholesaling and retailing costs, amounts to 71 cents, or 59 per cent of the price paid by the consumer and 145 per cent of the factory cost.

Many chain store organizations, however, having bought at even less than the wholesaler, sell the standard five-cent bars at three for a dime, or 80 cents for the twenty-four bar unit. The price spread between the factory cost of 49 cents and the retail price in this case is only 31 cents, which means that only 39 per cent of the consumer's dollar goes for markering.

Clearly conditions vary so widely in this industry that no definite conclusions can be drawn. Competition is so acute and the manufacturers and wholesalers know so little about their costs that total costs of production and distribution often may not be covered entirely by prices charged.

## 3. Apparel

Although the clothing industries embrace a multitude of different products varying widely in price and quality, certain pervasive characteristics help to explain pricing policies, price spreads, and marketing methods. Most of these articles are style goods of a sea-
sonal character, which necessitates flexibility in the industry and often involves substantial price spreads. Much, but not all, apparel manufacture is carried on by relatively small enterprises whose activities are largely limited to production and do not include the elaborate marketing methods involved in national advertising of trademarked goods. Many products such as shoes and hats, however, are commonly sold under national brands.

Cloching is generally sold by the producer directly to many kinds of retail outlets most of which, like general merchandise and department stores, also handle a wide variety of other products. In other words the business is marked by a specialization and limitation of function at the producing end and by exactly opposite conditions at the retail end.

## a. IYATS

Examples of wide variations in cost-price spreads in the distribution of a typical article of clothing may be seen in the prices of men's and women's hats. In comparison with some other kinds of clothing the price spreads of hats are relatively moderate in spite of the fact that rapid style changes, particularly in millinery, are accompanied by losses from obsolescence and mark-downs.

By far the largest volume of both men's and women's hats moves directly from the manufacturer to the retailer. Table 4 is based upon the 1936 experience of manufacturers who distribute in this manner. It shows that one brand of men's hat with a factory production cost of $\$ 1.70$ (including factory overhead but excluding general administration and selling expense) was sold for $\$ 2.13$ to the retailer, who in turn sold it to the consumer at $\$ 3.50$. The total spread between production cost and retail selling price, therefore, was $\$ 1.80$. In other words, about 51 per cent of the price paid by the consumer went for distribution. In contrast with this lowpriced hat, a hat selling to the consumer at $\$ 10$ cost the manufacturer about $\$ 3.74$ to produce and was sold to the retailer for $\$ 5.75$. In this case $\$ 6.26$ of the consumer's $\$ 10$, or nearly 63 per cent, went for distribution; and $\$ 4.25$, or 43 per cent, was paid for the retailer's expenses and profits.

The retail selling prices represent regularly maintained prices
for the two brands of hats and are comparable. Why the lowpriced hat should carry a total distribution cost of 51 per cent, while the higher-priced hat bears a total charge of 63 per cent of final cost to the consumer, needs explanation. It may be that the consumer pays too much for the quality product and too little for the cheaper article.

TABLE 4
Costs and Price Spreads of Mbn's and Women's Hats, 1936a

| Arsicle | Manufacturer's Factory Cost | Manufacturer's Selling Price to Retailer | Retailer's Selling Price | Spread Between Factory Cost and Rexail Price |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount | Per Cent of Cost | Per Cent of Recail Price |
| Man's hat | \$1.70 | \$2.13 | \$ 3.50 | \$1.80 | 105.9 | 51.4 |
| Man's hat | 3.74 | 5.75 | 10.00 | 6.26 | 167.4 | 62.6 |
| Woman's hat | 1.71 | 2.63 | 5.00 | 3.29 | 192.4 | 65.8 |
| Woman's hat | 2.06 | 2.75 | 5.00 | 2.94 | 142.7 | 58.8 |
| Woman's hat | 2.25 | 3.00 | 5.00 | 2.75 | 122.2 | 55.0 |
| Woman's hat | 3.58 | 5.50 | 10.00 | 6.42 | 179.3 | 64.2 |

a. The figures for manufacturer's and retailer's selling prices were furnished confidentially by representative hat manufacturers.

The manufacturer of the $\$ 10$ hat advertises extensively and has built up a reputation over many years for making a consistently dependable high-quality product. Thus, in addition to the guarantee of obtaining good materials and workmanship, the purchaser of this hat has to pay for the psychological satisfaction which wearing a universally recognized high-quality product is supposed to carry with it. The manufacturer must pay to establish and maintain this universal recognition, and of course the cost is passed on to the consumer.

## Higher Mark-up for Quality Goods

The higher percentage mark-up on the quality product is due to the fact that the turnover on this class of merchandise is smaller, and as a consequence, the selling expense is greater. There are many more buyers for a $\$ 3.50$ hat than for the $\$ 10$ one. Expenses chargeable to service and returned goods are also greater for
higher-priced products than for lower-priced goods.
If the manufacturer's production costs furnish an accurate measure, the high-priced hat is inherently worth only about $\$ 2.00$ more than the low-priced hat; yet the consumer must pay $\$ 6.50$ more for it. This raises a serious question as to whether conventional pricing policies for similar products of different quality are always sound, either from the standpoint of the businessman or the consumer. It is possible that they result in a vicious circle in which high mark-ups and high prices are responsible for a small volume of sales and slow turnover on quality products, which in turn make for higher unit costs of distribution and thereby necessitate higher prices.

If it costs only $\$ 1.80$ to market a hat costing $\$ 1.70$ to produce, there is little reason to believe that it should cost $\$ 6.26$, or nearly three and a half times as much to distribute a hat costing $\$ 3.74$ to produce. If actual distribution costs could be ascertained and properly allocated between the two, it might be argued that the markup and retail price should be higher on the low-priced product, and lower on the high-priced one. It must be remembered that it is the cost of potential distribution rather than current distribution which must be considered. If it is possible so to reduce prices as to double sales, the cost of production and distribution per item may be so reduced that the lower prices may result in more profits to producer and distributor as well as in savings to the consumer.

Even within the same price class, surprising differences in price spreads sometimes occur. Three manufacturers of women's hats retailing at a price of $\$ 5$ reported production costs ranging from $\$ 1.71$ to $\$ 2.25$. Thus 66 per cent of the consumer's dollar, in the first instance, and only 55 per cent, in the second instance, was paid for distribution. Such cost differentials, which are not uncommon in style merchandise, may reflecr either actual differences in production or distribution costs, differences in quality, or differences in profit margins.

## b. WOMEN'S DRESSES

Most manufacturers of women's dresses are small concerns which do not produce nationally advertised merchandise under
their own name, but sell direct to the retail trade, in many cases under the retailer's label. The manufacturer's selling expenses are therefore not a large part of the final price. Although cost accounting is not well developed in this industry, the typical dress manufacturer, following a rule-of-thumb method, breaks down his sales dollar into three equal parts. One-third covers the cost of materials and trimming, another third, labor costs, and the remainder provides factory overhead, administration, and selling expenses and profirs.
This distribution of costs must be considered as an average, however. The manufacturer's price to the retailer on a specific article of merchandise, and the latter's price to the consumer, often do not accurately reflect differences in costs because of the practice of adhering to a relatively few standardized retail price levels. One dress may cost more to make than another and yet sell at the same retail price. This is especially true of highly-styled merchandise but also holds to a degree even in the mass market.
table 5
Costs and Price Spreads of Wombn's Dresses, 1936a

| Article | Manufacturer's Material and Labor Cost | Manufacturer's Selling Price to Retailer | Retailer's Selling Price | Spread Berween Material and Labor Cost and Retail Price Per Cent <br> Amount Per Cent of Retail of Cost Price |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cotron dress | \$ . 91 | \$ 1.37 | * 1.95 | \$ 1.04 | 114.3 | 53.3 |
| Cotton dress | 1.25 | 1.88 | 2.95 | 1.70 | 136.0 | 57.6 |
| Silk or wool dress | 7.17 | 10.75 | 19.75 | 12.58 | 175.4 | 63.7 |
| Silk or wool dress | 8.50 | 12.75 | 22.75 | 14.25 | 167.6 | 62.6 |
| Silk or wool dress | 11.17 | 16.75 | 29.75 | 18.58 | 166.3 | 62.5 |
| Silk or wool dress | 12.50 | 18.75 | 39.50 | 27.00 | 216.0 | 68.4 |

a. The figures for manufacturer's and retailer's prices were fumished by three representarive manufacturers and in each case are fairly typical.

In general the higher the retail price of the dress, the larger is the margin of the retailer, both in percentage of cost and in actual price spread. The larger mark-up on more expensive dresses is due to their smaller turnover and particularly to heavy end-of-theseason mark-downs because of style obsolescence. No detailed in-
formation on actual production costs for specific products was submitted by manufacturers for this study; but there was substantial agreement that, irrespective of grades and qualities, materials and labor usually account for two-thirds of what the manufacturer receives for his merchandise. The second column of Table 5, which is based on this estimate is therefore not strictly comparable with the manufacturer's production cost as shown in other tables of this chapter.

## c. LEATHER SHOES

The manufacture of standard popular-priced leather shoes presents sharp contrasts with other kinds of apparel. These products, especially men's shoes, are not as subject to seasonal influences and abrupt style changes as are most other clothes. Their production is carried on in large and highly mechanized establishments. Nearly all of the standard machinery used in the industry is owned by the Unired Shoe Machinery Corporation and leased tather than sold to the manufacturers. Consequently, methods of manufacture are highly standardized and there is comparatively little variation in production costs from one factory to another.
Mose of the industry's production is put out under the manufacturer's brand, more than half of the total production going direct to retailers without the intervention of any intermediary. Specialty stores dominate the retail shoe business and in some cases manufacturers operate their own retail outlets. Confidential figures for 1936, obtained from certain representative manufacturers and shown in Table 6, furnish an accurate measure of price spreads for the popular-priced grades of men's and women's shoes. Spreads -particularly the margins of the manufacturer and wholesalerare surprisingly small in comparison with other articles of apparel. This may be due to the highly comperitive nature of the industry; in part at least to the fact that compecitors all use much the same machinery on much the same terms and are left with a relatively narrow field in which to demonstrate their comperitive excellence. Larger price spreads for women's shoes seem to be due to the importance of novelties and frequency of style changes and to the fact that larger inventories have to be carried.

TABLE 6
Costs and Price Spreads of Leather Shoes, 1936

| Article | Manu-fac-Production Cost | $\begin{gathered} \text { Manu- } \\ \text { fac-- } \\ \text { turer's } \\ \text { Selling } \\ \text { Price } \\ \text { to Jobber } \end{gathered}$ | Jobber's Selling Price to Recailer | $\begin{aligned} & \text { Retailer's } \\ & \text { Selling } \\ & \text { Price } \end{aligned}$ | Spread Berween Production Cost and Retail Price |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Amount | $\begin{gathered} \text { Per } \\ \text { Cent } \\ \text { of Cost } \end{gathered}$ | Per Cent of Retail Price |
| Men's |  |  |  |  |  |  |  |
| Work shoe | \$1.23 | \$1.28 | \$1.50 | \$1.98 |  |  | 37.9 |
| "Every day" shoe | 1.33 | 1.38 | 1.60 | 2.19 | . 86 | 64.7 | 39.3 |
| Side leather-calt tip shoe |  |  |  |  |  |  |  |
| Calf-skin shoe | 2.08 | 2.16 | 2.60 | 4.00 | 1.92 | 92.3 | 48.0 |
| Women's |  |  |  |  |  |  |  |
| Low-priced | 1.12 | 1.19 | 1.27 | 1.98 | 86 | 76.7 | 43.4 |
| Medium-priced | 1.35 | 1.57 | 1.62 | 2.45 | 1.10 | 81.3 | 45.0 |
| Moderate-priced | 2.35 | - | 2.92 | 5.00 | 2.65 | 112.8 | 53.0 |

a. This manufacturer's products are distributed direct to retailer at $\mathbf{\$ 2 . 9 2}$ a pair.
d. RUbBER FOOTWIEAR

The manufacture and distribution of rubber footwear is of course an entirely different industry from the leather-shoe business. These products are made chiefly by companies which produce a great variety of rubber goods. They are distributed through numerous channels, sold in many types of retail outlets and show little uniformity in prices and price spreads. A confidential report from one of the leading manufacturers on costs in 1938 shows the diversity of conditions in the industry and the difficulty of presenting an accurate and representative picture.
One of the typical items sold by this company is a men's short rubber work-boot produced at a factory cost of $\$ 1.25$ a pair. The manufacturer's selling price to the jobber is $\$ 1.45$. Jobbers resell this item to the majority of their retailer customers at $\$ 1.70$ a pair who sell it to the consumer for $\$ 2.29$. Thus the spread between the factory cost and the retail price of these boots amounts to $\$ 1.04$ or 45 per cent of what the consumer pays.

## 4. Other Products

Distribution costs and profits and price spreads vary so widely among products of different nature, quality and value that it is
dangerous to draw general conclusions from specific examples. Most of the varied products discussed below, however, are generally typical of a considerable group of commodities of similar nature.

## a. CIGARETTES

Cigarettes are a standardized product illustrative of lower distribution costs than many other articles of popular consumption. Tobacco distribution, like an hourglass, begins with the raw material, which originates on 2 vast number of small farms, passes through the hands of a much smaller number of tobacco middlemen, and after manufacture by a very small group of large-scale producers, spreads out again to wholesalers, to retailers and finally, to millions of consumers.
A breakdown of costs for popular brands of cigarettes in 1937 is shown in Table 7. The total expense chargeable to distribution is relatively low-not more than 28 per cent of the retail price. Less than four cents of the average price of fourteen cents a package is distribution cost-less than one cent representing the manufacturer's entire selling, advertising, and distributing expense. Contrary to popular ideas, advertising costs are responsible for only a small part of the consumer's price-amounting to less than half a cent a package.
Both the retailer's and jobber's margins are low, and contrary to the usual relation, almost equal. Each amounts to about one and a half cents or roughly to little more than 10 per cent of the selling price. Inasmuch as general operating expenses of tobacco retailers are more than 10 per cent of sales, their cigarette profits, if any, must be obtained from rapid turnover.
The largest single item in the price of a package of cigarettes is the federal excise tax of six cents, which is paid by the manufacturer. About $\$ 500$ million or nearly a tenth of the federal revenue comes from tobacco taxes, and cigarettes furnish the lion's share. In addition, twenty-five states impose taxes on cigarettes and tobacco yielding slightly more than $\$ 50$ million. ${ }^{14}$

[^6]TABLE 7
Costs and Price Spreads for Popular Brands of Cigarettes, 1937a
(Estimated Per Pack of Twenty and Per Thousand)

|  | $\begin{gathered} 1,000 \\ \text { Cigarettes } \end{gathered}$ | Pack of <br> Twenty | Per Cent of Consumer's Dollar |
| :---: | :---: | :---: | :---: |
|  | (In Dollars) | (In Cents) |  |
| Manufacrurer's costs Leaf tobacco | 1.006 | 2.00 | 14.30 |
| Manufacturing (labor, package matcrials, etc.) | . 48 | 0.96 | 6.85 |
| Selling, general and administrativer Advertising Other | . 24 | 0.48 0.42 | $\begin{aligned} & 3.42 \\ & 3.00 \end{aligned}$ |
| Total manufacturer's cost | 1.93 | 3.86 | 27.57 |
| Income taxes | . 08 | 0.16 | 1.14 |
| Manufacturer's profit | . 50 | 1.00 | 7.15 |
| Federal cax | 3.00 | 6.00 | 42.85 |
| Price to jobber | 5.51 | 11.02 | 78.71 |
| Jobber's margind | . 74 | 1.48 | 10.57 |
| Price to retailer | 6.25 | 12.50 | 89.28 |
| Retailer's margin ${ }^{\text {e }}$ | . 75 | 1.50 | 10.72 |
| Price to consumer | 7.00 | 14.00 | 100.00 |

a. Based upon an analysis of statements submitted by manufacturers to the S.E.C., and of tax reports, and usual trade discounts.
b. According to a memorandum presented at a hearing on Revenue RevisionHouse Ways and Means Commitree, 1934, this figure was 90 cents; prices have since risen and amounted to an average of about $\$ 1.00$ in 1937.
c. Total selling, general, and administrative expense for 1,000 cigarettes in 1934 was reported as 55 ceats (ibid.). Private estimate for 1936 was 52 cents, of which approximately 27.5 cents was represented by advertising expense (based upon reported advertising expenses for four leading producers appearing in the Annalist, July 23, 1937). The reported advertising expenses covered products other than cigaretres, but these products were relatively unimportant in both sales and expenses. This latter factor is offset to some extent by the fact that the reported advertising expenses did not include expenses for radio talent, endorsements, copy, etc., and biliboard advertising expenditures, most of which probably represented expenditures on cigarette advertising. The figures for "advercising" and "other selling, general, and administrative" expense for 1937 in this table were estimated on the basis of 1936 Gigures.
d. On the basis of the usual 10 per cent discount from the established price of $\$ 6.25$ to the retailer and on the assumption that the jobber takes adrantage of $\& 2$ per cent cash discount.
e. Assuming that the retailer sold at 14 cents per pack, the prevailing price in 1937.

Excluding this item of taxes from the manufacturer's selling price to the jobber, it would seem that the manufacturers, at the neck of the hourglass, make average profits of about 20 per cent.

In fact, their profit is probably as great as their manufacturing cost -averaging about one cent on a package.

## b. RYE WHISKEY

Whiskey is an example of a commodity which costs the manufacturer little to produce compared with the price the consumer must pay. Large distribution costs are augmented by heavy state and federal taxes.

Figures submitted in confidence by an important manufacturer of rye whiskey for 1936 show that the consumer paid $\$ 2.40$ for a quart of one-year-old whiskey, which cost only 30 cents to produce. The distiller sold this product to the wholesaler for 61 cents, a price which covered his profit, selling, advertising, and storage costs, the important item of evaporation losses and general administrative overhead.

At this point taxes amounting to $\$ 1$ a quart were added to the cost of the whiskey, making the value $\$ 1.61$. The wholesaler sold to the retailer at an advance of 10 cents, or for $\$ 1.71$ a quart. Selling at retail for $\$ 2.40$, the retailer's mark-up was 69 cents, or more than the total amount received by the manufacturer.

Taxes are obviously the largest element in the price the consumer pays for liquor, particularly in the case of low-priced goods. The amount of the tax also plays an important part in the retailer's mark-up. Since the tax has already become a part of the price before the product reaches him, he follows the usual practice of applying a normal percentage mark-up for his cost. If the $\$ 1$ tax on a quart of whiskey were collected as a separate payment from the consumer at the time of purchase, it seems doubtful whether the retailer would be able to charge a mark-up of 69 cents, or nearly 100 per cent of the cost to him exclusive of tax. Certainly the retail stage in the distribution of liquor involves few of the sources of loss and heavy expense inherent in certain other types of retailing which operate with much smaller mark-ups.

## c. MEDICINALS

The shifring patterns of discribution are nowhere more evident than in the evolution of the apothecary's shop of a generation ago
into the drugstore of today, which has become more and more a miniature department store selling thousands of articles of general merchandise. Even the drug business has changed radically in character. Packaged medicinals have lost some of their disrepute and many standard remedies are now manufactured by reputable pharmaceutical houses and often sold on doctors' prescriptions.

The drugstore today carries from 2,500 to 3,000 distinct products, or as many as 8,000 or 10,000 items, most of them small lowpriced arricles. Like other kinds of retail business invaded by chains, the typical drugstore operates a cash-and-carry business with rapid stock tumover. An average gross profit of 40 per cent of the retail price, or a mark-up of 67 per cent over cost, is regarded as enough to pay normal operating expenses and yield a good profit. Thus the retailer may sell for ten cents a tube of toothpaste costing him about six cents. Actual mark-ups on specific products vary widely and sometimes surprisingly, however. This is particularly true of nationally advertised cosmetics and pharmaceuticals as compared with similar unadvertised products.

For example a standard headache remedy of simple chemical composition, which the promotional effort of the manufacturer has made a household word throughout the United States, is normally sold in retail drugstores at a price of 59 cents for a bottle of a hundred tablets. For this the wholesaler's net price to the retailer is just under 37 cents, so that the retail mark-up is about 60 per cent. With a mark-up of 16 per cent, the wholesaler pays the manufacturer 32 cents for the same product. Since the manufactuter's expenses consist largely of advertising and promotion, actual factory production costs are probably considerably less than half the price he charges the wholesaler. In this case, therefore, a very large share-perhaps three-fourths or more of the amount paid by the retail customer-goes for costs and profits in the various stages of distribution.

## Unadvertised Goods Cost Less

The retailer can buy another product, not nationally advertised, but identical in appearance and composition and just as effective a remedy, from an obscure producer for a price of 11 cents for a
bottle of a hundred tablets. This article may be sold at retail for 39 cents or sometimes for as little as 23 cents. At either price there is a substantial saving to the consumer over what he would have to pay for the advertised brand in spite of the fact that the retailer's mark-up is much larger than for the advertised product.

Another example is an alkaline remedy, which is nationally advertised and intensively promoted among the medical profession and is frequently prescribed by physicians to their patients. The consumer pays 79 cents for a four-ounce bottle, which costs the retail druggist about 50 cents if he buys it direct from the manufacturer, and 60 cents from a wholesaler. The total price spread is 29 cents or 58 per cent of the manufacturer's price. Since the manufacturer probably spends much more for advertising and promotion than for production, distribution undoubtedly absorbs twothirds or more of the consumer's dollar.

A chemically identical, but unadvertised, competing product made by an old and reputable pharmaceutical manufacturer is sold direct to the retail druggist at a price of 38 cents for an eight-ounce bottle. This the latter ordinarily sells to the consumer for 89 cents, representing a price spread of 51 cents or a mark-up over the manufacturer's price of 134 per cent. Here again, in spite of the fact that the percentage of price spread and gross profit to the retailer is much greater than for the advertised product, the consumer makes a large saving in buying the unadvertised one. For eight ounces of the advertised product the consumer would have to pay $\$ 1.58$, of which the retailer would retain about 58 cents, whereas he pays only 89 cents for the unadvertised product on which the retailer's gross profit is 51 cents.

## d. ELECTRIC REFRIGERATORS

Unlike other products discussed in this chapter, electric refrigerators, like oil burners, radios, and automobiles, have a high unit value. The purchase of such products is a considerable investment for the average consumer and their sale usually involves protracted negotiations and demonstrations, installation and service charges, and frequently instalment financing.
Most of the mechanical refrigerators in the retail market are
manufactured by a few large and well known companies and are distributed through wholesale channels to department stores, electrical specialty shops, mail-order houses, stores operated by public utilities and to a few orher types of retail outlets. They are usually extensively advertised and sold under the manufacturer's trade mark.
Although detailed figures for a specific refrigerator were not available, confidential information on percentages of average margins and mark-ups were obtained. Applying these percentages to the average retail price in 1935 gives a fairly typical picture.

The average price paid by the retail customer for domestic electric refrigerators in 1935, according to reports of the National Electrical Manufacturer's Association, was $\$ 156$. The manufacturer's cost was estimated at about $\$ 58$, so that the total spread between production cost and the retail price was $\$ 98$. About $\$ 12$ was retained by the manufacturer, $\$ 16$ was the wholesaler's margin, and $\$ 70$ represented the costs and profits of the retail dealer. In other words the consumer paid as much to the retailer for selling the refrigerator as to the manufacturer for making it.

## e. AUTOMOBILE TRES

Automobile tires are an appreciable item in the family budget of most of the nearly twenty million American families owning automobiles. Tires on new cars, it is true, do not constitute a very important part of the cost of the automobile, but in normal years three or four times as many tires are sold for replacement purposes to automobile users through retail dealers.

The tire industry has long been concentrated in the hands of relatively few large corporations which sell tires for new cars directly to the automobile producers. Distribution of tires to the replacement market has changed rapidly in recent gears, and today tires are sold to consumers through a large variety of retail channels. Ten years ago independent dealers-specialty tire shops, garages, hardware stores, and general merchants-handled nine out of every ten tires sold at retail. Today the independents have lost a large share of their business to large-scale retail organizations such as mail-order houses, chain stores, oil company filling
stations, and tire manufacturers' retail stores. The latter organizations now account for half the retail business.
Invasion of the retail field by these mass-selling organizations resulted from the vast expansion of the market occurring in the twenties, and also because the price and distribution policies of several of the largest manufacturers favored the large retail buyers. Today the independent wholesaler has been almost eliminated, and 90 per cent ${ }^{13}$ of the output is sold by manufacturers directly to retailers or through manufacturer-owned outlets directly to the public.

## More Tire for Less Money

As a result of these shifts in distribution, and because of intense competition between large producers and powerful retail buying organizations, as well as lower raw material costs and improved manufacturing methods, the retail customer today gets a much better tire for much less money than he did a decade or more ago. A recent study ${ }^{16}$ compares costs for a best quality tire for light cars in 1926 and 1938. The smaller 1926 tire cost the consumer $\$ 23.95$, with an average mileage of 14,200 or $\$ .00169$ per mile, while the heavier 1938 tire cost $\$ 19.35$, with an average mileage of 26,500 , or $\$ .00073$ per mile. On the basis of 1926 values, the 1938 tire represented $\$ 44.78$ worth of mileage, or $\$ 25.43$ more than it cost. Also, no consideration was given to the value of increased comfort and safety which were built into the 1938 tire.
Table 8 shows the cost and price changes occurring between 1921 and 1933. Marketing costs declined substantially, but not as much as the retail price, and far less than factory costs, which in 1933 were at a little more than a fifth of the 1921 level. In spite of the great decline in prices and costs, therefore, slightly over 50 per cent of the consumer's dollar went for marketing costs in 1933 as compared with only 40 per cent twelve years before. This difference in trends is no indication that marketing is less efficient than it was in earlier years. In fact the contrary is probably true,

[^7]since the physical task of selling a tire has not been lessened by the reduction in its price.

TABLE 8
Average Prices and Costs of Automoblle Tires, 1921 and 1933a

|  | 1921 |  | 1933 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | Per Cent of Rerail Price | Amount | Per Cent of Retail Price |
| Cost at factory | \$22.50 | 58.6 | \$ 4.87 | 46.4 |
| Raw material cost | 7.93 | 20.7 | 2.27 | 21.6 |
| Cost of manufacture | 14.57 | 37.9 | 2.60 | 24.8 |
| Markering cost | 15.90 | 41.4 | 5.63 | 53.6 |
| Retail price | 38.40 | 100.0 | 10.50 | 100.0 |

a. Derived from table by W. W. Leigh, in "Wholesaling of Automobile Tires," The Jowrnal of Marketing, October 1936, P. 95.

The extent of price spreads for tires varies also according to the channel of distribution. ${ }^{17}$ Goodyear Allweather tires sold through the usual wholesale distributors to retailers at $\$ 8.40$ in 1930 bore a total distribution cost of $\$ 3.44$, or 41 per cent of the retail price. The intermediary distribution functions accounted for 16 per cent, and retail operating expenses were 25 per cent of the retail price. Sears, Roebuck's Allstate tire, a comparable product and sold through Sears, Roebuck's retail stores for $\$ 6.47$, entailed a total distribution cost of $\$ 2.07$, or 30.2 per cent of the retail price. The difference in discribution costs accounted for most of the differential of $\$ 1.93$, or 23 per cent, in the prices of the two tires. Similar tires were sold by Sears, Roebuck's mail-order division at $\$ 6.17$, with a distribution cost of $\$ 1.16$, or 18 per cent of the retail price.

## f. GASOLINB

In spite of the fact that gasoline is a well-standardized, imperishable commodity, easily transported with relatively small loss and usually handled in large quantities by simple mechanical methods, there is a relatively large spread in price between the value at the refinery and the amount paid by the consumer. Al-
17. John F. Thomas, "Varying Funcrions in Discribution, Their Costs and Influ. ence on Recail Prices," The Jowrnal of Markoting, July 1938, p. 33.
though some variation in prices to retail customers exists because of different transportation costs to various markets, the situation in the New York market is typical of the several elements (other than transportation costs) which make up the final price.

As shown in Table 9 the New York City consumer paid 17.5 cents per gallon for a standard grade of gasoline worth 5.5 cents at the Gulf port. State and federal taxes, which together amounted to almost as much as the cost of producing the crude petroleum and refining the gasoline, account for nearly one-third of the amount paid by the customer.

## TABLE 9

Costs and Price Spriads of Gasoline at New York, 193Ga

|  | Cencs per Gallon |  | Per Cent of Consumer's Dollar |
| :---: | :---: | :---: | :---: |
| Price at Gulf port |  | 5.50 | 31.4 |
| Transportation to New York | . 50 |  |  |
| Terminal charge | . 25 |  |  |
| Special processing | . 25 |  |  |
| Total differential to New York |  | 1.00 | 5.7 |
| Tank car price at New York |  | 6.50 |  |
| Margin to jobber |  | 2.00 | 11.4 |
| Tank wagon price at New York |  | 8.50 |  |
| Margin to retail dealer |  | 4.00 | 22.9 |
| Posted filling station price at New York |  | 12.50 |  |
| Tax |  | 5.00 | 28.6 |
| Price to retail customer at filling station |  | 17.50 | 100.0 |

a. Compiled from a confidential source.

After subtracting the amount of the taxes the twelve and a half cent net price is still more than twice the refinery price, reflecting transportation and distribution cosss of seven cents. Of this sum, the retailer's margin of four cents and the jobber's of two cents, nearly equaled the total cost of producing the gasoline, shipping it by water from the Gulf port to New York harbor, and delivering it in tank cars to the New York jobber. Furchermore even the one-
cent margin between the Gulf port price and the jobber's cost included a small charge for additional processing in New York.

Obviously the six-cent margin of the jobber and retailer, amounting to nearly half the retail price, exclusive of taxes, offers the largest area within which appreciable savings might reasonably be expected. But individual companies feel powerless to cope with the problem, although many leaders in the industry recognize the possibility of reducing costs of wholesale and retail distribution.

## Too Many Filling Stations

One source of high costs seems to be the excessive number of retail filling stations and consequent low average volume of sales. With the existing number of retail outlers the volume of business per station is so small that a margin of four cents per gallon, or nearly 50 per cent of the price to the retailer, is necessary to give the filling station operator an adequate compensation. If the number of filling stations could be cut in half the retail customer would still be adequately served, bur the average volume per station would be doubled and the unit cost of selling could be greatly reduced. In this respect, of course, gasoline distribution is no different from many other lines of retail trade.

A reduction in the number of retail outlers would also lower the operating expenses of the bulk-tank station or wholesaler, whose margin is two cents a gallon. As the situation now stands many of the small retailers are poor credit risks and are serviced on a cash-on-delivery basis. Often they are unable to buy as much as a hundred gallons, the minimum quantiry which can be handled economically from a tank-truck. Instead of emptying a full one hundred gallon compartment by hose into the retailer's tank, bulk distributors have to supply these outlets by "bucketing," five gallons at a time. This operation is of course wasteful and time-consuming and increases the wholesaler's cost.

## A "Volume-Minded" Industry

In spite of these wasteful practices, the industry is so volumeminded, and competition among refiners and wholesalers is so keen, that no single company can attempt to correct the situation.

If one company reduced the number of its stations without agreement on the part of others, competing concerns would buy up or supply the abandoned locations with the result that no change would be effected.
Entirely aside from this problem, there are other opportunities for economies in wholesale operations. A number of oil companies located their bulk-tank stations in the days of kerosene and horsedrawn tank wagons so as to serve a territory within a radius of five to ten miles. Now that large automobile tank-trucks are available to serve a radius of twenty-five to fifty miles, depending upon the density of outlets, it would be possible to effect substantial savings by discontinuing many of the existing stations. This has ofren been considered but has not been carried out because of the probable resentment at such action on the part of the local population. These bulk distributing stations, particularly in the South, are frequently an important source of employment and income in the small communities, and abandonment of a station by one company might easily lead to a local boycott against that company's products.

## Chapter 3

## THE FLOW OF GOODS THROUGH DISTRIBUTION CHANNELS

Although the primitive market dealt in many of the necessities of life, it was not the place to which most people went to obtain those necessities. People generally still lived on farms or in small isolated villages. The family was generally a self-supporting unit supplying most of its own needs from its own labor. Only the surpluses were sold to traders or bartered in the market place. In modern America, however, as an almost universal rule, we go to the market place for almost everything we need; whereas, in our capacity as producers, we produce nothing but surplus. If we are engaged in the textile industry, for instance, either as employers or employees, it is not for the purpose of supplying ourselves with cloth. Individually we might be able to turn our hands to a number of things, but there is only one thing we can do with a textile mill, and that is to make textiles for the market.
The ancient market place, therefore, has grown into a vast and complex system of modern distribution. Without it, we could not enjoy the advantages of mass production, for every one of the specialized products of modern industry must be sold and resold, sometimes many times, in raw, unfinished, or finished form, before it finally reaches the ultimate consumer. Since this study aims to measure and appraise methods and costs of distributing goods in the United States, it is important first to show the size of the task of commodity distribution as a whole and the diversity of channels through which goods move from their primary sources through processing and fabrication to their final destination.

At one end goods enter the economic system in the form of the crude products of agriculture, mining, forestry, and fishing, or as imports from abroad. Distribution begins as soon as these com-
modities leave the farms, mines, and forests, or the ports of entry, and continues at every stage of their movement through the system which finally delivers them in finished form and at the desired time and place to the millions of consumers and consuming institurions in the United States. Some of these primary products move directly from their source to the consumers, but this is exceptional. Ordinarily even fresh foodstuffs, coal, imported articles, and other products ready for consumption move first through the hands of intermediary or wholesale dealers and retail stores before they reach consumers. Raw materials destined for manufacture may move direct from primary sources to the factories, but here too the services of intermediary dealers are usually required.

Similar complexity and diversity characterize the distribution of semi-finished and finished manufactured products. Semi-finished manufactures may be sold and delivered directly from one factory to another or may go through wholesale channels. Factory-made goods in finished form may be sold and delivered directly to consumers or consuming institutions, or directly to retail stores; but the great bulk of such products enters wholesale channels where further sales and resales may take place before it goes through retail channels to consumers. Obviously distribution is far from being the straight-line transfer from farmer to manufacturer to wholesaler to retailer to consumer which it is sometimes considered to be. True, a large part of the distributive task is of this sort. But the work of the middleman in distributing raw materials and semi-finished products commences long before manufacturing begins and reappears repeatedly between various processing, fabrication and assembly operations performed in different factories.

## 1. Measuring the Flow of Commodities

The diversity of distributive channels in the vast system whereby goods are sold and exchanged in the United States is pictured in "The Flow of Goods" Chart (in the pocket of the back cover), which shows the movement of commodities from their origin as raw materials to their destination as finished products, and measures their increasing values at various stages throughout the entire
process. The dollar value of the goods produced or distributed by each industry or branch of trade (e.g., agriculture, manufacturing, retail trade, etc.) is measured by the heights of the various colored rectangles, while the volume and direction of their distribution is shown by the colored bands of varying widths moving out to the right from each rectangle. In the same way the bands moving into each rectangle from the left show the source and value of goods purchased by each branch of industry. The bands describing an arc from the right side of each rectangle to the left of the same rectangle show the re-circulation, or movement of goods to organizations within the same industry or, as in the case of agriculture or mining, the use of products at the source. The criss-crossing of the bands and the opposite directions of the arrows on the Chart illustrate the diversity in the movement of goods and in the channels of distribution.
The Chart, it should be emphasized, measures only the flow of movable tangible commodities from the point of origin to the point of final sale as commodities, and not the total volume of trade as the term is ordinarily used. The latter would include in addition to commodity production and distribution a large volume of transactions in real estate and construction, securities, insurance and finance, electric power and light, the amusement business and other commercial, professional and personal services-indeed the entire range of economic activity involving the purchase and sale of services as well as goods.
The Chart-as well as Table 10 which gives the estimates and figures-is based on the year 1929, when a larger volume of goods was produced and distributed in the United States than in any other year before or since. More complete data were available for that year than for any subsequent year because of the unusually complete coverage of the decennial Census. Census figures were supplemented by other official and unofficial statistics, and in some instances estimates had to be resorted to.
In spite of minor omissions and possible errors it is believed that the Chart gives a reasonably authentic picture of the movement of goods in a year when our system of production and distribution was operating closer to capacity than at any time since. Although
the total dollar volume of transactions in more recent years has been at lower levels, the relationships between the different branches of trade and production and between the volume of goods flowing through different channels probably remain approximately as pictured.

## a. SALES FROM PRIMARY SOURCES

The value of goods entering the system, as shown in Table 10 and by the rectangles at the left side of the Chart, amounted to less than $\$ 22$ billion, of which agriculture accounted for more thanhalf and the extractive industries for more than half the remainder. These goods followed varied routes. Nearly two-thirds of the $\$ 12.4$ billion worth of farmstuffs was sold to intermediary dealers for furcher distribution. Most of the remainder, in nearly equal shares, went to consumers ready for consumption, to manufacturing industries for canning and processing, and to agriculture, being retained on farms where it was produced or sold to other farms.

Extractive industries sold about 60 per cent of their $\$ 4.9$ billion output to manufacturers, and about the same proportion of the $\$ 4.4$ billion total of imports apparently consisted of raw and semifinished materials bought directly by the manufacturing industries. Most of the remaining imports went to intermediary dealers for further distribution. About $\$ 1$ billion of the output of extractive industries also went through the hands of intermediaries, but appreciable quantities, chiefly coal, were sold directly to retailers, consumers, utilities, and consuming institurions.

It will be noticed that each connecting band carries two figures, one at the place where it leaves the branch of production or distribution and the second where it enters the subsequent stage in the process. The difference between the two is the estimated amount added to the selling value by transportation charges. The bands therefore show both the volume and the direction of the flow of goods moved by the various agencies of transportation.

## b. Sales of manufacturing industries

Goods sold by manufacturers alone amounted to $\$ 69.6$ billion, or more than three times the total value of goods from primary

TABLE 10
Estimated Sales and Purchases of Goods by Various Branches of Industry and Trade
(In Millions of Dollars)

| Branches Buying Goods | Sales Value of Goods Sold by Pollowing Branches |  |  |  |  |  |  | Transportation Charges | Amounts Paid by Buyers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agriculture | Extractive Industries | Import Trede | Manufacturing Industries | Intermediary Trade | Recail Trade | Total |  |  |
| Primary and intermediary buyers |  |  |  |  |  |  |  |  |  |
| Agriculture | 1,524 | b | ** | b | 468 | 3,303 | 5,295 |  | 5,295 |
| Extractive industries |  | 188 |  | 345 | 640 | b | 1,173 | 56 | 1,229 |
| Manufacturing industries | 1,628 | 3,000 | 2,649 | 20,786 | 16,369 | 380 | 44,812 | 2,378 | 47,190 |
| Intermediary trade | 7,669 | 1,001 | 1,650 | 31,815 | 15,927 | 450 | 58,508 | 3,701 | 62,209 |
| Retail trade | 392 | 321 | 100 | 6,364 | 27,434 | 707 | 35,318 | 1,726 | 37,044 |
| Total | 11,209 | 4,510 | 4,399 | 59.310 | 60,838 | 4,840 | 145,106 | 7,861 | 152,967 |
| Terminal buyers |  |  |  |  |  |  |  |  |  |
| Consumers | 1,200 | 30 | $\cdots$ | 2,099 | 690 | 44,404 | 48,423 | 259 | 48,682 |
| Institutional buyera | b | 95 | ... | 2,027 | 2,148 | b | 4,270 | 165 | 4,435 |
| Utilitiet, consuruction and cransportation | . ${ }^{\prime}$ | 254 | $b$ | 3,098 | 3,709 | b | 7,061 | 294 | 7,355 |
| Export trade | ... | ... | ... | 3,066 | 1,907 | b | 4,973 | 187 | 5,160 |
| Total | 1,200 | 379 | *. | 10,290 | 8,454 | 44,404 | 64,727 | 905 | 65,632 |
| Grand total sales | 12,409 | 4,889 | 4,399 | 69,600 | 69,292 | 49,244 | 209,833 | 8,766 | 218,599 |
| Total purchases including transportation charges | 5,295 | 1,229 | $\ldots$ | 47,190 | 62,209 | 37,044 | 152,967 | ** | 152,967 |
| Increment | 7,114 | 3,660 | 4,399 | 22,410 | 7,083 | 12,200 | 56,866 | 8,766 | 65,632 |

a. Includes farm products retained by farmers for their own use. Sources: See Appendix Note I.
b. Quanticy unknown.
sources. Substantial amounts of manufactured goods-about $\$ 7.2$ billion worth-were sold direct to household and other terminal buyers, including public utilities, government institutions, the construction trade and transportation agencies. An additional $\$ 3.1$ was exported directly and sales of $\$ 6.4$ billion were made direct to retail trade.

The largest volume, however, was sold to intermediary dealers, who took almost $\$ 32$ billion, or nearly half the total output. These are not only wholesalers proper but also manufacturers' sales branches, chain store warehouses, agents and brokers, ecc. Sales of semi-finished or finished manufactures to other manufacturers for further fabrication, as the sale of tin plate to can manufacturers; for assembly into different products, as the sale of tires to the automobile industry; or for use in production, such as machine tools and lubricating oil, accounted for nearly $\$ 21$ billion of the total volume. That a goodly part of the volume of manufacturers' sales to intermediaries is sold again to other factories is evident from the width of the band showing the movement of wholesale goods to manufacturing industries. More than a third of factory purchases were made from intermediary dealers.

## C. INTERMEDIARY AND RETAIL SALES

The tocal sales of wholesale or intermediary dealers were almost equal to the sales of factory products. Of the rotal volume of over $\$ 69$ billion, more than $\$ 27$ billion went to retailers. Nearly equal amounts of commodities were sold to manufacturers and to other intermediaries-about $\$ 16$ billion to each. Sales to consuming instimuions and industries accounted for most of the remainder, with smaller amounts sold for export and direct to the consumer.
Total sales of retail trade, in terms of delivered values, amounted to more than $\$ 49$ billion, of which $\$ 44.4$ billion is shown in the Flow Chart and Table 10 as representing sales to consumers. This latter sum undoubtedly includes a small, and unfortunately indeterminable, amount of finished goods sold by retail dealers to business establishments (other than wholesalers and retailers), most of which, however, were terminal buyers. The remainder of the

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$\$ 49$ billion total was made up of sales to farmers of equipment, supplies and feed, estimated to amount to more than $\$ 3$ billion, and of sales to other retailers, intermediaries and manufacturers, which total $\$ 1.5$ billion.

## d. terminal purchases

The end result of the entire process of producing and distributing goods in the United States is measured by the rectangles at the right side of the Chart. These show the dollar volume of goods bought by what may be described as the terminal buyers, consisting of individual consumers, consuming institutions and agencies, such as utilities, railroads, building contractors, hospitals, hotels and government agencies, which consume commodities in conducting their operations and providing services to the public. Exports are properly included in this classification since they consist of commodities leaving our economic system.
Terminal purchases consisted of nearly $\$ 49$ billion bought by household consumers, almost $\$ 12$ billion bought by utilities, the construction industry and various institutional buyers, and more than $\$ 5$ billion of exports. The aggregate of $\$ 65.6$ billion paid by terminal buyers represents the cost of providing raw materials, semi-finished and finished goods with necessary form utilities and time and place utilities; in other words, the total cost of commodity production and distribution, including, of course, all transportation costs.

The achievement of this end result of delivering nearly $\$ 66$ billion of finished goods to ultimate buyers involves, as we have seen, a multitude of selling and buying transactions, amounting in dollar volume to well over three times the value of the finished goods. Aggregate sales of goods by all industries and trades throughout the process amounted to nearly $\$ 210$ billion, and the total amount paid for delivered goods by various buying agencies, because of the inclusion of transportation costs, was in excess of $\$ 218$ billion.

Obviously this great disparity between $\$ 66$ billion and $\$ 218$ billion reflects the large amount of re-circulation, of the sale and resale of the same goods or of goods in process of fabrication which
occurs at various stages throughout the system. ${ }^{1}$ Sales of manufacturing industries alone, for example, amounted to nearly $\$ 70$ billion, or more than total sales to terminal buyers, while the volume of intermediary trade was also nearly $\$ 70$ billion. As a whole, the sales of goods by producers and intermediaries to each other, prior to the final step, amounted to $\$ 145$ billion, or more than twice the total of final sales to terminal buyers.

## 2. The Increase of Values

As indicated above, the total of $\$ 65.6$ billion paid by consumers and other terminal buyers of finished goods measures in a very rough way the total cost of producing and distributing these commodities, including profits all along the line. How this total results from the gradual accumulation of costs and increase of prices at successive stages throughout the entire process can be seen from the Flow Chart and in the last three lines of Table 10. Every time a commodity moves ahead in the flow of trade, costs are incurred and its value is increased. When the farmer sells wheat to the miller a transportation value is added; when the wholesale merchant buys it from the flour miller the value of the milling process is added and so on through the bakery to the ultimate consumer who buys the wheat as part of a loaf of bread. The price he finally pays for the bread is an accumulation of all these increments of value.

On the Flow Chart the increment, or value increase at each stage of the process, is shown by the difference between the amount represented by the bands going into each rectangle on the left and that of the outgoing bands. For example, the value of commodities sold by agriculture amounted to $\$ 12.4$ billion. But farmers bought or retained for their own use $\$ 5.3$ billion worth of goods-fertilizer, feed, tools and other products used in production, farm products retained for use on the farm, and livestock transferred from one farm to another for fattening purposes. Hence the net

1. The total of $\$ 210$ billion, it should be pointed out, does not include the large volume of specularive and trading transactions on the organized commodity erchanges.
amount received by farmers for their products, or the increment of value created by agriculture, was $\$ 7.1$ billion.
In the same way the increment of value added by the extractive industries is the difference between the $\$ 4.9$ billion sales of these industries and the $\$ 1.2$ billion which they paid for supplies and materials, or $\$ 3.7$ billion. The total value of imports- $\$ 4.4$ billion -may be considered an increment so far as the domestic economy was concerned.
The increment of value resulting from the activities of manufacturers amounted to $\$ 22.4$ billion, or the difference between sales of $\$ 69.6$ billion and purchases of $\$ 47.2$. A large part of this increment, ${ }^{2}$ of course, is chargeable to the strictly productive operations of manufacturing industries as distinguished from their distributive activities.
With total sales only slightly less than for manufacturing, the value increment of intermediary trade (sales of $\$ 69.3$ billion minus purchases of $\$ 62.2$ billion) amounted to only $\$ 7.1$ billion, or less

[^8]than a third of that of manufacturing industries. This disparity reflects the smaller expense involved in the purely distributive operations of intermediaries.
Retail trade, with sales of $\$ 49.2$ billion and purchases of $\$ 37$ billion, shows a value increment of $\$ 12.2$ billion, which reflects the fact that retail distribution is a much more elaborate and costly process than wholesale distribution, requiring more labor, more costly equipment and facilities, and therefore necessitating larger mark-ups and expense ratios.

## 3. Total Sales and Purchases

Taken as a whole the various branches of trade and industry shown in the Chart-agriculture, extractive industries, import trade, manufacturing, and intermediary and retail trades-show total sales of $\$ 218.6$ billion, which represents the amounts paid by all purchasers including terminal buyers, and total purchases of $\$ 153$ billion, the amount paid for goods by all producing and selling agencies. The difference between the two, or the aggregate value increment of $\$ 65.6$ billion, ${ }^{3}$ representing total costs of producing and distributing goods, is equal to the total amount paid by terminal buyers for finished goods. Of this aggregate value increment of $\$ 65.6$ billion, about 87 per cent, or $\$ 56.9$ billion, represents value increases added by all the various agencies of extracting or growing, buying, storing, manufacturing, and selling, and $\$ 8.7$ billion, or 13 per cent, represents the services of transportacion agencies. Transportation charges are shown on each band on the Chart as the difference between the amount received by the selling
3. There is some error in the total value of end sales because manufacturers and distributors reported some sales to consumers which should have been allocated to other manufacturers, intermediary dealers, or retailers. For example, retail coal dealers would probably fail to distinguish in their reports between sales to wholesale establishments and other business buildings and institutions. Accordiagly, a sale of fuel to a wholesale grocer would appear on the Chart as a sale to a terminal buyer. Since the coal was an item of expense to the wholesale grocer and charged off by him against sales, it would also appear in the margin between purchases and sales in the intermediary rectangle. Wherever the sales of commodities to manufacturers, intermediaries, or retailers are considered expenditures by them chargeable against current gross income and also appear as sales to terminal buyers, the "end product" is unduly enlerged to that extent. The total duplication of value due to this cause, however, is probably not large.
agency and the amount paid by the purchasing agency. Thus, intermediary dealers received $\$ 16.4$ billion for goods sold to manufacturers, for which the latter paid $\$ 17.3$ billion, the difference of $\$ 900$ million being estimated transportation charges.

While the total of $\$ 65.6$ billion sales to terminal buyers (or the aggregate of value increments) may be regarded as a rough approximation of the total costs of commodity production and distribution, the increments occurring at each stage in the process cannot be considered as a measure of the costs of distribution, or of production, incurred at that stage. In Chapter 5 an attempr is made to estimate the total cost of distribution, as well as the costs attributable to various branches of industry and trade. Before attempting to measure costs, however, it is important to describe in greater detail the nature and functions of the various agencies engaged in distribution.

## Cbapter 4

## DISTRIBUTORS AT WORK

The agraruan family worked at production and distribution without distinguishing one process from the other. It was all work toward one definite end-whether one was plowing and plancing, manufacturing or processing, or engaged in ultimate or intermediate distribution. The boy who carried the wood in from the woodshed was simply putting the finishing touch upon a process which began with cutting down a tree; or, to be still more comprehensive, began with the family's need for fuel and iss search for raw materials with which to supply the need.
The process of distribution did not begin in the woodshed, however. The actual building of the woodshed to perform the storage function might logically be considered as part of the process. Food and water might have to be carried-distributed-to the woodchoppers. Even carrying the ax and saw to the woods was so necessary to the function of chopping that no one tried to make a theoretical distinction between the two processes.

## New Economy More Complex

In this new economy the jobs are all divided and sub-divided, but production and distribution are as necessary as ever. Food and fuel still have to be produced and stored and there has to be distribution boch before and after the storage. Goods have to be distributed not only for personal consumption but for consumption by the organizations engaged in production and distribution. Factories, for instance, are consumers not only of raw materials but of equipment and supplies, and if there is any advantage to the consumer in having a factory system, he must expect that a large part of production and distribution must go into its maintenance.

Also, it must be remembered that what it costs to distribute fac-tory-made products depends not only upon the efficiency with which the task is carried on, but upon how great the task of distribution is. On the old homestead with little machinery and no steam or electric power very little could be produced. But distributing the products of a family to the family was a relatively small job compared with distributing the products of a modern factory to all the people who want those products, scattered as they are throughout the whole United States.

No wonder, then, that there must be not only retailers but also middlemen. Manufacturers, if they decide to sell direct to the consumer, must first set up their own organizations to perform the retail and wholesale functions. Thus they do not sell direct to the consumer but simply sell through their own bired wholesalers and retailers. They do not thus eliminate the middleman but merely put him on a salary or commission basis. Whether this is an advantage to the ultimate consumer or not depends upon how economically and efficiently the necessary intermediary function is performed.

In any event, in our machine economy with its high degree of sub-division of labor and specialized functions there must be not only many stages of production but a constant recurrence of the distributive task throughout the whole process of making things available to people. Distribution begins when raw products leave the farm or mine and continues repeatedly throughout the process until they finally reach the consumer in finished form. Retail distribution of consumer goods is but the final stage.

## 1. Retail Distribution

A retail store transfers the ownership of commodities from the storekeeper to the household consumer. It stores the article until the consumer calls for it, sells it in the amount and form desired by the consumer and often delivers it to his home; and it usually stands ready to reverse the process and take the article back if the buyer is dissatisfied with it. But it does a good deal more than this.

Instead of waiting passively for the customer to come in and
make his wants known the modern retail merchant devotes a good part of his energies to "demand creation," not necessarily by offering lower prices than his competitor, but by aggressive advertising and promotional efforts to induce the consumer to buy whether he "wants to" or not. Sometimes, too, the retail store engages in processing, such as dissecting a side of beef and excracting the particulat part which the consumer wants. Or it may freeze ice cream, or grind coffee, or fit and alter clothes bought by the customer. If it deals in coal, it may sell not only to homes but to factories, thus becoming to some extent an intermediary distributor. Often it is difficult to say in just what category a particular store should be classed, which accounts for considerable variation in otherwise dependable tables of statistics.

In the United States in 1935 there were more than 1.6 million retail stores employing nearly four million persons, exclusive of proprietors, and doing a business of $\$ 33.2$ billion. This was about two-thirds of the $\$ 49$ billion peak reached in 1929 , but owing to the lower price level in the latter year the difference in the volume of commodities sold in the two years was not so great. There was an increase in the dollar value of retail trade to nearly $\$ 38$ billion in 1936 and to $\$ 40.4$ billion in 1937, according to Department of Commerce estimates. But even in 1937 retail trade was 18 per cent less in dollar volume than in 1929.

## Consumer Purchases in 1929

To the $\$ 49.1$ billion taken in by retail stores in 1929 (including restaurants and automobile repair shops) should be added $\$ 129$ million of retail milk sales, bringing the total to $\$ 49.2$ billion, the figure appearing in the Flow Chart in the previous chapter. As shown in the Chart, however, this total includes considerable quantities of goods (chiefly farm products) sold to wholesalers and manufacturers, fuel sold by retail distributors to commercial buyers, retail goods sold to other retailers, and $\$ 3.3$ billion of farm supplies and equipment sold to farmers for productive purposes. This leaves a balance of $\$ 44.4$ billion sold by retail establishments to consumers for which the latter paid $\$ 44.5$ billion after inclusion of estimated delivery charges.

To this must be added an estimated $\$ 1.2$ billion of products bought by consumers directly from farmers, $\$ 2.2$ billion from manufacturers, and smaller amounts from wholesalers and extractive industries. These bring the grand total of recorded purchases of goods by consumers in 1929 to $\$ 48.7$ billion. ${ }^{1}$

## Retail Sales by Size of Store

Of the total of more than 1.6 million retail stores in 1935, 60 per cent of them had sales of less than $\$ 10,000$ apiece and as a group did only 11 per cent of the $\$ 33.2$ billion volume in that year. In 1929, when retail volume was half again as large, only 44 per cent of the nation's stores were in this smallest size-class, but these stores accounted for only 6 per cent of that year's retail sales. At the other extreme of the size-scale, a small fraction of one per cent of all stores had sales averaging $\$ 1$ million or more and accounted for 10 per cent of the volume in 1935 and over 12 per cent in 1929. Relations between size-classes and sales volumes are shown in Figure 7 and in Table H of the Appendix.
It is interesting to note that the decrease in total sales volume between 1929 and 1935 was accompanied by a downward shift in the percentage of stores in each of the size-classes above $\$ 10,000$ annual sales and in the percentage of total sales of each size-class above the $\$ 50,000$ level. Size-classes below these levels showed relative increases both in number of stores and in sales. Since this shift resulted chiefly from the decline in total sales volume the figures cannot be cired to prove a trend either toward large stores or small.
The fact that there were a greater number of retail businesses in 1935 than in 1929, however, makes it clear that there was no strong tendency toward concentration during this period. Even in 1929 the stores in the $\$ 10,000$-or-less group averaged only $\$ 4,145$ in sales and the far greater proportion of such stores at the bottom of the depression in 1933 averaged only $\$ 3,529$, and in 1935, only

[^9]

FIGURE 7. At one extreme, the three largest size-classes-stores with 1935 sales of $\$ 300,000$ or more constituting less than one per cent of the rotal-aceounted for 21 per cent of total business. At the other extreme, the two smallest classes comprising more than 77 per cent of all stores had sales of less than $\$ 20,000$ and accounted for only 23 per cent of the entire retail volume. (Source: Table H.)
$\$ 3,677$. Since this is the average, it must be true that hundreds of thousands of our retail stores ring up sales of less than $\$ 10$ or $\$ 12$ a day. Out of this, they have to replenish their stocks, pay their rent, hire whatever help they must have, store commodities ready for the consumer to buy them-and reap their profits, if any.

## Kinds of Retail Business

What was actually being sold in the more than a million and a half retail stores? The consumer paid out more for food than for any other class of commodity in both 1935 and 1929. Food stores head the list by a wide margin not only in the number of stores but in the total volume of sales, as can be seen in Figure 8 and in Table I of the Appendix. In 1935 about 25 per cent of total retail sales, and in 1929 about 22 per cent, were made in grocery and meat stores and stores dealing in candy, dairy products, bakery goods and similar lines. Consumers also bought large quantities of food in hotels, department stores, drugstores, and from mail-order houses, as well as direct from the farm. The food total would not be complete without adding restaurants, which accounted for 15 per cent of all retail establishments and for 7 per cent of sales.

It is interesting to note in passing that the proportion of retail business represented by food outlets in the United States is about one-half the percentage in Germany and considerably less than that in Denmark. Food stores accounted for 47.3 per cent of the retail sales volume in Germany in 1930 and 63 per cent in Denmark in $1925,{ }^{2}$ as compared with only 22 per cent in the United States during approximately the same period. The smaller proportion here does not mean that Americans eat less food, but that they have more money for other things.

What was next on the list? As shown in Figure 8 it was automobiles and gas. Taken together, the filling stations and automotive group account for nearly 20 per cent of the patronage of all retail establishments in both 1935 and 1929. Since the total volume of retail sales in 1935 was only two-thirds as large as in 1929 these figures mean that we spent fewer dollars on automobiles in
2. Julius Hirsch, Standard Figuras for Parpores of Basizess Researth, International Chamber of Commerce, p. 4.


Drgurs 8. Food products, including meals served in restaurants, accounted for almost a third of the total volume of retail purchases in 1935 , tad nearly helf of all retail outlets were devoted to the sale of food. Automotive supplies were next in importance, accounting for nearly 20
cent of the rotal number of stores and the total sales volume. (Source: Table I.)
$\xrightarrow{\text { Pen cen }}$
1935. The motor car industry, in fact, suffered greatly during the depression. But the automobile occupied as large a part in the 1935 budget as it did in 1929. The figures speak eloquently, therefore, of the nature of our American economy. This economy is not geared to the production and distribution of mere necessities, but is devoted in large measure to making available goods which contribute to a higher standard of living.
General merchandise stores constitute the third largest group of retail outlets. These include deparment stores and the mail-order houses, which are relatively few in number but account for practically 10 per cent of the entire retail volume of the country. Even though much apparel is sold in deparment stores, the stores specializing in clothing and allied merchandise represent the fourth largest group, with 8 per cent of all retail sales in 1935 and 1929.
The lumber and building material trades made up the fifth largest group in terms of sales volume. The depressed condition of the construction business in 1935 is reflected in sharp decreases not only in the volume of trade but also in the number of stores handling lumber and building materials.
Country general stores still Ioom large in the retail structure of the country, and together with farmers' supply stores, rank sixth in importance. The actual number of such stores, as well as of other kinds shown in the table, may not have declined between 1929 and 1935 to the extent indicated by the figures. Some of the discrepancies may be due to differences in coverage by the Census enumerators arising from the fact that replies to Census inquiries were required by law in 1929 but were voluntary in 1935.
The volume and the price of goods distributed have fluctuated rapidly. Not only has the character of the goods changed with the years but interesting, and sometimes spectacular, changes have taken place in the methods and channels by which they are distributed. However, in spite of the changes since 1929 and the substantial decline in volume, the basic structure of retail distribution, as reflected in the proportion of business done by different kinds of stores, appears to have undergone few major changes. The shares of the total business done by automotive, lumber and building material, furniture, farm supply, and jewelry stores, as might
be expected, declined from 1929 to 1935, while stores dealing in necessities such as food, drugs, fuel and ice, as well as filling stations, increased their proportions. As consumer income shrank during the depression, economies were made first in luxury and durable goods.

## Concentration of Retail Trade in Cities

More than 44 per cent of retail distribution in 1935 was carried on in cities containing less than 30 per cent of the total population -those with more than 100,000 residents. Nearly 38 per cent of retail trade took place in towns and cities of from 2,500 to 100,000 residents, which include less than 27 per cent of the nation's population. Although all of the remaining areas comprise 43.8 per cent of the population of the United States, they represent only 18.1 per cent of the retail trade. Figures on the proportion of stores and sales in different city-size groups are shown in Table 11.

TABLE 11
Distribution of Retail Trade by Size of Community, 193sa

| Population | Per Cent of Total Population ${ }^{\text {b }}$ | Per Cent of Total Storese | Per Cent of Total Salesd |
| :---: | :---: | :---: | :---: |
| United States Total | 100.0 | 100.0 | 100.0 |
| All cities, 100,000 or more | 29.6 | 33.4 | 44.3 |
| 500,000 ar more <br> 250,000 to 500,000 <br> 100,000 to 250,000 | $\begin{array}{r} 17.0 \\ 6.5 \\ 6.1 \end{array}$ | $\begin{array}{r} 19.2 \\ 7.1 \\ 7.1 \end{array}$ | $\begin{gathered} 24.9 \\ 10.4 \\ 9.0 \end{gathered}$ |
| All civies, 2,500 to 100,000 | 26.6 | 32.9 | 37.6 |
| 73,000 20 100,000 | 1.8 | 2.0 | 2.6 |
| 50,000 to 75,000 | 3.5 | 3.9 | 4.8 |
| 30,000 to 50,000 | 3.9 | 4.4 | 5.5 |
| 20,000 to 30,000 | 3.2 | 3.6 6.8 | 4.4 |
| $\begin{array}{r}10,000 \\ 5,000 \text { to } 20,000 \\ \hline 10,000\end{array}$ | 5.6 4.8 | 6.8 | 7.8 6.8 |
| 2,900 to 5,000 | 3.8 | 5.9 | 5.7 |
| All other areas | 43.8 | 33.7 | 18.1 |

a. Census of Business: 1935, Reiail Distribution, Vol. II, p. 87.
b. Total population (1930): 122.8 million.
b. Total population (1930): 122.8 milion.
c. Total retail stores (1935): $\mathbf{1 . 6 5}$ million.

Inasmuch as each of these population areas contains approximately a third of the 1.6 million retail stores in the United States, it is apparent that not only is less business done in the smaller cities and rural districts but that more of the smaller stores are located there.
These figures dernonstrate, not that country people consume less than city people do, but merely that people travel farther to shop, or shop by mail, if they live farther from urban shopping centers. It is still true of course that the modern farm produces many things which the farm family consumes and which, therefore, it does not have to buy. The generally higher per capita income levels of city residents and the concentration of purchasing power in metropolitan areas also contribure to the relatively larger proportion of retail business in large cities.
One cannot be sure, however, that the preseat concentration of buying in big cities will be continued indefinitely. Already many cross-road stores are becoming units in voluntary chains. Because of their improved service and the advantage of lower rents they can compete in prices on many items with the chain stores in the larger cities. Just as the centralization of industry seemed to lead in the end to a new kind of decentralization, it is now at least possible that centralized control of distribution may Iead toward a decentralization of outlets.
Consideration of the various forms or types of retail operation is now in order. How the total volume of retail sales in 1929 and 1935 was distributed among different types of operation and the number of stores of each type are shown in Table 12.

## a. INDEPBNDENT STORES

The traditional single store, or so-called independent merchant, still plays the dominant role in the retail structure of the country. He and his prototypes operated nearly 86 per cent of the stores in 1935 and accounted for slightly better than 65 per cent of the retail sales volume. Census figures show that independent single outlets increased in number by 190,000 berween 1929 and 1935, and also slightly increased their proportion of the total retail business.

This apparent growth, however, may have been partially due to

TABLE 12
Retail Stores and Sales by Types of Operation, 1929 and 1935a

| Type of Operation | Number of Stores |  | Ner Sales |  | Per Cent of Total Net Sales |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 |
|  | (In Thomands) |  | (In Millions) |  | 100.0 | 100.0 |
| United Stares Toral-all types | 1,654.0 | 1,543.2 | \$33,161 | \$49,115 |  |  |
| Independents | 1,474.2 | 1,375.5 | 24,246 | 38,082 | 73.1 | 77.5 |
| Single-store | 1,419.9 | 1,230.3 | 21,634 | 31,486 | 65.2 | 64.1 |
| Two-smore | 40.9 | 49.1 | 1,750 | 3,021 | 5.3 | 6.1 |
| Three-swore | 13.1 | 15.5 | 771. | 1,255 | 2.3 | 2.6 |
| Local branch systems | . 3 | 2 | 91. | 65 | 0.3 | 0.1 |
| Rearilers-country buyers | .. | 73.3 | ... | 1,779 | ... | 3.6 |
| Retailers-wholesalers |  | 7.1 | ... | 476 |  | 1.0 |
| Chains | 127.5 | 148.0 | 7,550 | 9,835 | 22.8 | 20.0 |
| Local | 18.0 | 52.5 | 1,022 | 3,294 | 3.1 | 6.7 |
| Sectional and national | 107.6 | 92.1 | 6,413 | 6,151 | 19.3 | 12.5 |
| Manufacturer-controlled | 1.9 | 3.4 | 115 | 390 | 0.4 | 0.8 |
| All other types | 52.3 | 19.7 | 1,365 | 1,198 | 4.1 | 2.5 |
| Leased departments, independent | - 3.5 | . 6 | 48 | 24 | 0.1 | 0.1 |
| Leased deparmenes, chain | 3.7 | 3.7 | 108 | 130 | 0.3 | 0.3 |
| Utility-operated stores | 3.9 | 4.1 | 123 | 163 | 0.4 | 0.3 |
| Mail-order houses | . 4 | . 3 | 420 | 515 | 1.3 | 1.1 |
| Direct selling (house-to- house) | 6.3 | 1.7 | 125 | 94 | 0.4 | 0.2 |
| State liquor storesb | 2.1 | ... | 161 | ... | 0.5 | ... |
| Commissaries or company stores | 1.9 | 1.3 | 113 | 116 | 0.3 | 0.2 |
| Other types | 30.5 | 8.0 | 267 | 156 | 0.8 | 0.3 |

a. Census of Business: 1935, Retail Distribution, Vol. I, p. 1-22, Vol. IV, Pp. 6,13 ; Census of Distribution for 1929, Vol. I, p. 68.
b. Includes county or municipal liquor stores in some states.
differences of coverage and store classification between the two Census years. For instance, "retailers-country buyers" and "retail-ers-wholesalers" were listed separately in 1929, but not in 1935. Then, too, about 110,000 drinking places and package beer and liquor establishments, predominantly independent, were recorded in 1935. These were either non-existent or were not counted or otherwise classified in the earlier Census years.

A brief review of the kinds of business in which the independent distributor holds the center of the stage shows the relative strength of his position in 1935 compared with 1929. Taking independent merchants as a group, and including two-store and three-store

TABLE 13
Independent Retallers' Share of Total Business in Various Lines of Tradiz

| Lines of Trade | Percentage of Total Retail Sales 1935 1929 |  |
| :---: | :---: | :---: |
| All Retail Trade | 73.1 | 77.5 |
| Drinking places | 99.2 | $b$ |
| Motor vehicles | 95.6 | $b$ |
| Hardware and implements | 95.4 | $b$ |
| Jewelry | 90.3 | 93.0 |
| Furniture | 86.0 | 83.9 |
| Drugs (without fountain) | 84.13 | 81.2 |
| Drugs (with fountain) | $71.1\}$ | 81.2 |
| Restaurants | 84.0 | 86.1 |
| Fuel and ice | 82.7 | 6 |
| Family clothing | 78.9 | 71.5 |
| Men's clothing | 78.0 | 77.9 |
| Filling stations | 77.8 | 66.0 |
| Lumber and building materials | 75.6 | b |
| Radios | 75.6 | 79.0 |
| Farm and garden supplies | 75.0 | b |
| Women's ready-to-wear clothing | 72.3 | 74.3 |
| Hay, grain, and feed | 71.6 | b |
| Department stores | 61.4 | 72.1 |
| Cigar stores and stands | 61.1 | 73.5 |
| Groceries (without meats) | 60.8 | 53.6 |
| Combination stores (groceries and meats) | 60.5 | 67.6 |
| Automobile accessories and tires | 50.0 | b |
| Household appliances | 48.1 | b |
| Beer and liquor (packnged) | 48.0 | b |
| Shoes | 43.3 | 53.5 |
| Variety stores | 9.2 | 9.8 |
| All other lines of trade combined | 78.8 | $b$ |

a. Census of Business: 1935, Retail Distribation, Vol. IV, p. 9.
b. No true comparisons available.
units as well as the single-store type of operation considered above, the 1935 Census showed that 73 per cent of the nation's retail business was in the hands of independents, as compared with 77.5 per cent in 1929. In certain lines of retailing independent operation is predominant. Independents accounted for almost 96 per cent of the motor vehicle trade, 95 per cent of hardware and implements sales, and 90 per cent of the sales in jewelry lines, as shown in Table 13. Independent operators also did over three-quarters of the retail business in furniture, fuel and ice, filling stations, and men's and family clothing-all of which have shown a favorable trend toward the independents since 1929. The same is true of
radio and drug products, as well, although the independents' share in these fields has declined slightly since 1929. Except in variety items and shoes, both of which have been actively developed by chain organizations, independents in every other line accounted for half or more of the total business done in 1935.

## b. Corporate chain stores

The chain store is by no means a recent development, even on the American continent. The Hudson's Bay Company, chartered in 1670, is probably the oldest chain system in America, but research has traced the idea far back in the dim past of Chinese history. The rapid increase of chain systems in recent times, however, has been of far-reaching importance to distribution and has had a profound influence on both consumers and dealers.

## Comparison with Independents

Although less than one out of twelve of the 1.6 million retail stores in the United States in 1935 were owned by chain systems, chain stores handled nearly 23 per cent of the total retail sales volume in that gear. In 1929, with nearly 10 per cent of retail stores under chain management, their proportion of the retail volume was only 20 per cent. Chain stores operating on a sectional or national basis (in contrast to the local or manufacturer-controlled types) showed a substantial increase in number of outlets between 1929 and 1935. They accounted for more than 19 per cent of the entire retail business of the country in the latter year, as compared with only 12.5 per cent in 1929. Local and manufacturer-controlled chains, on the other hand, lost ground between 1929 and 1935.
Chain stores have made the greatest headway in staple articles with a rapid sales turnover. Variety stores have so far been the most outstanding chain store development, having 90 per cent or more of the business in this field in both 1929 and 1935. The shoe and automobile-accessories trades have been marked by a recent rapid chain store growth until by 1935 they did half of the retail business in these lines. Chains have also been successful in groceries, cigars, and drugs. In the grocery field, which is the largest single class of business, chains controlled nearly 40 per cent
of the trade in 1935, showing a gain in the combination grocery and meat trade since $1929,{ }^{3}$ the year which many have regarded as the peak in chain store development. The relative stability of sales volume shown by the chains in the depression as compared with retail trade as a whole is undoubtedly due, in part at least, to their concentration on necessities such as foodstuffs, variety and drug items, as well as to the economies of large-scale buying.

## Influence of the Cbains

But the figures on their proportion of total retail sales fail to show the total influence of chain store policies on distribution practices all over the country. The chains inaugurated new methods of buying and selling and demonstrated new advantages and economies which woke up hundreds of thousands of independent merchants and their customers to the need for better shopkeeping and a speed-up in the flow of goods. In many a country village the presence of a modern, systematized chain store has jolted the local storekeeper out of his easy-going habits to the benefit of the whole community.

Although chain methods have their disadvantages, they have clearly demonstrated the benefits of mass buying under central supervision, careful stock control, rapid turnover, central warehousing, intelligent display and store arrangement, standards of cleanliness and quality, effective use of part-time employees, systematic selection and training of the selling force and elimination of non-essential services. It was soon discovered that many of the advantages of the chains could be adopted or achieved under independent management by better cooperation between retailers, wholesalers, and producers. Economies were effected by other types of business operation which have made them better able to compete with the chains. Consumers as well as business interests have been at least partially influenced by the lower price levels of the chains to establish cooperative enterprises to cur the price spread between the production cost of goods and the ultimate selling price.
3. Census of Business: 1935, Retall Distribution, Vol. IV, p. 9.

## The Pros and Cons of Cbains

Although the rise of chains has enlisted wide public patronage they are considered by many to be a social menace. By their rapid growth they have undoubtediy caused various painful business readjustments. The Federal Trade Commission's extensive investigation in this feld raises some of the pros and cons of the chain store in American life. The Commission observed that chain operation resulted in certain advantages such "as those flowing from the integration of production and of wholesale and retail distribution, from the savings involved in avoiding credit and delivery service, and from the ability of chains to realize the benefits of large-scale advertising," and concluded that "to eliminate such advantages . . . would involve radical interference with the rights of privare ownership and initiative, virtual abandonment of the competitive principle, and destruction of the public advantage represented by lower prices and lower cost of living."
One part of the chains' competitive advantage in lower selling prices the Commission thought should be cancelled by force of Federal law-discrimination in prices and terms by manufacturers against independents and in favor of chains, a practice accounting for a most substancial part of the chains' ability to undersell independents. . . . It was concluded that many of the low buying prices of the chains had little, if any relation to differences in quantity or cost of selling. ${ }^{4}$

There has been some disagreement with the Commission's conclusions on this latter point, however. In an analysis of the findings, Charles F. Phillips of Colgate University denies that lower buying prices secured by the chains are a large factor in lowering their selling prices. Using the Commission's data, he points out that the success of the chains in reducing gross margins through more efficient management is much more important. In the grocery study, for instance, he contends that only 16.4 per cent of the independents' higher selling price can be traced to greater cost of merchandise while 83.6 per cent results from a larger gross margin. In drugs, similarly, 91.2 per cent of the independents' higher price is due to higher gross margin, leaving but 8.8 per cent to be

[^10] ber 10, 1935, p. 646.

## Criticism of Cbain Methods

The chief criticism of the bargaining mechods used by chains to get special price concessions has come from manufacturers. Out of 129 manufacturers of grocery products interviewed in the Federal Trade Commission inquiry, 76 admitted that preferential treatment in some form had been given to chain systems. Of these, 33 stated positively that chreats and coercion had been used by chain store companies to obtain these concessions and 23 of this group admitted that chain pressure had been successful. Among the farced concessions were: brokerage and freight allowances, lower prices, rebates, and advertising allowances.
Another common charge leveled at the chains is that they tend toward monopolistic control of certain kinds of business, at least in certain localities. While the chains have succeeded in forcing out competitors by selling at lower prices in many instances, the special inquiry uncovered no illegal instance of monopoly. The Commission concluded, however, that if the trend of the past decade or two should continue, a monopolistic situation in some lines would eventually result. This fear of undue power and monopoly is undoubtedly one cause for the wave of special chain store taxes. They have been advocated not so much as a source of revenue, as "to assist in the correcting of an unbalanced situation that has arisen in this country," in the words of one legislator. ${ }^{6}$
At least twenty-two states have passed and put into effect laws taxing chain stores in an effort to protect the independent merchant and slow down the rate of chain store growth.
The Federal Trade Commission reported other unfair practices charged against chains: an extensive use by large chains of loss leader merchandise sold at prices below the average cost of doing business in such commodities and in some cases below the actual cost of the merchandise itself. Some ground was found also for the charge that among the chains there was more extensive short-
5. Charles F, Phillips, "The Federal Trade Commission's Chain Store Investigarion: A Note," Joxrnal of Marketing, January 1938, pp. 190-192.
6. "Chain Stores," Final report in response to Senate Resolution No. 224, Federal Trade Commission, 1935, Pp. 24-86.
weighing, and less extensive over-weighing of goods sold by weight, than among independents. However, the evidence collected on this point was far from convincing.

As for misleading advertising, with which chains have been charged, the Commission admitted that the chains had gained through the use of loss leaders in advertising, but could find no legal grounds on which to question their general advertising policies. Nor did the Commission regard the carrying of undersized or sub-standard packages, with which the chains had been charged, as an unfair practice. In most cases it was found that the sizes were definitely made smaller by manufacturers, to be sold at lower prices. A very limited study of canned vegetables and fruits showed that the chains' brands were as good or better than nationally advertised brands.

## c. COOPERATIVE AND VOLUNTARY CHAINS

Two special types of retailers, particularly in the grocery field, have evolved as a direct result of chain store competition-the retailer-cooperative and the voluntary chain. These new types have grown fast in the past ten years.

The retailer-cooperative type resulted from the initiative of independent retail merchants who combined into groups to get the advantages of large-scale buying-one of the competitive weapons of the corporate chain. At first many of these groups were merely loose affliations without formal relationship. Nor did they have a central source of supply which could provide them with merchandise and perform the functions of storage and breaking of bulk. Within recent years, however, these groups-with central warehouses and uniform merchandising-have assumed the outward characteristics of corporate chains.

The voluntary chains, of somewhat more recent origin, came into existence through the activity of wholesalers who established a particularly close relationship with certain selected retailer customers. In some cases this relationship is based on a contract, in others, on hardly more than an informal agreement. Here again, however, the recent tendency is for these groups to assume a definite form.

A common feature of both of these types is the independent ownership of the retail store. In the retaile-cooperative the wholesale supply establishments are owned collectively by members of the group and in the voluntary chain the sponsoring wholesaler remains an independent entity. The aim in both cases is to bring about coordination of the wholesaling and retailing functions so as to compete more effectively with the corporate chain. While neither of these voluntary groups is standardized to the same extent as the corporate chain they use many of the same mechods. To a varying degree, and in various combinations, they use group advertising and promotion, private brands, uniform stock merchandising and control, suggested price lines, uniform store fronts, systems of display and arrangement of stores, standards of cleanliness, and standards of accounting and granting of credit.

## Estimates of Volume

So recently have cooperative and voluntary chains become important that comprehensive statistics have not yet been compiled. In 1929 there were 395 cooperative grocery chains of both types, with an estimated membership of 53,400 retail stores and a total volume between $\$ 600$ million and $\$ 700$ million. Although a large part of the business of the retailer-owned warehouses was with members, only a portion of the volume of the wholesaler-sponsored establishments consisted of sales to members. The Federal Trade Commission concluded that berween two-thirds and threefourths of the volume was represented by business with members.'
By 1935, the number of cooperative warehouses and voluntary wholesalers maintaining such group relationships in the grocery trade had nearly doubled and the total wholesale volume was over $\$ 722$ million. ${ }^{8}$ No comparable figures on the number of store members in the 741 groups operating in 1935 are available; but, according to another source,' there were in March 1936 slightly more than 100,000 retailers affliated with wholesaler-sponsored
7. Ibid., p. 7.
8. Census of Business; 1935, Volwntary Growp and Cooparative Wholesalers, Groceries and Related Prodxcts, p. 11.
9. Gordon C. Corbaley, Group Selling by 100,000 Resailers, American Institute of Food Distribution, Inc., New York, 1936, p. 52.
or retailer-owned warehouses. In addition, over 5,600 retailers engaged in group-selling activities.
Both the sponsoring wholesalers and the retailer-owned warehouses not only serve the members of these cooperative groups but also sell to other retailers. Retailer-owned warehouses in 1935 apparently sold slighty more than 91 per cent of their volume to their own members, but voluntary-group wholesalers who reported in detail sold only 39 per cent to members. ${ }^{10}$ The estimated total of purchases through these cooperative channels by member retailers in the grocery trade in 1935 was approximately $\$ 360$ million, reflecting a retail volume of around $\$ 440$ million.

## Gains of Cooperative-Retailers

Then, too, the individual retail members of these cooperative groups did not confine their business to them but also bought from other unaffiliated sources. Although no reliable estimates are available as to what proportion of the total retail grocery business is done by these cooperative-retailer groups the doubling in the number of their members and the apparent increase in volume of business leaves little doubt that they have gained ground rapidly since 1929, in contrast with the corporate grocery chains, which have just about held their own.

The ultimate to which this movement is likely to grow appears to be set by the number of stores of sufficient size to be included in any group or cooperative scheme. If it is true that 100,000 food retailers were affiliated with either wholesaler-sponsored or re-tailer-owned warehouses in 1935, the movement probably already includes a large proportion of the stores buying enough merchandise to make cooperation profitable. In 1935 the Census showed only 157,500 food stores with an annual volume of $\$ 10,000$ or more.
The cooperative movement in the drug trade is almost entirely of the retailer-cooperative type, commonly known as mutuals. As in the early efforts in the grocery field, members merely buy as a group, with a minimum of services or warehousing. Up to 1929 the movement had a regular but slow growth, and even now few
10. Census of Business: 1935, op. cit., p. 19.
of the policies and mechods used by the corporate chains, such as uniform store features, managerial services, etc., have been adopted. In 1929, twenty-four mutuals, with a total membership of 6,041 independent drugstores, reported to the Federal Trade Commission; only sixteen reported sales, amounting to less than $\$ 25$ million, and practically all to chain members. ${ }^{11}$ By 1935 the number of drug mutuals had increased to thirty-one, with total sales of nearly $\$ 35$ million. ${ }^{12}$ If a mutual wholesaler is defined as one transacting over half of its business with members or under a cooperative arrangement, there were only twenty organizations of this type.

Food "voluntaries" have not only established their success in their original spheres, but have constantly reached out for greater prestige and power. Imitating national and sectional corporate chains, they have associated with other voluntaries to build up national or territorial chains. In March 1936 there were 438 of these groups of voluntaries enumerated. Approximately 38 per cent of the retail stores belonging to voluntaries were affiliated with larger organizations for merchandising purposes. The percentage of local outlets connected with national or territorial groups is increased to slightly more than 51 by adding the retail stores belonging to voluntary groups which had some contact with one another through buying organizations. ${ }^{13}$ Obviously, voluntaries have passed the experimental stage. They have proven definitely successful in combating chain store competition. Organized cooperatively, independent stores have been able to seize many of the advantages of chain operation and at the same time to retain their own advantage in escaping chain store taxes and maintaining greater flexibility in prices, hours, and special services to consumers.

## d. CONSUMER COOPERATIVES

Cooperative societies of consumers formed for the purpose of buying and distributing commodities and taking the profits them-

[^11]selves have long existed in the United States. They have never played an important part in our distribution system, however, and until recently have not attracted much attention. In many parts of Europe, on the other hand, consumer cooperation has not only developed into the biggest kind of big business, but has had a vast influence on political and social thinking, usually in close association with labor unions and sometimes with labor parties.
Some American cooperatives have been conspicuously successful; but many of these have been established by immigrants from Europe who brought with them not only the formulas but the habits and the ideology of the cooperative movement. Their traditions generally led back to Rochdale, England, where a small group of impoverished weavers in 1844 succeeded in establishing a little cooperative store, so suited to their needs and to the times that its formula was rapidly adopted in other English communities, and then in other countries.

## The Rochdale Principles

The now famous "Rochdale principles" were, in brief:

1. Unrestricted membership and democratic control. This was effected by giving every member an equal vote, regardiess of the number of shares to which he had subscribed, by making the price of each share very low and by permitting even this to be paid for in instalments.
2. The sale of goods at prevailing market prices, all profits to be returned at frequent intervals to the member-customers according to the extent of their purchases, not to stockholders according to the extent of their holdings. The purpose of this was to avoid the antagonism of private business, and price-wars, by which merchants with superior capital had been able to undersell and crush many previous cooperative societies and, with competition out of the way, to raise their prices once more.
. Cash sales, to enable the society to make the fullest possible use of its necessarily limited capital.
One reason, at least, why American workers did not take readily to consumer cooperation was that they did not have to. There was poverty in the United States; but the standard of living here was almost constantly rising. The poor in this "Land of Opportunity," did not feel doomed to lives of poverty. However inequitably wealth might seem to be distributed this was not a land where
conditions were so bad that the masses could be persuaded their only hope lay in supplanting the profit system with some kind of cooperative commonwealth. The overwhelming majority had entirely different hopes, and their hopes were fortified by economic realities.
If Americans did not like their jobs they could become independent farmers; and even after the free lands were all taken up and the farmers themselves ceased to be independent, there were always great new developments-new mines to be opened, new railroads to be laid and grear new industries, not only with new jobs but new kinds of jobs and new and promising careers.

The depression in the early 1930's brought a different attitude. But it did not produce quite the mood which resulted in the Rochdale movement. That movement was born of the desperation of workers determined to protect themselves against capitalists who seemed to be making profits out of their misery. Whatever the cause of the depression, it was obviously not a condition out of which American capitalists were making profits. The depression resulted in a decided growth of consumer cooperatives and a great deal of excited talk about them. But when one looks at the figures, they do not bulk large among the figures of retail distribution as a whole.

## Volume of Cooperative Business

Although no complete census of the cooperative movement has yet been undertaken the Bureau of Labor Statistics has made several surveys, the latest of which covered the year 1936. ${ }^{14}$ Consumers' cooperation has taken many other forms than the buying of commodities, including the group purchase of medical care, housing; electricity, insurance, banking, and telephone service. However, the best known form of cooperative in this country is the retail store handling groceries and general merchandise. Many orher types of commodities, including farm supplies, hardware, paints, electrical appliances, clothing, furniture, milk, coal, gaso-
14. Florence E. Parker, Consumers' Cooperation in the Uaited Statar, 1936, Bulletin No. 659, Bureau of Labor Statistics, 1938. Most of the material in this section is based on this Bulletin.
line, oil, and tires are also distributed through cooperative enterprises.

So far as commodity distribution is concerned, the Bureau estimated that in 1936 there were about 3,600 cooperative retail associations in the United States, with a total membership of 677,750 individuals, and total sales of $\$ 182,685,000$. These were distributed as follows:

| Stores and buying clubs | $\mathbf{2 , 4 0 0}$ associations | $\mathbf{3 3 0 , 5 0 0}$ members | $\mathbf{\$ 1 0 7 , 2 5 0 , 0 0 0}$ sales |
| :--- | :---: | :---: | :---: |
| Petroleum associations | $\mathbf{1 , 1 5 0}$ | $\mathbf{3 2 5 , 0 0 0}$ | $\mathbf{6 9 , 9 8 5 , 0 0 0}$ |
| Other retail distribucive | $\mathbf{5 0}$ | $\mathbf{2 2 , 2 5 0}$ | $\mathbf{5 , 4 5 0 , 0 0 0}$ |

About 1,900 of these retail cooperatives have banded together to get the advantages of group purchases by establishing twenty regional wholesale associations, and eighteen of these wholesale federations have formed two "super-wholesales" in order to extend the advantages of large-scale buying. ${ }^{15}$ Cooperative wholesaling has become well established and has grown rapidly in recent years. Regional wholesale cooperatives reported sales in excess of $\$ 40$ million in 1936 -a gain of 24 per cent over the preceding year. Practically all of them enlarged their scope during the year by adding new lines of goods. An increasing number of oil associations are adding food and household supplies to the perroleum products and automobile tires already handled. Besides providing warehousing and bulk stations, a number engage in manufacturing operations and provide educational and auditing services for their members. ${ }^{16}$ By the end of 1938 there were twenty-two regional "wholesales" compared with twenty in 1936 and two joint or interregional groups were organized by the regional associations to distribute, respectively, women's clothing and farm machinery. The volume of the cooperative wholesale associations was reported to have reached a total of $\$ 53$ million in $1937 .{ }^{17}$

Growth of Consumers' Cooperatives
Although constituting only a negligible fraction of total retail

[^12]trade of the country in 1936, consumers' cooperatives have expanded rapidly since the depth of the depression. Membership in consumers' retail cooperatives increased 7.2 per cent from 1935 to 1936 and sales volume expanded by 16 per cent. From 1934 to 1936 cooperative retail stores increased sales by 38 per cent and petroleum associations, by 51 per cent; while wholesale associations formed by consumers' cooperatives increased their sales volume by nearly 86 per cent.

A picture of trends in retail cooperation during the twelve-year period ending in 1936 is given in Figure 9. ${ }^{18}$ Sales of both retail stores and petroleum associations increased steadily during the years of general prosperity ending in 1929, but petroleum associations showed a much more rapid gain. After 1929 sales volume


Ficura 9. Petroleum associations have grown more rapidiy than other types of cooperatives with sales and refunds to members in 1936 rising well above the previous peak. Sales of recail stores failed to equal their 1929 high point but patronage refunds advanced to new high levels. (Sowre: Table J.)
18. Ibid., Pp, 13, 14.
declined to a low point in 1933, since which there has been a marked recovery. Petroleum associations again fared better than retail stores, suffering a smaller depression loss and experiencing a much stronger recovery. Patronage refunds were well maintained, being 30 per cent larger in 1936 than in 1929 in the case of retail stores, in spite of a lower volume of business, and 74 per cent above the 1929 level in the case of petroleum associations. Since patronage refunds are paid out of profits, this record would seem to indicate that consumer cooperatives have been able to keep firm control of operating costs since 1929.

## Small Scale of Cooperatives

Although cooperative retailing in the United States appears in a variety of forms and locations, a large proportion of it is carried on in the North Central states. The petroleum associations are found almost wholly in the Mississippi Valley section. Most of the retail cooperatives are small organizations operating in small communities. The typical consumers' cooperative had from 100 to 250 members in 1936; nearly 37 per cent of all associations fell in this group. The average membership of store associations was 219 , and of petroleum associations, 335, and less than 4 per cent of all retail cooperatives had 1,000 or more members, which in Great Britain would be considered a fair-sized association. ${ }^{19}$

Analysis of store associarions and their members by the Bureau of Labor Statistics showed that "more than three-fourths of the associations, over three-fifths of the membership, and nearly threefourths of the business done in 1936 was in places with a population of 5,000 or less. Of the whole group of distributive associations, 48 per cent fell in the sales range of $\$ 25,000$ to $\$ 100,000, "$ while share capital reported to the Bureau averaged less than $\$ 15,000$ per association, and " 45 per cent had a net worth of less than $\$ 10,000$, and another 30.2 per cent had a net worth of from $\$ 10,000$ to $\$ 25,000$." Nearly half ( 47 per cent) of the distributive associations were employing from one to three workers at the end of $1936 .{ }^{20}$

## Future Outlook for Consumer Cooperation

Whether the cooperative movement in the United States is likely to grow rapidly in the future is not clear. After nearly a century since the establishment of the first store, the total volume done by retail cooperatives is still less than one per cent of total retail sales. Thus far at least the consumer cooperative movement holds out no great promise to its sponsors nor does it offer, except in a few localities, any serious threat to its competitors. Expansion of the movement in the future, as in the past, will depend upon the extent to which cooperatives are able to compete with existing distributive organizations. The history of both European and American cooperatives shows that social aims alone are not suffcient to insure their permanent growth. They must also be able to maintain low costs of operation and thus produce savings for their members, and there is evidence, especially in the retailing of farm supplies and petroleum products, that many cooperatives have been able to do this.

Over 70 per cent of cooperative retail organizations covered by the Bureau survey reported net savings on their 1936 operations, while 7 per cent sustained losses. Only 38 per cent of the store associations and 63 per cent of the petroleum associations distributed savings in the form of patronage refunds to their members. These ranged from 2 to 6 per cent of sales for most of the stores, while most petroleum associations paid refunds of 5 to 6 per cent and 10 to 11 per cent. The average amount refunded to memberbuyers was $\$ 13.42$ for the year in the case of retail stores, and $\$ 13.87$ for petroleum association members. ${ }^{21}$

A good augury for the future of consumers' cooperation is the emphasis the organized cooperative groups are placing on the education of members and employees, and on better auditing and accounting systems. They are developing centralized services to provide advice on merchandising methods and store planning, technical training for managers and clerks, an auditing service, and laboratory tests of the quality of goods. The Bureau of Labor Statistics found a sounder development of consumers' cooperation in 1936 than at any time since it began to study the movement in
1918. But it also found that many independent and isolated associations were far below the general level of the federated groups in business management and financial and operating stability. 22
e. SUPER-MARKETS ${ }^{23}$

Super-markets in the grocery distribution field have been the most recent major development. Whether they will prove to be as important as the deparment store, the mail-order house, the chain store, and the voluntary chain, still remains to be seen. Supermarkets of one form or another have been in operation for many years, but during the depression they experienced a rapid growth. Their history is somewhat like that of the chain stores. While chains reached a dominating position only in the postwar period, they had existed on a smaller scale for many years before that.

We lack an acceptable definition of the term super-market. The super-markets that captured the headlines in the early 1930's were known chiefly for their spectacular price advertising. Some of them used abandoned factories, warehouses, and garages not only because of lower rents available, but to make, by the very lack of fixtures, an economy appeal. Often they gathered around their food departments a variety of other retail outlets, including drugs, hardware, radio, beauty shops, shoe repair shops, variety lines, cheaper wearing apparel lines, etc. In such cases the grocery department was used more or less as a loss leader to attract business to these other stores or deparments. The latter were often leased to independent opetators, rather than being owned and operated by the same management as that of the grocery departments.

More recently the tendency of super-markets has been to limit themselves largely to food, to improve the attractiveness of buildings and fixtures, to locate in congested areas (rather than on the outskirts as many of the early super-markets did), and to appeal to consumers through lowered costs of distribution on staple products and well-known brands, rather than to act as dumping grounds for the surplus stocks of manufacturers who could not find a profitable market elsewhere.

[^13]
## Cbief Cbaracteristics

Even though there is no definite agreement as to what a supermarket is, it is possible to describe the chief characteristics which distinguish them from other types of reail food outlets-especially from the large so-called combination stores which handle a fairly complete line of food products. The most important of these characteristics are:

1. All the important types of food, including groceries, fresh meats, fresh fish, fresh fruits and vegetables, delicatessen items, bakery products, dairy products, cheese, and poultry products, are sold under a single roof. Furthermore, super-markets are departmentalized because of volume, to the point where customers are waited upon by separate sales people in each of the major departments in the store. This is the most important single distinguishing characteristic between a super-market and a large combination store. In practically all the latter, a single clerk will sell the customer almost anything in the store excepr fresh meat.
2. Super-markets usually, but not always, operate the grocery department on a self-service basis. This is one of the most important ways in which operating costs are cut to bring prices lower.
3. Super-markets usually, but not always, provide parking space for customers, either on the property owned by the super-market or near it.
4. Super-markets usually do a volume of business which is larger than even the largest combination stores. It is impossible to set an absolute minimum volume for a super-market. In general, however, a store doing less than $\$ 5,000$ a week on all products should not be classified as a supermarket unless it unmistakably possesses the other characteristics described above.

## Number of Super-Markets

How many super-markets there are at present is under sharp dispute. The Census of Distribution for 1929 reports a total of 489 grocery and combination stores (both chain and independent), each with a volume of $\$ 300,000$ and over, representing 3.9 per cent of the toral volume of business done by all grocery and combination stores. In 1935 the Census showed 479 stores of this size with the same proportion of the total volume. ${ }^{24}$ Those interested in the super-market claim there was a considerable increase in the number of large stores during 1936 and 1937. Although auchorita-
24. Census of Distribution for 1929: Food Retailing, pp. 9, 10. Census of Business: 1935, Retail Distribusion, Vol. VI, Pp. 154-156.
tive information is not available, in the judgment of persons thoroughly familiar with conditions in the grocery field, there were at the end of 1937 between 1,000 and 1,200 stores doing a sufficient volume of business and possessing characteristics to entitle them to be called super-markets. Growth during 1938 was rapid and it is safe to say there were between 2,000 and 2,500 super-markets in operation (having a volume of at least $\$ 5,000$ per week) as a minimum at the end of that year.
Another phase of super-market growth which has caused confusion is the type of ownership and control. Many super-markets are genuinely independent stores. Others are being operated as volume outlets by wholesale grocers. Others are owned and operated by corporate chains, notably the Atlantic \& Pacific, American, Kroger, and Safeway. Many super-markers, especially in southern Califomia, are members of retailer-owned cooperatives. Still others are members of wholesaler-sponsored voluntary chains.

## Future Importance

Any attempt to appraise the importance or forecast the future of the super-markets must take into account certain dynamic factors in distribution. In the first place, it is obvious that the large volume secured by a super-market can come only from drawing trade from a much larger area than is normally served by grocery stores. To induce consumers to travel regularly any considerable distance to purchase food involves a serious dislocation of normal food-buying habits. So far the super-markets have depended upon price as the means of inducing such changes in buying habiss. They have tried to offer large enough savings to offser the time and inconvenience involved in visiting them, as well as the actual out-of-pocket cost, for most long-distance shopping is done by those who drive their own cars.
The energy and aggressiveness with which super-markets have established themselves has undoubtedly caught competing types of food outlets off their guard. The average independent retailer did not have the capital to finance rapid expansion. Only a few wholesale grocers were strongly enough entrenched to be able to antagonize their retail customers by opening compering super-
markets. The larger chains-complacent in the belief that they were invulnerable to anything but the competition of other chains -have been somewhat slow to recognize the threat of a new form of price competition offered by the super-market. In the last two years, however, the threat of chain store taxation has undoubtedly been a factor in the expansion of corporate chains into supermarket operation.

## Probable Competition

It is inevitable that both chains and independents will look for ways to meet super-market competition. To the extent that they succeed they will make it more and more difficult for the supermarkets to draw trade from the present wide areas. To maintain their position the super-markets will either have to increase advertising in order to maintain their volume or secure still further operating economies.

Even now there are signs that super-markets are finding ir necessary to incur promotional and business-getting costs. This is narrowing the differentials between the costs and prices of supermarkets and those of competing chains and independents. In this respect the super-market may be expected to go through the same cycle as did the department store. Competition for volume and the addition of services in the last twenty years has resulted in an increase in department store operating costs.

Another way in which competition with and between supermarkets will develop is through the search-conscious or other-wise-for the optimum volume store. Many persons thoroughly familiar with retail operating costs believe that the most efficient food stores are those with a volume range of between $\$ 75,000$ and $\$ 150,000$, which is considerably less than the typical super-market volume. Stores in this volume range, it is believed, can reduce costs sufficiently to be comperitively attractive to consumers in the immediate neighborhood, and thus cut into super-market volume that has come from distant consumers.

Some of the best informed men in the chain store business are of the opinion that the chains themselves have not yet reached the minimum possible operating costs, though they realize that to do
so may involve far-reaching changes in present policies and methods of operation. If this belief is well founded, it is obvious that the corporate chains will be able to offer increasingly severe competition to the super-markets through narrowing of price differentials that now prevail.

## Will They Dominate?

In short, the super-market has increased the pressure to lower distribution costs just as the chain store did to the independent retailer-wholesaler grocery distribution structure, and just as the department store and mail-order house did. If we could assume that super-markets would continue to grow as rapidly as they have in the last few years they might fulfill the expectations of their proponents and become the dominating factor in food distribution. But in view of the fact that competition has not yet fully caught up with them, it is likely that the rate of super-market growth will slow down and that we shall see a steady increase in the relative importance of all retail food outlets in the larger volume brackets. An important contributing factor to this trend will be, as it has been recently, the growth of the combination store which is able to supply a full range and variety of food needs.

One of the best informed authorities in the retail grocery field, who may favor the independent type of operation, has summarized the future possibilities of the super-markets as follows:


#### Abstract

Some retailing and consumer trends are favorable to the comparatively large store. We shall see more large stores, at least for the present. We shall see many more self-service stores favorably located in residential areas with parking lots. In some areas chains will continue to build larger markets to avoid heavy chain store taxes. We shall see a continuance of the decentralization of food sales from downtown sections to residential locarions. Apparently, we shall see a healthy growth of medium large markets artractively designed, well srocked, and well equipped. We shall see a constant improvement in the service features and consumer appeal of thousands of markers. We shall continue to have with us hundreds of large stores that grew up in the past, long before we thought of calling them super-markecs. ${ }^{23}$


25. Carl W. Dipman, "What is the Super-market's Real Place in the Grocery Business?", The Progressive Grocer, August 1937, p. 108.

## 2. Intermediary Trade

In the popular imagination a middleman stands squarely between every producer and every retailer, exacting a toll on every article the consumer eventually buys. But a glance at the Flow Chart discussed in Chapter 3 shows that this is at once a distorted and an over-simplified picture of the role of intermediary or wholesale trade in distribution.
The middleman as an independent agency, it is true, is an important link between the producer and the retailer, but in many lines of trade the independent middleman is far from a necessity. More than $\$ 37$ billion of the nearly $\$ 70$ billion volume of goods sold by manufacturers, for example, went directly to other manufacturers, to retailers, or to ultimate buyers without the intervention of any middleman-even those owned by producers, retailers, or consumers. Thus less than half of the entire output of manufacturers in the United States passed through the channels of intermediary or wholesale trade.

- On the other hand, the wholesale dealer is much more than a mere link between producer and retailer. Out of total intermediary sales of $\$ 69$ billion, $\$ 16$ billion consisted of goods sold to manufacturers. Another $\$ 16$ billion worth went to other intermediaries, to be resold by them, and more than $\$ 8$ billion of the intermediary volume were sold directly to terminal buyers. Only $\$ 27$ billion worth, or considerably less than half of the total, was sold to retailers for ultimate distribution to consumers-the process popularly known as wholesaling.

The independent middleman is none the less a very important agency in the elaborate and complicated system that makes it possible for producers to sell their goods to distant and unknown buyers and for buyers to get what they want where and when they want it. To adjust far-flung supply to far-flung demand and to insure that goods made today will find a market months hence is a costly service. A single retailer may have on his shelves goods which originally came from hundreds or even thousands of separate factories. He has to depend on the wholesaler for most of his requirements. The wholesaler assembles from thousands of differ-
ent sources goods from which the retailer may select his particular needs in quantities which he may readily buy.

## The Necessity of the Intermediary Function

Every retailer would have to do business directly with the manufacturer of every article he carries in stock if it were not for the fact that the intermediary dealer performs this function for him. For example, a retail grocer handling from 1,200 to 3,000 items may select his merchandise from a typical wholesaler's inventory of berween 10,000 and 20,000 items; a hardware dealer stocking from 3,000 to 8,000 separate items can choose from a jobber's stock of from 20,000 to 60,000 items; and an independent druggist who may carry as many as 12,000 articles may buy what he needs from a wholesaler who carries from 40,000 to 60,000 items. ${ }^{26}$

This intermediary function is an essential part of the nation's distriburive system. If it were not performed by someone our economy in its present form could hardly exist. But this function does not have to be carried on by independent wholesalers or middlemen. As indicated above a large part of the output of our factories is sold direct to retailers. In these cases the intermediary function is performed by the manufacturer himself with his own staff. In many other instances the intermediary agency is set up as a separate concern, but owned entirely by the manufacturer, or by one or more large retailers, or by consumers through cooperatives. These captive or hired wholesalers are included as intermediaries in the Flow Chart.

Among the important changes taking place in wholesale or intermediary distribution is an apparent trend away from the independent middleman. More and more the intermediary function is being taken over by manufacturers, retailers and consumers, either directly or through agencies they own and control. In the following pages an effort has been made to picture the field of inter-
26. Theodore N. Beckman and Nachanael H. Engle, $W$ bolasaling-Principles and Practice, The Ronald Press, New York, 1937, p. 148.
mediary trade and to measure recent changes in this field.
From the $\$ 69$ billion level of 1929 , the dollar volume of intermediary trade in the United States fell sharply during the depression to little more than $\$ 32$ billion in 1933. This drastic shrinkage was due to the combined effect of falling prices and declining physical volume. The succeeding years have seen higher prices and increased volume, with sales totaling $\$ 37$ billion in 1934, nearly $\$ 45$ billion in 1935, an estimated $\$ 52$ billion in 1936, ${ }^{27}$ and probably a substantially larger total in 1937. Thus the 1936 total was 24 per cent under the 1929 peak as compared with a 33 per cent decline for retail trade.

## Relative Size of Intermediaries by Commodities

Of the $\$ 44.7$ billion intermediary sales volume in 1935, groceries and foods was the most important. This commodity group accounted for $\$ 8$ billion, or 18 per cent of the total. Raw farm products amounting to $\$ 5.8$ billion, or 13 per cent of the total, and farm products for consumption, with nearly $\$ 4$ billion, or more than 8 per cent of the total, were next in importance. Petroleum products, dry goods, machinery and equipment, and automotive products followed in importance. Figure 10 shows the relative importance in terms of dollar sales and number of establishments of the twenty-two lines of intermediary distribution with one per cent or more of the total volume of sales in 1935. Differences in the average scale of operations in various lines are reflected by comparisons of the distribution of establishments with the distribution of sales. Thus grocery and food intermediaries, with only 12.5 per cent of all establishments did 18 per cent of the total dollar volume, whereas petroleum product dealers accounted for nearly 16 per cent of all establishments, but for less than 7 per cent of total dollar sales.

## Types of Middlemen

It is even more important, of course, to classify intermediaries by types of business. The wholesale merchant, purchasing goods
27. Domestic Commerce, U.S. Bureau of Foreign and Domestic Commerce, February 20, 1937, p. 91.

| DISTRIBUTION OF INTERMEDIARY TRADE BY PRINCIPAL COMMODITIES-1935 |  |
| :---: | :---: |
| - Percent of total sales | WIDI Per cent of total number of astublistments |
|  | Percent of total sales and establishments |
| Groceries and foods (except farm products) | Racto |
| Farmproducts-raw materials |  |
| Farm products-consumer goods |  |
| Petroleurn and its products | 16.1 |
| Dry goods | $\text { Toxa.7 } 5.4$ |
| Machinery, equipment and supplies (except electrical) | $51.0$ |
| Automotive products |  |
| Metals (except scrap) |  |
| Tobacco and its products (except leaf) | $2^{134}$ |
| Clothing and furnishings |  |
| Electrical goods | $\frac{12.5}{\frac{2.5}{1020} 5}$ |
| Beer, wines and liquors | $\frac{2.4}{20.4303 .4}$ |
| Chemicals and paints | $\frac{x_{2} 2.2}{20.5}$ |
| Lumber and building materials (other than metal) | $2.0$ |
| Coal and coke | $30.1 .8$ |
| Paper and its products |  |
| Drugs and drug sundries | 䝆1.1 |
| Furniture and house furnishings | $\frac{10.0}{\operatorname{man}}$ |
| Handware | 70.1 |
| Chain store warehouses | $40.3$ |

Figure 10. Groceries and foods and farm products accounted for nearly 40 per cent of the dollar volume of intermediary trade in 1935, with petroleum products, drygoods, machinery and automotive products following next in importance. (Sowfce: Table K.)

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and maintaining stocks for resale, primarily to the retail trade, corresponds with the popular understanding of the term middleman. There are many other kinds of intermediary distributors, however, each with his own characteristics. Intermediaries may be grouped as follows:

1. Independent distributors who take title to the goods, assume the risks of ownership, and sell them to the retail trade, taking their compensation in the form of profics. These are usually known as wholesalers.
2. Middlemen who do not take possession of the goods but act as agents or brokers, taking their compensation in the form of commissions or fees.
3. Wholesaling organizations set up as distinct operating units, but affiliated with either the producer or the ultimate distributor. Manufacturers' sales branches, most of the bulk-tank stations, chain store warehouses, and cooperative marketing associations are included in this class.
4. Specialized intermediaries in certain commodity fields. These are assemblers and country buyers who operate in agricultural regions either independently or on a commission or salary basis and may be affiliated with the producer or ultimate distributor.
5. Manufacturers themselves, who often perform the functions of intermediaries directly and, insofar as they do, should be included in this list.

## The Role of Manufacturers

Manufacturers as distributors enter into and cut across all the other patterns of distribution. They may engage in house-to-house selling, or sell by mail, or own and operate retail stores. Often they perform the entire function of the wholesaler, sometimes selling to all types of retailers and sometimes only to their own retail outlets. On the other hand, they may sell their entire output through independent intermediaries; they may deal with other manufacturers, producing largely on order; or they may combine two or more of these methods of distribution. They may employ one method for one of their products and other methods or combinations of methods, for others; or they may use different methods for different territories in merchandising the same product.

Although many manufacturers have given up their excursions into distribution and are now content merely to look for orders from intermediaries, the manufacturer's role in distribution is apparently becoming more and more important. Even when conven-
tional wholesale channels are depended on for the actual physical distribution the manufacturer of branded goods often engages in costly national advertising and promotion to create a demand from the consumer which retailers and wholesalers cannot afford to ignore.
A manufacturer may criticize the wholesalers as being mere order-takers, nor aggressive salesmen, by which he really means that they fail to push his product in preference to his competitor's. As the wholesaler sees it, however, he should be neutral so far as manufacturers are concerned and should push only those products which are most in demand-that is, to take orders via the retailer from the consuming public rather than from some particular producer. The wholesaler regards this attitude as not only fair to the public but helpful to the manufacturer. The latter is thus compelled to seek profits by adapting his product to the public taste rather than by aggressive promotion.

Of the various types of intermediaries the wholesaler group is by far the most important, both in terms of number of establishments and volume of trade. This group accounted for 39.5 per cent of the total sales of intermediary concerns in the United States in 1935. Manufacturers' sales branches handled 24.8 per cent of the total business, and agents and brokers, $19.9^{-}$per cent. Table 14 shows the way intermediary trade of the United States was divided among the various types of agencies in 1935 and 1929-in terms of the net sales and the per cent of total business of each type.

## Sbifts and Trends in Wholesale Trade

At one time the retail storekeeper depended almost entirely on the conventional wholesaler for the bulk of his merchandise requirements. Over a period of years, however, the conventional wholesaler has been losing ground, as evidenced by the failure of many long-established wholesale businesses. Contributory causes for this decline have been the rapid increase in chain store business and the consequent elimination of the traditional wholesaler's services, and the tendency of many manufacturers to expand their direct selling activities to department stores and other retail outlets.
Only in the past decade, however, have figures been available to

TABLE 14
Distribution of Intermediary Trade by Various Types of Agencies, 1935 and 1929

| Type of Inzermediary | 1935a |  | 1929b |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Net Seles | Per Cent of Total | Net Sales | Per Cent of Total |
|  | (In Billions) |  | (In Billions) |  |
| United States 'Total | $\$ 44.7$ | 100.0 | $\$ 68.9$ | 100.0 |
| Wholesalers | 17.6 | 39.5 | 29.2 | 42.5 |
| Wholesale merchants | 14.4 | 32.2 | 25.4 | 36.8 |
| Importers | 1.1 | 2.4 | 1.8 | 2.6 |
| Exporters | . 6 | 1.3 | 1.5 | 2.2 |
| Industrial distributors | . 4 | 1.0 | c | c |
| Drop shippers or desk jobbers | 4 | 0.8 | c | c |
| Converters | . 3 | 0.6 | c | c |
| Wagon distributors | . 2 | 0.5 | c | c |
| Retailer-cooperative warehouses | . 1 | 0.3 | c | c |
| Voluntary group wholesalers | . 1 | 0.2 | c | c |
| Cash and carry wholesalers | e | 0.2 | c | c |
| Mail-order wholesalers | e | 0.03 | c | c |
| Manufacturers' sales branches | 11.1 | 24.8 | 16.3 | 23.7 |
| .With stocks | 7.5 | 16.7 | c | c |
| Without stocks | 3.6 | 8.1 | c | e |
| Agents and brokers | 8.9 | 19.9 | 14.3 | 20.7 |
| Brokers | 2.9 | 6.5 | 4.0 | 5.9 |
| Commission merchants | 2.7 | 6.0 | 4.7 | 6.8 |
| Selling agents | 1.4 | 3.2 | 2.7 | 3.8 |
| Manufacturers' agents | . 8 | 1.7 | 1.8 | 2.6 |
| Other agents, including export and import | 1.1 | 2.5 | 1.1 | 1.6 |
| Bulk tank stations (petroleum) | 2.7 | 6.1 | 2.4 | 3.5 |
| Assemblers and country buyers | 2.5 | 5.5 | 4.8 | 6.8 |
| Assemblers of farm products | . 7 | 1.5 | 2.3 | 3.3 |
| Cooperative marketing associations | 1.0 | 2.1 | 1.5 | 2.1 |
| Elevators | . 6 | 1.3 | 1.0 | 1,4 |
| Packers and shippers | . 2 | 0.5 | c | c |
| Cream stations | e | 0.1 | c | c |
| Chain store warehouses | 1.9d | 4.2 | 1.94 | 2.8 |

a. Census of Business: 1935, Wholesale Distribution, Vol. I, p. 36.
b. Census of Business: 1933, Wholesale Distyibution, Vol. I, P. ©-1. These are revised Gigures for 1929.
c. Data equivelent to 1935 not available.
d. Census of Business: 1935, Retail Cbains, P. 39.
e. Less than $\$ 0.1$ billion.
measure the trends in wholesaling. In 1929, as shown in Table 14, total sales of conventional wholesale merchants (the largest group included under "wholesalers") accounted for 36.8 per cent of the total volume of intermediary trade, while the business passing through manufacturers' sales branches and chain store warehouses together accounted for 26.5 per cent. By 1935, although the wholesale merchant still maintained his position as the most important branch of intermediary trade, his share had declined to 32.2 per cent while the other two groups controlled 29 per cent. While the sales branches of manufacturers sell to wholesalers to some extent, by far the largest percentage of their business is done with retailers or industrial establishments.

The shift away from the wholesale merchant shows marked differences among various kinds of trade. In dry goods, for example, the volume of business done by wholesale merchants declined over 60 per cent between 1929 and 1935 while manufacturers' sales branches dealing in the same line lost not quite 2 per cent in this same period; the total of intermediary trade in dry-goods showed a decrease of only 36 per cent. On the other hand, irrespective of the degree to which wholesalers in the grocery and clothing trades lost ground prior to 1929, since that date they have held a relatively stable proportion of the total intermediary trade. Table 15 gives in detail the figures showing the place of the wholesale merchant in the intermediary trade of each of twenty-three different groups of commodities in 1929 and 1935.

## Sbifts in Distribution of Manufactured Goods

Further evidence of the shifts taking place in the distribution structure is found in the changes occurring in the distribution of manufactured goods. In general, they tend to confirm the trends discussed above. Manufacturers' direct sales to retailers, including chains, increased from 20 per cent of the total in 1929 to 22.9 per cent in 1935, while the volume passing through their own wholesale branches rose from 18 per cent to 20.6 per cent. Sales to independent wholesalers and jobbers of all types, on the other hand, declined from 31.8 per cent of the total in 1929 to 27.3 per cent in 1935. These changing proportions are shown in Figure 11, for

TABLE 15
Comparison of Wholesale Merchants' Position in 1935 AND 1929

| Kind of Business A | Sales |  |  |  | Number of Establishments |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935* |  | 1929 ${ }^{\circ}$ |  | 1935* |  | 1929 ${ }^{\text {b }}$ |  |
|  | Amount | Per Cent of Total | Amount | Per Cent of Total | Number | Per Cent of Total | Number | Per Cent of Total |
| Total Sales of Wholesale Merchants | $\stackrel{\text { (In }}{\text { Billigst) }}$ | (lis |  | (In Thotigateds) |  | $\stackrel{(I n}{2 h o w a n d s)}$ |  |  |
|  | \$14.4 | 100.0 | \$25.4 | 100.0 | 77.7 | 100.0 | 74.5 | 100.0 |
| Groceries and foods (ercept farm products) | 3.1 | 21.6 | 4.8 | 18.8 | 13.3 | 17.1 | 13.9 | 18.7 |
| Farm products-consumer goods | 1.8 | 12.6 | 3.0 | 11.7 | 10.2 | 13.1 | 8.8 | 11.8 |
| Farm products-raw materials Automotive products Tobseco and its products (except leaf) | ls 1.0 | 7.1 | 2.6 | 10.2 | 1.8 | 2.4 | 3.0 | 4.0 |
|  | . 8 | 5.2 | 1.3 | 5.3 | 5.6 | 7.2 | 3.4 | 4.6 |
|  | . 8 | 5.2 | . 8 | 3.2 | 1.9 | 2.5 | 1.6 | 2.1 |
| Clothing ead furnishings | . 6 | 4.3 | 1.1 | 4.2 | 3.8 | 4.9 | 3.4 | 4.6 |
| Dry-goods | . 6 | 4.2 | 1.6 | 6.2 | 2.8 | 3.6 | 3.4 | 4.6 |
| Beer, wines, and liquors | . 6 | 4.1 | - | - | 3.9 | 5.1 | - | . |
| Electrical goods | . 6 | 3.9 | . 9 | 3.3 | 2.4 | 3.1 | 2.1 | 2.9 |
| Machinery equipment, supplies (encept electrical) | lies 5 | 3.5 | 1.1 | 4.5 | 5.7 | 7.3 | 6.0 | 8.0 |
| -Drugs and drug sundries | . 4 | 2.9 | . 5 | 2.0 | 1.4 | 1.8 | 1.1 | 1.5 |
| Paper and its products | .4 | 2.8 | .7 | 2.7 | 2.5 | 3.2 | 2.2 | 3.0 |
| Waste materials | 4 | 2.7 | . 4 | 1.8 | 4.8 | 6.1 | 3.9 | 5.2 |
| Lumber, building materials | 3 | 2.3 | 1.1 | 4.5 | 2.3 | 2.9 | 3.5 | 4.7 |
| Hardware | 3 | 2.1 | .7 | 2.8 | 1.0 | 1.2 | 1.2 | 1.6 |
| Farm supplies | . 2 | 1.7 | . 5 | 2.0 | 1.4 | 1.8 | 1.1 | 1.5 |
| Metals (except scrap) | . 2 | 1.6 | . 4 | 1.6 | . 8 | 1.0 | . 8 | 1.1 |
| Chemicala and paints | . 2 | 1.6 | .3 | 1.3 | 1.3 | 1.7 | 1.1 | 1.4 |
| Plumbing and heating equipment and supplies | . 2 | 1.5 | . 5 | 1.9 | 1.6 | 2.1 | 1.7 | 2.2 |
| Furniture and house furnishingt | 2 | 1.4 | . 4 | 1.6 | 1.6 | 2.1 | 1.4 | 1.9 |
| Coal | . 2 | 1.4 | . 6 | 2.5 | 4 | 0.5 | . 8 | 1.0 |
| Jewelry and optical goods | 1 | 1.0 | -3 | 1.0 | 1.6 | 2.0 | 1.5 | 2.1 |
| Petroleum and its products | . 1 | 0.9 | . 5 | 1.9 | . 6 | 0.7 | 3.0 | 4.0 |
| All other products | . 6 | 4.4 | 1.3 | 5.0 | 5.0 | 6.5 | 5.6 | 7.5 |

a. Census of Business: 1935, Wholesale Distribution, Vol. I, PP. 56-58.
b. Census of American Businese: 1933, Wholesale Distributiom, Vol. I, pp. a-5, a-6. These art revised bgares for 1929.
c. Not available in 1929.
manufacturers' sales as a whole and for various important kinds of goods.

Here again wide variations appear among the different commodities in the channels employed. For example, the role of the wholesaler in the distribution of manufacturers' sales was drastically cut in 1935 as compared with 1929 in stone, clay, and glass


FIGURE 11. The proportion of manufacturers' sales reaching the market through wholesalers and jobbers decreased materially from 1929 to Although the proportions passing through various channels differed widely among industries, the trends showed similarity. (Source: Table L.)
Alt
products (from 50 to 19 per cent of their total sales) ; in iron and steel products (from 34 to 13 per cent) and in textiles (from 22 to 15 per cent). On the other hand the proportion of the total sales of stone, glass, and clay manufactures made direct to retailers increased from 6 to 17 per cent and the proportion sold through their own wholesale branches increased from 5 to 28 per cent between 1929 and 1935. Iron and steel manufacturers sold 6 per cent of their total product through their own wholesale branches in 1929 and 21 per cent in 1935.

Caution must be used, however, in assuming from these figures that permanent changes have taken place in our distributive system. The fact that iron and steel manufacturers distributed 2 smaller proportion of their products through wholesalers in 1935, for example, may have been caused by a temporary shift in the demand for different kinds of iron and steel products which ordinarily are distributed in different ways.

## 3. Distribution of Industriay Goods

American industry is its own best customer. Every factory, and to some extent every business organization, is a buyer-not necessarily of finished goods that people need in order to live, but of products which industry uses to produce the finished arricles and services which the consumer demands. Goods sold in the industrial market consist of machinery and equipment and tools and supplies necessary in the operation of business concerns, but chiefly of raw materials and semi-frrished products which undergo further processing and fabrication before they appear as finished goods and services ready for consumption.

The industrial market, it must be emphasized, does not apply to the large volume of goods bought by wholesalers or intermediaries and by retailers to be sold again in unchanged form. Also, for the purposes of this study, supplies sold to farmers are not included, for this trade is largely handled by retailers who deal in consumer goods. The movement of products from the farms to factories and packing plants, however, regardless of the channels they follow, is necessarily included in the industrial market.

## Size of the Industrial Market

The size and limits of the industrial market are readily apparent from a glance at the Flow Chart. Purchases of supplies and equipment by the extractive industries, shown by the bands entering this rectangle from the lefr, amounted to $\$ 1.2$ billion. Manufacturing industries, with purchases of $\$ 47.2$ billion-chiefly raw materials and semi-finished products for further fabrication-were the largest element in the industrial market. Among terminal buyers, represented by the rectangles at the right side of the Chart, utilities (including transportation agencies and the construction industry) purchased $\$ 7.4$ billion worth of industrial goods used in producing services sold to the public. Institurional buyers, including hotels, hospitals, government institutions, erc., accounted for an additional $\$ 4.4$ billion. Goods sold to the industrial market, therefore, amounted in the aggregate to more than $\$ 60$ billion, a larger total by $\$ 11$ billion than the sales of all retail stores in 1929.

## Nature of Industrial Market

The industrial market differs from the consumer market in many ways. For one thing, the whole setup of industrial marketing is relatively simple, as contrasted with the marketing of consumer goods. Induscries generally buy for utility. Taste and style considerations are almost absent and the buyers of industrial goods, as a rule, are in a much better position to state what they want in terms of actual standards of utility, than are the shoppers for household supplies. As a result there is much less guesswork, both in the production and distribution of industrial goods.

When he is ready to buy, the large industrial buyer has no end of assistance which the average consumer does not have. He has a purchasing department trained in the science of buying. In any case he is not tempted to buy a lathe or a crane because some agent assures him that it exactly suits his personality and would give him a reputation as a distinguished manufacturer. He would want to know, rather-and he would have means of finding out-just what the machine could do. Standardization and buying on specifications, in fact, have gone so far in the matter of industrial goods that it is next to impossible for dealers in most raw materials and
factory equipment to successfully misrepresent their wares.
A large quantity of typical industrial goods goes through but one layer of dealers. Some manufacturers sell their large and special equipment directly to industrial consumers, leaving only miscellaneous products to be sold by the trade. The bulk of the trade to small establishments, however, usually passes through one or more intermediaries.

For many reasons the buyers, rather than the sellers, generally dominate the industrial goods market. Buying, as a rule, is planned for a considerable period in advance; and with the tendency of industries to cluster in certain centers, such as automobiles in Michigan and moving pictures in Hollywood, the bulk of the market is easily accessible to those supplying it. Of the 3,073 counties in the United States, 106 counties, each with a total of $\$ 100$ million or more value of manufactured goods, in the aggregate accounted for almost 70 per cent of the manufacturing of the entire country. Nearly 94 per cent of our factory output, moreover, was produced by less than 32 per cent of our manufacturers-those doing an annual business of more than $\$ 100,000$ each in $1929 .{ }^{28}$

## Captive Sources and Captive Markets

Many industries directly control their most important sources of supply. Steel companies, for instance, own and operate many captive coal mines. Both selling and purchasing coses are largely eliminated. This tends to reduce the costs of distribution of coal to the actual expense of transportation and accounting. There are many other similar captive sources such as ores, lumber, rubber, and other raw materials.

There are also captive markets. Utility companies, for instance, may be regularly supplied by some large manufacturer of electrical goods who has captured the market through contract or (in earlier periods) by ownership of stock in a utility holding company. In such cases it is difficult to say whether the producer or the buyer of industrial goods really dominates the market.

The economic danger of capturing either markets or sources of supply is obvious. While such an arrangement may eliminate many
28. Census of Manufactures: 1929, Vol. I, pp. 76, 252.
real costs it also eliminates comperition and often tends to substitute unprogressive routine for the constantly better methods which keen competitors are forced to discover and adopt. Many manufacturers have invested heavily in sources of supply, only to find in the end that much cheaper ways of supplying their needs have been developed and are already being used by their competitors.

The Ford Motor Company is often cited as a vertical organization which achieves economies through the control of all the processes of production and distribution from the raw materials to the finished product. A careful study of Ford practices, however, shows that the company has regularly been opportunistic in this respect, readily disposing of its captive interests as soon as the special purpose of each capture has been achieved. Its control of sources of supply has generally been undertaken not for the purpose of achieving a monopoly, but in the hope of breaking one.

## Distribution of Industrial Goods

The $\$ 60.2$ billion paid by industrial buyers for goods bought in 1929 includes not only the amounts received by the sellers of domestically produced commodities, but also the costs of delivering these goods, as well as the money paid for imported goods entering the industrial market.

Deducting the value of imports and the estimated total of transportation charges leaves a total of $\$ 54.7$ billion which represents the sales value of all American goods bought by manufacturing concerns, public carriers and utilities, horels, mines, oil wells, government agencies, hospitals, hotels and institutions and orher industrial buyers. The kinds of goods bought and the channels through which they entered the industrial market are shown in Table 16. Manufacturing industries, with purchases of $\$ 42.1$ billion, were the largest buyers of industrial goods. More than half of what they bought came directly from orher manufacturers. Other industrial buyers supplied nearly half their needs with purchases from manufacturers. The importance of the middleman even in this field, however, is evident from the fact that nearly $\$ 23$ billion worth of industrial goods, or more than 40 per cent of the total of $\$ 54.7$ billion, was distributed through intermediary dealers.

TABLE 16
The Distribution of industrial Goods, 1929a
(In Millions of Dollars)

| Industry Group | Grand | To Manufacturens |  |  |  | To Other Industrial Buyems |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | $\begin{gathered} \text { Direct } \\ \text { from } \\ \text { Primary } \\ \text { Producers } \end{gathered}$ | $\begin{gathered} \text { Direct } \\ \text { from } \\ \text { Manau- } \end{gathered}$ | Through mediaries | Total | $\begin{gathered} \text { Direct } \\ \text { from } \\ \text { Primary } \\ \text { Producers } \end{gathered}$ | $\begin{gathered} \text { Direct } \\ \text { from } \\ \text { Manu- } \\ \text { facturers } \end{gathered}$ | Through Inter: mediarie |
| Iron and steel and their products Food and farm products, fishing and trapping | 7,715.2 7,673 | ${ }^{\mathbf{8 , 4 1 0 . 6}} \mathbf{7 , 6 1 3 . 1}$ | 1,657.3 | 3,994.6. | $2,416.0$ $5,051,6$ | 1,304.6 | $\cdots$ | 844.7 .7 | 459.9 |
| Machinary aud electrical equiipment, except immo- |  |  |  |  |  |  |  | 1,092.2 |  |
| Textles, dry gods, apparel, etc. ${ }^{\text {a }}$ Minerab, nonferous metais and products | 4, $4,990.7$ | 4,899.7 4 | 763.6 | $2,4749.0$ $\mathbf{2}, 176.6$ | (2,142.7 | 88.1 | $\cdots$ | 88.1 | 2.0 |
| Transportation equipment | 3,765.0 | 1.567 .0 | \%3.6 | 1,390.5 | 176.5 | 2,198.0 | $\cdots$ | 1,995.9 | $20 \mathrm{i}^{2} \mathrm{i}$ |
| Chemicals and allited products | $2,467.2$ $2,420.4$ | 2,342.9 | 536.7 | 1, $1,50.2$ <br> $1,208.5$ | 692.7 84.0 | 5991. 2 | 79.0 | 117.8 <br>  <br> 18.9 | 303.3 |
| Printing and publahing | 2,323.2 | 1,744.6 | 53.7 | 1,744.6 | 84.0 | 578.6 | 79.0 | 576.3 | 3, ${ }^{3}$ |
| Petroleum and its productu | 2,103.3 | 1,674.7 | 1,425.7* | -164.5 | 81.5 | ${ }^{4128.6}$ | 113.0 | 80.7 89.9 | 234.9 |
| Coll and coked product | 1,232. ${ }^{1}$ | 1,799.7 | 243.8 | 229.4 | 350.5 | 432.7 | 168.7 | 29.9 | 264.5 |
| Stone, clay, ylasa and conastruction materiais | 968.3 | 839.7 | . | 259.7 | 3791 | 708.6 | 177.0 | 384.5 | 147.1 |
| Leuher Rod is products | 784.8 324.2 | 784.8 | ... | S05.7 | 279.1 | ... |  | ... | ... |
| Miscellaneouls, unclumified, and all other | 6,401.0 | 2,692.9 |  | 396.9 | 2,296.0 | 3,708.i | :..: | $15 i .7$ | 3,556.9 |
| Lew discount | 54,740.1 | $\begin{array}{r}41,139.8 \\ 358.0 \\ \hline\end{array}$ | 4,627.3 | 21,143.6 | 16,368.9 | 12,600.3 | 537.2 | 5,566.2 ${ }_{\text {96.0 }}$ | 6,496.9 |
| Plue transportation | 2,776,0 | 2,361.0 | 400.0 | 975.0 | 88.6 .0 | 515.0 | 32.0 | 148.0 | 345.0 |
| Total frou primary producens and manufacturers and through Intermediariea | 57,062.1 | 44,042,8 | 5,027.3 | 21,760.6 | 17,254.9 | 13,019.3* | 559.2 | 5,618.2 | 6,841,9. |
| Fuel from retall dealers Imports plus traneportation ${ }^{\text {d }}$ | 2,767.8.8 | $\begin{aligned} & 3,797.8 \\ & \hline, 767.0 \end{aligned}$ | $\cdots$ |  |  |  |  | $\ldots$ |  |
| Grand total-Industrial market | 60,208.9 | 47,189.6 | $\ldots$ | $\ldots$ |  | $\ldots$ | $\ldots$ | $\ldots$ |  |

2. Datu derved from U.S. Bureall of the Censuas, Distribsulion of Salus of Table 3, p. 74, and other gooment sources.
b. Tmapporistion, pubbicic utuiltien, coostrinctlon, mhees and wells, bustines,
covernment institutions, ect.
d. Balance goos through Intermedierices e. This total fincludes 97.4 blition purchaus by the utilites and 54.4 billon


The wide variation in the channels followed by different kinds of goods entering the industrial market is evident from the table. A large proportion of iron and steel products-the most important single class of industrial goods, with sales of $\$ 7.7$ billion-went directly from producers to buyers; while the almost equally large volume of food and farm products reached the industrial market chiefly through intermediary channels. Intermediary dealers also play an important-though not dominant-role in the distribution of iron and steel, textiles, machinery, paper, coal and coke, and leather products. Transportation equipment, forest products, printing and publishing, and petroleum products, on the other hand, are distribured to an overwhelming extent directly from producers to the industrial users.

## Cbapter 5

## $\sqrt{ }$ COSTS AND PROFITS IN DISTRIBUTION

Earlier chapters have discussed some of the reasons for the expanding role of disuribution in our economic system and have described and measured the agencies engaged in distributing commodities. Chapter 3 provided a statistical measure of the flow of commodities through the channels of distribution and showed how the successive steps in producing and marketing commodities involve additional costs and result in increased values. At the end of the entire process consumers and other terminal buyers, as shown in the Flow Chart, paid a total of $\$ 65.6$ billion for finished goods ready for consumption or further use in providing services for consumers.

What terminal buyers paid for goods in 1929 is a very rough measure of the total cost of commodity production and distribution in that year, including as part of the cost, of course, the profits taken by producers and distributors. This total is not exact, since it takes no account of inventory adjustments, sales taxes, depreciation allowances, etc.

As shown in Table 10 on page 62, this $\$ 65.6$ billion not only represents the total amount paid by ultimate buyers for finished goods "leaving the system," but corresponds to the sum of the increments of value added at successive stages of production and distribution, plus all shipping and transportation charges. Obviously the increment of value at each step-the difference between the amount paid for goods purchased and the amount received for goods sold-corresponds closely, but not exactly, to the cost incurred at that stage. Thus the $\$ 22.4$ billion difference between the $\$ 69.6$ billion received by manufacturers for their goods and the $\$ 47.2$ billion worth of materials and supplies purchased by them is a rough measure of the costs incurred by manufacturers in
processing and selling their products plus profits, if any. ${ }^{1}$
In the case of farming, as well as manufacturing and the primary industries, the increment of value added includes both production and distribution costs. Increments of value added by intermediary dealers and retailers correspond very closely to their distribution costs since their function is almost purely distributive.

## 1. What We Pay for Commodity Distribution

How much of the $\$ 65.6$ billion paid for finished goods in 1929 represented costs of distribution rather than production? This question cannot be answered with any degree of precision in view of the lack of comprehensive data. An attempt to answer it involves analysis of a multitude of public and privare reports and statistics and necessitates arbitrary decisions as to what are or are not "commodities" ${ }^{2}$ and as to where production stops and distribution begins. Any estimate of the total cost of distribution, therefore, must be a rough approximation.

Also it must be remembered that a total figure of distribution cost throws little light on whether distributive costs are excessive or distriburive operations are wasteful. This is just as true of total costs as of the cost of distributing a specific product. Estimates of the total cost of distribution, and of the various categories of expense which make up the total, are useful primarily as a measure of the areas within which possible economies in distribution may be sought.

## The Total Costs of Distribution

The estimated total cost of commodity distribution in 1929 was about $\$ 38.5$ billion, or almost 59 per cent of the $\$ 65.6$ billion estimated total cost of producing and distributing commodities. On

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the whole, therefore, it cost more to distribute goods in that year than it did to make them. Furthermore since the dollar volume of goods sold in more recent years has been consistently less than in 1929 and distribution expenses have been rather rigid elements in the cost structure it seems probable that distribution constitutes an even larger share of the total cost of making goods and getting them into the hands of buyers today.

The largest single elements in the national bill for discribution were the costs incurred by retailers, by manufacturers, and by intermediary dealers and the amount paid for transportation of commodities, as indicated in the following tabulation for 1929:3


Supplies and equipment used by distributors count as expenses on their books and thus appear to the extent of their full value in the margins taken by such distributors. But the same supplies and equipment are also commodities which had to be distributed, and part of their value reflects distribution expense and appears in the margins taken by the agencies which handled them. To this extent their inclusion involves duplication. Accordingly, the estimated sales cost of supplies and equipment used by distributors-nearly $\$ 100$ million-should be deducted from the total costs of distribution to obtain a net figure of $\$ 38.5$ billion.

## The Items in the Bill

Nearly 2 third of the total cost of distribution was accounted for by retail trade-the expenses of selling finished goods to consumers. Manufacturers' distribution costs accounted for almost a fourth of the total, and transportation costs were nearly as large. Intermediary trade followed in importance, accounting for somewhat

[^15]less than a fifth of total costs. The $\$ 1.1$ billion "other costs" shown above include nearly $\$ 600$ million paid for national advertising (exclusive of advertising expenses included in the costs of retailers or other distributors as described in Chapter 8) more than $\$ 300$ million of interest charges paid by consumers for instalment loans and about $\$ 200$ million representing costs of distributing natural gas.

Although all of the figures given above are estimates, the retail and intermediary costs and transportation charges are probably more nearly accurate than the estimate of manufacturers' distribution costs. This $\$ 9.1$ billion item may be subject to a considerable error in view of the small sample on which the estimate was based. ${ }^{4}$

In addition to selling expenses manufacturers incur purchasing costs which cannot readily be segregated from other operating costs but which have been variously estimated up to $\$ 1$ billion annually.' These costs might as properly be charged to distribution as to production, but have not been included in the tabulation above. Another item not included in the total of distribution cost is the selling expenses of farmers and primary producers. These expenses, which cannot be estimated, are probably not large, however, except for transportation charges, which are accounted for separately above.

On the whole it seems likely that any possible over-statement of the total of manufacturers' distribution costs is largely or entirely offset by failure to include any estimate of primary producers' selling expenses or of manufacturers' purchasing costs, and that $\$ 38.5$ billion is a reasonable approximation of the total cost of distributing goods in 1929. This comes to 59 per cent of the total cost of production and distribution. Hence it costs more, on the average, to distribute goods than it does to produce them. A considerable part of the total cost of living can therefore be traced to the processes of getting things to people in usable or convenient form.
4. See Chapter 7.
5. As verbally reported by a representarive of the American Association of Purchasing Agents.

## 2. Profits in Distribution

From the standpoint of the buyer what he pays for goods is their "cost" to him, alchough the price paid includes the profits as well as the operating expenses of the producers and distributors who supply the goods. Sometimes, of course, the distributor's operations are carried on at a loss, in which event the price paid for the goods does not fully cover the distributor's costs. Since the following chapters are based on an analysis of cost from the standpoint of the distributor-i.e., operating expenses exclusive of profits-it may be worthwhile at this point to give some consideration to distributors' profits and losses. Are the profits of middlemen and retailers, as many believe, largely responsible for the high cost of distribution?
Some distributing organizations, it is true, particularly those in the newer and more successful branches of retail distribution, have been conspicuously profitable. Thus eight of the leading national "variety" chains, according to the SEC, ${ }^{6}$ earned annual profits amounting to about 8 per cent of their total sales during the past few years. In this case average prices charged consumers could have been reduced by 8 cents on the dollar if profits bad been eliminared entirely. But 8 per cent on sales is undoubtedly far above the usual rate of profirs in distribution. For every outstandingly successful distributor there are many others that barely break even, and some that operate at a loss even in good years.

## Half of Corporations Unprofitable

In 1936, for example, 76,257 of the 149,805 trade corporations in the United States, or more than half of the total number, reported a loss on the year's operations to the Bureau of Internal Revenue. These unprofitable distributors reported gross income (total sales plus other income) of $\$ 8,460,648,000$, and expenses (deductions) of $\$ 8,673,702,000$, or a net deficit of $\$ 213,054,000$. Even the 69,263 distributors operating at a profit reported a net income of only $\$ 1,136,410,000$ on gross income of $\$ 34,810,547$,-

000 , or little more than 3 per cent on sales. Considered as a single group the corporations engaged in distribution reported a profit of only $\$ 923$ million on a volume of $\$ 43.3$ billion, or little more than 2 per cent on sales in one of the most profitable years since 1929.7

These figures, it must be remembered, refer only to corporations. For every incorporated distributor there are perhaps ten organizations operated by individuals or parmerships. These are usually small and often unprofitable. Furthermore, profits for years like 1929 and 1936 must be offset against losses for depression years like 1932 and 1933. A study made by the Harvard University Bureau of Business Research of operating results of several hundred deparment stores over a period of eight years showed that the only years in which profits were made by the group as a whole were 1929, with 1.2 per cent on sales, and 1936, with 1.6 per cent. Losses rose as high as 6.4 per cent of sales in $1932 .{ }^{\text {B }}$

## Profit Figures by Groups

Figures collected by Dun \& Bradstreet confirm the conclusion that distributors' profits do not constitute a very large proportion of the total costs of distribution. In the retail food, beverage, and restaurant group profits in 1936 ranged from 1.2 per cent of sales for fruit and vegetable markets, and 1.7 per cent for grocery stores, to 7.1 per cent for drinking places. In the general merchandise group profits amounted to 2.3 per cent of sales for country general stores and to 2.6 per cent for large city department stores, but were as high as 6.6 per cent for variety stores. Moror vehicle dealers reported a profit of 2.2 per cent of sales, and filling stations showed 2.3 per cent. Profits of jewelry stores amounted to 4.8 per cent of sales, hardware stores made 3.6 per cent, furniture stores, 6.6 per cent, radio stores, 5.9 per cent, and refrigerator stores, 7.3 per cent.' Fairchild's Financial Manual reports an average profit of 4.2 per cent of sales for a group of "independent and chain deparment stores, specialty shops, variety chains and mail order
7. Statistics of Income for 1936, Preliminary Report, U.S. Bureau of Internal Revenue, 1938, pp. 6-7.
8. Oparating Resules of Department and Specially Stores in 1936, Hervard Bureau of Business Research, Bulletin No. 104, p. 3.
9. 1937 Retail Survey, Dun $\&$ Bradstreer, Inc.
houses" with a total sales volume of about $\$ 3.2$ billion in $1938 .{ }^{10}$
Published figures of retail operating results, however, are necessarily based on limited samples with inadequate representation of the vast number of very small retail stores. Since the great majority of these small enterprises earn little or nothing beyond a meagre living for their owners, the average rate of profir for retail trade as a whole is undoubtedly considerably less than published figures appear to indicate. Considering the entire retail field and offsetting good years against bad it is not unreasonable to suppose that the average profit ratio is not more than 2 per cent on sales and may be as low as one per cent.
Among the wholesale trades covered by Dun \& Bradstreet surveys, wholesale grocers earned 1.3 per cent on sales in 1936, confectionery wholesalers made 2.2 per cent, dry-goods wholesalers earned 2.7 per cent, while profits of paint and varnish wholesalers ran as high as 4 per cent of sales. ${ }^{11}$ These ratios reflect operations of wholesale merchants, which account for only a third of all intermediary trade. Other types of intermediaries, such as brokers and agents, have much lower profit ratios, if indeed their profits can be distinguished from personal compensation. Manufacturers' sales branches and chain store warehouses, which account for a considerable share of total intermediary trade, are conducted on a nonprofit basis except as their profits are included in those of the parent organization. Taken as a whole it seems unlikely that profits in intermediary trade amount to as much as one per cent of the total volume of sales.
All these figures, it must be remembered, relate to operations in a fairly profitable year. During the depression years a considerable proportion, and probably a majority, of distributors showed a net loss on their operations.

Distributive profits of manufacturers are hard to estimate with accuracy. Published figures show total profits and do not distinguish between those resulting from distribution and those arising from strictly production activities. All manufacturing corpora-
10. Fairchild's Pinancial Masmal, Fairchild Publications Corporation, New York, May 1939, p. 6.
11. 1937 Wholesale Survey, Dun \& Bradstreet, Inc., Reports Nos. 1, 3, 4, 7.
tions in the United States, according to their 1929 reports to the Bureau of Internal Revenue, showed net income (after payment of income tax) amounting to 5.4 per cent of gross income. In 1930 the profir ratio fell to 1.4 per cent, and in the three succeeding years net deficits were incurred, rising to almost 6 per cent in 1932. For the seven-year period from 1929 to 1935 profits averaged less than one per cent of gross income; and, of course, only part of this can be charged to distribution operations. ${ }^{12}$
Transportation charges are an important share of the total distribution cost but here again profirs in recent years have been small or non-existent. Net income of the railways-by far the most important freight carriers-dropped precipitately from the 1929 high point of more than $\$ 800$ million and since 1931 have failed in any year to recover more than a small fraction of their decline. ${ }^{13}$

## Three Cents of Consumer's Dollar for Profits

On the whole it seems clear that average profits taken by distributive agencies in recent years do not constitute a very large part of the price paid by consumers for finished goods. With manufacturers' distribution profits and those of intermediary trade probably averaging less than one per cent of sales and retail profits amounting to no more than 2 per cent, it seems unlikely that aggregate distribution profits amount to more than three cents out of every dollar paid for finished goods by consumers and other terminal buyers, or to more than 5 per cent of the total amount paid for the services of distributive agencies. Substantial economies in the field of distribution, it seems clear, must be sought chiefly in reduction of operating expenses, either through elimination of services or by performing distributive services more efficiently and economically.

## 3. Upward Trend of Distribution Costs

Wherher or not distribution "costs too much" today, it is clear, as pointed out in Chapter 1, that the spectacular gains achieved in

[^16]productive efficiency during the past six or seven decades have not been duplicated in the field of distribution. Furthermore fragmentary data indicate that the trend of distribution costs appears to have been markedly upward for a considerable period of years prior to 1929, even though sales volume also was generally on the increase. With declining sales after 1929, of course, operating expense ratios rose rapidly to a peak in 1932-1933. A general decline in cost ratios has since taken place. Operating expenses appear to be relatively inflexible, so that when sales decline rapidly expenses do not decrease in the same proportion.

What data we have show that in certain lines at least retail operating expenses have tisen to higher levels over a period of years. For example, one study shows that American department stores with annual sales of less than $\$ 500,000$ increased their expense ratios from 27 per cent of net sales in 1922 to 30 per cent in 1929, and then to 37 per cent in 1932. ${ }^{14}$ The rise in expenses during the period was not confined to one or two items but was general through the various accounts: payroll, real estate, advertising, supplies, service purchased, and communication. By 1936 expense ratios had been reduced, but not to the 1929 level.

Another study shows the same general tendencies in deparment stores with more than $\$ 1$ million of annual sales volume over the period of 1921 to 1934 inclusive. ${ }^{15}$ In 1921 costs were 28.6 per cent of sales. In 1932 they reached a peak of 39.6 and in 1934 they were 36.2 per cent of sales.

There is at least some evidence of the same upward trend in the wholesale business. For example, a year-to-year analysis of seventeen identical grocery wholesalers in Ohio shows a slow but steady rise in expenses from 8.9 per cent in 1924 to 9.8 per cent in 1929, then to a peak of 12.6 per cent in 1932 , followed by a recession to 10 per cent in $1934 .{ }^{16}$
14. Carl N. Schmalz, Operating Reswlis of Depanment and Specialty Stores in 1931; in 1932; Harvard Bureau of Business Research, Bulletins Nos. 88, p. 5; 91, p. 2.
15. Edward A. Filene, Next Steps Forward in Retailing, privately printed, Boston, 1937, p. 18. Based on Harvard Business School srudies.
16. Operatiag Ressles of Obio Wholesale Grocors-Year 1934, Ohio Stare University Bureau of Business Research, p. 13.

## Similarities in Europe

The upward trend of distribution costs seems to be just as true of European countries as of the United States. Available evidence indicates that costs have risen in Europe for most kinds of business as much as they have in this country. This approximate parity was especially true in 1929, but during the depression period the volume of sales in the United States decreased more than in most European countries, without a corresponding decline in expenses. Thus the expense ratios for depression years show a greater discrepancy between Europe and the United States than a normal year would reveal.

Comparisons with foreign countries are difficult because of many differences in the retail structure of the United States and Europe. A much larger proportion of European trade is in staple commodities and necessities, which have lower distribution expenses. Wide differences in the range of stocks carried, the services rendered, the use of advertising, allocation of taxes and other important factors influencing costs need also to be taken into account. The tasks performed by retail trade in one country may differ so widely from another that a simple comparison of gross margins does not prove that the work of providing people with goods is more economically conducted in one country than another.

In spite of many variations in the economic structure of the United States and European countries, however, total average expense margins appear to be strikingly similar. This indicates, according to Julius Hirsch, ${ }^{17}$ that underlying trends in distribution and cost relationships have been similar in Europe and America. In the United States, for instance, average retail costs in 1929, on a comparable basis, were only slightly higher than in Europe- 26 per cent of retail sales as compared with 24 per cent in Germany. Wholesale foodstuffs expense ratios for roughly comparable years also show fairly close similarity- 11.8 per cent for Germany, 10.6 for the United States, 10 for Norway, but only 7.6 per cent of sales for Holland. Labor and advertising costs were higher in the United States for similar business units, but the burden of taxation was

[^17]somewhat lower in this country than in some European countries.

## More Facts Badly Needed

That distribution costs form a large and growing share of what we pay for goods does not prove that distribution costs too much. Most of the facts needed to answer this question are not yet available. In spite of the information provided by the Censuses of 1929, 1933, and 1935, whole areas remain dark. Manufacturers' selling costs, for example, have had only superficial attention, and virtually no data exist on the distribution costs of raw material producers. Still more important, there has as yet been no integrated study of distribution, commodity by commodity, from their appearance as raw materials through all the channels of distribution to the point where they are bought as finished products by consumers.
It is the purpose of the following chapters to compare the costs of some of the established forms of merchandising for which figures are available, to contrast different methods used to perform the same or similar distributive functions and to analyze some of the factors which influence these costs. In the chapter that follows, retailers' costs are reviewed from various angles. The expenses of retailing by stores handling different kinds of commodities are compared, and wide variations are shown berween the different lines of trade. Comparisons are made of the relative operating costs of the different types of stores-independents, chains and super-markets, and here again the differences are great. The influence of the chief factors in retailing expense, such as wages and stock turnover, is also discussed.

In the succeeding chapter the operating costs of intermediaries and producers are reviewed and comparisons made among various types. Not only are there wide cost variations between the different lines of trade and types of operation; but, within each group, differences occur between individual concerns. In this study, however, it has not been possible to study the operations of individual firms, but only to compare the results among different types of operation and kinds of business.

## Cbapter 6

## THE COSTS OF RETAILING

Retauing is the most costly part of the distribution process. As shown in the preceding chapter, consumers paid about $\$ 12.6$ billion for the services of retailers in 1929, or nearly a third of the entire cost of commodity distribution in that year. When this sum is compared with the total volume of retail sales- $\$ 49.2$ billionit is also clear that retailing costs more per dollar of sales than do the services of intermediary trade or the distributive services of manufacturers. The reasons for the high cost of retailing are obvious. Breaking up goods into small lots and making them available to 130 million people is obviously a far bigger job than the distribution of the same goods in much larger lots to a mere million and a half retailers, or in still larger lots to 177,000 wholesalers.
Even small retailers may have to buy as much as $\$ 100$ worth of goods in a single order, but few retailers sell in any such amount. An extreme example of the small size of retail purchases is furnished by one large drugstore chain which reports confidentially that its average sale per customer amounts to twenty-two cents. This chain's trade may be dominated by sandwiches, sodas, cigarettes, chewing gum and other low-priced goods, but it would doubtiess lose the trade in these items if it did not carry a rather full line of what the average American now expects to find in a drugstore.
That means a large inventory-stocks of thousands of varied commodities, many of which are rarely called for. If everybody preferred the same toothpaste, the same face powder, and the same brand of candy, and if everybody with a cold or a headache asked for the same remedy, a retail drugstore's task would be a simple one. But few, if any, retail stores have any such simple task.

Operating Costs
Out of every $\$ 100$ which customers paid to retailers in 1929, about $\$ 73$, on the average, was paid by the retailer for the goods sold, and $\$ 25$ or more went for his operating expenses. Of the latter sum more than $\$ 14$ was paid out for wages, including an estimated remuneration for proprietors. ${ }^{1}$ Of the remaining $\$ 11$, rent accounted for more than $\$ 4$ and the remainder of $\$ 7$ went for light, fuel, supplies, interest, etc.
During the years following 1929, because of price reductions and shrinking physical volume, dollar sales fell off more rapidly than expenses so that by 1933 total operating costs had risen to more than $\$ 32$ per $\$ 100$ of sales. With the recovery in retail volume after the depression the expense ratio fell toward the 1929 level, and by 1935 , when retail sales had reached the $\$ 33$ billion mark (compared with the 1929 sales volume of $\$ 49$ billion and the low point of $\$ 25$ billion in 1933), operating costs amounted to $\$ 27.50$ of every $\$ 100$ worth of goods sold.
In this chapter an attempt is made to measure and examine in greater detail the principal elements of cost in retail distribution. Comparisons are made among retail stores handling different kinds of commodities, among stores of different operating types, and among stores of different size and in cities of different size. The influence of the chief factors affecting retailing expenses, such as wage costs and stock turnover, are also discussed.

## 1. Comparisons by Lines of Trade

A comparison of the figures on operating costs of retailers in different lines of trade-grocery stores, automobile dealers, furniture stores, etc.-shows wide variations according to the kinds of goods sold. Expenses of restaurants, for example, amounted to fifty-two cents for every dollar of sales. General stores, at the other extreme, and automobile dealers, carried on their business with an operating expense of only sizteen cents on the sales dollar.

[^18]Between these two extremes were sixty-three other groups of retailers as classified by the Census.

Operating expenses expressed as a percentage of net sales are shown in Figure 12 for seventeen of the most important kinds of retail business, as well as for retail trade as a whole, in 1929 and 1935. The principal elements of operating expense-wages and rents-are also shown.

## High and Low Costs

Food sold in a restaurant has to be cooked before it is served, and the high cost of running such an establishment is due to the fact that its function includes processing and serving as well as selling. The next highest costs are found in a typical luxury trade -jewelry-and the next in furniture and apparel in which style and service play a most important part and turnover is not very rapid because of the high unit price of the goods sold. Costs were lowest in general stores, most of which operate in small towns and country districts where rents and labor costs are less than in the cities.

Operating expenses were low, on the whole, in stores dealing in standardized basic necessities of low unit cost, such as groceries, where not much effort is involved in selling and servicing the customer. Selling articles of high unit cost, on the other hand, such as clothing and furniture, where the customer shops around extensively, takes a long time to make up his mind and then may require service and alteration, involves greater expense. But there are some exceptions to these tendencies. In spite of the high unit costs of their products, automobile dealers reported low operating expenses, perhaps because automobiles are highly standardized and are sold to a large extent by the national advertising of the manufacturers. Cigar stores, on the other hand, although they deal in standardized low-priced commodities, were not conspicuous for low expense ratios, partly because of high rental costs.

When total operating expense is subdivided into its principal components-salaries and wages, rents, and all other expensesmarked variations among different lines of trade also appear. Wages and salaries in every instance are the most important single


Figula 12. The increase in expense ratios from 1929 to 1935-which was fairly general among various kinds of retail business-reflects relatively rigid costs, with substantial shrinkage of dollar sales. Wages, constituting over half of cotal expense, as well as other items, were reduced less than the volume of sales. (Somres; Table M.)
item of cost, amounting to 15.5 per cent of net sales, or well over half the total operating expense of retail trade as a whole in 1935. Restaurants, as might be expected, showed the highest ratio of wage costs to net sales ( 24.9 per cent), followed by jewelry stores ( 22.2 per cent) and furniture stores ( 17.5 per cent). In these three trades wages amounted to nearly half of total operating costs. At the other extreme, wages amounted to less than 11 per cent of net sales in combination grocery and meat stores, general stores and motor vehicle outlets. But in each of these trades payrolls made up considerably more than half of the total expense of doing business.
Rental costs also show wide variations, and little consistent relationship with other iterns of expense, except that groceries, motor vehicle dealers and general stores, which showed the lowest total expense ratios, also had the lowest rental costs-ranging from 1.2 to 2.8 per cent. Cigar stores, shoe stores and restaurants showed rent-cost ratios of close to 7 per cent, higher than for any other groups.
"All ocher expenses" include various miscellaneous cost items, among which taxes have become important. Restaurants top the list in all other expenses with a 20 per cent ratio, followed by jewelry, furniture and deparment stores with more than 12 per cent. The lowest ratios, of about 4 per cent, are those for general stores and filling stations and for cigar and grocery stores.

## Changes in Costs by Years

Changes in operating expenses in relation to sales of each of the different kinds of retailers can also be compared for the years 1929, 1933 and 1935, when Census figures are available. For retail trade as a whole they show a sharp increase from 1929 to 1933 (from 25 to 32 per cent of sales), when retail sales. volume suffered a sharp shrinkage, and a moderate decline in the recovery years from 1933 to 1935 (from 32 to 28 per cent). Expense ratios for 1929 and 1935 are shown in Figure 12 and for 1933, as well, in Table $M$ of the Appendix.

These ratios of course do not measure the increase or decrease in the actual dollar costs of operations. Since costs are expressed
in relation to sales they are influenced largely by changes in the dollar volume of sales. This is especially true when it is realized that many of the costs of doing business-like rent, interest, and even payrolls-cannot be adjusted quickly to the amount of business done. One would expect, therefore, that in a depression year like 1933 operating costs would be larger in relation to sales than in a boom year like 1929.

However, some of the individual groups show lower expense ratios in 1935 than in 1929, despite the smaller volume of dollar sales. Notable among these were motor vehicle dealers and cigar stores. Deparment stores and drugstores came close to the 1929 level. Between 1933 and 1935 all groups showed reduced expense ratios, with the exception of restaurants and cafeterias which acturally had higher expense ratios in 1935.

Much of the increase in expense ratios between 1929 and 1935 was caused by a rise in expenses other than payroll and rent, which individually were the largest items in both years. For retail trade as a whole, costs were higher by $\$ 2.70$ per $\$ 100$ of sales in 1935 than in 1929, the increase in miscellaneous items of expense accounting for $\$ 1.80$ of this amount.

The Census reports give no explanation of the relatively large increase in miscellaneous expense, but figures on department stores submitted to the Harvard Bureau of Business Research indicate that rigid and heavier taxes were partly or largely responsible. Miscellaneous expenses more than doubled in restaurants and cafeterias, while payrolls and rents remained virtually unchanged. Other lines of business showing relatively large increases in costs other than personnel and rent were jewelry stores, meat markets and combination grocery and meat stores.

Rental costs, which are usually considered a tigid item of expense, were reduced in relation to sales in nearly all of the seventeen lines of trade. This reflects the heavy reduction in rentals on store properties. The 1929 rental-expense ratios in various trades appear to have been unreasonably high because of the active bidding for preferred locations which was going on at that time between various chain store organizations. Cigar store rental costs were reduced from 9.3 per cent of net sales in 1929 to 7.7 per cent
in 1935. Possibly this was related to the reorganization of some of the larger cigar store chains and the consequent modification of long-term high-cost leases.

## 2. Comparisons by Types of Stores

The line of trade or kinds of goods sold by the retail unit is not the only factor affecting operating costs. The type of store is also important. Independents, chain stores, direct selling methods, mailorder concerns, etc., show varying costs in selling the same commodities. These variations are in many respects more significant and interesting than differences based on the kinds of goods sold, and they are of great current public interest because of the hue and cry over chain stores and other newer types of retailing.

## a. ALL GROUPS COMPARED

Great care must be used in comparing the costs of different types of stores, however. If one type shows lower costs than another it does not necessarily follow that actual distribution has been accomplished at lower cost to the consumer. The consumer should expect to find lower prices at a self-service store than at a store where he has the aid of a salesman and the service of an organization willing to deliver the goods to his home on trial and to take them back if he finds them unsatisfactory. According to the distributor's cost sheets, the cost of selling in the first case would be far less than in the second-so much so, perhaps, as to account for the full difference in price. This does not mean that the one store is more or less efficient than the other, but merely that it performs less service than the other.

Whether this is an advantage to the consumer depends upon whether he can better afford to spend his own time and effort in serving himself. If so, self-service is the answer, but if he attaches considerable value to his own time and effort, it may not be. The ultimate test of efficiency is not found in the price tag, but in the relation between what the consumer pays and what he gets for his money in terms of goods and service.

Where a certain type of store attracts increasing consumer pa-

## 134 Does Distribution Cost Too Much?

tronage, however, it may reasonably be inferred that it is meeting a demand and therefore giving relatively efficient service to its patrons. This holds true when services and costs are increasing or when lower costs are achieved by eliminating such services as credit accounts and delivery, which the patrons would often rather do without or perform for themselves, particularly in a declining market when competition is keen.

## Independents' Costs Higher

In spite of all the attention centered in recent years on the growth of chains and ocher mass distribution types of retail operation, independently owned single stores still do nearly two-thirds of the total volume of retail business in the United States. Single independent stores, on the average, had an operating expense ratio of 28.7 per cent of net sales in 1935 , slightly higher than the 27.5 per cent ratio for retailing as a whole. Independently owned two-store and three-store units showed appreciably lower operating coses; but local branch systems had a 32.4 per cent expense ratio. Chain stores, as a group, showed lower cost ratios than independents. Sectional and national chains, which account for nearly a fifth of the total retail volume, had a ratio of only 24 per cent of net sales.
Of the other types of retailing, mail-order houses also had a low expense ratio ( 25.4 per cent), but not as low as specialized types such as commissaries, with 14.9 per cent. The highest cost-nearly forty-six cents out of each dollar of sales-was incurred by direct house-to-house selling, but this type of operation is not strictly comparable with other types of retailing since its cost undoubtedly includes a large part of the wholesaling function. Expense ratios for various types of retail stores and the relative importance of each type are shown in Figure 13.

In comparing Census figures on independents and chains, several points should be kept in mind. First, the chain expense figures include only the costs of operating the retail stores and a pro-rata (probably small) share of the expenses incurred in the central offices and warehouses which serve the stores. Since the latter perform the same essential functions for the chain stores as a wholesale merchant does for independent retailers, chain warehouse ex-


- Figura 13. Independently owned single stores are atill the predominant type of retail operation in the United States, accounting for almost wo-chirds of total sales. sectional and national chains, however, win lower average expense racios than the indepeadents, increased their share of the business substantially between 1929 and 1935. (Source: Table N.)
penses may properly be considered a part of wholesaling expense. The central offices of the chains, however, perform some costly functions, such as administration, accounting control and buying, which appear in the expenses of the independents, but only to a small extent in the data for the chain retail store. The general average cost of operating chain retail units for all kinds of business in 1935 was 25 per cent. When all the expenses of chain central offices and warehouses are added, the total cost reached 27.2 per cent. Even this figure is somewhat under the average expense of the independents, which was 28.4 per cent in 1935.

In comparing costs of chains and independents it should also be realized that the typical chain store is located in centers large enough to assure a substantially larger volume than the average for independents and that it deals in the kind of goods which have a consistent and usually heavy turnover. The independents, on the other hand, include a widely dispersed and heterogeneous number of small ourlets whose services, though expensive, may, be essential. Furthermore the independents include not only well-organized stores with merchandising experience and trained management and personnel, but also many ventures on the part of people with no business experience, whose main reason for entering business may have been the mere lack of any other profitable employment.

## Cost and Sales Variations, 1929-1935

Expense ratios for all kinds of retail stores, as we have seen, were higher in 1935 than in 1929, although not as high as they were in 1933. With very few exceptions, this was true whether the businesses were under chain or independent management, but differences in the degree to which sales volume declined and expenses increased are marked and significant.

The independents as a group suffered a severe loss of volume in 1933, and largely in consequence of this, a sharp rise in operating expense. Chain stores also lost in dollar volume and experienced increased costs, but to a much less marked degree. But by 1935 this trend was reversed, and the independents increased their sales and decreased operating expenses at a more rapid rate than the chains.

Between 1929 and 1935, however, the chains strengthened their position in the retailing field. With a loss of 23.2 per cent in dollar volume-as compared with a 36.3 per cent drop in sales for the independents-chain stores increased their share of total retail business from 20 per cent to 22.8 per cent. Expense ratios of the independents rose from 25.6 per cent of net sales in 1929 to 28.4 per cent in 1935, half again as much as the chains, which increased from 23.3 to 25 per cent.

Comparisons between independents and chains in different lines of trade are still more illuminating. Although chain organizations as a whole increased their share of the total business by 3 per cent berween 1929 and 1935, the sectional and national organizations in particular made rapid strides by increasing their proportion from 12.5 per cent of all retail business in 1929 to over 19 per cent in 1935. Contrary to what might be expected, this gain in dollar volume and relative position was accompanied by an appreciable increase in their expense ratio. The two other principal types of chains, the local and manufacturer-controlled groups, lost ground in sales and experienced a much larger rise in the relative cost of doing business than did the sectional and national organizations.
Reasons for this general trend toward higher expenses are not entirely clear but mounting chain store taxes àre probably at least partly responsible. It is significant that although sectional and national chains and single-store independents showed roughly comparable increases in expense ratios, this development accompanied a loss of nearly one-chird in the dollar volume of the independents and an actual gain in business on the part of the chains.

Among other types, commissaries and company stores had low operating costs. This may not be significant, however, since these stores may be virtual monopolies and their prices (which are not reported) may be out of line with prices of orher outlers. Such stores are under no compulsion to make profits since the commissary may be operated as a convenience rather than a business. Although commissaries had almost regained their 1929 volume by 1935, their operating costs went up considerably.

Direct house-to-house selling, on the other hand, was one-chird greater in volume than in 1929, but was operating at only slightly
lower cost. This business was even larger in 1933 before recovery got under way, reflecting the fact that the great numbers of people who go into business during times of widespread unemployment find house-to-house selling one of the easiest fields to enter.

## b. Chand versus independents

The most significant cost comparisons are between various types of stores selling similar articles. It is more illuminating to compare operating costs of different rypes of stores dealing in foods, such as single-store independents, retailer-cooperatives, voluntary or corporate chains, or super-markets, than to compare expenses of food stores with those of furniture stores. Real comparability, of course, would require that a whole series of conditions be carefully established. Among the more important factors affecting costs are the kind and quality of services rendered by the store, the size of the business and the size of the city. The limited statistics on these points are discussed in a later section of this chapter.
In this section a comparison is made of the trends in sales and operating expenses of chains with all other types of stores in twelve selected kinds of business. Since all other types are overwhelmingly independently owned the data really provide a comparison of chains and independents. Expense ratios and changes in net sales in 1929 and 1935 for chains and all other stores for these twelve lines of trade are shown in Table 17.

TABLE 17
Sales and Operating Expenses of Chains Compared with All Other Stores by Selectid Kinds of Business, 1935 and 1929

| Kind of Business | Per Cent of Toral Ner Sales |  | Per Cent of Change in Dollar Volume 1929-1935 | Operating <br> Expenses: <br> Per Cent of <br> Net Salesb |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1929 |  | 1935 | 1929 |
| United States Totalall kinds of business | 100.0 | 100.0 | -32.5 | 27.5 | 8 |
| Chains | 22.8 | 20.0 | -23.2 | 25.0 | 23.3 |
| Independencs and all others | 77.2 | 80.0 | -34.8 | 28.3 | 25.6 |
| Independents All orhers | ${ }^{73.1}$ | 77.5 | -36.3 +13.9 | 28.4 | 25.6 25.8 |

TABLE 17 (Continued)

| Kind of Business | Per Cent of Total Net Sales |  | Per Cent of Change in Dollar Volume 1929-1935 | Operating <br> Expenses: <br> Per Cent of <br> Ner Sales ${ }^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1929 |  | 1935 | 1929 |
| Groceries (without meats) |  |  |  |  |  |
| Chains | 2.5 | 3.2 | -46.6 | 15.6 | 13.8 |
| All orhers | 4.1 | 3.8 | -27.4 | 22.8 | 20.3 |
| Combination stores (groceries and meats) |  |  |  |  |  |
| Chains | 4.9 | 2.5 | +29.2 | 17.5 | 14.3 |
| All others | 7.6 | 5.4 | - 4.6 | 19.0 | 17.0 |
| Department stores |  |  |  |  |  |
| Chains | 2.7 | 1.5 | +22.6 | 24.7 | 24.4 |
| Mail-order (catalog only) | 1.2 | 0.9 | -13.6 | 23.7 | 22.8 |
| All others | 6.1 | 6.5 | -35.8 | 32.2 | 30.0 |
| Variecty stores |  |  |  |  |  |
| Chains | 2.1 | 1.7 | -13.0 | 27.2 | 25.2 |
| All others | 0.2 | 0.2 | -19.3 | 26.5 | 23.2 |
| Men's clothing-fumishing stores |  |  |  |  |  |
| All others | 1.6 | 1.9 | - 44.6 | 30.2 | 28.5 |
| Women's ready-to-wear stores |  |  |  |  |  |
| Chains | 0.6 | 0.5 | -19.0 | 28.8 | 29.9 |
| All others | 1.8 | 1.7 | -29.2 | 31.8 | 28.9 |
| Shoe stores |  |  |  |  |  |
| Chains | 0.8 | 0.6 | -16.5 | 29.6 | 30.8 |
| All others | 0.8 | 1.0 | -48.9 | 32.0 | 28.5 |
| Filling stations |  |  |  |  |  |
| Chains | 1.3 | 1.2 | -30.1 | 29.9 | 23.8 |
| All others | 4.6 | 2.4 | +30.7 | 25.4 | 23.8 |
| Furniture stores |  |  |  |  |  |
| Chains | 0.3 | 0.5 | -56.1 | 36.3 | 37.9 |
| All others | 1.8 | 2.6 | -53.7 | 34.6 | 30.0 |
| Restaurants, cafeteris, lunch rooms |  |  |  |  |  |
| Chains | 0.7 | 0.5 | - 1.4 | 54.5 | 42.5 |
| All others | 4.3 | 3.2 | $-8.5$ | 49.2 | 47.9 |
| Drugstores |  |  |  |  |  |
| Chains | 0.9 | 0.6 | + 1.4 | 26.1 | 27.6 |
| All others | 2.8 | 2.8 | -33.5 | 28.1 | 27.0 |
| Jewelry stores |  |  |  |  |  |
| Chains | 0.1 | 0.1 | -39.0 | 49.1 | 42.9 |
| All ochers | 0.6 | 1.0 | -57.4 | 41.2 | 35.0 |

a. Census of Business: 1935, Retail Distribution, Vol. IV, pp. 13, 14; Census of American Business: 1933, Retail Distribution, Vol. 1, Pp. a-12, a-13; Census of Distribution for 1929 Vol. 1, p. 71.
b. Includes imputed proprietors' compensation. The ratios for United States totals for all kinds of business were taken from Table M. The 1929 Census did not provide detailed figures showing operating expenses for the various kinds of business vide detailed figures showing, operating expenses for the various kinds of business
divided according to types of operation. However, a special report entided Retail

Of the twelve kinds of business, chains operated at a lower cost chan independents in half of them and at a higher cost in the other half. They had the greatest advantage in groceries, where the chain store expense ratio was 16 per cent of net sales as against 23 per cent for all other stores, and in department stores, with a ratio of about 25 per cent as compared with 32 per cent for independents. Other stores had the largest lead in the case of jewelry, with an expense ratio of 41 per cent as compared with 49 per cent for the chains, and in restaurants, with a ratio 5 per cent lower than the chains.

## Trends of Sales and Costs

Comparisons of 1935 expense ratios with those for 1929 in relation to changes in the volume of business done by the chains and other stores in these years reveals an interesting picture of the ebb and flow of competition in sales and costs.
In the grocery business, for example, independent stores increased their share of the business at the expense of the chains, but only slightly narrowed the spread in operating expenses. When the volume of the two classifications-groceries without meats and combination stores-is combined for both years, it appears that independents and chains each experienced a sales decline of about 14 per cent. Grouping of the two classes is necessary because of the marked extent to which grocery stores have added meat departments and thus shifted in classification since 1929.
Operating expense ratios of chains in the department store field were 7.5 per cent less than those of the independents in 1935. These lower expenses may be due largely to differences in the kind of goods and services offered. The independent department stores, however, like the chains, depend largely upon mass de-

[^19]mand, not upon the exclusive trade. If the masses indicate that they would rather forego special services than to pay for them the chain department store may well become an increasingly serious threat to the independent.
While sales of independent department stores declined by more than a third between 1929 and 1935, the volume done by chains increased by nearly 23 per cent. Even so, their operating expense ratios increased slightly, though not as much as the independents'. The catalog business of mail-order houses, significantly, involved operating costs almost as large as the chain deparment stores.
Expense ratios were reduced from 1929 to 1935 in only four of the twelve lines of trade shown in Table 17, and in every case these gains were made by the chains. The chains gained in relative sales position and actually reduced their expense ratios in the women's ready-to-wear and shoe and drug businesses, while the independents in each case registered an increase in expenses. In furniture, a comparatively unimportant chain field, the chains lost in sales slightly more than the independents, and while still out of line in costs, succeeded in somewhat reducing them. The independents, however, have gained a striking advantage in filling station costs since 1929, when they were exactly on a par with the chains. While chain costs rose from 24 per cent to 30 per cent of sales, the costs of independents increased to only a little more than 25 per cent. In the meantime the chains suffered a loss in volume of about 30 per cent, while the independents gained to just about the same extent. This undoubtedly reflects the fact that chains in this field have been selling or leasing their retail outlets to independent operators. This tendency-evident to a less extent in ocher linesis partly responsible for relative changes in sales volume from 1929 to 1935.

## 3. Comparisons by Size of City and Store

Both the size of the retail store and the size of the community in which it is located seem to affect operating costs. These relationships cannot be measured with detailed accuracy on the basis of existing Census data. But fragmentary studies appear to justify
the conclusion that, disregarding the size of the store, the small town concerns have lower costs than those in the larger cities. On the other hand, if the size of the town be disregarded the cost of doing business seems to decrease as the size of store increases-at least up to a certain point.

Census data on operating expenses for stores in cities of different size are available only for 1929 , and these reports group all cities of more than 30,000 population in one classification. Operating expenses by kind of business and average annual sales per store in three city-size groups are shown in Figure 14.

Because a large proportion of small town stores are operated by proprietors and non-salaried members of the family, two expense ratios are shown: one including, and the other excluding, proprietors' compensation, as shown in the Census. The inclusion of "impured proprietors' compensation" narrows the spread of operating expense ratios, particularly between the small communities and the middle-size brackets, but it does not change the general conclusion that operating expense ratios are lower in the smaller cities. This is true in all lines of trade shown in the chart, with only minor exceptions, and in spite of the fact that the smaller average sales volume of small town stores would be expected to result in higher costs. In two related kinds of business-the food group and restaurants and eating places-proprietors' services are so important that inclusion of their imputed compensation raises operating expenses in the smallest.city-size stores above the figures for the middle group.

On the whole it seems clear that in cities of over 30,000 population the cost of doing business is greater than in the smaller communities. Whether this expense continues to rise steadily within the 30,000 -and-over population group (which accounts for about 60 per cent of all retail sales), or reaches a maximum at a certain size of city and then declines, cannot be answered conclusively by Census data.

Special studies of operating expenses in department and hardware stores presented in subsequent sections of this chapter, however, tend to confirm the conclusion that expense ratios continue to rise as the size of city increases. A survey of 1936 operating ex-


Figure 14. Lower wage and rental costs in the small cities probably account for the fact that for every kind of retail business shown in the chart, operating expenses, exclusive of proprietors' compensation, are lowest in cities with less than 10,000 poptlation, and highest in cities of over $\mathbf{3 0 , 0 0 0}$. (Sowres: Table O.)

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penses of 514 retail drugstores ${ }^{2}$ also shows a tendency toward higher expense ratios in the largest cities, particularly as compared with the small towns. Stores of various size-groups, ranging from less than $\$ 10,000$ average annual sales to over $\$ 50,000$, had expense ratios in towns under 5,000 population from as high as 32 per cent for the smallest stores to as low as 22 per cent for the largest. In cities of over 100,000 population expense ratios of the smallest stores were 34 per cent, and of the largest, 27 per cent. The Dun \& Bradstreet 1937 Retail Survey showed a similar, but less pronounced tendency, with drugstore operating expenses of about 27 per cent in cities under 20,000 as compared with 29 per cent or more in cities over 100,000 .

Expenses of combination grocery and meat stores in the Louis-ville-Cincinnati area in 1929, according to a special Census survey, ${ }^{3}$ were somewhat larger in the largest cities (over 100,000 population) than in the small towns (under 5,000 ), but the margin was slight-berween 1 and 2 per cent of net sales.

Obviously the cost advantage of the smaller communities is by no means universal among all lines of trade, nor is it always a marked advantage. Lower costs in the smaller cities are probably due almost entirely to lower wage rates and lower rental and real estate costs.

## Small Stores Most Costly

Cost variations as related to size of store are not clearly established. Except for the fact that the small one-man independent store-when reasonable wages are imputed to the proprietorshows a very high cost ratio as compared with all other size-classes, there is no convincing evidence of a general tendency for costs to decrease progressively as store-size increases.

Size of business is apparently only one factor affecting the cose ratio, which appears to vary widely for the same size and type of business according to location by size of city. A glance at Table 18 will show this range for a number of different types of stores.

[^20]These figures are based on a limited sample and include only stores under independent management but they appear to offer evidence that for most businesses there is no uniform or continuous drop in cost ratios as the size of business increases. The Lilly survey of drugstores shows similar fluctuations although it is again clear that the smallest establishments have higher costs than the middle-size and larger stores. ${ }^{4}$

TABLE 18
Operating Cost Ratios of Various Types of Indbpendent Stores by Siza of Busnness, 1936"
(As Per Cent of Net Sales)

| Eind of Store | Sine of Business (Annucal Sales in Thourauds of Dollars) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-10 | 10-20 | 20-30 | 30-50 | 50-100 | 100 or More |
| Battery, ignition and tire | 51.5 | 34.0 | 32.5 | 35.7 | 30.4 | 28.1 |
| Jewelry | 45.2 | 36.5-43.1 | 37.4-44.4 | 39.5-42.7 | 36.7-39.2 | 36.3 |
| Furniture | 38.1 | 30.1 | 30.0-35.6 | 29.1-35.9 | 28.8-35.8 | 29.1-34.9 |
| Electric and gas applinnco | 36.5 | 26.6-35.5 | 29.2-35.3 | 27.3-33.2 | 29.2-31.3 |  |
| Books stores | 32.0 | 28.3 | 30.3 | 22.6 | 23.6 | 28.4 |
| Drugstores | 30.1 | 26.9-30.3 | 27.1-30.0 | 27.6-28.6 | 27.3-29.3 | ... |
| Candy and confectionery | 29.2 | 26.4 | 31.0 | 24.6 | 32.0 |  |
| Shoe stores | 28.7 | 27.3-29.6 | 26.7-32.0 | 26.8-32.4 | 22.1-29.8 |  |
| Women's ready-to-wear | 27.4 | 25.6-30.2 | 26.5-29.1 | 25.6-29.3 | 25.0-30.4 | 30.8 |
| Dry-goods | 27.1 | 21.9-24.0 | 21.9 | 20.1-22.3 | 21.6-22.5 | 25.8-29.8 |
| Coal | 26.9 | 28.2 | 26.6 | 22.4 | 24.1 | 24.7 |
| Family clething | 26.7 | $22.5-25.1$ | 24.3 | 23.2-27.5 | 24.0-28.9 | 28.4 |
| Limited price variety stores | 26.6 | 23.4-24.7 | 23.6 | 23.4 | 27.0 |  |
| Men's and boys' clothing | 26.5 | 24.6 | 24.4-26.0 | 25.2-26.4 | 24.3-32.1 | 29.4-30.3 |
| Elardware | 26.1 | 23.0-27.5 | 25.2-30.1 | 24.4-29.5 | 24.1-29.8 | 22.7 |
| Filling stations | 20.0 | 20.3-21.6 | 20.5-21.4 | 20.7-21.6 | 22.2-23.9 |  |
| Grocery | 19.3 | 14.0-15.6 | 14.5-16.4 | 15.1-17.1 | 14.1-15.8 | 18.0 |
| Country general stores | 17.9 | 14.4 | 14.9 | 15.0 | 15.8 | 18.5 |
| Combination grocery and ment | 17.1 | 16.8 | 14.8-15.5 | 16.1-17.5 | 16.5-18.1 | 14.8-15.8 |

a. 1937 Retail Swrvey, Dun a Bradstreet, Inc.

Note: Rangea in cost ratios within sizo-groups denote variations due to alze of city.
Definite trends have been noted, however, in a few lines of trade for which special studies have been made. In the retail hardware survey discussed later in the chapter operating expenses were found to decrease steadily as the size of business increased. But here again, size of city was shown to have an important effect on expense ratios, since in every store size-class the costs of doing business were greater in the larger cities than in smaller towns. In contrast, department stores show increased cost ratios in the largersize businesses, with the lowest costs appearing in the smallest

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stores. ${ }^{5}$ Here again the fact that the larger stores are usually in large cities undoubtedly has an important influence on costs. The Census survey of combination food stores previously quoted shows a sharp drop between stores with less than $\$ 10,000$ sales and stores of the next largest size-class, and some tendency for a further slight decline with increased sales volume up to $\$ 100,000 .{ }^{6}$ For the larg. est stores, however-those selling more than $\$ 100,000$ annuallythe expense ratio increased sharply. These figures suggest that there may be an optimum size for different lines of retail trade for which operating expenses are lower than for either the largest or the smaller stores. Final conclusions on this point, as well as other aspects of the relation between store-size and expense, must await more comprehensive and representative data. Even when this becomes available it seems probable that the relation between size and expense will show wide variations for different kinds of stores and business locations.

## 4. Wages as a Cost Factor

Wages and salaries are the largest single cost element in retailing. Fifteen cents out of every dollar spent by the consumer for retail goods in 1935, or more than half the retailers' average markup or gross profit, was needed to cover wages and salaries, including the proprietors' imputed compensation. ${ }^{7}$ With the smaller retail sales volume in 1933, personnel compensation amounted to nearly 18 per cent of sales.

## a. PERSONNEL COSTS IN DIFFERENT KINDS OF BUSINESS

Personnel expenses and their relation to total operating costs vary widely among different lines of trade and types of operarion. These variations-in part at least-reflect differences in the kinds of goods sold and in the amount and costs of services supplied by the retailer. Restaurants, for example, had a 29 per cent payroll expense in 1933, as compared with around 15 per cent in grocery
5. See page 159 for detailed discussion of department store trends.
6. Census of Distribution for 1929, Food Retailing, pp. 79, 80.
7. See Table 17, foomore b, also Section 3 of this chapter for discussions of "imputed proprietors' compensation."
and department stores, specialty shops and shoe stores. In stores selling expensive and slow-moving articles like furniture, household appliances and radios, the ratio of payroll costs to net sales is substantially above the average. Automobile dealers are a striking exception to this tendency, however. Their personnel expense is only 11 per cent of their net sales, no doubt reffecting the fact that the automobile manufacturer does a large part of the selling job through his national advertising. The importance of wage and salary costs, as compared with toral expenses for different kinds of business and types of operation, is shown in Table 19.

## TABLE 19

Personnel Costs, Total Expenses, Avieragb Earinings and Average Sales for Eighteen Kinds of Retail Business and Five

TYpes of Operation, 1933a

| Type of Operation and Kind of Business | Personnel Costs as Per Cent of Net Sales ${ }^{\text {b }}$ | Total <br> Expenses as <br> Per Cent of Net Sales | Average Annual Earning Per Full-time Employee | Average <br> Annual Sales Per Pergon Engaged* | Sales Per <br> Dollar of <br> Personad <br> Cont |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All stores | 17.8 | 32.2 | \$ 986 | 5 5,853 | \$ 5.94 |
| Direct house-to-house selling | 29.7 | 45.3 | 1,251 | 4,325 | 3.46 |
| Independerata | 19.4 | 33.6 | 947 | 5,162 | 5.45 |
| Chains | 12.7 | 27.2 | 1,079 | 9,161 | 8.49 |
| Mail-order houses (catalogon | aly) 10.2 | 28.1 | 873 | 8,743 | 10.01 |
| Commisearies or company stor | ores 10.0 | 15.6 | 1,075 | 11,532 | 10.73 |
| Restaurants and cating placea | 28.7 | 50.7 | 669 | 2,326 | 3.48 |
| Jewrelry stores | 28.2 | 53.3 | 1,376 | 5.043 | 3.66 |
| Household appliance stores | 24.7 | 43.5 | 1,057 | 4,707 | 4.45 |
| Redio stares | 24.2 | 44.9 | 1,131 | 4,934 | 4.36 |
| Filling stations | 20.0 | 32.5 | 990 | 4,941 | 4.99 |
| Furniture stores | 19.5 | 41.6 | 1,223 | 6,506 | 5.32 |
| Hardware stores | 18.4 | 31.7 | 1,068 | 6,093 | 5.71 |
| Family clothing stores | 17.6 | 36.0 | 1,141 | 6,828 | 5.98 |
| Drugstores | 17.2 | 32.1 | 985 | 6,106 | 6.20 |
| Men's and boys' clothing and <br> furnishing stores <br> $16.9 \quad 35.5$ <br> 1,291 <br> 8.030 <br> 6.22 |  |  |  |  |  |
| Cigar stores and stands Women's ready-to-wear opecialty stores | 16.9 | 32.4 | 878 | 5,183 | 5.90 |
|  | 15.5 | 33.2 | 996 | 6,875 | 6.90 |
| Grocery stores (without meata) | ) 15.4 | 24.4 | 1,019 | 6,929 | 6.80 |
| Department stores | 15.3 | 32.7 | 990 | 6,956 | 7.03 |
| Shoe stores | 14.7 | 33.6 | 1,188 | 8,650 | 7.28 |
| Variety, 5 and 10 cent and $\$ 1.00$ stores | 12.9 | 29.3 | 760 | 6,545 | 8.61 |
| Combination stores (groceries and meats) | 12.5 | 21.4 | 1,035 | 8,791 | 8.49 |
| Motor vehicle dealers | 11.3 | 21.4 | 1,041 | 9,229 | 8.87 |

[^21]
## 148 Does Distribution Cost Too Much? <br> Earnings and Wage Costs

There is no evidence of any consistent relation berween average earnings per employee in different kinds of business and total wage costs in the same line of trade. For retail trade as a whole average earnings in 1933 were $\$ 986$ and the payroll expense ratio was 17.8 per cent of net sales. Annual earnings of restaurant workers were only $\$ 669$-much less than for any other trade-yet total payroll expenses of 28.7 per cent were higher. Men's clothing stores paid their employees nearly twice as much, but had a persoanel expense ratio of only 16.9 per cent. In other kinds of business too-notably shoe stores, grocery and meat stores, and automobile dealers-higher-than-average employee earnings were accompanied by payroll expense ratios which were below the average for retail trade as a whole. Furniture, hardware, household appliance and radio stores also paid their employees better than average wages, but in these trades payroll expense ratios were also above the average. In Table 19 average earnings in various lines of trade are compared with payroll expense and with sales per person engaged.
Also the level of employee earnings in a particular trade seems to have no consistent relation to the average volume of sales per employee or the average sales per dollar of personnel cost. With average earnings of $\$ 1,041$ in the motor vehicle trade, for example, the sales volume per employee of $\$ 9,229$ was higher than for any other kind of business. Jewelry store employees, on the other hand, had average earnings of $\$ 1,376$, with average sales of only $\$ 5,043$, while employees in household appliance stores, with average sales of $\$ 4,707$, earned an average of $\$ 1,057$. Personnel costs in the jewelry trade amounted to 28.2 per cent of net sales and in household appliance stores, to 24.7 per cent, as compared with only 11.3 per cent in the retail automobile business.

## b. Independents compared with chains

When personnel costs, average earnings and sales volumes are compared by types of operation striking differences appear. Personnel costs vary from as low as 10 per cent of net sales in com-
missaries to as high as 29.7 per cent in house-to-house selling. Average sales in commissaries were $\$ 11,532$ and in direct selling $\$ 4,325$. These disparities are not surprising. Selling goods from house to house obviously requires vastly more time, ingenuity and sales effort than filling orders in a company store. Mail-order houses also had a low payroll expense ratio, partly because of economical operation, but also because the annual earnings of $\$ 873$ were much below the average. Average sales per employee were twice as large as in direct selling and far above the average for retail trade as a whole, but considerably below the volume in company stores.

TABLE 20
Personnel Costs, Total Exprnses, Average Earnings and Average Sales for Channs and Indeprndent Stores for Eighteen

Kinds of Retail. Business, 1933a

|  | Total Expensea as Per Cent of Net Sales |  | Pensomnel Costs as Per Cent of Net Salesb |  | Average Annual Earnings Per Fulltime Employee |  | Average Annual Sules Per Person Engagede |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indepeadents | Chains | Independents | Chains | Independent | (s) Chains | Indepesdents | Chaina |
| Ciger stores and stands | 37.8 | 21.5 | 21.7 | 7.8 | \$858 | \$ 920 | \$3,961 | \$12,905 |
| Combination stores (gro- ceries and meats) | 27.1 | 19.0 | 13.7 | 9.6 | 899 | 1,195 | 6,860 | 13,795 |
| Department stores | 35.4 | 27.4 | 17.4 | 11.3 | 1,000 | 995 | 6,085 | 10,174 |
| Drugatores | 32.9 | 28.1 | 18.6 | 12.3 | 972 | 1,024 | 5,649 | 8,431 |
| Family clothing stores | 35.1 | 39.1 | 17.9 | 15.8 | 1,127 | 1,197 | 6,597 | 7,990 |
| Filling stations | 30.1 | 32.5 | 19.9 | 16.0 | 838 | 1,130 | 4,216 | 7,052 |
| Furniture stares | 41.5 | 42.0 | 20.0 | 15.7 | 1,200 | 1,357 | 6,235 | 8,721 |
| Grocery stores (without meats) | 26.5 | 17.9 | 17.5 | 8.9 | 813 | 1,191 | 4,794 | 14,986 |
| Hardware stores | 31.8 | 29.9 | 18.5 | 15.4 | 1,059 | 1,216 | 6,019 | 8,136 |
| Househald appliance storea | ( 41.3 | 49.1 | 23.3 | 28.8 | 1,136 | 900 | 5,306 | 3,223 |
| Jewelry stores | 53.4 | 52.1 | 28.8 | 19.2 | 1.379 | 1,340 | 4,955 | 7,070 |
| Men's and boys' clothing and furnishing stores | 35.3 | 35.5 | 17.8 | 13.2 | 1,261 | 1,394 | 7,423 | 11,158 |
| Motor vehicle dealers | 21.1 | 26.5 | 11.2 | 12.4 | 1,024 | 1,338 | 9,154 | 10,935 |
| Radio tores | 46.0 | 36.5 | 25.4 | 16.4 | 1,095 | 1,278 | 4,599 | 7,879 |
| Restaurants and eating places | 50.1 | 52.6 | 29.2 | 23.9 | 649 | 758 | 2,219 | 3,166 |
| Shoe stores | 35.8 | 31.8 | 18.8 | 11.1 | 1,172 | 1,255 | 6,551 | 12,430 |
| Variety, 5 and 10 cmin and $\$ 1.00$ stores | 30.5 | 29.0 | 16.9 | 12.4 | 665 | 766 | 4,321 | 6,892 |
| Women's ready-to-wear epecialty stores | 34.0 | 30.7 | 16.9 | 11.3 | 998 | 988 | 6,309 | 9,288 |

[^22]Comparisons of independent retailers with chain stores are of special interest because these types together do over 95 per cent of all retail business. Chain stores as a whole had a much lower personnel cost than independents- $\mathbf{1 2 . 7}$ per cent of net sales as compared with 19.4 per cent for independents (with imputed proprietors' compensation included). Nor was this advantage gained by paying lower wages than the independents. Average earnings of chain store employees in 1933 were $\$ 132$ more than the average reported by independents. But the chain store employees sold $\$ 9,161$ worth of goods, while the average for independent stores was only \$5,162.

Comparisons between chains and independents for various kinds of business, as shown in Table 20, tell the same story. With the exception of the household appliance trade and motor vehicle dealers, personnel costs are a smaller proportion of net sales for chains than for independents. In some trades-such as grocery, shoe, radio, department, jewelry, and drugstores-the chains have a conspicuous advantage. When payroll cost is compared with total expense rather than net sales, the chains also are in a stronger position than the independents in most lines of trade.

## Chain Store Wages Higher

The lower average personnel expense ratios of chain stores were generally accompanied by average employee earnings considerably above those of the independents. Chain stores paid higher wages in fourteen of the eighteen lines of trade shown in the table. In the case of filling stations, food stores, and motor vehicle dealers the average chain store employee had an advantage in annual earnings of about $\$ 300$ or more. Chain department stores, jewelry, and women's specialty stores paid slightly lower wages than independents in the same fields.

The chains made a much poorer showing than the independents, however, in the household appliance trade. Their employees earned only $\$ 900$ as compared with $\$ 1,136$ for independents. Personnel costs and total expenses were considerably higher, and sales volume much less, than for independent dealers.

A comparison of Census data for a single week in October $1935^{8}$ confirms the fact that chains pay higher wages to selling employees on the average than other types of retail operation. In only three of the twenty-three kinds of business for which comparable figures are available did chain store selling employees earn less than the general average for retail trade. Chains were far below the average in the retail milk and dairy products trade, but paid much higher wages in combination grocery and meat stores, in filling stations, men's clothing stores, jewelry stores and in the fuel and ice trade. For the entire group, chain store wages averaged $\$ 23.65$-exactly $\$ 4$, or nearly 20 per cent, more than the average wage of all employees included in the sample. These comparisons are shown in Table $P$ of the Appendir.
It is abundantly clear from Table 20 that the lower total wage cost of the chain stores and the higher earnings of their employees are related. They both grow out of the fact that the average sales volume per employee is much larger in chain stores than in independent stores. The average for all kinds of business was $\$ 9,161$ for chains and $\$ \$, 162$ for independents.
It does not follow that because the average chain employee accounts for a greater volume of sales than the average independent employee, he is necessarily a more efficient salesman. The payment of higher wages may enable an employer to hire more efficient employees; but modern distribution, like modern production, does not depend primarily upon the individual efficiency of those engaged in it. The typical chain store, it must be remembered, is larger than the average independent store, and this fact in itself may be chiefly responsible for the larger average sales of chain employees. For this and ocher reasons, comparisons based on Census figures of average sales per emplopee in chain and independent stores furnish no conclusive evidence either as to the relative efficiency of the employees or of the management in the two types of stores. Final conclusions on this widely debated question cannot be drawn from existing data on operating costs.
8. Census of Business: 1935, Retail Distribution, Vol. V, pp. 14, 155. Refail Chains, Pp. 40, 44.

## 5. Stock Turnover in Relation to Expense

The rate of stock turnover is only one factor by which the efflciency of a retail business may be judged. Other things being equal, profits will be greater and expenses lower as turnover increases. But other things are tarely equal. Turnover must therefore be viewed in its relation to other factors influencing operating expense, such as the size of store and the size of city in which it operates and the average sales per employee. The cost and effectiveness of advertising and rent and credit control also have an important bearing on costs. Getting rapid stock-turn by excessive expenditures for advertising or high-cost locations may dissipate what would otherwise be an advantage. Likewise, reducing gross margins in order to gain turnover may increase sales-and sacrifice profits.

Rapid stock turnover as a factor in successful retail store operation is probably overemphasized. As a matter of fact, it seems to depend largely on the size of business, which in turn is of course influenced to some extent by the rate of stock-turn itself. In general the larger the store the greater the number of times its stock is turned over during the year.

In three lines of trade for which data are at hand-hardware and deparment stores and food chains-there seems to be no direct and consistent relation between stock turnover and total expense ratios. Hardware stores show a steady increase in the annual rate of stock turnover in each successive size-class. Expense ratios and gross margins tend to decrease with increasing size, but these changes are not marked. Deparment stores show the same tendency toward rapid turnover as the stores grow larger, but in this case expenses also show a decided rise. Food chain organizations show no very consistent relation between stock turnover and total expense when the various size-classes are compared. Profits-the difference between expense and gross margin-do appear to have some relation to stock-turn, however. Detailed figures are given in Table 21.

Profit margins in each of the three trades were larger in the size-class with the highest rate of turnover than in the groups with
low turnover. Here again, however, it is difficult to disentangle the various influences at work and to distinguish cause from effect. The large organizations are the more profitable ones; usually they

TABLE 21
Stock-Turn Compared with Total Expinses and Gross Margnns for Hardware and Dipartment Stores and Food Changs

| Kind and Size of Business (Annual Net Sales) | Stock-Turn Per Year | Total Expensesa as Per Cent of Net Sales | Gross Margin as Per Cent of Net Sales |
| :---: | :---: | :---: | :---: |
| Hardware stores, 1936 |  |  |  |
| Less than \$25,000 | 1.8 | 26.8 | 28.7 |
| \$25,000 to \$40,000 | 2.3 | 23.7 | 27.3 |
| \$40,000 to \$60,000 | 2.6 | 22.2 | 26.5 |
| \$ 60,000 to $\$ 100,000$ | 2.8 | 22.2 | 26.1 |
| \$100,000 and over | 3.0 | 21.5 | 25.4 |
| Department stores, 1936e |  |  |  |
| Less than \$150,000 | 2.4 | 30.0 | 30.0 |
| \$150,000 to \$300,000 | 2.9 | 31.6 | 31.6 |
| \$300,000 to \$500,000 | 3.4 | 32.4 | 33.1 |
| \$500,000 to \$750,000 | 4.1 | 32.4 | 34.2 |
| \$750,000 to \$1 million | 4.3 | 33.2 | 34.8 |
| \$1 million to $\$ 2$ million | 4.3 | 33.6 | 34.6 |
| \$2 million to 84 million | 4.6 | 34.6 | 35.8 |
| \$4 million to $\$ 10$ million | 4.9 | 35.3 | 36.5 |
| \$10 million to $\$ 20$ million | 4.9 | 35.6 | 37.4 |
| \$20 million and over | 3.4 | 35.1 | 37.5 |
| Food chains, 1934 d |  |  |  |
| Less than $\$ 2$ million | 7.2 | 21.0 | 21.8 |
| \$2 million to 87 million | 7.1 | 23.1 | 22.6 |
| \$7 million to \$20 million | 8.4 | 22.3 | 23.5 |
| \$20 million to $\$ 50$ million | 9.9 | 22.8 | 23.9 |
| \$100 million or more | 8.2 | 22.3 | 24.3 |

a. Before interest on capital.
b. Hardware Retailer, June 1937, National Retail Hardware Association.
c. Carl N. Schmalz, Operating Reswlis of Department and Specialty Stores in 1936, Harvard Bureau of Business Research, Bulletin 104, PP. 11, 14, 20.
d. Carl N. Schmalz, Expenses and Profits of Food Cbains in 1934, Harvard Bureau of Business Research, Bulletin 99, p. 27. It should be especially noted that the expense figures include not only store operating expense but also the cost of central offices and warehouses.
are also the ones with the highest rate of turnover. The extent to which high profit ratios can be attributed to size of organization, or to turnover, or stock tumover to size, is impossible to say.

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 Does Distribution Cost Too Much?In the deparment store business, however, faster turnover decreases mark-downs, which are an important expense item for many kinds of goods. The amount of mark-downs is closely related to the length of time merchandise is allowed to remain in stock,9 for when groods age in stockrooms they spoil or go out of style.

## Chain Stores Have Higher Turnover

In most lines of trade chain stores, with their larger size and better locations, have a higher rate of stock turnover and lower operating costs than the independents. This is clear from Figure 15, which is based on Census figures for 1935. It should be observed that the "sales-stock" ratio shown in the chart is arrived at by dividing total sales at retail value by the total stock on hand at the end of the year at cost. Really adequate figures on turnover would be computed from the total cost of goods sold and average stocks on hand during the year, but the Census does not furnish data on the cost of goods, and reports inventory for only one date. The figures furnish a rough indication, however, of the stock-turn in different kinds of business.
The marked differences in the sales-stock ratios of various lines of trade are due largely to differences in the kinds of goods sold. Filling stations, for example, sell only a few grades of a standardized product, which explains their turnover of 26.8 , more than six times the rate for shoe stores. Groceries and combination grocery and meat stores also had sales-stock ratios considerably above the general average of 7.7 for retail business as a whole.

The sales-stock ratio for chain stores as a group was 9.8 as compared with 7.2 for all others (largely made up of independents). Only in the case of department stores was the turnover rate for chains less than for independents. But in spite of their slower turnover the expense ratio of chain department stores was less than that of independents. Chain store expenses were lower than those of independents in most lines of trade; but in variety stores and filling stations their expense ratios were higher, in spite of a more rapid rate of turnover. Here again there is no convincing
9. Werner K. Gabler, Time as En Eloment in the Cost of Retailing, University of Pitrsburgh, 1933.


Figuse 15. Chain stores in most lines have higher stock-turn rates and lower expense ratios than other types. Filling stations and pariety stores, with higher rates of srock-rurn for the chains accompanied by higher expense ratios, are exceptions; Hikewise chain deparment stores, with lower expense ratios, but a slightly lower rate of srock-turn. (Sowrce: Table Q.)

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evidence that high turnover is the only or primary reason for a low expense ratio.
If chain stores and independents were identical in all respects except their management-in average size of store, in the kinds of goods carried, in the nature of services rendered, and in the size of city in which they operate-comparisons of sales volume per employee and of average earnings would justify valid and significant conclusions. Actually, however, it is known that chain stores on the average are larger than independents, which helps to explain the fact that their average sales per employee are greater. Moreover, a larger proportion of chain stores than of independents are located in the larger cities, where retail sales and turnover are greater than in the smaller communities and where wages are necessarily higher. Chain stores have better locations, too, than independents, which involves higher rents but also contributes to a larger sales volume. As a rule chain stores render fewer services and carry a more limited variety of merchandise than do many of the independents. All of these factors-as well as the superior organization and management of the chains-contribute to their more favorable showing when they are compared as a group with independent stores.

## 6. Expenses in Four Lines of Trade

Because of the importance of food distribution and the variety of competing types of stores in the field an examination of available data on operating expenses from other sources than the Census may be useful. The three such sources called upon in general confirm and supplement the picture presented by the Census.

## a. FOOD STORES

Among combination grocery and meat stores-the most important type of food outlet-total operating expenses ranged from 12 to 19 per cent of sales in 1934 and 1935, depending upon the type of store and the services rendered. According to the 1935 Census the average operating expense of such stores, including chains and all other types, was 18.4 per cent of net sales. Dun \& Bradstreet's

Retail Survey for the same year reports a figure of 16.7 per cent, the discrepancy being attributable to the fact that the average size of store in this latter sample was larger than in the Census.

The most interesting comparisons in this field are between the conventional independent operator, the chain store, and the supermarket. Comperition berween these groups has been one of the leading legislative issues of the last few years.

## Costs and Services

According to the Census, the general average expense of stores other than chains (including the smaller independents and supermarkets) in 1935 was 19 per cent, including the compensation imputed to proprietors. A study published by The Progressive Grocer shows that the average expense of twenty-five selected representative independent stores offering services-either charge account service, delivery service, or both-was 16.7 per cent in 1934. But the operating costs of twenty-three selected independent cash stores was 14.4 per cent of net sales. In discussing the service element this report points out:

It is practically impossible to determine the exact cost of rendering parricular services such as credit or delivery, even when the operaring expenses of a large number of stores are studied. Such factors as store Iocation, size of town, the variety of merchandise handled and the class of trade, each bring variables into the expense picture. It is impossible to find a given number of independent stores operating under identical conditions, the only variable being the character of the service. Even when individual stores operate under similar conditions, there is still one factor that varies greatly from store to store and that is the individual merchant's capacity and his personality.

But one fact does stand out as a result of studying hundreds of operating starements: Service when properly and efficiendly rendered in a limited and well-defined trading area-whether credit service, delivery service or both -does not add as much to the operating expense as many merchants think it does. To be sure, many service stores have a comparatively high operating expense but frequently it is the result of poor management, of scattering their energy over too much territory, and the high expense is not due entirely to the additional service rendered.

Insofar as one can generalize, it appears that credit service when properly rendered need not add more than 2 per cent to the operating expense,

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and likewise, delivery service . . . need not add more than 2 per cent, making a total of 4 per cent. ${ }^{10}$

Wide variations in the expenses of individual stores were noted in this study. In the case of the twenty-five service stores ranging in size from about $\$ 20,000$ up to $\$ 93,000$ in annual volume, total expenses ran from a minimum of less than 13 per cent up to 20 per cent, with little relation to the size of the store. The cash stores showed even wider fluctuations in expense ratios. They ran from a minimum of less than 10 per cent for four individual stores up to over 20 per cent in several instances. The thirteen self-service stores in this group had the lowest expenses.

## Super-Market Costs

This study also analyzes the expenses of twentr-five deparments of super-markets selling grocery and delicatessen lines, all of them located in Los Angeles. As these deparments were operated on the basis of a completely independent set of books they can be considered as separate stores. Six of them were of the self-service type. They did a strictly cash-and-carry business, averaged nearly $\$ 150$,000 in annual sales, and were located in the center of the best residential communities. These stores had average expenses of 12 per cent.
A second group of super-market grocery departments offered both counter-service and self-service but very little delivery service. Selling only for cash and averaging about $\$ 60,000$ annual volume, their average expenses were 13.8 per cent. A third group of seven stores of about the same average size doing about 80 per cent of their business on a credit and delivery basis showed average expenses of 18.3 per cent.
In addition a detailed analysis of one super-market selling groceries, meats, vegetables and delicatessen lines, with total sales of $\$ 540,000$ in 1934, showed total expenses of 11.7 per cent. Practically all of the business of this market, which was located some distance from the downtown section, was on a cash-and-carry
10. "Operating Expenses of 110 Selected Food Stoxes," Tbo Progressive Grocest, 1935, pp. 12-27.
basis. This store is more or less typical of the successful, mediumsized, low-expense market.

## Chain Store Costs versus Other Stores

A study made in 1934 by the Harvard Bureau of Business Research gives a good basis for comparing chain and independent store costs in this field. ${ }^{11}$ Total chain costs given in this study include not only the expenses incurred in operating the retail stores, but also overhead costs of maintaining central offices and a good deal of the cost of the wholesale function. Overhead expenses, including administrative and general costs (advertising, most of the taxes, etc.) and warehousing and transportation, accounted for about 30 per cent of all food chain costs in 1934. The remaining 70 per cent were the costs of actual retail store operation.

The total figure for combination food store chain costs given in the Harvard study was 21.4 per cent of sales. If warehouse and other costs are deducted to give a fair basis of comparison with other retail stores, we get a figure for the chains of 15.1 per cent. This is a little less than the costs of independents which give credit and delivery service ( 16.7 per cent), but a little more than the cash-and-carry independents ( 14.4 per cent). The cash-and-carry super-markets were both below the chains in costs (12 and 13.8 per cent as against 15.1); but those that did most of their business on a credit and delivery basis were above (18.3 per cent).

The 1935 Census reported chain combination store expense at 17.5 per cent of sales. This figure includes a small amount of central office expenses, which the Harvard figures indicate must have been somewhat more than 2 per cent.

## b. DEPARTMENT STORES

The typical big-city department store is really a host of individual shops brought togecher under one roof and single management. Commonly located in a congested urban center and offering its customers a wide range of goods and services, it is one of the more costly forms of retail distribution. The largest department

[^23]stores-those with annual sales of more than $\$ 10$ million, for ex-ample-show an average expense ratio of more than 35 per cent of net sales, nearly twice that of combination grocery and meat stores.

However, as indicated in a study of the Harvard Bureau of Business Research, from which these figures are taken, cost ratios decline steadily as the size of store declines. Operating costs in stores with annual sales of $\$ 1$ million to $\$ 2$ million amounted to less than 34 per cent, while the smallest stores-with less than $\$ 150,000$ volume-paid only thirty cents out of each sales dollar for expenses. Detailed figures are given in Table 22.

TABLE 22
Elembnts of Department Store Expinse by Size of Store, 1936

| Net Sales <br> (In Thousands) | Typical Population of City (In Thousands) | Expenses as Per Cent of Net Sales |  |  |  |  | Net <br> Profit as <br> Per Cent <br> of Sales |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Payroll | Real Estate | Advertising | $\underset{\text { Other }}{\text { All }}$ |  |
| Less than \$150 | 14 | 30.0 | 15.7 | 3.5 | 2.1 | 8.7 | 0.0 |
| \$150 to \$300 | 18 | 31.6 | 16.9 | 3.3 | 2.6 | 8.8 | 0.0 |
| \$300 to \$500 | 33 | 32.4 | 17.1 | 3.4 | 2.7 | 9.2 | 0.7 |
| \$500 to \$750 | 45 | 32.4 | 16.9 | 3.6 | 2.8 | 9.1 | 1.8 |
| \$750 to \$1,000 | 65 | 33.2 | 17.0 | 3.6 | 3.4 | 9.2 | 1.6 |
| \$1,000 to \$2,000 | 105 | 33.6 | 16.7 | 3.9 | 3.5 | 9.5 | 1.0 |
| \$2,000 to \$4,000 | 235 | 34.6 | 16.6 | 4.6 | 3.7 | 9.7 | 1.2 |
| \$4,000 to \$10,000 | 470 | 35.3 | 17.3 | 4.4 | 4.0 | 9.6 | 1.2 |
| \$10,000 to \$20,000 | 1,200 | 35.6 | 17.9 | 4.6 | 3.9 | 9.2 | 1.8 |
| \$20,000 or mare | 2,000 | 35.1 | 17.7 | 5.4 | 3.4 | 8.6 | 2.4 |

a. Carl N. Schmalz, Operating Rosults of Depaytment and Spacialty Stores in 1936, Harvard Bureau of Business Research, Bulletin 104, pp. 12-22.

Since the big stores are usually in the large cities and the smaller stores in the smaller centers, the size of the city rather than the size of the store is probably the most important influence on operating expenses. Payroll and real estate costs per dollar of sales are higher in the larger cities, while the big stores spend up to twice as much for advertising as the smaller ones. Another important element in the higher cost of big-city deparment store operation is the fact that returns and allowances in the largest stores amounted to 14.5 per cent of sales, as compared with only 7.7 per cent for stores in the $\$ 1$ million to $\$ 2$ million class. In spite of higher expense ratios
the big stores made the biggest profirs. Profits measured against sales rose steadily from zero in the two smaller size-classes to 2.4 per cent in the largest.

Other surveys tend generally to confirm the figures quoted above. Average operating expenses of department stores of all sizes were 34.9 per cent of net sales in 1936 and 35.8 per cent in 1935, according to the Harvard studies. Average expenses of 34.2 per cent in 1936 and 33.9 per cent in 1935 were reported by Dun \& Bradstreet on the basis of data from the Controllers' Congress of the National Retail Dry Goods Association. The slight differeace in the figures from the two sources is due to the fact that the Harvard figures include items-especially financial expenseswhich are not covered by the Controllers' Congress. In both cases, however, the figures are larger than the 1935 Census figure of $\mathbf{2 9 . 2}$ per cent, which is probably partly due to the comprehensive coverage by the Census of a very large number of small department stores. These have the lowest expense ratios. Also the fact that the typical store reporting to the Census does not keep detailed records or a close check on costs may result in some understatement.

While total costs of department store operation range from 30 to 35.6 per cent, according to size of store, payroll costs run from 15.7 to 17.9 per cent of sales. But the latter do not consistently increase with the size of the store. Except for the smallest sizeclass, and the two largest, payroll expense is uniformly close to 17 per cent of net sales. Real estate costs, however, show a fairly consistent rise with increasing size, running from 3.3 to 5.4 per cent of sales, which doubtless reflects the higher rentals of the big cities, where most of the large stores are located.

## Department Store Chains

A further interesting expense comparison was made for 1934 by the Harvard Bureau of Business Research between two types of firms commonly referred to as department store chains, but with quite different characteristics. The first type, called ownership groups, includes mostly large-city department stores which are linked together in common ownership, but which perform most of the important operating functions independently. The second class
(called chains by the Bureau) comprises companies in which there is much more central control and whose stores are usually distinctly smaller than those of the ownership groups.
The chains showed a much lower cost of operation, with a ratio of 23.9 per cent of sales in 1934 compared with 37.5 per cent for the ownership group-a remarkable spread. Moreover, the chains had a gross margin of 28.3 per cent, and therefore a profit of 4.4 per cent on sales, compared with 36.3 per cent, and a 1.2 per cent loss for the ownership group. ${ }^{12}$

Although all items of expense were lower for the chain department stores, it was in payroll costs that their advantage was greatest over the ownership group. The differential was 6.3 per cent of sales. The higher personnel costs of the ownership groups may have been partly due to the fact that they perform several functions, such as delivery service and extensive granting of credit, not performed to the same extent by the chains. Also the clientele of ownership stores demand more personal service from more capable and highly paid individuals than do chain store customers. These chains, in contrast with the situation existing in other lines of trade, operate primarily in smaller communities, where wage rates are lower. The ownership groups place more emphasis on fashion merchandise than do the chains, and fashion merchandise always involves higher salesmanship costs.
These reasons obviously raise no presumption that the lower personnel expense of the chains is due primarily to their form of organization. Nevertheless this possibility seemed to the author of the report "sufficiently great to encourage the executives of department store ownership groups to continue and to intensify their experiments in centralized buying and merchandising and in centralized control of operations." ${ }^{13}$

## American versus Foreign Costs

American deparment store costs appear to be higher than those of department stores in foreign countries, notably England and
12. Sranley F. Teele, Openating Reswles of Deparsment Stora Cbains and Deparzment Siors Ownorship Grosps: 1929, 1931-1934, Harvard Bureau of Business Research, Bulletin 101, p. 1.
13. Ibid., p. 5.

TABLE 23
Operating Expenses of American and English Department Stores, 1933a
(As Per Cent of Net Sales)

| Nature of Expense | United States | Grear Britain |
| :--- | :---: | :---: |
| Total expense | 35.5 | 24.7 |
| Administrative | 6.7 | 5.1 |
| Executive | 1.4 | 1.2 |
| Accounting | 2.3 | 1.6 |
| Administrative general | 3.0 | 2.3 |
| Merchandising | 10.9 | 7.9 |
| Buying | 2.6 | 1.8 |
| Selling | 8.3 | 6.1 |
| Publicity | 5.2 | 3.3 |
| General advertising | 4.8 | 3.0 |
| Display | .4 | .3 |
| Total occupancy | 9.7 | 5.7 |
| Rent and caxes | 6.2 | 3.3 |
| Occupancy general | 3.5 | 2.4 |
| Despatch (delivery) | 3.0 | 2.7 |

a. Data for the United States adapred from Bulletin 92 of the Harvard Bureau of Business Research, and for Great Britain, from a 1935 study made by the Bank of England in collaboration with the London School of Economics. These data were presented in an address by Philip J. Reilly, "Cost of Operation of English Department Stores Compared with American Stores," prepared for the Boston Conference on Distribution, September 1935.

Germany. A comparison for 1930 shows that in the United States expenses were 33.9 per cent of sales, as against 26.7 per cent in Germany. Payroll and advertising costs were noticeably higher in the United States: payrolls amounted to 17.3 per cent of net sales and advertising to 3.5 per cent in this country, as compared with 13.5 per cent and 2.15 per cent, respectively, in Germany. ${ }^{14}$

English deparment store costs appear to be even lower. A study made by Philip J. Reilly of the Associated Merchandising Corpora-
14. German figures-Julius Hirsch, Sfandavd Figures for Purposes of Business Research (unpublished mimeographed manuscript), p. 66 .

United States figures-Carl N. Schmalz, Operating Rosults of Department and Specialty Stores in 1933, Harvard Bureau of Business Research, Bulletin 92, p. 1.

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tion shows that in 1933 British costs were 24.7 per cent as against 35.5 per cent for the United States in that year. In this study the figures for American and English stores were adjusted to make them as comparable as possible. The greatest differences in expenses were found to be in rents and taxes and in the costs of buying and selling. Table 23 gives the details.

Both the American and the English figures are for 1933, a depression year with exceptionally high costs in the United States, but of more nearly normal volume in England. Average American department store costs showed a decline of nearly 2 per cent of sales from 1933 to 1934 while expenses of English stores were virtually the same in both years.

## Reasons for Low Costs in England

Among the reasons given by English department store managers for their low expense rates are "that they have tried to keep their top executive organization simple and free from the over-specialization that exists in American department stores, and that they have persistently challenged the introduction in their management routine of any extraneous 'system' unless it virtually can be proved beforehand that such system will assist management in the maintenance of a low expense rate, or in the elimination of such wastes in merchandising or operation as to more than compensate for its cost." ${ }^{15}$

Other reasons for smaller running expenses of English stores are that the amount of charge business is lower than in the United States, which results in smaller losses from bad debts; rentals and rates (taxes) are lower in England than in America and more restricted advertising space is used and smaller publicity organizations are needed. Newspaper rates in England are relatively much more expensive; no radio publicity expense is incurred, since commercial broadcasts are not permitted in Great Britain; customer returns and adjustments average less than 5 per cent in England as compared with 12 per cent of gross sales in the United States; and employees' duties are more comprehensive and their rates of pay lower.
15. See Table 23, footnote a.

A common salary for an assistant buyer in England is $\$ 30$ a week; and, besides their buying activities, many of them also act as floormen or sales clerks as well as being responsible for a simple form of unit stock control. Likewise, buyer specialization has not been carried as far as in the United States. Central buying has made notable progress in England in recent pears, however, and according to this report the trend undoubtedly will be to develop the department manager type of buyer who will be obliged more and more to take over direct responsibility for all selling activities.

## C. RETAIL HARDWARE STORES

A good deal of significant information is available on operating costs of hardware stores. In addition to Census figures and those from Dun \& Bradstreet, the Hardware Retailer ${ }^{16}$ publishes each year detailed and comparable data for a representative group of large and small stores in cities of various size. Figures from the different sources are in general agreement in showing average expense ratios for 1929 and 1936 of around 24 to 26 per centlower than department store costs, but considerably above those of grocery and meat stores. The smaller sales volume of 1935 resulted in higher expense ratios than in 1929 and 1936. In the latter year-unike most lines of retail trade-average expenses were slightly below 1929. This seems to indicate real improvement, since expenses showed a steady rise from about 21 per cent in 1923 to 24 per cent in 1928 and 1929. Because of the sharp decline in sales and relative inflexibility of expenses, costs rose to a peak of 35.2 per cent in 1932, but have since been steadily reduced. Operating costs expressed as per cent of net sales were as follows:

| National Retail Hardware Association | 24.0 in 1929 | 25.1 in 1935 | 23.8 in 1936 |
| :--- | :--- | :--- | :--- |
| Census | 26.6 | 28.0 | $\therefore$. |
| Dun \& Bradstreet | $\ldots$. | 27.7 | 25.8 |

Although the Association's figures are based on a relatively large sample, it is not improbable that the typical reporting store is somewhat more efficiently operated than the average.

[^24]Effect of Size of Store and Community on Expenses
As in the case of department stores, retail hardware expenses are definitely related both to the size of store as measured by sales volume, and to the size of community in which the store operates. Irrespective of the size of city, expense ratios show a decided tendency to become smaller as the business becomes larger. Department stores appeared to show just the opposite tendency, but it must be remembered that the typical department store has a much larger sales volume than the typical hardware store. Hardware stores with annual volume of less than $\$ 25,000$ had total costs of 26.8 per cent of sales. The next larger size-group showed a sharp decline, and the remaining groups less marked decreases, while the largest group, with sales of more than $\$ 100,000$, had operating expenses of 21.5 per cent. These figures, together with other operating data, are shown in Table 24.

TABLE 24
Operating Factors in Hardwarb Retailing by Size of Business, 1936

| Item | $\underset{\text { Aizes }}{\text { All }}$ Sizes of Business | Size-Groups by Annual Sales |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 25,000 \end{aligned}$ | $\begin{aligned} & 25,000 \\ & \$ 0 \\ & \$ 40,000 \end{aligned}$ | $\begin{aligned} & \$ 40,000 \\ & \text { to } \\ & \$ 60,000 \end{aligned}$ | $\begin{gathered} \$ 60,000 \\ \text { to } \\ \$ 100,000 \end{gathered}$ | $\begin{aligned} & \$ 100,000 \\ & \text { and Over } \end{aligned}$ |
| Total expense-per cents | 23.8 | 26.8 | 23.7 | 22.2 | 22.2 | 21.5 |
| Gross margins-per cent | 27.1 | 28.7 | 27.3 | 26.5 | 26.1 | 25.4 |
| Earaings on sales-per cent | 3.3 | 1.9 | 3.6 | 4.3 | 3.9 | 3.9 |
| Profit on investment-per cent ${ }^{b}$ | 10.6 | 6.3 | 11.1 | 13.4 | 13.0 | 14.4 |
| Stock-turns per year-number | P 2.4 | 1.8 | 2.3 | 2.6 | 2.8 | 3.0 |
| Sales per person employed dollarse | 10,574 | 7,901 | 10,135 | 11,212 | 12,421 | 14,640 |
| Credit sales-per cent ${ }^{\text {d }}$ | 49 | 37 | 44 | 11,23 | 39 | 68 |
| Days' credite | 97 | 111 | 96 | 97 | 87 | 76 |

a. Does not include interest on invesmeat.
b. Includes all earnings of business.
c. Except deliverymen and shopmen.
d. Per cent of total sales for year.
e. Number of days' credit business on books at end of year.

Some of the reasons which may account for the lower costs of the large stores are the larger volume of sales per employee, the more rapid rate of stock turnover and the better credit experience,
as evidenced by the smaller volume of outstanding accounts on the books at the end of the year. Although gross margins charged by the largest stores were lower than for any other size-class, their profit on investment was the highest, and earnings on sales were well above the average.

The stores with sales of less than $\$ 25,000$ show up badly in comparison with all other size-groups. Gross margins and expenses were higher for this group, while earnings on sales, profits on investment, stock turnover and average sales per employee were lower than for any other size-class, and their credit position was especially poor. The small sales volume of this group, which means that fixed expenses are larger per dollar of sales, is undoubtedly the immediate cause of their unfavorable record. But perhaps the low sales volume is itself due to the fact that they lose business to the larger stores because their mark-up is greater, or because of a poor selection of goods, or because they do not employ efficient help, or possibly because they are unsuccessful in granting credit to customers.

The medium-sized stores made the greatest earnings on their sales, but in most orher respects were about average in their performance. In spite of their favorable credit position the larger stores do a substantially larger proportion of their business on credit than other groups. Apparently they are willing to grant credit, but are shrewd enough to control their credits. Certainly no one factor, but a variety of causes, appears to be responsible for the better experience of the larger stores.

Operating expenses are also affected by the size of community, being markedly higher in the larger towns (at least up to 50,000 population) than in the smaller centers. Here it appears that higher salary and rental expenses account for practically all of the difference in total costs, as there is no evidence of appreciable differences in the rate of stock turnover, sales per person employed, or profit on investment.

The contrasting effects of the size of store and the size of town on expense ratios are made strikingly clear in Table 25. Costs increase steadily and substantially in every store size-class as the size of town increases. And in towns of every size expense ratios de-
cline with every increase in size of store. Thus the little business in the big town is at one extreme of cost, with an expense ratio of 32.2 per cent, and the big store in the small town, with 15.7 per cent, is at the other extreme.

TABLE 25
Operating Expenses of Hardwarb Stores by Sze or Busingss and Stze of Town, 1936

| Size of Business <br> (Anntal Net Sales) | Size of Town by Population |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Under } \\ & \mathbf{1 , 0 0 0} \end{aligned}$ | $\begin{gathered} 1,000 \\ \text { to } 3,500 \\ \hline \end{gathered}$ | $\begin{gathered} 3,500 \\ \text { to } 10,000 \\ \hline \end{gathered}$ | $\begin{gathered} 10,000 \\ \text { to } 50,000 \end{gathered}$ | $\begin{gathered} \text { Over } \\ 50,000 \end{gathered}$ |
|  | (Expenses ar Per Cent of Net Sales) |  |  |  |  |
| Less than \$ $\mathbf{2 5 , 0 0 0}$ | 22.9 | 26.2 | 29.5 | 31.8 | 32.2 |
| \$25,000 to \$40,000 | 19.2 | 21.6 | 24.8 | 28.6 | 26.8 |
| \$40,000 20 \$60,000 | 18.0 | 19.8 | 23.4 | 26.2 | 24.4 |
| \$60,000 to $\$ 100,000$ | 13.8 | 19.0 | 21.8 | 24.8 | 25.3 |
| \$100,000 and over | ... | 15.7 | 17.7 | 23.6 | 24.6 |

## d. Retail shob stores

Shoe stores show wider variations in operating expenses than most other lines of retail trade. These differences, as in the case of deparment stores, reflect the size of store and size of city, but are also related to the rype of operation and the quality of merchandise carried.

Average expenses amounting to 30.4 per cent of 1936 sales and average profits of 3.8 per cent were shown in a survey of seventy stores made by Dun \& Bradstreet for the National Shoe Retailers' Association. But stores with most of their business at less than $\$ 5$ ${ }^{2}$ pair had expenses of only 28.3 per cent and a profit ratio of 4.2 per cent. At the other extreme of quality, expenses rose to 34.3 per cent and profits fell to 2.2 per cent in a group of stores reporting three-quarters or more of their sales at $\$ 5$ to $\$ 10$ a pair or over. The lower-priced stores had a much higher rate of stock turnover than the higher-priced ones and an advantage in most individual items of expense, particularly advertising and rental costs.

Costs also varied widely for stores managed under different systems of operation. Leased shoe departments of department stores had the lowest costs, with an expense ratio of 24.9 per cent of
sales, while costs rose as high as 35.8 per cent in multiple stores operating from two to four branches. ${ }^{17}$ Independent single stores and chain stores fell between these extremes, with ratios of 29.2 and 30.6 per cent, respectively.

With their marked cost advantage leased departments were able to make profits of 8.2 per cent on sales as compared with only 3.8 per cent for all other stores covered in the survey. Leased departments also had more rapid inventory turnover than the orher stores ( 3.2 times per year as compared with 2.6 times) and reported annual sales of $\$ 13,055$ per salesman as compared with $\$ 9,810$ for the others. Largely as a result of this, leased deparments had a payroll expense of only 13.7 per cent as compared with 16.8 per cent. Their advertising costs were also much smaller, reflecting dependence on the institutional advertising of the department store.

The figures for the independent group of shoe retailers, when compared by size of store, showed a general tendency for costs to mount as store size increased. The smallest stores (with $\$ 10,000$ to $\$ 30,000$ sales) had a total expense ratio of 28 per cent, payroll expense of 13.4 per cent and profits of 4.2 per cent, on sales. Costs rose to 32.9 per cent for the $\$ 100,000$ to $\$ 500,000$ class and payroll expense for this group amounted to 17.5 per cent of sales. Single stores with more than $\$ 500,000$ annual volume, however, had slightly lower total expenses ( 31.1 per cent of sales) and payroll expenses ( 13.7 per cent), but a profit ratio of 6.2 per centhigher than for any orher group of single stores.

The higher expenses of the large stores are probably due chiefly to the location of such stores in big cities. An analysis of expenses of a group of chain, single and multiple stores by size of community shows that the largest cities present more difficult competitive conditions than do the smaller ones.

The most pronounced differences are found in the smallest population size-class (under 25,000 ) and in the largest (over 500,000 ). The expense ratio of stores in the smallest cities was 26.9 per cent of sales, and in the largest, 36.3 per cent. In the

[^25]$17^{\circ}$ Does Distribution Cost Too Much?
three intermediate population classes-ranging from 25,000 to 500,000 -average expense ratios were almost identical-30.7 per cent. The small-town stores appeared to enjoy a special advantage over the big-city concerns in labor and advertising costs. Profit ratios were much higher in the small cities than in the big ones4.7 per cent compared with 1.0 per cent of sales. ${ }^{18}$
18. Ibid., p. 29.

## Chapter 7

## COSTS OF PRIMARY AND INTERMEDIATE DISTRIBUTION

Although retaning is the most costly single phase of distribution the total of costs incurred prior to this final stage is about twice as large as retailers' expenses in selling finished goods to consumers. Not only is almost everything sold at retail sold one or more times before it reaches retailers' shelves, but these earlier stages include the sale and resale of vast amounts of raw materials and semi-finished goods between various steps of production and distribution. Manufacturers' distribution costs are estimated at about $\$ 9$ billion; transportation charges, most of which accrue before the retail stage, account for $\$ 8.8$ billion; and intermediary or wholesale distribution costs amount to about $\$ 7$ billion. All these costs, togecher with national advertising and certain minor items, equal $\$ 26$ billion, as compared with less than $\$ 13$ billion for retail trade. The above figures relate to 1929 as shown in the Flow Chart.

## 1. Intermbdiary or Wholesale Costs

The costs of wholesale or intermediary distribution are not only the straight-line costs of buying goods from producers, transporting them, storing them and selling and shipping them to retailers. As the Flow Chart shows, several intermediary agencies are often involved-one frequently sells to another. The sales of all intermediary dealers in 1929 exceeded $\$ 69$ billion, but almost $\$ 16$ billion of this amount consisted of sales from one dealer to another within the intermediary system. Thus the net outflow of goods from intermediary or wholesale trade to retailers, industry and consumers was about $\$ 53$ billion. Obviously the costs of this resale

TABLE 26
Expenses and Sales of Intermediaries in Selbcted Consumar
Products, 1929a

| Product | Sales |  |  | Expenses |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | To Other Intermediary Dealers | To Outlets Outside of Intermediary System | Amount | As Per Cent of Sales to Others Than Intermediaries |
| (In Millions) |  |  |  |  |  |
| Toys, games, and sporting goods | \$ 261 | \$ 24 | \$ 237 | \$ 51 | 21.7 |
| Jewelry and optical goods | 574 | 45 | 529 | 103 | 19.6 |
| Plumbing and heating equipment and supplies | 558 | 3 | 554 | 102 | 18.3 |
| Automotive products | 2,165 | 103 | 2,062 | 330 | 16.0 |
| Radios and equipment | 605 | 147 | 458 | 70 | 15.3 |
| Furniture and house furnishings | 1,228 | 85 | 1,144 | 173 | 15.1 |
| Drugs, drug sundries, and toiler preparations | 1,255 | 74 | 1,181 | 172 | 14.6 |
| Petroleum and petroleum products | 3,356 | 58 | 3,298 | 477 | 14.5 |
| Dry-goods and apparel | 5,764 | 1,323 | 4,441 | 555 | 12.5 |
| Food products and groceries | 15,382 | 1,578 | 13,804 | 1,491 | 10.8 |
| Cigars, cigarertes, and tobacco | 1,762 | 465 | 1,297 | 126 | 9.7 |

a. Data derived from U.S. Consur of Distribwtion for 1929, Vol. II, and unpublished material in the files of the National Bureau of Economic Research.
or recirculation are part of the price paid for goods as they pass out of intermediary channels.

A sugar broker, for example, may sell only to wholesale grocery merchants, who in turn sell to retailers. Total costs of performing the intermediary function in sugar distribution obviously include the costs of the broker as well as those of the wholesale merchant. Similarly about a fourth of the total intermediary sales of radios and equipment and of cigars, cigarettes and tobacco are made not to retailers, but to other intermediaries. In other lines, such as automotive products, the proportion of total sales made by intermediaries to other intermediaries is 5 per cent or less. The cost of making these sales within the intermediary system must be added to the costs incurred by intermediaries in selling goods to retailers and industry.

The resultant total cost should then be compared, not with the
total volume of intermediary trade, but with the net ourflow from the system. This means that a rough measure of the ratio-of-cost-to-sales of the intermediary function is furnished by comparing the $\$ 7$ billion cost of intermediary distribution with the net outflow of $\$ 53$ billion, rather than with the total sales of $\$ 69$ billion. Measured in this way the total cost involved in intermediary trade amounted to 13 per cent of sales.

Figured on the basis of net outflow the cost of the intermediary function for different commodities varies widely-from as low as 9.7 per cent of the sales of goods leaving the system, in the case of tobacco products, to 21.7 per cent for toys, games, and sporting goods. Table 26 shows the costs of the intermediary function in percentage of sales to other buyers than intermediaries for each of eleven typical consumer products as well as the dollar figures on which these expense ratios are based. The expense ratio for food and groceries was but 10.8 per cent and that of petroleum products, 14.5 per cent, while jewelry and optical goods had a ratio of 19.6 per cent. In the latter case, infrequency of sales and the diffculty and risk of estimating demand more than offset the obviously greater physical task of storing and handling bulky products like food and petroleum.

## a. COMPARISONS BY TYPES OF ESTABLISHMENT

Cost ratios of various types of intermediary establishments vary widely. These differences arise from differences in the kinds of commodities handled and from great variations in the functions performed. Cost ratios (based on total sales, including sales to other intermediaries) for various types of intermediaries and the relative importance of each type as measured by the dollar volume of sales in 1935 are shown in Figure 16, while Table R of the Appendix provides similar data for 1929 and 1933 as well.

Of the various major groups of intermediaries listed by the Census, agents and brokers have the lowest costs in relation to sales2.9 per cent in 1935. Bulk-tank petroleum stations had the highest tatio- 14.5 per cent. Wholesalers proper showed a ratio of 12.6. The average for all types of intermediaries in the United States was 9.5 per cent in 1935.

## NET SALES AND OPERATING EXPENSES OF VARIOUS TYPES

 OF INTERMEDIARY DEALERS IN 1935

Figure 16. Nearly a third of all intermediary trade is still hendied by the traditional wholesale merchant, al though manufacturers' sales branches have expanded in recent Wholesale merchant, although manufacturers sales branches have expanded in receat
years and account for a fourth of total volume. They bave lower expense ratios than years and account for a fourth of total volume. They bave lower expense ratios than
for wholesale merchants but not as low as chain store warehouses. (Sowre: Table R.)

Most of the major types given in the Census classification are broken down into a number of more narrowly defined types. Of these, mail-order wholesalers showed the largest expense ratio ( 21.4 per cent) and brokers the smallest ( 1.3 per cent). Wholesale merchants had a ratio of 13.2 per cent; manufacturers' sales branches, 6.6 and 11.8 per cent, according to whether they did business without or with stock; commission merchants, 2.5 per cent, and importers, 9.2 per cent.

By 1933 sales of intermediary trade as a whole had fallen to less than half of the 1929 volume-from $\$ 69$ billion to $\$ 32$ billion. In spite of drastic reductions in dollar costs, the cost ratio increased from 8.9 to 11.5 per cent. With the recovery in 1935, expenses fell to 9.5 per cent of sales-a good showing with business still onethird below the 1929 volume.

Similar trends occurred in most of the principal groups of intermediaries. Wholesalers proper, accounting for about 40 per cent of the total volume, had about average experience. Manufacturers' sales branches, on the other hand, made a better showing than wholesalers proper, and closely approximated the general average of all intermediary dealers. The business of assemblers and country buyers suffered almost a 50 per cent decline while their costs rose in just about the same proportion.

Agents and brokers and chain store warehouses had excellent control of costs. In spite of a substantial loss in business, operating expenses in 1933 held close to the 1929 level. Although the 1935 recovery failed to restore 1929 sales volumes, expense ratios in both cases were below 1929. The most significant change occurred in bulk-tank stations handling petroleum products, which had an actual increase in dollar volume from 1929 to 1935, accompanied by a sharp rise in operating costs.

Even when different types of establishments are dealing in the same general commodities there is a strikingly wide variation in their expense ratios. The greatest differences are explained by the limited services and functions performed by most of the low-cost dealers such as brokers and agents, in contrast with the more elaborate setup of high-cost wholesale merchants and manufacturers' sales branches. Nevertheless some of the types which per-

TABLE 27
Net Sales and Operating Expenses for Seven Kinds of Business by Types of Intbrmediary Establlishment, 1935 and 1933a

| Kind of Business and Type of Establishment | Net Sales |  | Operating Expense Ratio |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1933 | 1935 | 1933 |
|  | (In Millions) |  | (As Por Cent of Sales) |  |
| Groceries and foods (L) |  |  |  |  |
| Wholesale merchanes | \$3,108 | \$2,748 | 10.8 | 13.1 |
| Voluntary grocery wholesalers | 93 | , | 9.1 | ... |
| Retail cooperative wrarehouses | 109 | ... | 5.1 | . . |
| Cash-and-carry wholesalers | 55 | ... | 5.0 |  |
| Wagon distributors | 65 |  | 14.1 |  |
| Manufacturers' sales branches | 2,506 | 1,852 | 9.4 | 12.6 |
| With stocks | 2,252 | 1,662 | 9.0 | 12.5 |
| Without stocks | 254 | 190 | 13.5 | 13.8 |
| Chain store warehouses |  | 1,173 | $\because$ | 4.3 |
| Brokers | 1,530 | 1,175 | 1.3 | 1.4 |
| Commission merchants | 75 | 47 | 2.5 | 4.0 |
| Manufacturers' agents | 99 | 97 | 2.2 | 4.4 |
| Selling agenss | 33 | 24 | 3.0 | 5.5 |
| Farm products (consumer goods) |  |  |  |  |
| Wholesale merchants | 1,812 | 1,516 | 11.0 | 14.9 |
| Manufacturers' sales branches | 75 | 113 | 24.4 | 22.7 |
| With stocles | 72 | 107 | 24.5 | 23.4 |
| Without stocks | 3 | 6 | 20.8 | 11.2 |
| Chain store warehouses | - | 82 |  | 8.0 |
| Brokers | 232 | 169 | 2.5 | 2.8 |
| Commission merchants | 388 | 379 | 5.3 | 6.2 |
| Dry-goods |  |  |  |  |
| Wholesale merchants | 611 | 754 | 13.4 | 13.5 |
| Manufacturers' sales branches | 405 | 258 | 6.8 | 8.5 |
| With stocks | 180 | 115 | 10.8 | 13.0 |
| Without stocks | 225 | 143 | 3.6 | 4.9 |
| Chain store warchouses | $\cdots$ | 63 | - 0 | 3.1 |
| Brokers | 198 | 172 | 0.6 | 0.5 |
| Commission merchants | 269 | 340 | 4.0 | 3.6 |
| Manufacturers' agents | 70 | 114 | 2.5 | 3.8 |
| Selling agents | 458 | 385 | 3.0 | 2.9 |
| Clothing and furnishings |  |  |  |  |
| Wholesale merchants | 614 | 391 | 13.7 | 16.0 |
| Manufacturers' sales branches | 383 | 268 | 10.9 | 11.8 |
| With stacks | 282 | 200 | 12.2 | 12.8 |
| Without stocks | 101 | 68 | 7.5 | 8.8 |
| Chain store warehouses |  | 19 | - | 3.8 |
| Brokers | 4 | 4 | 2.9 | 4.0 |
| Commission merchants | 12 | 36 | 4.2 | 4.2 |
| Manufacturers' agents | 77 | 59 | 3.8 | 4.3 |
| Selling agents | 110 | 75 | 3.6 | 3.7 |

[^26]TABLE 27 (Continued)

| Kind of Business and Type of Establishment | Net Sales |  | Operaring Expeose Ratio |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1933 | 1935 | 1933 |
|  | (Is Millioss) |  | (As Per Cemt of Sales) |  |
| Drugs and drug sundries |  |  |  |  |
| Wholesale merchants | \$ 411 | \$ 342 | 15.1 | 16.6 |
| Manufacturers' sales branches | 138 | 97 | 26.1 | 28.4 |
| With stocks | 128 | 87 | 26.5 | 28.7 |
| Without stocks | 10 | 10 | 21.5 | 25.8 |
| Chain store warehouses | $\ldots$ | 56 |  | 3.0 |
| Brakers | 5 | 4 | 1.9 | 2.7 |
| Manufacturers' agents | 11 | 7 | 6.2 | 8.4 |
| Selling agents | 6 | 3 | 11.2 | 25.2 |
| Electrical goods |  |  |  |  |
| Wholesale merchants | 559 | 271 | 17.4 | 22.3 |
| Manufacturers' sales branches | 487 | 396 | 8.2 | 14.3 |
| With storls | 350 | 323 | 9.1 | 15.5 |
| Without stocks | 137 | 73 | 6.1 | 9.0 |
| Chain store warehouses | ... | 4 | ... | 13.6 |
| Brokers | ... | b | . . | 11.1 |
| Commission merchants |  | 2 |  | 11.0 |
| Manufacturers' agenss | 42 | 20 | 6.7 | 10.0 |
| Selling agents | 1 | 5 | 19.0 | 14.4 |
| Hardware |  |  |  |  |
| Wholesale merchants | 310 | 339 | 18.4 | 21.4 |
| Manufacturers' sales branches | 28 | 34 | 13.0 | 13.2 |
| With stocks | 18 | 21 | 15.1 | 18.1 |
| Without stodes | 10 | 13 | 9.2 | 5.5 |
| Chain store warehouses | ... | 1 | ... | 27.8 |
| Brokers | ... | 1 | . | 3.3 |
| Commission merchants | 3 | b |  | 9.6 |
| Manufacturers' egenss | 24 | 14 | 5.2 | 6.3 |

b. Less than $\$ 0.5$ million.
form the same essential functions of warehousing, breaking bulk, and transportation show a diversity of expense ratios. These fairly comparable classes are wholesale merchants, manufacturers' sales branches with stocks, chain store and retailer-cooperative warehouses. Because the first two have the expenses of selling in addition to the functions mentioned above they have distinctly higher costs.
The effects of the depression on sales volume and on cost ratios -in view of the difficulty of reducing rigid items of operating ex-pense-are also shown in Table $R$ of the Appendix.

## (1). Seven Consumer Goods Lines

Analysis of Census data for the various types of intermediary dealers in important kinds of consumer goods shows interesting variations attributable to differences in the nature and cost of goods handled and to different methods employed and services rendered by various types of agencies. Data on sales volume and expense ratios for various types of intermediaries in seven important lines of consumer goods are shown in Table 27.

In every one of the lines shown in the table the traditional wholesale merchant handled a larger volume of business in 1935 than any other type of intermediary. His dominance, however, was being threatened in groceries and foods, clothing and furnishings, dry-goods and electrical goods by manufacturers having sales branches. To the extent that expense ratios of wholesale merchants are representative of costs in various lines, it appears that intermediary distribution costs were lowest in groceries and foods and farm products and highest in hardware and electrical goods.

Probably reflecting the tendency of manufacturers of textile products to go direct to the retail trade rather than through the wholesale merchant, manufacturers' sales branches in the drygoods line registered an increase in sales of nearly 58 per cent between 1933 and 1935, when they almost equaled the 1929 sales volume. Expenses were cut from 8.5 per cent in 1933 to 6.8 per cent in 1935. Wholesale merchants, on the other hand, lost nearly 20 per cent in volume between 1933 and 1935, following an even greater loss after 1929, and were not able to effect an appreciable reduction in operating expense.

## Cbain Store Warehouse Costs Low

In six out of seven kinds of business shown in the table it is significant that costs of chain store warehouses were lower in 1933 than those of the two seemingly comparable outlets, wholesale merchants and manufacturers' sales branches with stocks. What is the explanation? In the first place, of course, the chain store warehouse is not a business in itself. It is the chain store organization, not merely the warehouse division, that buys the stocks to supply its stores; and the cost of selling these goods to the individual re-

## Costs of Primary and Intermediate Distribution

tail stores does not appear among warehouse costs. Hence these organizations are not exactly comparable with the independent wholesale merchant or the manufacturer's sales branch carrying stocks.
The wholesale merchant operates an independent business. He buys the stocks with which his warehouses are filled and he sells them to his customers in competition with other intermediaries. The total costs of buying and selling therefore fall on him.
The manufacturer's sales branch, on the other hand, is stocked by the manufacturer. It does not have to shop for the goods which in its opinion are temporarily in greatest demand at different times in different territories. In this sense it has no buying costs, but carries whatever the manufacturer wants to sell. Beyond the cost of warehousing, of transportation and of breaking bulk, therefore, it also bears the cost of selling to the trade. To the extent that it is harder to sell a particular brand to the trade than to sell the brands which seem to be in most demand its selling costs may be even higher than those of the wholesale merchant.
The chain store warehouse, on the other hand, does have to shop for its stocks, but it does not in any true sense sell them to the retail outlet. It simply supplies those outlets with the stocks which in the judgment of the management of the whole organization they are expected to carry. The costs of the chain store warehouse, therefore, are simply the costs of physical handling at the intermediary stage of distribution.
It seems fair to say that the manufacturer's sales branch is an intermediary dominated by a special producer; that the wholesale merchant is usually independent of such domination, being guided rather by his own judgment of what his customers prefer; and that the chain store warehouse is a mere machine for the performance of the routine function of storage, transportation, and breaking bulk. A chain store warehouse neither has to overcome the sales resistance of retailers nor carry the tremendous variety of stocks which the wholesale merchant thinks he has to carry if he is not to meet sales resistance on the part of bis retail outlets.
In two fields of intermediary distribution, comprehensive statistics permit a more detailed examination of costs.

## (2). Food Wholesaling

In the food business a rough comparison of the wholesaling costs of chains (i.e., exclusive of expenses of operating their own retail stores) with the operating costs of wholesale merchants is possible. In 1934 combined administrative, general, warehouse and transportacion expenses of a group of food chains amounted to from 6 per cent to 7.5 per cent of the retail sales volume. The author of the study says: ${ }^{1}$

This is equivalent to from 7.6 per cent to 9.9 per cent of the value of goods sold, at the chains' cost prices, the chains' gross margin being taken at from 21 per cent to 24 per cent of sales. Since the ordinary wholesalers' selling prices presumably are higher than the chains' cost prices, but lower than the chains' retail prices, the cost to the chains of performing their central office functions amounts to between 6 per cent and 9.9 per cent of the wholesalers' selling prices. . . . It must be noted, however, that the chains' costs include those for several functions frequently not performed by wholesalers. These include:

1. Advertising, such as that commonly done by, and at the expense of, the retail stores which buy from wholesalers.
2. Transportation of goods from the warehouse (which corresponds to the wholesalers' establishment) to the retail store.
3. Supervision of the retail store.
4. Taxes, such as commonly are paid by independent retailers, plus any taxes levied solely, or at higher rates, on chains.
5. In some cases, cosss for the wholesale function on meats and on fresh fruits and vegetables, which may run higher than corresponding coses on dry groceries.

## Independents' Costs Higher than Chains

Bearing in mind the differences in funcrions performed, the range of 6 to 9.9 per cent for chain costs may be compared with expenses of a group of Ohio grocery wholesalers, which averaged 9.9 per cent of sales in the same year. ${ }^{2}$ The 1935 Census showed a 10.8 ratio for the United States as a whole, and 2 sample study of eighty-eight firms shows average costs of 9.6 per cent in $1936 .{ }^{3}$

1. Carl N. Schmalz, Expenses and Profits of Pood Cbains in 1934, Harvard Bureau of Business Research, Bulletin 99, p. 19.
2. Operating Retults of Ohio Wholesale Grocers-Yewr 1934, Ohio State University Bureau of Business Research, 1936, p. 7.
3. Wholesale Grocers, Wholesale Survey No. 1, Dun \& Bradstreet, Inc., 1937, p. 13.

Thus, there is close agreement in figures from three sources on wholesale grocery costs in these years. The average cost of wholesalers, however, is barely equal to or slightly above the maximum "overhead cost" of grocery chains, which includes not only warehousing and equivalent wholesale expenses but also some costs ordinarily absorbed by the retailer customers of the independent wholesale merchant. The Census of 1933 segregated chain warehouse expenses as a separate item in overhead costs, amounting to 4.3 per cent of the value of goods handled.

## Voluntary Groups and Retailer Cooperatives

Is it possible to perform the wholesale function for independent retailers at anything like the low costs of chain store warehouses? Apparently such costs can be achieved by retailer cooperatives, judging from data on the grocery and drug trades, in which this form of wholesaling has made substantial headway.

According to the 1935 Business Census, ${ }^{4} 157$ retailer-cooperative warehouses doing over 7 per cent of the total wholesale fullline grocery business had average operating expenses of 5.2 per cent of sales in contrast with nearly 9 per cent for independent wholesale merchants in the same field. On the other hand, "voluntary group wholesalers," accounting for nearly 30 per cent of the wholesale grocery business, incurred an even higher expenseabout 10 per cent of net sales.

A possible explanation of the higher expenses for voluntaries as compared with independent wholesalers, may be that the voluntaries emphasize private brands and include in their reported expenses the cost of special merchandising services extended to their customers. The costs of group advertising and other special services are sometimes treated by the sponsoring wholesalers as part of their own costs, even though funds may be collected from retail members to maintain such activities. Also, the voluntaries on the average are much larger than the independent wholesalers-with $\$ 990,000$ annual sales compared with $\$ 440,000$-and a Census study of grocery wholesalers by size of business shows that ex-
4. Census of Business: 1935, Voluntary Growp and Coopevative Wholesalors-Groceries and Related Products, Pp. 9, 12, 13.
penses tend to increase for the larger establishments. ${ }^{5}$ This may help to explain their higher costs.

## Costs in Relation to Size

Among all three kinds of grocery wholesalers-independents, voluntary groups, and retailer cooperatives-cost ratios vary with the size of the concern. For the independents the figures run from 8.3 to 11.1 per cent of sales; for the voluntaries, from 8.7 to 11 per cent; and for the retailer cooperatives from 5 to 5.4 per cent. With the exception of retailer cooperatives the lowest cost ratio for all kinds of wholesalers is in the $\$ 200,000$ to $\$ 300,000$ sales bracket. Above this level expenses rend to increase with size. These figures are given in detail in Table 28.
An analysis of the expenses of 493 of the grocery voluntaries studied by the Census showed that their average cost of marketing $\$ 100$ worth of goods was $\$ 9.90$, divided as follows: administrative expenses $\$ 2.60$; selling $\$ 2.70$; delivery $\$ 1.30$; warehousing $\$ 1.50$; occupancy $\$ 80$; and other expenses, $\$ 1.00$. With some exceprions the larger houses had higher selling, delivery, and warehousing costs. Administrative expenses show little variation with size of firm, the ratio being constant at 2.7 per cent for all groups over $\$ 300,000 .{ }^{6}$

Selling expenses, which consist chiefly of salesmen's salaries and expenses and advertising costs, increase in the upper brackets. This suggests that emphasis on private brands and wide sales areas are possible reasons for the higher costs of extremely large houses. Delivery expenses also increase in the higher brackets, probably because the larger houses, located as a rule in population centers, make delivery on a larger portion of their sales and render this service at more frequent intervals.

The retailer-cooperative warehouses, with nine-tenths of their sales to their own members, have substantially lower cost ratios than either independent wholesale grocery merchants or voluntary group wholesalers. Among the latter group the degree of cooperation appears to have a definite effect on costs. The lowest expense

[^27]TABLE 28
Operating Costs in Relatton to Szze of Businvess for Thrbe Txpes or Wholesale Grocers, 1935
(As Per Cent of Sales)

| Size of Business (Annual Sales in Dollars) | Full-Line Wholesale Merchants ${ }^{\text {a }}$ | Voluntary Group Wholesalersb | RetailerCooperative Warehousesb |
| :---: | :---: | :---: | :---: |
| All sizes | 9.2 | 10.1 | 5.2 |
| Under 10,000 |  |  |  |
| 10,000-49,999 | 11.1 | 8.8 | 5.0 |
| 50,000-99,999 | 9.5 |  |  |
| 100,000-199,999 | 8.6 | 10.5 | 5.3 |
| 200,000-299.999 | 8.3 | 8.7 | \} 5.4 |
| 300,000-499,999 | 8.4 | 9.5 | \} 5.4 |
| 500,000-999,999 | 8.7 | 9.7 | 5.3 |
| 1,000,000-1,999,999 | 9.1 | 9.2 | 5.2 |
| 2,000,000 and over | 11.0 | 11.0 | 5.1 |

a. These data are based on figures appearing in the Ceusus of Business: 1935, Wholesale Distribution, Vol. VI, p. 34. In making this special study, these establishments were reclassified and "Voluntary Group Wholesalers" were xeported separately. According to the reclassification there were 2,676 full-service wholesale merchants with a total volume of $\$ 1.2$ million and with operating expenses averaging 8.9 per cent. No breakdown of expenses by size of establishments for this group 8.9 per cent.
is available.
b. Census of Business: 1935, Volantary Growp and Cooperative Wholesalers, p. 24. Based on a study of 584 voluntary group wholesalers and 157 retailer-cooperacive warehouses.
tatio-8.3 per cent of sales-is found in establishments selling 90 per cent of their goods to members. From this point costs increase consistently as the proportion of sales to members decreases, reaching 11.5 per cent for establishments selling only 10 to 30 per cent of their merchandise to their own members. ${ }^{7}$

## Costs of Services and Credit

Expenses for grocery cooperatives selling entirely on credit were 6.6 per cent of sales, as compared with 4.1 per cent for those not granting credit. In spite of the economies of doing a cash business, only 31 out of 130 cooperatives analyzed made no sales on credit. Of the total number, 83 made less than 50 per cent of their sales for cash, but generally limited credit to a short period, in many cases only seven days. Apparently most grocery retailers want to

$$
\text { 7. Ibid., pp. 18, } 19 .
$$

buy on credit and are unwilling or unable to take advantage of the economies of buying for cash, even when purchasing through their own warehouses.

These comparisons suggest that by rendering a minimum of services, cooperative warehouses can be operated at extremely low costs. However, when numerous services such as credit and delivery are added, total expenses approximate those of service wholesalers.

Cooperatives vary materially in the services rendered. Some operate very much as full-service wholesalers while others merely warehouse a limited number of items which the retailer must call for and for which he must pay cash. Those with the least services showed only two items of expense: administrative, amounting to 2 per cent of sales, and a combined figure for warehouse and occupancy, amounting to 1.3 per cent.

One feature which distinguishes cooperatives sharply from voluntaries and helps to explain their lower costs is the smaller number of salesmen they employ. Whereas 24.6 per cent of the voluntaries' employees were salesmen, they constituted less than 10 per cent of the employees of cooperatives. On the other hand, 48 per cent of the cooperatives' working force were warehousemen, as compared with 36 per cent for voluntaries. Apparently less emphasis is placed by cooperatives upon soliciting and selling because they pay their salesmen less than do the voluntaries. Other classes of employees are paid approximately the same wages by the two types. Unlike voluntaries the cooperatives show little variation in expenses by size, but have a slight tendency toward lower costs in the higher brackets. ${ }^{\text {B }}$

## (3). Drug Whalesaling

In the drug business, the cooperative or mutual wholesalers also had an operating cost advantage over the conventional wholesalers, but it was less pronounced than in the grocery business. According to a special study of the 1935 Census, ${ }^{9}$ thirty mutuals (defined as wholesalers doing more than half their business with
8. Ibid., pp. 26-28.
9. Census of Business: 1935, Wbolesala Distribution, Drkg Wholesaling, P. 41.
members or under a cooperative arrangement) with sales of about $\$ 34$ million had average operating expenses of 10 per cent. Eighteen houses doing over 90 per cent of their business on a cooperative basis had average expenses of 9 per cent in contrast with the 13 to 14 per cent operating expense of the usual type of full-line drug wholesaler. The two types of wholesale establishments had almost equal delivery, warehouse and occupancy expense, but the mutuals showed considerable economies in selling ( 1.1 per cent of sales as compared with 3.4), administration (4 per cent compared with 4.7), and other expenses ( 0.5 and 1.9 per cent).

While the mutuals have much lower total costs the Census report states that "the data indicate just as strongly that the selling functions performed by these two types differ materially, particularly with respect to outside selling. As a result, the information presented does not make possible valid conclusions regarding the relative efficiency of the two groups. Rather the available facts emphasize the difference in the function performed by cooperative and mutual wholesalers as contrasted to full-service wholesale merchants. ${ }^{10}$

This raises the question of what the economic functions of wholesalers should be. Are they to sell, grant credit and create demand, or merely serve retailers as a source of supply? If the latter view is sound the cooperative arrangement undoubtedly provides a means of performing the wholesale function for the retailer at relatively low costs.

With selling and advertising so large a part of total expenses in intermediary trade, one cannot avoid asking whether such costs are necessary. The experience of grocery and drug retailer cooperatives suggeses a more economical way of supplying retail stores with the stocks they really want. If correspondingly low costs can be achieved by the same methods in other lines of trade, wholesaling appears to offer promising opportunities for economies in distribution.
b. COST BLEmENTS IN INTERMEDIARY TRADE

That selling expenses are a large factor in other lines than gro10. Ibid., p. 41.
ceries and drugs is apparent from analysis of additional data. The Census does not give a detailed breakdown of costs for all types of intermediary establishments. A functional analysis of expenses has been made, however, for a sample of twenty-four different types of wholesale merchants and industrial distributors, each doing more than $\$ 100,000$ business annually. The results of this study, based on a special tabulation of the 1935 Census are shown in Figure 17. ${ }^{11}$

## Importance of Selling Expense

Selling expenses were found to be the largest item, with administrative costs nearly as great. These two items, consisting largely of wages and salaries, together amounted to nearly 7 per cent of sales or about 57 per cent of total costs. Next in importance were occupancy, warehousing, and delivery expenses, each accounting for 10 to 11 per cent of total expense.

A substantial part of administrative expense, however, should properly be charged to selling. If this were done selling would be àn even more important cost factor. Selling expenses are relatively more important in lines of trade with high total expense ratios. This is true of high-priced specialized products like furniture and industrial equipment.

The importance of delivery costs and of warehousing and occupancy varies widely among the trades shown in the table. Delivery costs are important for dealers in bulky and perishable products meeting with a steady demand; and in these kinds of businesssuch as dairy products, fruits and vegetables, and meats-selling expenses are relatively small. Warehouse and occupancy expenses are also relatively higher for bulky products like builders' supplies, plumbing and heating equipment and furniture, and low for expensive and non-perishable goods like jewelry, clothing and shoes. As a rule, however, expenses for delivery and warehousing, which are usually regarded as primary intermediary functions, are relatively unimportant.

[^28]

Figure 17. Selling and administracion, of nearly equal importance, account for more than half of wholesale expenses. Wide variations exist among different trades in total expense and in various cost elements. Personnel expense is heavy for fabricated goods like household appliances, jewelry and apparel, while occupancy, warehouse and delivery costs bulk large for standardized industrial products. (Sowret: Table S.)

Other studies show the same predominance of the selling expense item. The Dun \& Bradstreet analysis of operating expenses of conventional wholesalers for 1936, embracing seven different kinds of business, shows that selling accounts for 25 to 40 per cent of all costs, depending upon the individual trade. ${ }^{12}$ Also, as indicated above, a part of administrative expense, the other largest single item, should be charged to selling.
Similar studies of wholesalers' expenses for six lines of trade conducted by the Harvard Bureau of Business Research between 1922 and 1927 revealed the same range of selling and advertising expenses as compared with total operating costs. ${ }^{13}$
In two regional studies conducted by the Department of Commerce, selling expenses of hardware wholesalers were found to be 32.6 per cent of total operating expenses, while furniture wholesalers' selling expenses were about 40 per cent of total expenses in 1929. ${ }^{14}$

## Payrolls as an Expense Item

Personnel costs make up a large share of most of the functional items of expense in intermediary trade-4.5 per cent out of 9.5 per cent in 1935-and the proportion does not vary much among the various classes of dealers. Wholesale merchants, for example, had payroll costs of 7 per cent of sales out of total costs of 13.2 per cent. Manufacturers' sales branches, the next largest group of intermediary dealers, showed payroll expenses of 4.6 per cent com-

[^29]pared with total costs of 10.1 per cent. Agents and brokers, with total costs of only 2.9 per cent, reported payroll costs of 1.5 per cent, again about half of all costs. ${ }^{15}$
When payroll costs and total expenses are compared for intermediary dealers according to the kind of commodities handled about the same relationship is shown. In most lines of trade, the proportion of payroll expense remains close to half the total irrespective of whether the total cost ratios are high or low. An analysis of the costs of wholesale merchants in 1935, for example, shows that clothing and furnishing dealers had payroll costs of 7.5 per cent compared with total costs of 14.1 per cent. Electrical household appliance wholesalers recorded payroll expenses of 9.2 per cent compared with total costs of 18.4 per cent. Payroll expense accounted for a somewhat larger proportion of the total, however, in the case of drug and grocery wholesalers- 7.1 per cent and 5.2 per cent, respectively, compared with total costs of 13 per cent and 9.3 per cent.

## c. FACTORS THAT INFLUENCE COSTS

Having reviewed the comparative costs of various types of intermediaries in different lines of trade it may be of interest to consider some of the principal factors that influence costs. As in retailing these include the size of the establishment, population density, size of orders, lines of merchandise carried, inventory turnover and services to customers. Since the cost of wholesaling is influenced by all of these factors, however, it is difficult to isolate one of them such as turnover, and draw sweeping conclusions as to its effect. The facts seem to indicate considerable variation in the relationship of any one factor to total operating costs in each trade.

In considering the influences affecting wholesale costs, average figures are necessarily used. Since these averages are made up of figures from individual establishments reporting widely varying experiences even in the same kind and size of business, they can indicate only general relationships and broad tendencies. As an example of how widely costs can vary the Ohio State University report on the operating results of thirty-two wholesale grocers for the year

1934 showed that with an average expense for the group of 10 per cent of sales, individual company costs varied from as low as 6.6 per cent to as high as 17.8 per cent. ${ }^{16}$

Even among firms of approximately the same size one firm may have a cost ratio twice as high as another. This is illustrated in the following tabulation based on a confidential analysis of the costs of a group of dry-goods wholesalers for 1936, which shows for each size-group the average, and the range, of expense zatios, respectively.

| Under $\$ 500,000$ annual sales | 15.5 per cent | 11.3 to 18.7 per cent |
| :--- | :--- | ---: |
| $\$ 500,000$ to $\$ 999,999$ | 9.5 to 18.5 |  |
| $\$ 1,000,000$ to $\$ 1,999,999$ | 13.5 | 8.7 to 15.0 |
| $\$ 2,000,000$ and over | 13.5 | 11.4 to 16.6 |

(1). Effect of the Size of Establishment

As we have seen in the case of grocery wholesalers, ${ }^{17}$ the size of establishment influences costs-often to a marked degree. The tabulation above illustrates a condition apparently prevailing in a number of trades. The smallest businesses have relatively high operating costs, which drop sharply for the medium-sized companies and then tend to flatten out, sometimes rising slightly for the largest companies. A survey of automotive and equipment wholesalers, ${ }^{18}$ shows that relatively small firms (with sales under $\$ 100,000$ ) had operating costs of over 29 per cent in 1936. Costs dropped to less than 26 per cent for the next larger group followed by smaller declines for the next size-groups down to about 21 per cent for the largest firms.
Statistics of the 1935 Census for wholesalers in groceries, clothing, dry-goods, drugs, electrical goods, furniture, and hardware, as shown in Figure 18, reveal somewhat the same situation. Cost ratios decline as the size of the business increases-at least up to a certain point. In drugs, dry-goods, furniture and hardware there was a steady decline up to the $\$ 2$ million size business. In groceries and foods, on the other hand, the lowest operating ratio was

[^30]

FIgURB 18. In spite of the wide variation in average costs among various lines of wholesale trade, there is a uniform tendenty for expense atios to decline sharply as the size of firm, measured by annual sales, increases. In the highest size brackets, however, costs in most lines tend to rise again. (Sourca: Table T.)
reached in the $\$ 300,000$ to $\$ 500,000$ size-groups. It is notable that after a certain point is reached costs apparently cannot be reduced further, and in fact often tend to rise again. In all but two lines of business-clothing and electrical goods-wholesalers doing over $\$ 2$ million worth of business had slightly higher operating expense ratios than those in the next lower size-group.

## (2). Population Density

Wholesale operating expenses may also be materially influenced by the population density of the sales territory or by the physical extent of the trade area in which the wholesaler operates. The 1937 Dun \& Bradstreet report on the confectionery trade ${ }^{19}$ points out that wholesalers located in the relatively populous New England states had an expense ratio of about 9 per cent in contrast with 14 per cent for companies in the Southern states.

The same survey also showed that wholesalers with customers concentrated within a hundred-mile radius ran their organizations at an average expense of from 12 to 13 per cent of sales while those with a more extended territory had costs above 17 per cent.

## (3). Size of Account

The size of account is another important factor in costs-too often overlooked. Many merchants in their zeal for volume forget that small, unprofitable accounts drastically increase their operating expense. A case study of one relatively efficient drug wholesale merchant ${ }^{20}$ showed that a third of his customers bought less than $\$ 10$ worth of merchandise a year, but that the total volume accounted for by this group represented only 0.2 per cent of his business. When operating expenses were carefully allocated by customers it was found that the actual cost of this class of business was twice the amount of the gross income accruing from it.
(4). Lines of Merchandise Carried

The same group of confectionery merchants mentioned in the
19. Confectionery Wholesalers, Report No. 4, 1937 Wholesale Survey, Dun a Bradstreet, Inc., pp. 17, 18.
20. Wholerale Druggistr Operations, U.S. Burean of Foreign and Domestic Commerce, 1934, pp. 12, 13.
section on population density ${ }^{21}$ showed marked variations in operating expense between those with most of their volume in strictly candy lines and those doing up to a third of their business in candy and the remainder in tobacco products. The average expense of running the candy business was 15 per cent of sales and of the candy-robacco combination, 6 per cent.

Further evidence of cost variation within the same general category is provided by an intensive study made by the Department of Commerce of a Louisville wholesale grocery establishment and the costs of handling various types of items carried. ${ }^{22}$ This analysis showed that with total operating expenses of somewhat more than 5 per cent of sales the cost of handling one group of commodities ran as high as 11 per cent, in contrast to less than 4 per cent for anocher group. The commodities in the second group were characterized by high value with little weight or bulk, low sales resistance, non-perishability, rapid turnover, convenient packaging and a limited range of sizes, brands and types.
The effect of emphasis on private label goods is demonstrated by a Dun \& Bradstreet study of the wholesale grocery trade covering 1936 operations. ${ }^{23}$ Wholesalers' private brands required more selling and promotion than nationally advertised goods, and selling costs therefore comprise a substantial part of the larger expense of featuring such goods. Selling costs were 4.6 per cent of net sales for distributors selling three-fifths or more private label merchandise, compared to 2.9 per cent for those selling less than one-fifth private label goods. The same study also showed that firms handling a relatively large volume of perishable merchandise had costs of operation 2.2 per cent higher than other houses.

## (5). Inventory Turnover

Carrying a large variety of stock is almost sure to involve higher expenses because of slower turnover, greater warehousing expense, less quantity discounts because of smaller unit purchases, and a

[^31]larger mark-down on distress lots. A Deparment of Commerce study shows that a typical wholesale grocer in his eagerness to overcome sales resistance, stocked two and a half times the number of iterns carried in a typical grocery chain store warehouse. ${ }^{24}$

That this policy tends to taise costs is evident from Census fig-

TABLE 29
Operating Costs in Relation to Stock-Turn, 1929, 1933, $1935{ }^{\circ}$

| Type of Establishment and Year | Net Sales | Stock on Hand at End of Year at Cost | $\begin{aligned} & \text { Sales-Stock } \\ & \text { Ratiob } \end{aligned}$ | Operating Expense as Per Cent of Sales |
| :---: | :---: | :---: | :---: | :---: |
|  | ( In Billions) |  |  |  |
| Wholesale merchants | \$24.6 | \$2.9 | 8.6 | 12.4 |
| 1933 | 11.3 | 1.7 | 6.5 | 15.8 |
| 1935 | 14.4 | 1.7 | 8.7 | 13.2 |
| Manufacturers' sales branches with stocks |  |  |  |  |
| 1929 |  | $\cdots$ |  |  |
| 1933 | 5.1 | . 6 | 9.4 | 14.9 |
| 1935 | 7.4 | . 6 | 12.5 | 11.8 |
| Chain store warehouses |  |  |  |  |
| 1929 | 1.9 | . 1 | 19.5 | 4.3 |
| 1933 | 1.4 | . 1 | 21.6 | 4.5 |
| 1935 | 1.9 | . 1 | 19.9 | 4.1 |

a. Census of Distribution for 1929, Vol. II, p. 81 ; Census of American Business: 1933, Wholesale Distribution, Vol. I, p. a-1; Census of Business: 1935, Wholasala Distribution, Vol. I, p. 56 and Retail Cbains, p. 39.
b. Computed by dividing total sales by stock on hand at the end of the year. A true stock-turn comparison would require data on the cost of goods sold but the Census does not provide such figures.
ures on the relation of sales-stock ratios to operating cost ratios, which show a marked tendency for costs to be higher with a decrease in stock turnover. The results of this analysis, covering wholesale merchants, manufacturers' sales branches and chain store warehouses, are shown in Table 29.

The sales-stock ratios of the wholesale merchants varied from 6.5 to 8.7 in 1929-1935 and their cost ratios varied from 12.4 per
24. The Wholesald Gracer's Problem, Disribution Cost Srudies No. 4, U.S. Bureau of Foreign and Domestic Commerce, 1928, p. 4.
cent of sales to 15.8 per cent. At the opposite extreme were the chain store establishments with sales-stock ratios of 19.5 to 21.6, and cost ratios of only 4.1 to 4.5 per cent. Manufacturess' sales branches were between these extremes, with sales-stock ratios of 9.4 to 12.5 and cost ratios of 11.8 and 14.9 per cent.

With a ratio of sales to stocks only half as large, it is clear that independent wholesalers carry much heavier inventories than the chains. In spite of this they probably receive smaller discounts on purchases for they are not likely to buy in as large volume in any single transaction as the chains. A study made by the Federal Trade Commission in 1931 shows that wholesalers in groceries, drugs and tobacco were not able to get as high average discounts as were granted to independent department stores and to both corporate and cooperative chains. Table 30 shows some typical discounts given by manufacturers to wholesale merchants and chains. In almost every instance the wholesaler received the smallest discount $\rightarrow$ sometimes only half as large as was granted to the corporate

TABLE 30
Discounts Granted by Manufacturers to Different Types of Dealers in Thres Trades, 1929-1930a

| Type of Dealer | Sales |  | Discount |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $19291930$ |  | Amount |  | $\begin{aligned} & \text { Per Cent of } \\ & \text { Sales } \end{aligned}$ |  |
|  |  |  | 1929 | 1930 | 1929 | 1930 |
| ( 1 Thousands) |  |  |  |  |  |  |
| Drug products | \$ 27,533 | \$ 28,335 | \$2,433 | \$2,849 | 8.8 | 10.1 |
| Independent departent stores | 475 | 530 | 36 | 39 | 7.7 | 7.4 |
| Wholesalers | 18,331 | 20,493 | 981 | 911 | 5.4 | 4.5 |
| Grocery products |  |  |  |  |  |  |
| Corporate chains | 165,015 | 163,021 | 5,684 | 5,840 | 3.4 | 3.6 |
| Cooperative chains | 9,791 | 9,656 | 249 | 245 | 2.6 | 2.5 |
| Wholesalers | 13,918 | 15,170 | 373 | 354 | 2.7 | 2.3 |
| Tobacco products |  |  |  |  |  |  |
| Corporate chains | 54,449 | 122,703 | 5,263 | 6,122 | 9.7 | 5.0 |
| Wholesalers | 36,780 | 56,807 | 1,154 | 807 | 2.0 | 1.4 |

[^32]chain. Not only larger individual orders, of course, but larger total annual purchases are a factor in getting large quantity discounts.

Low operating costs do not always accompany rapid turnover, however. A confidential study of dry-goods wholesaling shows that although the larger establishments as a rule had greater turnover than the smaller houses, within any one size-group the individual firms with rapid stock-turns did not always have lower operating expense ratios. High turnover was sometimes accompanied by high expense, but, on the other hand, some firms with less than average turnover had relatively low costs. Dun \& Bradstreet's 1937 survey of wholesale grocers tends to confirm the conclusion that there is no direct and simple relationship between turnover and costs.

## (6). Credit Operations

Since credit operation depends so much on individual and personal factors it is difficult to arrive at even an approximation of its cost in general. However, the 1933 Wholesale Census shows that the 30 per cent of all intermediary concerns which did not grant credit had smaller total operating expenses than the 70 per cent that did.2s Aggregate operating expenses of the credit-granting group were about 13 per cent of net sales, while the comparable figure for establishments not reporting a credit business was about 7 per cent. Cost ratios in relation to the amount of business done on credit for various types of operation are shown in Table 31.
Out of the fourteen types of intermediaries shown in the table only two-manufacturers' sales branches without stocks and bulktank stations-show higher costs for concerns doing an exclusively cash business. In these exceptional cases the difference is small and in almost all other cases the cash firms operate at much lower costs. The difference in operating expenses of the two groups is not due entirely to the credit factor, however, since cash establishments do not perform as many services and stock as wide a range of goods as the credit-granting establishments.

As a further example of this general tendency, the expenses of service wholesalers in the confectionery trade covered by the Dun
25. Census of American Business: 1933, Wholesale Distribution, Vol. 1, pp. 26, 2-27.

TABLE 31
Influence of Credit on Oprrating Exprnses for Selectid Types of Intermbdiary Dealers, 1933a

| Type of Establishment | Credit Firms ${ }^{\text {b }}$ |  | Non-Credit Firms |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Expenses as Per Cent of Net Sales | Average Sales Per Firm | Expenses as Per Cent of Net Sales | Average Sales Per Firm |
|  | (In Tbowsands) |  |  | (In Thousands) |
| All Types | 13.4 | \$ 198 | 7.4 | \$ 189 |
| Wholesalers proper | 15.8 | 292 | 11.4 | 101 |
| Wholesale merchants | 16.5 | 166 | 12.6 | 92 |
| Exporters | 7.9 | 1,440 | 3.4 | 1,010 |
| Importers | 10.8 | 366 | 8.0 | 288 |
| Limited-function wholesalers | 12.8 | 144 | 9.1 | 70 |
| Manufacturers' sales branches | s 13.0 | 421 | 10.5 | 577 |
| With stocks | 15.2 | 400 | 13.3 | 503 |
| Without stocks | 7.2 | 486 | 7.7 | 383 |
| Bulk-tank stations | 19.3 | 66 | 21.5 | 120 |
| Chain store warehouses | 7.3 | 948 | 4.3 | 3,335 |
| Agents and brokers | 4.1 | 420 | 2.3 | 536 |
| Brokers | 1.8 | 683 | 1.5 | 555 |
| Commission merchants | 5.0 | 600 | 2.1 | 808 |
| Manufacturers' agens | 7.3 | 121 | 5.3 | 103 |
| Selling agents | 4.4 | 801 | 3.4 | 796 |
| Other agents | 3.8 | 480 | 3.2 | 650 |
| Assemblers and country buyers | 11.2 | 118 | 9.0 | 61 |

a. Figures for firms reporting credit sales from Census of American Business: 1933, Wholesale Distribution, Vol. I, p. a-27. Figures on non-credit firms deduced from above table and ibid., p. a-1.
b. Percentages of sales on credit range from 78 to 95 for all types of establishments reporting except "bulk-rank stations" whith reported 56 per cent credit sales ments reporting except bulkrank stations"
\& Bradstreet survey ${ }^{26}$ in 1936 were found to increase as the proportion of credit business expanded. Firms selling for cash had expenses of less than 12 per cent of sales and as the proportion of credit business became greater there was a consistent increase in expenses up to nearly 15 per cent of net sales for concerns doing 90
26. Confortionery Wbolesalens, Report No. 4, 1937 Wholesale Survey, Dun a Bradstree, Inc, p. 16.
per cent or more of their business on credit. However, a similar study ${ }^{27}$ for paint and varnish houses for the same year shows just the opposite relationship. Firms doing practically all of their business on credit reported appreciably lower costs than those doing a considerable cash business. This condition was no doubt due to better control of credit since the bad-debt losses of the full-credit firms were only half as large as those of firms with a substantial amount of cash business.

## 2. Manufacturers' Distribution Costs

In spite of their large and growing importance manufacturers' marketing costs have been subjected to less study and analysis than almost any other aspect of distribution. Manufacturers are regarded chiefly as producers. They themselves often fail to appreciate their significance as distributors and have no accurate knowledge of how much it costs them to distribute their goods. Even when provision is made in cost systems for distribution, the entire administrative expense of a manufacturing company is often charged against production instead of being allocated in part to distribution. There are no standard generally accepted systems of expense allocation for the distributive operations of manufacturers such as are used, for example, in department stores.

Yet the manufacturer is steadily taking more and more responsibility for distribution of his products. The integration backward toward sources of supply on the part of such mass distributors as chain stores and mail-order houses has been paralleled by the development of extensive distribution and sales organization by large manufacturers. This trend is particularly evident in the growing importance of branded articles which must necessarily be adverrised and distributed by the manufacturer on a national scale.

Even in 1929, as will be seen from a glance at the Flow Chart, manufacturers sold a large part of their output through other than the usual wholesale channels. More than half of the $\$ 69.6$ billion total sales of manufacturers was sold directly to other manufac-
27. Paint and Varmish Wholesalers, Report No. 7, 1937 Wholesale Surver, Dua a Bradstreet, Inc., P. 8.
turers, to retailers, and to consumers and consuming institutions. Furthermore, a considerable portion of the $\$ 31.8$ billion shown in the Chart as sales to intermediary trade was actually distributed through wholesale branches owned by the manufacturers. Since 1929, moreover, the share of manufactured goods distributed through their own wholesale branches has increased-from 18 to 20.6 per cent of total sales. ${ }^{28}$

## The Total Cost Bill

The total costs incurred by manufacturers in distributing their products can only be guessed at, but for 1929 they may have been larger than the estimated $\$ 9$ billion given in Chapter 5 . This figure, which amounts to about 13 per cent of manufacturers' sales in 1929, includes only expenses involved in direct selling, administration of advertising and promotion, warehousing and storage, credits and collections, financial expenses and a pro rata share of general administrative expense. It does not include such distribution expenses as are incurred in the maintenance of separate sales branches, transportation charges on out-going shipments paid by the manufacturer, and expenditures for national advertising. The first of these items has already been considered in the preceding section of this chapter as part of the costs of intermediary distribution. The second and third items will be discussed separately as consolidated estimates for all phases of distribution since it is difficult to determine how much of the total costs of transportation and advertising are met by manufacturers.

But the estimate of $\$ 9$ billion for manufacturers' selling costs (excluding items treated separately) may well be questioned. Because of lack of adequate and comprehensive data this estimate was based on a study of the experience of 312 manufacturing firms representing less than 5 per cent of total manufacturers' sales in 1931. Since the completion of this study the Census Bureau has published the results of a survey of the distribution costs of manufacturers in 1935. According to this survey, the selling costs of manufacturers averaged 9.4 per cent of sales, instead of the 13 per cent indicated

[^33]by the earlier survey. Under ordinary circumstances it would be possible to accept the Census figure, which was based on a much larger sample than the other survey. Comparison of the Census figures with the results of the earlier survey and of another confidential study, however, indicates that the distribution cost ratios reported by the Census for a number of important industries were much too low. Until much more comprehensive and reliable data become available it is clearly impossible to make an accurate estimate of manufacturers' distribution costs. About all that can be said is that they probably amount to somewhere between 10 and 13 per cent of sales; or, on the basis of nearly $\$ 70$ billion sales in 1929, to between $\$ 7$ billion and $\$ 9$ billion, exclusive of cost items mentioned above which are considered separately. It may be of interest, however, to consider in greater detail the admittedly inadequate data on the subject which are now available.

## a. DISTRIBUTION COSTS OF 312 MANUPACTURERS

This study was made by the Association of National Advertisers and the National Association of Cost Accountants and published in 1933. ${ }^{29}$ It covered the distribution costs of 312 manufacturers in 1931. The sample included twenty-nine distinct kinds of products ranging from drugs and groceries to chemicals and machinery, with both large and small firms represented, varying from less than $\$ 500,000$ sales to more than $\$ 5,000,000$. Reporting firms employed a variety of distributive channels, some selling direct to large retailers, some maintaining their own sales branches and others using regular wholesale channels. Although all of the 312 companies reported some advertising expenditures a considerable number were not national advertisers. In spite of the wide range of conditions represented, however, the sample was so small that the organizations making the survey make no claim that the results are adequately representative of all manufacturing industries. On the whole it seems probable that the sample is less representative of the small than of large companies in each industry.

[^34]DISTRIBUTION COSTS OF 312 MANUFACTURERS IN 1931


Ficurs 19. Although wide variations exist among industries, consumer goods, on the average, have higher costs than industrial products. Direct selling is usually the largest single cost irem, but for drugs and toilet articles and tobacco products heavy advertising and promocion expenses result in lower selling costs. (Sowrce: Table U.)

Wide variations exist for different products not only in the total cost ratio but in the various expense items. Distribution costs for consumer products-ranging from 16.5 per cent of sales for radio equipment to 38.8 per cent for drugs and toilet articleswere considerably higher than for industrial goods, which ranged from 9.2 per cent for textiles to 25.8 per cent for machinery and tools. This latter tatio, which was the highest among industrial products, was exceeded by more than half the consumer products. The cost advantage of industrial products, which reflects the fact that a large proportion of these goods are sold on specification direct to the users, was especially noticeable in lower advertising and sales promotion expenditures. These relationships are shown in Figure 19.

Advertising costs amounting to 18.4 per cent of sales-more than twice as much as for any other consumer product-were chiefly responsible for the high expense ratio for drugs and toilet articles. On the other hand, tobacco products with a higher than average advertising cost- 8.2 per cent of sales-reported almost the lowest total expense ratio. Relatively high advertising costs for paints and varnishes and heating equipment, however, were accompanied by high total expenses. Direct selling expenses (chiefly salesmen's compensation and traveling expenses and sales office expense) for these products-amounting to 17 per cent and 16 per cent of sales, respectively, were exceeded by only one other group, office equipment and supplies, which obviously can be sold most effectively by demonstration and personal sales effort. With direct selling expenses amounting to 21.3 per cent of sales-higher than for any other group-advertising expenses of 3.2 per cent were among the lowest.
b. MANUPACTURERS' DISTRIBUTION COSTS: 1935 CENSUS

In the 1935 Census of Business an attempt was made for the first time to get reports on manufacturers' distribution costs. A single reporting form was used for all industries (irrespective of substantial differences in their distribution setup) and each manufacturer was asked to report on: (1) total salaries and wages, bonuses and commissions paid to full-time and part-time officers and employees
who devoted all or a major portion of their time to distribution activities such as selling, advertising, sales promotion, credit and the invoicing, installing and servicing of goods sold; and (2) distribution expenses other than salaries and wages, including traveling expenses of salesmen, advertising, credit and collection expenses, losses from bad debts, and rent, interest and general administrative expenses allocated to distribution. ${ }^{30}$ The latter amount was exclusive of expenses of manufacturers' sales offices which were covered separately in the Wholesale Census.

## Census Data Incomplete

Both the method employed in getting this information and the wording of the question undoubtedly permitted a considerable opportunity for error in reporting, with a minimum chance of derection. Many, even of the large firms, have no clear conception of what items should be included in distribution costs and a considerable proportion have probably never attempted to segregate distribution costs from production costs.
As indicated previously, the results of this Census survey cannot be accepted as providing reliable measures of distribution cost ratios in various industries. The Census Bureau itself recognized the weakness of the basic data in stating:

Many manufacturers do not have accounting systems showing these costs separately . . . there is a decided lack of uniformity in bookkeeping methods used by manufacturers . . . one plant may consider a certain item as an expense while another plant may either ignore it or classify it as something other than an expense. In some plants few or no records of distribution expenses are kept. In such instances figures reported were necessarily estimates. Because of the lack of uniformity among manufacturers in classi: fying and recording expense data, the accuracy of such data cannot be guaranteed, and any conclusions drawn from analysis of expenses must be made with this fact in mind. 31

The detailed figures for individual industries in the Census report compared with data from other sources, as discussed with rep-
30. Census of Business: 1935, Distribution of Mannfacturers' Sales, see schedule opposite p. 208.
31. Ibid., p. 23.
resentatives of various industries and trade associations, show that the ratios reported to the Census in many if not most cases give an understatement of the actual level of distribution costs. Several industries out of the 315 covered by the Census show wide differences in costs of distribution for manufacturers as reported by the Census and by other sources, which indicates that the former generally are too low. This opinion is confirmed in an address before the Boston Conference on Distribution on September 21, 1937, by N. H. Engle, Assistant Director of the United States Bureau of Foreign and Domestic Commerce, who said, "manufacturers' distribution costs appear to be consistently low in the Census reports as compared with other studies in this field."

Figures on distribution expense were received from 53,623 of the 134,392 manufacturing establishments reporting to the Census in 1935 , but these plants had total sales of $\$ 21.4$ billion, or nearly half of the total sales of all establishments. Total distribution costs, payroll, and other distribution expenses, each expressed as a per cent of net sales, are shown in Table 32.

TABLE 32
Manufacturers' Distribution Costs, 1935a
(As Per Cent of Net Sales)

|  | Total | Payroll | Other Expenses |
| :--- | ---: | ---: | :---: |
| All Groups | 9.4 | 4.1 | 5.3 |
| Chemicals and allied products | 15.2 | 5.9 | 9.3 |
| Machinery | 11.7 | 4.9 | 6.8 |
| Stone clay, glass | 11.7 | 5.7 | 6.0 |
| Forest products | 11.4 | 5.5 | 5.9 |
| Food and kindred products | 9.4 | 4.1 | 5.3 |
| Nonferrous mearals and their products | 9.1 | 4.4 | 4.7 |
| Leather and its manufactures | 8.9 | 4.4 | 4.5 |
| Printing and publishing | 8.8 | 6.0 | 2.8 |
| Textile products | 8.7 | 4.5 | 4.2 |
| Paper and allied products | 8.5 | 4.0 | 4.5 |
| Iron and steel products | 8.1 | 3.8 | 4.3 |
| Rubber product | 7.8 | 2.7 | 5.1 |
| Petroleumand coal products | 7.4 | 2.6 | 4.8 |
| Transportation equipment | 3.2 | 1.2 | 2.0 |
| Miscellaneous | 12.5 | 4.7 | 7.8 |

a. Census of Business: 1935, Distribution of Menafactarers' Sales, p. 24.

Payroll expense as a whole amounted to 4.1 per cent of sales or to about 44 per cent of total reported expenses, reflecting the fact that labor cost is important here, as it is in other stages of distribution. The high total expense ratio for the chemicals group probably results from the fact that it includes drugs and cosmetics, with high costs, particularly advertising which is included above in "ocher" expenses.
c. COMPARISON OF DATA FROM VARIOUS SOURCES

By deducting certain expense items included in the survey of the Association of National Advertisers, the results of that study can be put on a nearly comparable basis with the ratios reported for specific industries by the Census. These comparisons are shown in Table 33, which also includes expense ratios reported in a confidential study for the year 1931.32 Even with these adjustments the results of the three stadies are not exactly comparable because of differences in classification of industrial firms. However the comparison shows the wide variations in the available data and probably serves to establish the reasonable limits within which the average manufacturer's selling costs, exclusive of branch office and transportation expenses, fall.

In nearly every instance the Census ratios äre lower-and usually substantially so-than those from the other two sources. The relative position of various industries, however, is generally much the same in each of the surveys. High expense ratios, for example, are shown for drugs and cosmetics, beverages, furniture, jewelry, machinery, and other similar non-standardized products requiring considerable sales effort and servicing.

[^35]
## TABLE 33

Avbrage Selling Expenses of Manupacturers by Industries, According to Three Sources
(As Per Cent of Net Sales)

|  | US. Bureau <br> of the <br> Industry | Association <br> of National <br> Advertisers, <br> Census, 1935 | Confidential <br> Study, 1931 |
| :--- | :---: | :---: | :---: |

## Consumer Goods

| Automotive products | $\cdots$ | 16.3 | $\ldots$ |
| :---: | :---: | :---: | :---: |
| Moror vehicles | 3.4 | ... |  |
| Bodies and parts | 3.1 | ... | 11.4 |
| Clothing |  | 16.3 |  |
| Men's and boys' | 9.4 | ... | 12.4 |
| Women's and children's | . ${ }^{\text {a }}$ | $\cdots$ | 14.6 |
| Coats and suits | 8.6 | ... | ... |
| Dresses | 9.5 | . . |  |
| Hosiery and underwear |  | ... | 5.6 |
| Hosiery | 8.9 | . . | ... |
| Knitted underwear | 9.4 | ... | . $\cdot$ |
| Confectionery and bottled beverages |  | 22.5 |  |
| Beverages, non-alcoholic | 22.9 | ... | 30.7 |
| Confectionery | 12.2 | . $\cdot$ | 10.3 |
| Drugs and cosmetics |  | 32.6 | 39.4 |
| Patent medicines, etc. | 21.7 | . . | ... |
| Cosmetics | 27.5 | . . . | ... |
| Flour | 5.0 |  | 7.2 |
| Rurniture | 13.3 | 23.2 |  |
| Hardware | 11.7 | 13.7 | 6.5 |
| Jewelry | 16.2 | 22.6 |  |
| Meat packing | 4.4 |  | 3.2 |
| Paint and varnish | 17.6 | 28.7 | 19.4 |
| Petroleum products | 6.8 | 18.9 |  |
| Shoes | 8.2 | 16.1 | 11.9 |


| Striai Goods |  |  |  |
| :---: | :---: | :---: | :---: |
| Building materials and supplies | $\cdots$ | 17.5 |  |
| Plumbers' supplies | 11.5 |  | 8.0 |
| Clay products | 14.3 |  | 14.2 |
| Cement | 12.6 | ... | 9.0 |
| Electrical equipment and supplies Electrical machinery | 10.6 | 14.3 | 16.4 |
| Iron and steel and their products |  | 14.4 |  |
| Forgings | 7.7 | ... | 7.9 |
| Foundries | 7.9 |  | 5.8 |
| Boiler shops | 12.5 |  | 16.1 |
| Machinery and machine tools |  | 19.3 |  |
| Machinery | 14.9 |  | 16.6 |
| Machine tools | 11.8 | , | 14.1 |

TABLE 33 (Continued)

| Industry | U.S. Bureau of the Census, 1935 | Association of National Advertisers, 1931 | Confidential Sudy, 1931 |
| :---: | :---: | :---: | :---: |
| Paper and paper producs |  | 13.5 |  |
| ${ }_{\text {Paper }}$ Paper boxes | 6.6 | $\ldots$ | 5.1 |
| Textiles | ... | 6.2 |  |
| Coron cloch and yarn |  |  | 4.5 |
| Woven goods | 4.9 |  |  |
| Narrow fabrics | 8.6 |  |  |
| Yarn and thread | 6.4 | $\ldots$ |  |

Comparatively low expense ratios, on the other hand, were reported for certain kinds of standardized industrial goods such as paper and paper boxes, forgings, foundry products and textiles. Mass-distributed standard consumers' goods like meat and flour also involved small distribution expense, while individualized goods like clothing and shoes had higher expense ratios.

## 3. Primary Producrrs' Costs

No estimates of the costs of distribution of primary producers are available but it is known that their selling activities are comparatively small since sales are usually made in bulk to a limited number of buyers. Because primary products are bulky and are usually produced at a considerable distance from the point of use, transportation is the largest element in the cost of distributing them. Transportation charges are ofren paid by the buyer rather than the producer, however; in any event this cost is considered separately in Chapter 8.

Many primary commodities are produced under the control or ownership of the processors and users, and little or no discribution expense (except transportation) is involved in the disposition of the products of such captive sources. The mining of iron ore, for example, is controlled to a very large extent by the steel companies with little ore sold in the open market. Other metallic ores such as copper, lead and zinc move directly to smelters located near the
mines, which are largely owned or operated by the smelting companies.

The oil industry presents a more complicated picture, since a substantial amount of petroleum production is in the hands of independent operators. Even here, however, distribution expense, aside from transportation, is relatively low. The number of outlets for crude oil is limited because of the necessity for economical transportation by pipe lines.

Coal mining companies incur substantial selling expense in addition to heavy transportation charges. Often they have sizable sales organizations or employ the services of brokers who in turn sell to wholesalers and large retailers. Yet 25 per cent of the total production it is estimated ${ }^{33}$ involves no selling cost because it is controlled by large consumers such as railroads and steel companies.
The costs of distributing forest products are relatively low. Lumber and paper manufacturers and naval store producers control the largest portion of the production. Distribution expenses are involved, but they are chargeable as purchasing costs to the manufacturing industry and not to primary production.

## Farmers' Distribution

Farmers are extensively engaged in distribution. The $\$ 1.2$ billion of agricultural products sold direct to consumers in 1929 was distributed as well as produced by farmers. Since raw materials from the farm are generally grown at a distance from the railroad the farmer incurs a distribution expense in hauling his product to the shipping point. Grain must be hauled from the farm to elevators, livestock to concentration shipping points, tobacco and cotton to warehouses, and milk to bulk plants. It has been estimated that if wheat producers were to have their grain hauled by commercial truckers the cost would average about 10 per cent of the price received for the grain at the elevator. ${ }^{34}$

Whether the farmer sells his produce to local buyers or ships it by rail or parcel post the procedure consumes time and energy and
33. H. H. Maynard, W. C. Weidler, T. N. Beckman, Principles of Merketing, The Ronald Press Co., New York, 1932, p. 361.
34. Ibid., p. 317.
involves a selling cost which should be added to the farmer's hauling and delivery expense. Selling farm produce from house to house or in farmer's markets or roadside stands involves considerable expense and helps to explain why consumers can often buy as cheaply from dealers as from the farmers direct. Selling by mail also involves time and transportation costs in addition to the parcel post charges. No estimate of the cost of distributing these goods (except for transportation) is possible. However, although distribution costs incurred by farmers and other primary producers may be considerable in some instances, the aggregate of these costs is not large when compared to those of manufacturers and wholesale and retail dealers.

## Chapter 8

## THE COSTS OF FACILITATING AGENCIES

Distribution costs incurred by retailers, intermediary dealers and manufacturers include, in addition to the expenses of operating their own establishments, charges for a host of supplementary services. Although the cost of services provided by such agencies as banks, railroads, storage warehouses and advertising agencies, as well as taxes paid by distributors, were included in the total operating expenses of distributors as discussed in preceding chapters, it may be of interest to consider some of these costs separately and in greater detail.

By far the largest share of the cost of operating the nation's transportation facilities is chargeable to the distribution of commodities. Financing the storage, movement and sale of goods accounts for a large part of the activity of commercial banks and of hundreds of specialized organizations such as credit reporting and collection agencies and instalment finance companies. A part of government costs arising from the activities of regulatory and research agencies serving distributors also might properly be charged to distribution, although these costs are met out of general tax revenues as well as proceeds of taxes on distributors.

In recent decades especially, the growing emphasis on demand creation and "selling the consumer" has brought new agencies and functions into existence. In the case of many products advertising has come to be regarded as the most important method of selling rather than as a mere supplement to orher sales effort. Specialized advertising and market research agencies, as well as newspapers, magazines, radio broadcasting systems, and other kinds of advertising media, have therefore become important parts of the whole system of distribution. In the following sections the costs of trans-
portation and storage and advertising and credit used in distribution will be briefly reviewed.

## 1. Costs of Transportation

No study of distribution and its costs can ignore transportation. The transportation of commodities between various steps in the distribution process was estimated to cost in the aggregate $\$ 8.8$ billion, or about 23 per cent of the $\$ 38.5$ billion total cost of distribution. Since "rerminal sales" amounted to $\$ 65.6$ billion, this means that on the average, about thirteen cents out of every dollar paid by ultimate buyers for finished goods goes for transportation costs at various stages in the whole process.

This charge, like other items of distribution cost, is paid for essential services performed. Without the function discharged by transportation agencies our economic system as we know it today could not exist. Transportation creates place utility, but it does much more; it makes possible the geographical division of labor. Without a far-flung and efficient transportation system the exploitation of mineral and agricultural resources in favored areas and the development of specialized manufacturing regions-indeed the machine economy in its present form-would be virtually impossible. Nevertheless the same question may be asked about transportation as about other phases of distribution: is this vital function performed as efficiently and economically as possible?

## Costs Vary Widely

The amount which transportation charges add to the cost of commodities varies widely among different products. Naturally transportation accounts for a large part of what the consumer eventually pays for bulky and perishable commodities, especially foodstuffs shipped from distant producing areas. Transportation and transit costs for fresh fruits and vegetables, as shown in Figure 5, often amount to as much as twenty to thirty cents or more out of every dollar paid by the consumer.

Although extensive information on the proportion of the purchase price paid for transportation is not available for most com-
modities, a recent survey of commodity flow made by the National Bureau of Economic Research gives some figures in terms of freight revenue as related to producers' selling prices. ${ }^{1}$ This study shows that transportation costs were a relatively unimportant itemamounting to less than 2 per cent of the producer's prices in 1933 for such products as cigars and cigarettes, dry-goods, automobile tires, industrial and electrical machinery, office and store equipment and stoves and ranges. At the other extreme, transportation charges added nearly 58 per cent to the producer's selling price for fruits and vegetables, and more than 20 per cent for fuel and lighting products.

Products carrying the largest transportation charges (expressed as percentage of producer's selling prices) were as follows:

| Fruits and vegetables | 57.9 in 1933 | 49.7 in 1928 |
| :--- | :--- | :---: |
| Fuel and lighting products | 20.7 | 15.9 |
| China and household utensils | 17.3 | 10.6 |
| Monuments and tombstones | 13.0 | 16.1 |
| Caskers and caffins | 12.1 | 5.9 |
| Poultry and eggs | 10.7 | 4.8 |
| Household furninure | 10.5 | 4.8 |
| Radio apparatus and musical instruments | 10.5 | 4.8 |
| Office and store furniture and fixtures | 10.5 | 4.8 |

All finished commodities covered in the survey had an average transportation charge amounting to 7.8 per cent of producers' prices in 1933 as compared with 5.4 per cent in 1928.

In spite of the fact that transportation charges constitute an important element in total distribution costs, distributors have limited control over them. For this reason, and because transportation is a separate and highly complex subject, it can receive only limited attention in this report.

## The Nation's Transportation Facilities

Six principal types of agencies share in the freight handling business: steam railways, trucks, water-carriers, pipe lines, electric railways, and air carriers. Among these the railroads, which account for about 65 per cent of the total interstate traffic, are by far

[^36]the most important. According to a special report ${ }^{2}$ on the transportation situation made to the President in December 1938, the railroads have suffered two major handicaps in recent years: economic depression and severe competition from other forms of transportation. Between 1926 and 1937 their share of the freight business declined from more than three-fourths of the total volume to less than two-thirds, a loss of more than 10 per cent. Motor truck transportation, pipe lines, air carriers, and inland waterways, all showed gains during the same period. These trends are apparent in the detailed figures shown in Table 34.

TABLE 34
Relative Importance of Transportation Agencibs, 1926 AND 1937

| Agencies | Revenue Ton-Miles |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1926 |  | 1937 |  |
|  | Volume | Per Cent of Total | Volume | Per Cent of Total |
|  | ( In Billions) |  | (In Billions) |  |
| Toral | 593.5 | 100.0 | 561.8 | 100.0 |
| Stearn railways | 447.4 | 75.4 | 362.8 | 64.6 |
| Grear Lakes | 90.0 | 15.2 | 93.2 | 16.6 |
| Intercity trucks | 23.5 | 3.9 | 43.4 | 7.7 |
| Pipe lines | 21.7 | 3.7 | 44.8 | 8.0 |
| Other inland waterways | 9.5 | 1.6 | 16.9 | 3.0 |
| Electric railways | 1.3 | 0.2 | . 7 | 0.1 |
| Ainways | nil | ... | a | ... |

a. About $\$ 2.2$ million.

Leading authorities assert that the United States is oversupplied with transportation services. There is general agreement with a statement made by Commissioner Eastman in 1934 that there is today, and probably would be under normal conditions, an excess of carrying capacity of existing transportation facilities. ${ }^{3}$ This duplication of facilities and services and excessive competition among
2. Report of the President's Committee to Submit Recommendations upon the General Transportation Situation, December 23, 1938, pp. 44, 45, 57, 66.
3. Address of Joseph B. Eastman, Federal Coordinator of Transportation, before National Rivers and Harbors Congress, Washington, D.C., April 30, 1934, Pp. 2, 3.
different transportation agencies must inevitably result in substantial wastes. In his first report to Congress the Federal Coordinator of Transportation characterized this waste, in the railroad field alone, as "a tremendous burden on the public."4
Because a reduction of transportation charges can result in savings to the consumer through lower distribution costs it is clear that consumers as well as distributors have a stake in the elimination of unnecessary expenses and wasteful methods of operation and in the better coordination of the railroads, waterways, and highways.

## 2. THE RAULOADS

For many classes of goods-notably merchandise shipped in less than carload lots-the largest costs in moving freight are not on the road but at the ends of the run. A sample test made by the Pennsylvania Railroad showed that terminal and transfer expenses amounted to $\$ 4.80$ per ton, or three-fourths of the total cost of $\$ 6.43$. Road haul costs in this case were only $\$ 1.16$ per ton, or 18 per cent of the total, and car maintenance and freight accounted for the remaining 7 per cent.' A survey made in 1932 by the Coordinator of Transportation showed that railroad terminal costs for merchandise freight averaged $\$ 7.28$ per ton while truck terminal costs for the same year were $\$ 2.62$ per ton. ${ }^{6}$ An analysis of comparative costs of terminal facilities in cities of varying size indicates significantly that the most economical operation was in ciries of from 25,000 to 50,000 population. Both larger and smaller places had higher costs for a given amount of goods.?
In considering terminal costs, it must be remembered that unless a company has its own siding, it must haul its goods to the freight terminal. This cost is part of the transportation bill. Trucking companies allege that the elimination of these and other handling
4. Federal Coordinator of Transportation, Regulation of Railsoads, First Report to Congress through the Interstate Commerce Commission, 1934.
5. Harold G. Moulton and Associates, Tbe American Trussportation Problem, The Brookings Institution, Washington, 1933, p. 672. Figures cover tests made by the Penosylvania Railroad.
6. Federal Coordinator of Transportation, Merchandisa Trafic Repert, 1934, p. 16.
7. Reported by W. C. Maxwell in Procesdings of the Americam Railway Arsociation, Freight Station Section, Detroit, Michigan, June 15 to 18, 1926, Pp. 193-201.
costs is a principal reason for the rapid development of highway truck tonnage.

A conspicuous source of high terminal charges in the large cities is the investment in costly and frequently excessive terminal facilities. In a number of cities railroads have erected terminals that so obviously duplicated existing facilities as to be criticized by the Interstate Commerce Commission. Terminal facilities not necessary to handle the traffic and not used to capacity mean higher freight charges for the shipper. This type of terminal multiplication is socially wasteful as well as a drain on railway finances.

It is obvious from these facts that one of the most fruifful points of attack on rail costs is at the terminals. But it is much more difficult to prescribe the remedy than to diagnose the ill. Line-haul and terminal costs are interwoven in many cases; and the economies which might be achieved by establishing terminals on the outskirts of the large cities and using motorized delivery have to be offset against the costs and difficulties of disposing of present terminal facilities.

## (1). Cross-Hauling

In spite of the fact that line-haul costs are only a fraction of the total in many cases, the possibility of excessive costs between terminals cannot be ignored. Of these the one most often discussed is cross-hauling. Although ordinary railway statistics fail to show the amount of cross-hauling, several special studies show that it must be substantial. A study by the United States Forest Service and the Census Bureau shows a tremendous cross-hauling of lumber, ${ }^{8}$ and another investigation in the last decade of the movement of goods to and from the Pacific Southwest showed that the same kinds of goods moved in considerable amounts both into and out of the Pacific Southwest.?
How much of the total of railway ton-miles is traceable to crosshauling is not known but the amount is probably large. Public ac-

[^37]ceptance of the desirability of competition, the attitude of regulatory commissions and the natural desire of the railroads to avoid a loss of traffic have all combined to discourage careful study of this practice. Even if the facts were known it is questionable whether there would be general agreement as to the extent to which cross-hauling is unnecessary and wasteful. A good deal of it is undoubtedly inevitable and desirable in facilitating the continuous adjustment of the supply of goods to the varying conditions of many markets.

However, it seems clear that much of the cross-hauling takes place, stimulated by the railroads in a natural desire to increase their traffic, and by public policy in order to promote competition. The basing-point pricing policies of the iron and steel and other heavy industries have also resulted in considerable cross-hauling. Without attempring to draw a sharp line between necessary and unnecessary cross-hauling it is obvious that some public discouragement of the most wasteful elements of this practice would be desirable, particularly where the competition within a region is already sufficient to protect the interests of consumers.

## (2). Circuitous Car Routing

Another unnecessary cost in railroad operation is the circuitous routing of freight cars. One of the alternate routes berween cities served by competirive railroads is often materially longer than another. The longer routes of course endeavor to carry as much of the business as they can get, even though it involves a longer haul. ${ }^{10}$ Where cars must be switched from one line to another in order to reach the destination, the first road will keep the car on its tracks for the longest possible haul in order to get a larger share of the total revenue. Both types of practice result in increased costs of operation and higher freight charges.

The Coordinator of Transportation believes that circuitous routing often doubles the mileage that goods travel and says that, "millions of dollars annually are expended because of circuity in
10. Length of haul in this sense is, of course, not so simple a matter as mere mileage. It is a matter of engineering and operating costs. Every motorist who chooses an outside route to avoid a straight cut through city congestion understands this readily.
routing." ${ }^{11}$ The National Transportation Committee in its report recommended that "circuitous haulage should be eliminated." ${ }^{12}$

While there is little question that circuitous routing is a wasteful practice, some of it is necessary because the railroad with the shortest mileage between two cities may not have adequate facilities to handle the entire volume of traffic, particularly in peak load periods. Then too, many roads would be unable to maintain efficient service between points on their own lines were it not for the added revenue from circuitously routed traffic. For these reasons it is probably too much to expect that all "circuitous haulage should be eliminated."

From the railroad's own standpoint, it is desirable to reduce circuitous routing in order to shorten the time required to transport goods. This would help the railroad in its competition with trucks. From the public viewpoint, there is little justification for the higher rates and longer delivery time involved in unnecessary circuitous haulage.

## (3). Empty Car Movement

Unnecessary empty car movement is one of the important wastes in railway operation. The volume of empty car mileage has increased quite consistently since soon after the war. From 1920 to 1933 the percentage of empty to loaded car-miles rose from 47.3 per cent of the total to 64.1 per cent. ${ }^{13}$ A large part of the empty car movement is obviously unavoidable and could not be eliminated without a radical re-location of many of our major industries. The volume of goods-mostly of a bulky nature-moving from agricultural and raw material producing areas which are distant from the centers of population and industry into consuming regions is much heavier than the movement in the opposite direction. For every ton of freight moving out of New England, for example, six tons move in. But three of the six incoming cars are filled with coal and these cars of course could not be used for much
11. Federal Coordinator of Transportation, Regulation of Railrodds, First Report to Congress through the Interseate Commerce Commission, 1934, p. 19.
12. Moulton, at al., op. cir., p. xivi.
13. Federal Coordinator of Transportation, Report on Fraight Car Pooling, Ocrober 23, 1934, p. 17.
else on a return journey. New England is an extreme example of the unbalanced movement of goods arising from the concentration of our population and the existence of specialized producing areas.

There is a considerable movement of empty cars, however, which is unnecessary and wasteful. The Coordinator estimated that the annual excess empty car movement exceeded two billion carmiles and stated that "a conservative estimate of the operating savings possible by the prevention of this unnecessary movement is $\$ 75$ million per year.' 14 The haphazard return system and the large number of empty car-miles necessitate invesment in a supply of cars considerably in excess of total national needs. Carrying charges on this extra investment have been estimated by the Coordinator at $\$ 25$ million annually. The Coordinator has recommended a more complete pooling of car ownership and operation to reduce waste from this source, pointing out that mergers would result in the complete pooling of cars and would save unnecessary movement of empties.

## (4). Unprofitable Facilities

Another possible source of economy in railroad operation lies in the abandonment-or rehabilitation-of antiquated or littleused facilities. Most railroads have some miles of lines which are no longer profitable because of shrinkage of traffic. Maintaining locomotives and other operating equipment ou these lines adds to the cost-and to the waste. Often a single gasoline driven car would meet all traffic requirements and permit a large reduction in expense.

Since the maintenance of unprofitable lines adds to the cost of sending merchandise over main lines it would obviously be to the advantage of both the railroads and the public to encourage improvement of unprofitable lines with more efficient equipment, or if this proves impracticable, to permit their abandonment. There is no longer the need which formerly existed of maintaining these unprofitable lines. Automobiles, busses and trucks now reach all towns that would be left without rail facilities if these moneylosing lines were abandoned. The railroads are not entirely free
14. Ibid., pp. 3, 4.
to effect these economies, however, for the changes which have to be made are of such a nature that they must be authorized by public regulatory authorities.

## (5). Burden of Fixed Cbarges

The railroads, it must be recognized, have been burdened with many handicaps for which their managements cannor be held responsible. By preventing price (rate) competition, public regulation has forced comperition to assume more wasteful forms such as excessive terminal facilities, empty car movement and circuitous routing. Regulation in terms of "public necessity" has made it difficult for the roads to eliminate unprofitable operations or to meet the competition of new forms of transportation which are often subsidized.
The heavy proportion of bonded debt in the capital structure of the roads and the consequent burden of long-term interest charges are additional facrors making for inflexibility and high costs. Part of the blame for this situation obviously lies at the door of our legislators. For many years it was assumed that railway bonds offered the highest safery for life insurance and savings bank investment. As a result the roads were encouraged to raise capital by bond issues rather than by the sale of equities.
The railroads also suffer from other frozen conditions that make solution of their problem difficult. Rules and regulations on operations and labor have been passed to fit conditions of better days. Flexibility of management to meet current conditions has been impaired. Even labor is not free to move over to the newer motor services, for different unions rule in the two fields.
In spite of the difficulties that confront them railroad managements in recent years have demonstrated their ability to adapt their organizations to new conditions, to develop new and better equipment and methods and to lower costs and improve service. Experience has shown that the rail managers have increased operating efficiency in those fields where public authority leaves them a comparatively free hand. Evidence given before the Interstate Commerce Commission by leading railroad executives gives concrete examples of annual savings through increased efficiency in the
period from 1928 to 1932. The eastern roads showed such savings amounting to $\$ 56$ million a year and the western carriers made a showing that was almost as good. The southern lines also made a good record on a smaller scale.

## b. INLAND WATERWAYS

Inland waterways accounted for aearly 20 per cent of the total interstate movement of commodities-aside from ocean trafficin 1937. About 80 per cent of this traffic consists chiefly of bulky commodities carried on the Great Lakes. ${ }^{15}$ In addition there is a coastwise movement of goods estimated by the United States Engineers as probably equal in importance to the Great Lakes traffic.

Because of its importance and because of the enormous government subsidies it has received, inland water transportation is in need of a searching cost analysis. A recent estimate shows that from 1890 to 1931 the federal government spent about $\$ 790$ million for inland-waterway development, exclusive of the Great Lakes and of seacoast harbor and flood control. With the addition of state expenditure the total public investment amounted to at least $\$ 1$ billion by $1931,{ }^{16}$ or about 4 per cent of the value of rail property as established by the Interstate Commerce Commission. The rail valuation, moreover, includes rolling stock and terminal structures, which the waterway does not.

## Profitability of Waterways

In an attempt to discover whether or not inland waterways could be profitably operated, Congress in 1924 established the Inland Waterways Corporation to operate the public-owned barge lines started during the war, particularly on the lower Mississippi and Warrior rivers. Government operation increased the traffic on these rivers from 980,000 tons in 1923 to 1.9 million tons in $1928,{ }^{17}$ but the net income earned up to the end of 1933 was only $\$ 707,000 .{ }^{18}$ Rates charged have had to be at a substantial discount
15. An Economic Survey of Inland Watervay Transportatios in the United States, Bureau of Railway Economics, Washington, 1930, p. 211.
16. Moulton, ot al., op. cih., p. 442.
17. Bureau of Railway Economics, op. cit., p. 55.
18. Annual Report, 1933, of the Inland Waverways Corporation, Washington, D.C., p. 17.
-normally 20 per cent-in order to attract traffic from the railroads. ${ }^{19}$
Government barge lines on the lower Mississippi were conducted at a nominal profit during the period from 1925 to 1929, but the loss on other divisions which they were required by Congress to operate was so great that the government barge system as a whole showed an operating loss. ${ }^{20}$
The Erie Canal is another example of a costly and unprofitable inland waterway financed out of public funds. The total capital cost of the present Erie Canal has been nearly $\$ 370,000$ per mile as compared with an average cost of $\$ 188,000$ per mile for railroads in the Eastern district, including of course their multiple tracks and expensive terminals. ${ }^{21}$ Improvement of the Ohio River is estimated at about $\$ 200,000$ per mile, or about the same as the per mile cost of secondary rail lines handling similar traffic in that area. The capacity of a rail line is obviously greater than the warm weather capacity of a canal or of most canalized rivers, whose limiting factor is their locks, while some waterways cannot be operated at all in the winter. On the basis of capital costs the rails are generally more efficient than the best landlocked canal and as good as a fairly good canalized river.

## Maintenance Costly

The maintenance of a waterway is also unexpectedly costly. With about half the traffic volume of the Erie Railroad, the New York Barge Canal system had a greater maintenance cost in 1930. This means that the maintenance cost per unit of traffic was twice as high by water as by rail without making allowances for the passenger business of the latter. In the case of the Ohio River, maintenance charges are greater per mile than for such neighboring railways as the Chesapeake and Ohio and the Norfolk and Western. ${ }^{22}$ The comparison includes terminal costs for the railroads, but not for river traffic, and makes no allowance for the meander-

[^38]ing of the river which adds to the mileage of the waterway.
Public expenditures provide canals and rivers with free right-of-way, including maintenance, operation of locks, and free lights. In addition, the waterways have had differential freight rates and lower wage rates, yet their success has been so limited that the government has had to go into the business of operating them to demonstrate possibilities of cost reduction.

Actual transport costs of water tonnage are almost impossible to estimate because of the miscellaneous nature of the various carriers and the lack of adequate accounting systems. Costs must be judged by the rates and by data on earnings and operations. In general it may be said that the best water transportation-such as that on the Great Lakes-is cheap, while the worst is extremely expensive. The average appears to be much higher than that of competing forms.

The total costs per ton-mile on the Ohio River for effective distance covered, have been estimated for 1931-1932 at about 18.84 mills for transporting bulky commodities of the lowest grade of traffic. This compares with an average of 5.97 mills per ton-mile on the Chesapeake and Ohio Railroad and of 6.84 mills on the Norfolk and Western Railway. The average for roads of the Central Eastern region, which carry a higher class of taffic, was 10.32 mills per ton-mile. ${ }^{23}$ Costs on the Erie Barge Canal were about double the rates on competing rail lines in 1931 and were even higher in 1929.24 All in all, it seems clear that the subsidization of inland waterways by federal and state governments has been far from a profitable undertaking. To the extent that this program represents unnecessary expenditure it has added to the cost of distribution.

## c. MOTOR TRUCKS

Motor truck transportation has grown by leaps and bounds in the last ten years. Indeed the loss of freight revenues resulting from diversion of traffic from the railroads to trucks is one of the chief causes of the present predicament of the railroads. The proportion of total traffic movement handled by intercity trucks vir-
23. 1bid., P. 486.
24. Bureau of Railway Bconomics, op. cib, p. 199.
tually doubled from 1926 to 1937 , rising from 3.9 per cent of the total ton-miles to 7.7 per cent, as may be seen in Table 34.

The trucks have become particularly important in the movement of livestock, as well as fruits and vegetables, butter and eggs and other perishable commodities. Livestock receipes by truck in seventeen leading markets were 52 per cent of the total in 1937 as compared with less than 25 per cent in $1929,{ }^{25}$ while receipts by rail declined in the same proportion. The trucks have also made heavy inroads in two other fields which are among the most profitable sources of rail revenues-short haul traffic, largely fast package freight and the lucrative less-than-carload shipments.

By the end of 1937 motor trucks registered in the United States numbered 4,255,000, an increase of 26 per cent over 1929. Only a small portion of them, however, are engaged in public trucking and perform services comparable with the railroads. In the early $1930^{\circ}$ s it was estimated that about one million of the 3.5 million trucks in use were owned by farmers, while an additional two million were privately owned and not operated for hire. Of the remainder, 300,000 were contract carriers operating for hire or under hauling agreements and not observing fixed routes or schedules, while only about 200,000 were genuine common carriers. ${ }^{26}$ While no recent figures are available, the number of trucks operated for hire undoubtedly has increased at a faster rate than the growth in total truck registrations. Furthermore there has been a great increase in the capacity of trucks and a more extensive use of trailers, and many corporations operate fleets of trucks engaged exclusively in their own business.

## The Nation's Trucking Bill

The total cost of trucking as an agency of distribution, as measured by the gross revenue of trucking concerns covered in the Census of Business, was more than $\$ 530$ million in $1935 .{ }^{27}$ More than $\$ 200$ million of this amount was received for local transportation such as moving goods from freight stations to stores and

[^39]moving household furniture. Intrastate movement of goods accounted for $\$ 131$ million, while interstate revenue was nearly $\$ 196$ million. But the Census covered only 61,000 conceras operating 189,000 trucks of the estimated total of about 200,000 operators who would eventually come under federal regulation. Most of these are small enterprises; over 85 per cent of all truckmen own but one truck. ${ }^{28}$

With the exception of the larger operators anything like rigid or uniform cost accounting has been unknown. Rates have not generally been established on the basis of cost, but appear to have been set at 10 to 20 per cent less than the comparable railroad freight rate. The experience of a firm in New York requesting bids on an annual contract basis is an illustration. Out of eight trucking concerns replying, three refused to bid on the ground that they could not compere with the rails. The bids of five concerns on identical specifications ranged from $\$ 26,500$ to $\$ 96,000$. Of the eight firms, only half showed that they were capable of analyzing the problem from the standpoint of equipment and personnel requirements or had an adequate knowledge of their own costs.

Although low truck rates often result from ignorance of real costs the trucks do possess certain basic cost advantages over the railroads. Perhaps the chief of these is the fact that truck operators, unlike the railroads, are called upon to bear only a share of the cost of the construction and maintenance of their right-of-way. For every \$7 invested, the railroads collect about \$1 annually in gross revenues. But for every $\$ 1$ invested by one of the largest truck operators the gross revenue is $\$ 3$, while it is estimated that less efficient operators gross $\$ 2$ for each $\$ 1$ of investment. ${ }^{29}$

The motor truck is more flexible and furnishes prompt door-todoor service which railroads cannot equal. ${ }^{30}$ Truck operators usually move their loads all the way from consignor to consignee while much of the rail traffic involves additional trucking and re-handling at each end of the haul. Until recently, moreover, the trucks have been free from restrictions imposed on the railroads by the federal

[^40]government. Under pressure from the railroads, as well as the larger trucking concerns, Congress passed the Motor Carriers' Act in 1935. This Act provides for the complete regulation of all trucks engaged in interstate business even though the truckman merely handles the goods in transit. Official permission to operate must be granted by the Interstate Commerce Commission, which is also empowered to establish minimum and maximum rates and hours of labor and to set up whatever safety requirements it deems necessary. Although the Act has been in effect for more than three years its provisions have not yet been universally applied. The problem of determining the rate structure and of defining rates is obviously a gigantic one. While no one can anticipate the eventual effects of federal regulation there is little doubt that it will have profound effects on the competitive position of the trucking industry.

## 2. Storage and Warehousing Costs

For many commodities, especially those of a seasonal or perishable character, storage and warehousing charges are a substantial item of distribution cost. Most of the warehouse facilities, however, are owned by producers or dealers and the cost of the storage function is therefore included in their operating expenses. But many manufacturers and dealers employ the facilities of public warehouses for the storage and distribution of their products. According to the Census of Business for 1935 such commercial warehouses had a total revenue of nearly $\$ 98$ million, of which the storage of general merchandise accounted for $\$ 29$ million, farm products for $\$ 23$ million, and cold storage for $\$ 27$ million. ${ }^{31}$ While a small part of the revenues of warehouses was derived from trucking operations, this was probably more than offset by storage revenues obtained by businesses engaged primarily in trucking.

## 3. The Costs of Advertising

Advertising is often pointed to as a conspicuous example of unnecessary cost and waste in distribution. Although advertising costs
for certain highly competitive products amount to a substantial share of what the consumer pays for them, the total cost of advertising in the United States is no more than a small percentage of the entire cost of distributing commodities. According to a recent estimate ${ }^{32}$ the total revenue of various advertising media in 1937 was about $\$ 1.8$ billion, distributed as follows:

| Newspapers | $\$ 570$ million |
| :--- | ---: |
| Premiums | 350 |
| Direct mail | 300 |
| Magazines. | 165 |
| Radio | 165 |
| Car cards, store and window displays, theatre pro- | 100 |
| grams, sky writing, ecc. | 50 |
| Business papers | 50 |
| Ourdoor | 28 |
| Farm papers |  |

Added to the $\$ 1.8$ billion is an estimated $\$ 200$ million or more for agency commissions and for art and mechanical charges and advertising department expense. In the aggregate, therefore, the costs of advertising in 1937 amounted to about $\$ 2$ billion. Included in this total is about $\$ 500$ million for national advertising as reported in the 1935 Census. Fees paid to professional adverrising agencies by national advertisers amounted to $\$ 75$ million. ${ }^{33}$

A very large proportion of this $\$ 2$ billion total is chargeable to commodity distribution, but not all of it is, since the total includes advertising expenditures of institutions and service agencies such as amusement and transportation enterprises. When it is remembered that terminal buyers paid a total of almost $\$ 66$ billion for goods in 1929 it is clear that commodity advertising probably averages less than 3 per cent of the price of finished goods and less than 5 per cent of the $\$ 38.5$ billion estimated total cost of distribution.

Advertising takes so many forms and varies so widely among different types of distributors and kinds of products that it is hazardous to make any generalization about it. One type of retail store specializing in style merchandise, for example, may have advertising running to 10 per cent of sales, while another store selling

[^41]staple merchandise may find it unprofitable to advertise at all. Even among trade-marked products distributed to the national market there is a wide difference in the extent to which they are advertised, and among those which are extensively advertised the cost of advertising is often surprisingly small.

## Cigarettes as an Example

Cigarettes furnish an extreme example of competitive advertising, yet the average cost for cigarettes selling at fourteen cents is little more than half a cent a package. ${ }^{34}$ But small as this sum is the advertising expenditures of cigarette manufacturers for their enormous volume in 1937 came to a total of nearly $\$ 45$ million.

Whatever one may think of the social desirability of comperitive advertising it has undoubtedly been effective in selling more cigarettes. The industry's sales rose from 119 billion cigarettes in 1929 to 163 billion in 1937, while combined advertising expenditures for newspaper, magazine, radio and other media increased nearly $\$ 10$ million in the same period. ${ }^{35}$ In spite of its effectiveness in increasing sales, however, it is clear that cigarette advertising is almost purely competitive and has little educational value. Like an armament race among nations, when one producer increases his appropriation for advertising, his competitors have to defend their own positions by doing likewise. Competition in the cigarette industry has become solely a battle of wits and of money to influence the consumer, not to improve the quality or lower the cost of the product.
Cigarettes appear to be no exception among highly advertised mass distributed products in their relatively small cost per unit of sale. According to an address by Bernard Lichtenberg, ${ }^{36}$ the average cost of advertising Campbell soup is only $36 / 1000$ ths of a cent per can. Advertising Coca-Cola costs less than 16/1000ths of a cent for each five-cent glass. Loose-Wiles Biscuit Company reported an expenditure of less than one-tenth of a cent for a ten-cent pack-

[^42]age. The cost of advertising a nationally-known breakfast food was three-tenths of a cent for a fifteen-cent package. For a Lord Pepperell shirt selling for $\$ 1.95$ the manufacturers' advertising expense amounted to about six-tenths of a cent; for a nationally advertised sheet costing the consumer $\$ 1.75$ only one cent was spent for advertising.

Advertised products, however, are often sold at retail at considerably higher prices than their unadvertised equivalents. This may not be due to actual costs of advertising such products, nor even to the larger profits of successful national distributors, but to the fact that it frequently costs much more to maintain the elaborate and far-flung organization needed to provide continuous national distribution of a trade-marked article than it does to distribute a standard product through traditional channels to a readily accessible market. There is also some evidence that profits on nationally advertised products are larger than on similar goods which are not advertised. On the other hand it is clear that national advertising, by widening the market for goods and creating mass demand, has helped to make the spectacular economies of mass production possible.

## Drugs and Cosmetics

Cosmetics and pharmaceuticals are examples of products often sold at much higher prices than their unadvertised equivalentswhether because of heavy advertising expense, large profits made possible by advertising, or the elaborate organizations required to distribute on a national scale. Many examples were reported by the Federal Trade Commission in 1931.37 The average wholesale price per ounce of twelve proprietary or branded medicines was $\$ 2.64$, while the average for chemically-identical non-proprietary substances was 94 cents per ounce. The difference of $\$ 1.70$ per ounce was the price the retailer (and ultimately the consumer) paid for the advertised product.
The higher cost of the branded article to the retailer is partly justified, of course, for it is easier to sell packaged demand items
37. Report on Resale Price Maintenance, 1931, Federal Trade Commission, Part II. Pp. 51-53.
to the consumer than to fill a prescription or push a substitute. The retailer's mark-up is usualify less on advertised than on non-proprietary products. The difference between what the consumer pays for the proprietary and for the non-proprietary product, therefore, is not as great as the discrepancy in wholesale prices would indicate.

That drugs and toilet articles are conspicuous for the proportion of advertising expense which they bear is obvious from a glance at Figure 19, which shows advertising and sales promotion expenses of manufacturers of various products expressed as a per cent of their net sales in 1931. More than eighteen cents out of each dollar that the manufacturer of drug and toilet products receives is for their advertising and sales promotion activities. In contrast, somewhat more than eight cents is spent by tobacco manufacturers, the next in rank, and one and a half cents by producers of agricultural implements, the lowest in rank. The price which the consumer pays, of course, is larger than that which the manufacturer receives, so that advertising cost does not represent as large a share of the consumer's dollar.

## 4. Credit Costs in Distribution

Credit costs form a significant part of the toral cost of distribution. These costs include not only interest paid on borrowed funds but the expenses of credit departments in checking customer risks and collecting bills, as well as losses on bad debts. In the last analysis these costs, like other distribution costs, enter in one way or another into the price the consumer pays for finished goods. He pays directly, if he buys on the instalment plan, and indirectly for the costs incurred by distributors in financing their operations.
How much credit charges add to the cost of distribution is unknown, but it has been estimated that as much as 90 per cent of the total business of manufacturers and wholesalers is done on credit and that at least 33 per cent of retail sales are charge accounts or instalment purchases. ${ }^{38}$ In addition individuals borrow consider-

[^43]able sums to finance the purchase of consumer goods. The cost of credit is therefore an item of some importance in the nation's distribution bill.
It is impossible to determine the net amount of capital or credit employed in distribution. The capital of one producer or distributor, or the credit he obtains from a bank or other lender, is usually passed on to his customers, and by them to theirs. Producers of raw materials and semi-finished goods often ship products to their customers knowing that they will not be paid for sixty to ninety days or even longer. The producer's capital is necessarily tied up to this extent and the purchaser has the benefit of that amount of working capital. But the latter, after processing or fabricating the goods, may in turn extend credit to his wholesale customers, possibly in larger amounts and for as long a period. The wholesaler also may extend credit to his customers-retail stores-but usually for shorter periods than in the case of the previous transactions. The chain is not yet ended, however, since the retailer may also extend credit to his customers, the ultimate consumers.
For the final stage-retail credit sales to consumers-it has been estimated that the interest cost (figured at 6 per cent of the estimated amount of credit for the length of time the average account was outstanding) on total credit sales amounting to about $\$ 12.6$ billion in 1936 was approximately $\$ 241.4$ million, or 1.9 per cent of net sales. ${ }^{39}$ To these sums must be added the interest paid by individuals on personal loans used to finance purchases of consumer goods, as well as the extra clerical and administrative expense incurred by distributors in handling credit transactions, and their losses on uncollectible accounts.

## a. BAD-DEBT LOSSES

Bad-debt losses vary widely among different trades and from year to year. Among twenty-five lines, manufacturers' and wholesalers' losses in 1929 ranged from 0.2 per cent of net sales in food products, petroleum products and coal and coke, to 0.9 per cent for

[^44]establishmenss handling jewelry and musical instruments and merchandise. The average for all lines was 0.4 per cent in 1929 and 0.6 per cent in $1930.0^{40}$ On the basis of the average rate for 1929 total bad-debt losses of all manufacturers and wholesalers in that year probably exceeded $\$ 500$ million.

The average consumer-at least the consumer able to obtain credit-is nearly as good a credit risk as the average businessman. Bad-debt losses of retailers on their open-credit sales in 1936 amounted to 0.5 per cent of such sales according to estimates made by the United States Departiment of Commerce. ${ }^{41}$ Losses on instalment sales, however, were relatively much higher-1.2 per cent of such sales. On the estimated total open-credit sales of over $\$ 8$ billion and instalment sales of $\$ 4.5$ billion, aggregate losses were $\$ 94.5$ million in 1936 , or 0.75 per cent of total retail credit sales.
Department and women's specialty stores in 1936 had the smallest losses on open-credit business- 0.3 per cent of sales, while hardware stores suffered the highest rate of loss- 1.3 per cent. Instalment credit losses ranged from 0.1 per cent for dealers in coal, fuel oil and wood, to 4.5 per cent for jewelry stores. The Retail Credit Survey of the Deparment of Commerce for 1936 shows credit losses of 0.5 per cent for open-credit stores, and 1.2 per cent ( 1.5 per cent in 1935) for instalment stores.
It is of interest in this connection that a study of costs and markups in 1,259 retail jewelry stores made by the Deparment of Commerce in $1931^{42}$ shows stores reporting no instalment business with an average gross mark-up of 41.4 per cent, a credit loss of 0.5 per cent and advertising expense of 2.9 per cent of total net sales; while stores whose instalment business amounted to more than threequarters of their total volume reported an average gross mark-up of 55 per cent, a credit loss of 5.6 per cent, and advertising costs of 9.3 per cent of total net sales.
40. Mercantile Credit Survey, Part III, Domestic Commerce Series No. 78, U.S. Bureau of Foreiga and Domestic Commerce, 1932, p. 4. Detailed figures for later years are not available.
41. Domestic Commerce, June 30, 1937, p. 372.
42. Jewolry Distvibution by Retail Jewelors, Domestic Commerce Series No. 48, U.S. Bureau of Foreign and Domestic Commerce, 1931, PP. 39, 42, 45.

## Instalment Operations Costly

These figures indicate that instalment stores incur heavier expenses and have to protect themselves against loss by higher markups. If this is true the instalment customer who meets his payments, as well as the cash customers of such stores, are penalized by higher prices. ${ }^{43}$ Back of this is the fact that instalment sellers do not have sufficient information on the ability of prospective customers to assume the obligation of meeting instalments promptly and fully.
There has been a tendency in recent years to stimulate instalment sales by reducing or even eliminating down payments, lowering carrying charges, lengthening terms of sale and enlarging the classes of merchandise sold on instalment. The latter trend has expanded instalment sales in goods of a non-durable nature not previously sold in this way and having no repossessible value and therefore no recourse for the seller in case of default. Even vacation cruises to the Caribbean are now sold on the instalment plan. While the rates of collections and bad-debr losses to date tend to show no harmful results, the possible results of these recent trends to retailers in the way of credit losses and failure to cover other costs of conducting an instalment business may ultimately prove serious. ${ }^{4}$
While some credit losses cannot be avoided there appears to be good evidence ${ }^{45}$ of laxity in granting of credit, not only on the part of retailers but also on the part of wholesalers and manufacturers in some fields. Credit losses could undoubtedly be reduced by more careful investigations of customers and by a better coordination of the sales and the credit departments. But credir losses, like ocher distribution wastes, cannot be eliminated entirely, and any successful effort to reduce them involves other costs in the form of more expensive investigation and possible loss of sales volume.

[^45]
## b. CONSUMER CREDIT

A large and growing part of the credit used in distribution goes to finance sales to the ultimate consumer. In the broadest sense consumer credit may be considered as including all credit extended to individuals, as contrasted with business firms and institutions. In its more usual sense the term includes loans made or credit given to individual consumers to finance purchases of consumable goods and services. This would exclude consumer borrowing for purposes of investment in securities or real estate or for home construction.

A recent estimate by F. R. Hoisington, jr. ${ }^{46}$ on whose material this section is based, shows that the total amount of credit advanced to consumers for all purposes and outstanding at the end of 1937 was $\$ 11.1$ billion, as shown in Table 35 . The principal agencies extending credit to consumers were: (1) retail stores doing an ordinary credit business, accounting for about $\$ 1.5$ billion of the total outstandings, (2) instalment credit agencies, which account for about $\$ 3.1$ billion, (3) commercial banks and several varieties of personal loan agencies, such as personal finance companies, industrial banks, pawn shops, credit unions, remedial loan associations, philanthropic loan funds, illegal lenders, etc., with aggregate loans of approximately $\$ 1.9$ billion, and (4) agencies making loans based on savings, such as life insurance companies and building and loan associations, with total outstandings of about $\$ 3.6$ billion. In addition, advances by relatives and friends were estimated at about $\$ 1$ billion.

## Credit for Consumption Purposes

How much of this grand toral of $\$ 11.1$ billion is really consumer credit used for consumption purposes can only be guessed at. The $\$ 4.6$ billion of retail charge accounts and instalment credit outstanding was obviously all used for that purpose. Results of a few scattered and limited studies also indicate that a large proportion of personal loans are actually made to finance the purchase of consumption goods and services. An analysis made by the Household
46. F. R. Hoisington, jr. Economist, International Telegraph and Telephone Company, unpublished manuscripr, 1939.

Finance Corporation and the Beneficial Industrial Loan Corposation (in 1934-1937) and the American Investment Company of Illinois (in 1934-1935) of the purposes for which small loans were made showed that 50 per cent were probably for consumers' goods and most of the remainder for consumers' services. ${ }^{47}$ If only 75 per cent of the $\$ 1.9$ billion of loans made by commercial banks and personal loan agencies were for consumption purposes the estimated volume of consumer credit would be increased by more than $\$ 1.4$ billion, bringing the total to about $\$ 6$ billion.

Building and loan association share loans and life insurance policy loans differ both in nature and purpose from other types of credit extended to consumers. Since they are based on paid-in values they are not loans in the true sense of the word for the borrower is really borrowing his own money, albeit he has to pay interest on it. Loans on building and loan shares are made largely for purchase of real estate, and the proceeds of life insurance loans are used for many purposes besides the purchase of consumers' goods-to buy securities or meet margin calls, to make a down payment on a house, and often to keep the policy in force when the policyholder is unable to meet premium payments.

It is impossible to estimate how much of the money borrowed on insurance policies is consumer credit, but it is probably a substantial share of the $\$ 3.4$ billion outstanding on life insurance policy loans. A large part of the $\$ 1$ billion loaned by relatives and friends goes also to meet consumprion needs. On the whole, the total volume of consumer credit may be conservatively estimated as in excess of $\$ 7$ billion and possibly as large as $\$ 9$ billion.

## c. CONSUMER CREDIT COSTS

Consumer credit (with the exception of life insurance and other loans based on savings) costs from two to six times as much as

[^46]business credit. This disparity is due neither to discrimination against the wage or salary earner nor to a large percentage of bad debts. Net losses of the three largest instalment companies, including repossession and resale expenses, amounted to less than twothirds of one per cent in 1929,4 and the losses of personal finance companies and industrial banks were on the same order.

Consumer credit costs more than business credit chiefly because it is a retail business. Just as coal bought by the bushel costs far more than by the car-load, so credit extended in amounts of $\$ 50$ to $\$ 500$ usually costs several times as much per dollar as in larger sums. Most of the cost consists of the sales, clerical, accounting and legal expenses of handling the application, investigating the applicant and collecting the repayments. ${ }^{49}$

Information on consumer credit costs is hard to get because lenders (often deliberately) fail to publish their charges except in such general terms that exact calculation of rates is difficult. The advertising of many instalment selling and personal loan agencies is either vague or grossly misleading, describing the cost with some such phrase as "twelve easy payments," "actual cost" or "a reasonable charge." Where the cost is given as " 6 per cent," what is usually meant is 6 per cent of the original unpaid balance for an average period of six and a half months (equal to more than 11 per cent a year).
Because of the lack of definite information the average rates and amounts shown in Table 35 must be regarded as estimates and in some cases as no more than rough approximations based on uncertain assumptions. Excluding loans based on savings by insurance companies, savings banks, etc., on which the rate is normally 6 per cent (except on new policies beginning in 1939 in a few jurisdictions), the estimated yearly interest cost on the $\$ 7.5$ billion of "credit based on personal property and general credit" was nearly $\$ 1.1$ billion, or an average of about 14 per cent. This average, how-

[^47]ever, conceals wide variations in the rates charged for various kinds of consumer credit.

TABLE 35
Estimated Amount of Credit to Consumers and Approximate Average Rate and Yearly Cost

|  | Estimated Amount Outstanding at End of 1937 | Approzimate Average Yearly |  |
| :---: | :---: | :---: | :---: |
|  |  | Rate | Cost |
|  | (In Mintions) | ( F P Per Cent) | (In Malions) |
| Credit based on personal property and general credit: |  |  |  |
| Retailer and finance company instament credit | \$3,100 ${ }^{\text {m }}$ | 15 | \$465 |
| Retailers' open accounts | 1,526 ${ }^{\text {m }}$ | . 0 | . |
| Advances by relatives and friends | 1,000* | $3^{4}$ | 30 |
| Commercial bank personal loans (bot segregated) | 500 | 6 | 30 |
| Industrial banks (including Morris Plan) | $390{ }^{\circ}$ | 16 | 62 |
| Personal finance companies | 3658 | 348 | 124 |
| Personal loan departments of commencial banks | 262 ${ }^{\text {b }}$ | $10^{1}$ | 26 |
| Pawnshop loans | $110^{\circ}$ | 48 | 55 |
| Illegal lenders | $100{ }^{\text {c }}$ | 240 | 240 |
| Credit unions | 951 | 12 | 11 |
| Remedial loas associations | 35: | 16 | 5 |
| Philanthropic, employer, student and other special Ioan funds | 250 | 6 | 1 |
| Axias | 20 | 28 | 1 |
| $\begin{array}{ccc}\text { Group totals } \\ \text { Credit based on savings and other reserves: } & \mathbf{7 , 5 1 0} & 14\end{array}$ |  |  |  |
|  |  |  |  |  |
| Life insurance policy loans | 3,411 ${ }^{1}$ | 5.9 | 201 |
| Building and loan association share loans | 1050 | 6 | 6 |
| Savings bank loans on passbooks | $8{ }^{\circ}$ | 6 |  |
| Loans by other savings, loan and investment companies | -5 $50^{\circ}$ | 6 | 3 |
| Group totals | 3,574 | 6 | 210 |
| Grand totals | 11,084 | 11 | 1,260 ${ }^{\text {m }}$ |

[^48]
## (1). Instalment Credit

Instalment credit is one of the most important types of consumer credit. It may be extended directly by the retailer or more often by an instalment finance company. Under the usual contract the buyer makes a down payment and agrees to pay the remainder in equal monthly instalments over a period of twelve to twenty-four months or more. The lender retains a lien on the goods sold and may repossess in case of default. Interest and other costs are not charged separately but are included in the total sum the borrower agrees to pay. Estimated average interest charges on instalment loans amount to about 15 per cent, or a yearly cost of $\$ 465$ million on the $\$ 3.1$ billion outstanding. Obviously instalment purchases usually cost more than cash. Also prices and mark-ups of instalment goods in some lines of trade are higher than for corresponding goods sold for cash, partly perbaps because the seiler encounters less sales resistance in selling on credit than in selling for cash.

The cost of the instalment credit for automobiles is complicated by the inclusion of insurance in the price the buyer pays. Since the insurance is of value its cost should not be considered part of the cost of credit. However, there is a catch in many of these insurance provisions, for the insurance must sometimes be purchased at higher rates than the buyer would have to pay for the same coverage from responsible companies. On the other hand one of the large automobile manufacturers gives the borrower through its own insurance company the advantage of even lower cates than outside insurance companies.

Instalment credit charges shown in the table have been adjusted to allow for these differences on the basis of typical New York City rates. The present insurance (comprehensive and $\$ 50$ deductible collision) charge on a Chevrolet in New York City (based on an f.o.b. factory price range of $\$ 601$ to $\$ 700$ ) is $\$ 38.70$. Such insurance costs $\$ 51.60$ at manual rates, or about $\$ 45$ from certain "outside" companies.

## (2.). Retail Open Accounts

Retail charge accounts have always been an important form of consumer credit. Ordinarily these accounts run for only short peri-

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ods with payment for purchases during a month due on the first of the following month. But many customers take advantage of the leniency of retailers and of the fact that no interest is charged and allow bills to go unpaid for two or three months or longer.

The real cost of credit extended by retail stores on charge accounts cannot be estimated because these expenses are a part of the general administrative costs of the organization. To the extent that operating costs are increased by credit operation both the cash and credit customers must meet this additional cost in the form of higher prices. Buyers with charge accounts ordinarily can purchase from department and other stores at the same prices as the cash buyers pay. Some retailers claim that credit sales really cost no more, or less, than cash sales. It is said that the charge sale requires less of the buyer's and seller's time and that the saving in cost and risk of carrying cash and making change offsets the expenses of the credit department and credit losses.

On the other hand cash stores probably sell at somewhat lower prices than many credit stores, one reason being the abuse of the return privilege by charge customers. If every customer were reasonable as well as honest the charge system might well be cheaper.

## (3). Commercial Banks

Commercial bank loans for consumption purposes are of two kinds. The first-estimated at about $\$ 500$ million-is in no respect different from the usual business commercial loan. A borrower with satisfactory credit standing or good collateral can discount his note for small sums whether the money is to be used for business or consumption purposes.

Interest on regular commercial bank loans may be paid either at the time the loan is made or when it is repaid. Repayment is usually in a lump sum, rather than in instalments. The rate of interest for small sums is commonly 6 per cent or on a discount basis, 6.38 per cent. In these days of easy money, however, a bargaining borrower of good credit standing or with ample collateral can often obtain a loan for 5 per cent or even less on larger sums.

Persons without credit standing or collateral may have access to the personal loan department. So far only a small proportion of all
commercial banks have established personal loan departments but the number is growing rapidly. Discount rates of the leading New York City banks range from 4 to 6 per cent, but the average tate charged by personal loan departments of commercial banks is probably close to 10 per cent.

With the amendment of the New York banking law in 1936 legalizing 12 per cent per annum on unpaid balances a great impetus was given to the establishment of personal loan departments. The resulting increased facilities and the greater volume of business have made it possible for some banks to furnish this service at lower rates than before.

## (4). Industrial Banks

Industrial banks like the Morris Plan have always been an important source of consumer credit for wage and salary earners without assets or credit standing adequate for ordinary bank loans. Industrial banks usually require one or more co-makers except on collateral loans. They usually discount a note for ten, twelve or fifteen months and refund less than the pro rata amount in case of earlier repayment. Thus they are expensive as a source of very short-term credit. The present charges of the Morris Plan Industrial Bank of New York for the typical co-maker loan are based on a discount of 6 per cent per annum, plus $2 / 5$ to 2 per cent service charge, plus insurance. A $\$ 120$ note repayable in fifteen monthly instalments of $\$ 8$ is discounted for $\$ 107.10$. If the insurance on $\$ 120$ for an average of eight months is worth 58 cents (typical group insurance rate) the ner cost is $\$ 12.32$ for eight months' credit of $\$ 107.68$ or at a rate equal to 17 per cent per annum. For collateral loans the cost may be as low as 6 per cent and certain other special types of loans are offered by the Morris Plan at rates from 10 per cent to 14 per cent on the average amount loaned.
Since rates outside New York are generally higher the estimated total of $\$ 350$ million industrial bank credit outstanding probably costs the borrowers an average of about 16 per cent, or nearly three times the normal commercial bank discount rate on small business loans and half again as high as the average rate of personal loan departments.
(5): Personal Finance Companies

Personal finance companies are generally the most costly legal source of credit to the borrower-except that instalment credit is ofren even more costly for amounts of less than $\$ 50$. The standard personal loan contract calls for repayment in ten months for loans of less than $\$ 50$ and for twenty months in the case of larger loans. These are longer periods during which interest must be paid than for most instalment contracts, but the borrower is free to repay the loan in full at any time and is charged interest for only the time actually elapsed on the actual loan balance.

These companies offer the borrower the following advantages: (1) loans can be obtained in smaller amounts-sometimes as small as $\$ 25$-than from other lenders, and (2) many borrowers can obtain a loan without security except a wage assignment and a chattel mortgage on household effects, actual possession of which is retained by the borrower. No co-maker is required except usually the maker's wife or husband. Many of these borrowers could not borrow elsewhere without secuting one or more outside co-makers, which they may be unable or unwilling to do. Wage assignments are commonly limited to 10 per cent of wages, and in practice foreclosure on household goods is resorted to on fewer than 0.3 per cent of the loans made.

## (6). Pawnshops and Remedial Loan Societies

Pawnbrokers advance sums of money secured by the pledge of jewelry or other personal property of value. The amount loaned is usually determined by the sale value of the pledge. Their investigation and collection costs are small, but they have the additional expense and risk of caring for the collateral. Such collateral usually may be sold if not redeemed within the period for which the loan was made-usually one year. Pawnbrokers' rates vary widely, since they are fixed by state laws. They range from one to 10 per cent per month and extra charges are frequently allowed.
Many remedial loan societies make pawnbroking loans as well as loans on other forms of security. They usually are of semi-philan-
thropic origin and operate on a limited dividend basis. Their charges on pawnbroking loans range from three-fourths of one per cent a month to 3 per cent a month. The Provident Loan Society of New York is the largest and best known of the remedial loan societies. It has no stockholders, but is authorized to pay interest not exceeding 6 per cent per annum on funds contributed for its use. Its charge to borrowers, of three-fourths of one per cent per month or 9 per cent per annum, is said to be the lowest known rate on loans secured by pledge of personal property.

## (7). Credit Unions

Credit unions offer credit at a reasonable rate of interest to those unable to borrow on a business basis or without collateral as required by the commercial agencies. Operating expenses are usually low compared with other agencies because of their cooperative setup, because loan investigation costs are less, because most of their clerical labor, and often rent, is obtained free and-in the case of federally chartered ones-because of tax exemption. A co-maker, or collateral acceptable to the credit committee, is generally required on a loan of $\$ 50$ or more in excess of the value of shares held. Credit union charges cannot exceed one per cent a month on unpaid balances or 6 per cent discounted (about 11.78 per cent per annum, since loans are repayable in instalments). Laws generally require refunding of interest for discounted loans repaid in less than the full period. Hence credit unions are a source of cheap credit for personal loans.

Axias (or Achriahs) are a form of personal loan agency, frequently used by immigrants (especially Hebrews) before the World War, but now of dwindling importance.

## (8). Other Types of Consumer Loans

The various other kinds of consumer credit-exclusive of that based on insurance policies and other savings accumulated by the borrower-constitute a relatively unimportant share of the total amount outstanding. Since insurance and savings are the safest collateral in the world from the lender's standpoint, the six per cent
rate charged for this type of loan is lower than for other kinds of consumer credit. Even so, it might often be wiser for the borrower to cash in the underlying security rather than to borrow on it (providing that in the case of life insurance he is able to pass the examination for a new policy) unless the loan is to be repaid promptly.

Illegal Lenders still flourish in many communities in spite of increasing competition from legitimate organizations providing consumer credit. They charge scandalous rates, so that the toll they extract from borrowers is undoubtedfy a substantial one in spite of the fact that the total of this type of loans is relatively not large.

Estimating the amount of loans between friends and relatives, or the average rates charged, can be little more than guesswork. The total outstanding at any one time, however, is probably larger than the outstandings of many of the institutional forms of consumer credit. The average interest paid on such loans is probably lowif for no other reason than because neither the interest nor the principal is paid in many instances.

## d. EFFECTS OF CONSUMER CREDIT ON DISTRIBUTION

What influence has the expanding use of consumer credit had on the processes and costs of distribution? This question has not yet been adequately explored, and until comprehensive data become available it is impossible to do more than speculate about it.
The first and most obvious effect of instalment selling, of course, is to add service and interest charges to the price the consumer has to pay. As we have seen, these charges are substantialusually several times as high as the return which the same consumer receives on his own savings. So far as the individual is concerned, he could save money by "borrowing" his own savings and "repaying" himself, or by deferring the purchase until he has accumulated enough money to pay cash. But these alternatives to the "easy payment plan" involve either the disadvantage of waiting or the exercise of will power, or both.
The charge for consumer credit, therefore, is what the buyer pays for the "economic service" involved in providing him now
with goods he might ocherwise have to wait for and in compelling him to save enough to pay for them after they have been delivered, rather than before. So long as the consumer is aware of the alternatives offered to him and fully understands what he is paying for and how much he is paying for it, consumer credit cannot be regarded as more wasteful or unnecessary than any other distributive cost. When the credit charges are concealed in the purchase price, however, or the buyer is misled or deceived as to the terms of the contract, the situation is exactly the same as if there were misrepresentation of the nature of the product itself.

However, in spite of the fact that some consumers could save money by paying cash instead of buying on the instalment plan, it is undoubtedly true that many families with small incomes would find it difficult or impossible ever to accumulate enough money to make a lump sum payment for a high-priced article like an automobile or electric refrigerator. Without the possibility of buying such products with small (and compulsory) monthly payments many families would be unable to own them; and the money they now spend for them would be spent for other purposes. On the other hand it is undeniable that, from the standpoint of the borrower, consumer credit is unwisely extended in many cases. With a shrinkage of family income, repayments on the debt contract become a burdensome item in the family budget. But they must be met in order to avoid repossession even though this may involve curtailment of more necessitous expenditures.

Instalment financing and consumer credit have unquestionably had an important effect in widening the market and increasing demand for many kinds of household and other durable goods which sell for high unit prices. This in turn has probably made possible the economies of mass production and resulted in lower selling prices than if the market for these goods were limited to those able and willing to pay cash for them. The effects of consumer credit on prices and costs-like those of advertising-are complex and varied. While these charges add directly to the price consumers pay, the indirect effect of consumer credit has probably been to widen the market and thus lower costs and prices.

By stimularing the demand for the kinds of goods sold on the

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instalment plan, consumer credit may cause a shrinkage in the demand for other types of goods. Here again the effects on consumers' choices and on the distribution of consumer expenditures is not clear, but there is some evidence that sales of jewelry and other products have been relatively depressed by the development of instalment selling for durable household goods. ${ }^{30}$ Under certain conditions, however, as when capital facilities, labor, and bank credit are in ample supply, an increase in the demand for one kind of goods-whether induced by consumer credir or by other means -will cause an increase, rather than a shrinkage, in the demand for other goods.

Another question which needs investigation is the extent to which instalment and other forms of consumer credit help to stabilize the flow of consumers' purchasing power and the operation of industries and trades producing and distributing instalment goods. It seems evident that the demand for consumers' durable goods, and therefore production and employment in the industries supplying them, would be subject to much wider fluctuations through the different phases of the business cycle if these goods had to be paid for in full on delivery. This in turn might result in higher costs and prices.

Any valid appraisal of consumer credit and of its effects not only on the individuals directly concerned, but on the whole system of distribution, cannot be rendered without a more searching examination than has been possible in this survey. Fortunately the forthcoming report of the Russell Sage Foundation and the comprehensive series of studies of consumer credit now being carried on by the National Bureau of Economic Research promise to provide much of the information needed for such an evaluation.
50. Unpublished letter, May 11, 1939, from Rolf Nugent, Director of Consumer Credit Studies of the Russell Sage Foundation.

## Cbapter 9

## GOVERNMENT REGULATION OF DISTRIBUTION

No study of distribution and its costs can ignore the effects of the increasing intervention of government in the conduct of private business. Since regulation of business necessatily affects distribution costs, at least an exploratory glance at its relation to them is essential to the purposes of this study.
Outstanding among the laws affecting distribution are the Sherman Law, the Federal Trade Commission Act, the Clayton Act, the National Industrial Recovery Act, the Robinson-Patman and Borah-Van Nuys acts, the state fair trade laws and their federal corollary, the Miller-Tydings Act, state unfair practice laws and various chain store tax laws.
The cumulative effect of these legislative interventions, administrative orders and court decisions has been to make business behavior something different than it would orherwise have been. The sensitive item of costs has been touched again and again. Nevertheless, measurements are difficult. Conclusions about the long-term results are still speculative, while even those on today's. happenings must rest on inadequate evidence.

## The Effects of Legislation

Their effects must be tested not only in terms of their immediate impact on business practices, but also of their influence on the character of economic evolution. By the second test an immediate increase in cost may be justified if some ultimately sound social purpose is also served.

For example, a large company might be able to cut prices in a particular locality below an independent competing concernespecially if it can make up for the loss by charging more elsewhere, and eventually, in that identical community. To prevent

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this price-cuting would increase prices in that community. But the pery cash loss would be mimportant when compared with the maintenance of a healihy compecitive surucure-

This issue was setled long ago and the pracrice of descructive price-curing is now rare But the reasoning has been used time and time again in behalf of new schemes to prorecr comperitors from comperition. It is in the name of this same principlemaintenance of a sound comperitive structure-thar price discrimination, resale price maintenance and loss leader controls are defended.

That such laws accomplish the immediate porpose of lifring prices is hardly to be doubted, even though evidence on the extent of the increase is still fragmentary and often parrican. Granting that the increases on procected artides are partly offser by lower prices on menchandise of to crstomers not direcaly involved, or by decreases on these self-same articles in some types of localities, the net balance of price movement is and was expected to be upward. Congress is aware of this possibility, but ins strongest defense is its obligation to preserve fair compecition. If this is done, it is contended that prices will automarically find their right level.

In practice, therefore, prices are probably mised somewhat by the polisical surength of business groups demanding and gerving legislative help. This is defended on the grounds that the pracrice of destruaive pricecurring tends to substinte mere power for efficiency as the determinant of comperirive survival. These are not readily measurable terms, and in larer pages the circumstances offered in support of them will be eramined. The fact that the cost of such measures to consumers is immediare and visible places the burden of proof on those who advocare legislarive commol of distriburion processes.

## 1. Peessure Groups

Most of the business laws discussed in this chapter came out of the changing fortunes of comperitive groups. Ar times it might almost be said that parricular groups become effective in polirics to


## What Is the Consumer Interest?

The consuming public, with the principal stake in this struggle, has had relatively little to say about it. Its passive attitude must be taken to mean that the issues involved seldom stir it to the point of indignation. Such public sentiment as does exist seems to derive from traditional doctrine, sympathy for the underdog in the struggle, and personal advantage.

The early trust-busting campaigns established in the public mind the doctrine that monopoly and conspiracy are bad. As for sympathy, it is human nature to favor the little fellow. But the personal advantage of buyers leads them to favor low prices-which they generally feel they have received from the mass distributors. In spite of this, the public has not expressed itself vigorously against price-fixing or price-supporting laws. Resale price maintenance laws, for example, have undoubtedly brought visible rises in the price of well-known staples, without regard for the moment to equally visible decreases in other prices. Yet quite a number of manufacturers and retailers report that consumer protest over such increases has been unexpectedily light.

Consumers are probably scarcely aware of what has happened. Chain store tax laws submitted to popular referenda have been upheld in some states and defeated in others; and the outcome seems to depend more on political manipulation than on consumer self-interest. Professor Paul D. Converse recently made an inquiry into chain and independent prices which included a cross-sectioning of consumer opinion, ${ }^{1}$ and discovered that relatively few consumers were either definitely favorable or unfavorable to chain stores.
In passing laws regulating distribution, Congress must do its best to reconcile the conflicting interests of its constituents with each other and with inherited principles. Whatever the real effect of such laws may be, however, and whatever special group they may protect, they are always passed in the name of competitioncompetition as free as emergencies and urgent human needs will permit. The anti-trust laws were passed to prevent large producers

1. P. D. Converse, "Prices and Services of Chain and Independent Stores in Champaign-Urbana, 1937," T'be Jowynal of Marketing, January 1938, p. 197.
from stifling the small. Anti-price discrimination and price maintenance laws have been passed to prevent large distributors from stifling the small. Whatever the results the preservation of a clear field for individual initiative has always been the announced objective.

## 2. Thb Laws

The original anti-trust laws were stimulated by a wave of mergers, combinations and agreements and alleged monopolistic controls of prices, production and markets. Today the attack is against the giants in distribution, for the purpose of holding up prices. The public attitude on plain morality in business, already expressed in common law, has projected itself increasingly into all manner of legislative and administrative assaults on fraud and misrepresentation.
Early measures were designed as structural barriers against excessive growth. Today's laws deal increasingly with business policies. The 1914 prohibition of tying contracts and of certain forms of price discrimination set an early precedent. Instead of seeking to check size directly, recent legislation aims to curb internal practices such as price discrimination and loss leaders, through which the power of vast size is supposed to exert itself in uneconomic forms. A return to the earlier principle of direct attack on size is suggested by the current effort to enforce the anti-trust laws and to penalize big distributors through taxation.

## a. Thb Sherman and federal trade commission acts

Under the Sherman Act of 1890 contracts, combinations, or conspiracies in restraint of trade, as well as actual monopolies or attempts to monopolize, were declared illegal. In 1914 Congress set up the Federal Trade Commission in an act outlawing "unfair methods of competition in commerce." The Commission was given power to put an end to such methods through so-called "cease and desist" orders which, however, were to be subject to judicial review. The Commission was also expected to help in various ways in enforcing the anti-trust laws. The original act was amended in the spring of 1938 to overcome difficulties that had developed and
to cope with new problems which Congress decided to place under the Commission's jurisdiction.

The Commission was given the right to proceed against deceptive or other unfair practices whether or not competitors were injured. Its cease and desist orders were made final if court review was not sought by the respondent within sixty days after issuance; a $\$ 5,000$ civil penalty was provided for each violation of a cease and desist order after it became final; and the Commission's control over false advertising of food, drugs, devices and cosmetics was elaborately strengthened. Certain minor corrections were made in the law to improve the Commission's legal footing in its skirmishes with suspected wrongdoers.

## b. THB CLAYTON ACT AND THE NRA

Hard on the heels of the Federal Trade Commission law came the Clayton Act in 1914. One of its most notable features was the famous Section II forbidding certain types of price discrimination. The Clayton Act also banned tying contracts, under which buyers were in effect required to purchase a seller's supplementary lines in order to get the item or items they wanted. Restrictions were placed on the acquisition by a corporation of the stocks of its competitors and on interlocking directorates in competing corporations. Enforcement of these provisions was made the responsibility of the Federal Trade Commission.

In 1933 these relatively mild controls were overwhelmed by the National Industrial Recovery Act. Bur NRA was essentially a depression phenomenon; while it borrowed some of the phrases of earlier laws it was essentially a release from them. Every part of it had a root somewhere in the history of compromise between free and regulated competition, but the growth was wild. In its more publicized aspects, it was falling back toward original principles long before the Schechter decision put an end to it. Its principal sponsors, however, while approving and even directing this retreat to earlier principles, never ceased to believe in the need for discretion in handling diverse industrial problems. After the death of NRA, the old struggles were resumed in their separate and original arenas.

## C. THE ROBINSON-PATMAN ACT

The first legislative attempt to deal with price discrimination (Section II of the Clayton Act, 1914) met with indifferent success. Dissatisfaction of many wholesale and retail dealers, with whom a large number of manufacturers passively sympathized, finally led to sweeping modifications in the summer of 1936 in the form of the Robinson-Patman and Borah-Van Nuys acts. The principles of these acts were reproduced in many of the states in the guise of anti-discrimination or unfair practice acts.

The Clayton Act had forbidden price discrimination in commodities of the same grade, quality, or quantity, where such discrimination was capable of lessening competition, except for due allowance for differences in the cost of selling or of transportation. The first major contribution of the Robinson-Patman Act was a new emphasis on quantity. It was made very clear that a small difference in quantity could not justify an unlimited differential in price. In computing such differentials only due allowance could be made for differences in the cost of manufacture, sales, or delivery, resulting from the different methods or quantities involved. The second radical change was to make exceptional discounts (as thus defined) unlawful if it could be shown that individual competitors were substantially injured, whether or not the effects were general. This at any rate was probably the intention of the law's sponsors, although in most of the cases heard to date the Federal Trade Commission has continued to look for evidence of a fairly wide import.

Payment of brokerage by sellers or buyers to the other party in the transaction, except for services rendered, was forbidden. Advertising allowances and special sales aids had to be dispensed on proportionally equal terms. "Knowing" buyers were made equally guilty with sellers in case of violation. These specifications were qualified in various ways and supplemented by other provisions.

## d. THE BORAH-VAN NUYS ACT

The Borah-Van Nuys Act was passed as a part of the RobinsonPatman Act and with the same general intent, principally as a political compromise between opposing beliefs as to how the prob-
lem should be handled. In reality it constirutes separate legislation and thus far has seldom been invoked.
This act forbids discriminatory discounts, rebates, allowances or advertising service charges on goods of like grade, quality, or quantiry. It prohibits both geographical discrimination and unreasonably low prices, if for the purpose of destroying competition.

Despite the similarity in approach there are several sharp distinctions between the Robinson-Patman and the Borah-Van Nuys acts. The Robinson-Patman Act amends Section II of the Clayton Act while the Borah-Van Nuys Act is independent legislation. The first creates a civil liability, the second a criminal liability. The first forbids discrimination on goods of like grade or quality while the second clings to the language of the original Clayton Act and forbids discrimination on goods of like grade, quality, and quantity. Presumably so long as there is a difference in the quantity purchased by competing customers the first clause of the BorahVan Nuys law will not apply.

The Robinson-Paman Act condemns a discrimination only if the effect is to injure competition in the ways above specified, while the Borah-Van Nuys Act makes the kinds of discrimination with which it deals unlawful under any circumstances.

The Robinson-Patman Act says nothing about sales at unreasonably low prices. The Borah-Van Nuys Act makes no specific reference to so-called dummy brokerage commissions, but may include them by implication. There are also a number of procedural differences.

## e. RESALE PRICE MAINTENANCE LAWS

Resale price maintenance legislation differs from the foregoing measures in two important respects: (1) it withdraws a specified area from the jurisdiction of the anti-trust laws rather than adds to it, and (2) it originated with the states and culminated in federal law instead of being primarily a Washington conception. Fair trade laws with the general purpose of permitting sellers to name the prices at which their goods may be sold or resold have been passed by forty-four states.

In the main they follow two basic and related forms, although
with many individual variations. Outstanding characteristics are: (1) merchandise so privileged must be trade-marked and must be in free and open competition with other commodities of the same general class; and (2)-their most radical departure from previous legal concepts-distributors and dealers who do not themselves contract to observe a designated resale price are bound nevertheless if duly informed of the existence of such a contract in their state. Pains were taken in virtually all of the state laws to bar price agreements between or among direct competitors.

The Miller-Tydings Act effective August 17, 1937, is a federal statute. It was passed to exempt from the federal anti-trust laws such maintenance of resale prices as might be "lawful as applied to intrastate transactions, under any statute, law or public policy now or hereafter in effect in any State . . . in which such resale is to be made, or to which the commodity is to be transported for such resale. . . ."

Floor-price laws are also state creations. They are nominally an inheritance from the loss leader provisions of the NRA. In reality their history reaches far back to the early days of chain store growth when the still older practice of selling popular goods at attractive prices was systematized on a wide scale and backed by heavy, but dexterous, advertising. Twenty-one states have now put curbs on the use of this device, usually by forbidding sales below invoice price plus varying mark-ups figured in various ways.

## f. Chain store tax laws

In point of intensity, the chain store tax movement seems to climax the independents' legislative onslaught on their favorite adversary. It dispenses with the protective coloring of such terms as fair and unfair, and virtually challenges the right of the chains to exist.

Chain store taxes have already been imposed in twenty-two states, although even this substantial figure does not include a number of states whose general business taxes, such as licenses and warehouse fees, happen to have a particularly sharp incidence on chain stores. The diversity in methods and rates among these states is so great as to preclude any itemized account. As a rule, however,
chains are taxed by these laws on a steeply graduated scale in accordance either with the number of stores in the state or with the total number in the United States.

## g. Lawf restricting interstate trade

The power of regulating interstate commerce, granted to the federal government by the Constitution, has been challenged in recent years by a multitude of state laws which constitute serious barriers to trade among the states. Most of these laws, passed since the low point of the depression in an effort to protect home industry, have taken the form of prohibitions, taxes and regulations imposed on the use or employment within the state of products, services and even persons from other states. These restrictive laws have taken a variety of forms, most of them clearly based on the rights of the states to regulate business within their own borders, but some of them of doubtful constitutionality.
The adoption of sales taxes by many states during the depression resulted in a loss of retail business to retail merchants in cities near the borders of other states with lower taxes. This situation led the State of Washington to impose a "use tax" on "foreign" products equivalent to its sales tax, and this legislation, after being upheld by the Supreme Court, was copied by several other states. Many states have passed laws prohibiting the use of products from other states in public purchases or providing preference for home products, and these laws have led to retaliatory legislation in neighboring states. Several states tax out-of-state corporations at a higher rate than the tax imposed on domestic business.
"Foreign" products competing with local industries have sometimes been taxed prohibitively, and quarantine regulations against plant and animal diseases have been converted into what amount to embargoes against the produce of other states. Motor vehicle regulations and tax laws and the establishment of "ports of entry" in some states have raised serious obstacles to interstate trucking. These restrictive laws have taken many other forms, including restrictions and special taxes on liquor produced in other states, requirements that even finished products locally produced contain a minimum percentage of local materials, and in some cases pro-
hibitions against the export of products such as electric power in an effort to induce the migration of industry to the state.

Although this drift toward state-ism has to make its way against American traditions and Constitutional limitations, state legislatures have professed to find authority for their restrictive measures in the taxing and police powers, general regulatory powers in the interest of public safety and morals, and proprietary powers touching conservation of resources and ownership of public works. The courts have not yet fixed definite limits to their use of these powers. The Twenty-First Amendment has been construed to give the state complete control over the liquor business. The compensatory use tax has been upheld by the Supreme Courr. The Nebbia decision declared the milk industry to be affected with a public interest and within the regulatory powers of the states. Preferential treatment of resident workmen and materials has been found legally proper. The Commerce Clause has not been construed to prevent the states, owners of their own highways, from requiring special compensation for their use by residents of other states. Powers of exclusion have been affirmed to permit individual states to establish ports of entry. In sundry other respects the courts have found themselves obliged to tolerate discriminatory acts that the Constitution had not been popularly regarded as sanctioning.

## 3. Government Regulation Issues, Controls, and Effects

How have business and the consumer been affected by the welter of laws passed during the last half-century? It is impossible to relate the history of each attempt to regulate business in terms of a specific statute. One practice may be regulated by several laws, and succeeding statutes have been forever catching up with the effects of earlier regulation. For example, the monopoly problem is attacked through the Sherman Act as a product of "combinations in restraint of trade'; through the Clayton and RobinsonPatman acts as a product of "tying contracts" and "stock acquisitions" and "price discrimination"; and through the Federal Trade Commission Act as a product of unfair practices. On the other
hand, the adoption of the Miller-Tydings Act was furthered by the overly rigid ban of the Sherman Act on resale price maintenance.

Then too, these laws cannot be read apart from the judicial interpretations that over the years supply them with content. Congress cannot always foresee the effects of simple rules on a bewildering variety of special situations. It therefore takes refuge at times in the enunciation of general principles and figuratively hands the pen to administrative agencies and the courts-by which the writing goes on and on.
Even where Congress attempts to be specific, someone must exercise discretion. For the discharge of this duty Congress originally set up a body responsible to itself-the Federal Trade Com-mission-but with the power of final review vested in the courts. As matters developed, the interpretative powers of the Commission itself were subjected more and more to judicial scrutiny. There is more actual anti-trust law in court archives today than on the statute books and for an understanding of events it is necessary to examine both records.
Thus business practice and business policy have been pulled and hauled for the past forty years by legislative intentions, judicial opinions and, in spite of both, perhaps by some sort of predestination. All of these laws have had an effect-sometimes direct, more often indirect-on the prices the consumer has to pay. If a transaction was between producers the price became a primary cost in the next process. If in the channels of distribution, it perforce filtered through to consumers and left them with more-or lesscash on hand for the satisfaction of other needs. Each practice with which the laws dealt was leaving some kind of mark so that either the success or failure of these laws was certain to change the configuration of the business world. But it is easier to see the inevitability of these effects than to measure them.

The best way to study the effects of these laws is to consider the practices which the laws sought to regulate or control. The following sub-sections briefly review the consequences of government control over various phases of distribution-as far as the available evidence permits.
a. BUSINESS SIZR

In the Sherman Act Congress set its hand against immensity in business, or more specifically against monopoly, conspiracy, and restraint of trade, which were believed frequently to be the instruments or consequences of excessive size even though not confined to it. Its sponsors felt that among the evils of size was undue control over prices. But whether prices have been raised or lowered by large-scale operations has been bitterly debated from that day to this.

Possibly the main cause of administrative concern at the moment, as expressed in the creation of the Temporary National Economic Committee, is the prevailing heavy industrial unemployment. It is argued in some quarters that bigness is largely responsible for rigid prices and that rigid prices are responsible for stagnant production in a period of declining demand.

Rigid prices it is claimed result when a small number of concerns control the bulk of the market, and when price leadership on the part of one or more of them is so pronounced as virtually to set or influence the price policies of all other units in the industry. With administered prices kept rigid by artificial means the only free factors in periods of economic strain are production and employment.

The friends of bigness do not agree that mere size is responsible in any major sense for price rigidities. They contend that the prices of durable goods, for example, have always been more or less rigid and that at least one of the major sources of price inflexibility is in the inflexible demand for such goods in periods of declining business. It is further maintained that increasingly inflexible elements of cost such as high taxes, rigid wages and social security charges, must bear a considerable share of the responsibility for rigid price structures. With respect to the narrow question of rigidity, as such, they point out that many of the supposed rigid prices are really no more than formal or dummy quotations and that a great deal of trading and shading goes on beneath the surface; also, reversing the argument, that the price schedules of the larger concerns actually serve as an umbrella for small competitors and so
help to preserve rather than destroy economic opportunity.
Perhaps the greatest resentment is against the effort to confine the bigness issue to prices. Big business asks to be judged on the basis of its social contributions in the form of increasing outpur, improved quality of goods and services, better treatment of labor, and greater efficiency. It is convinced that the costs of production and distribution have been substantially reduced by large-scale operations and that this contribution to the public welfare is infinitely more important than such share of the price rigidities of any given moment as may be legitimately charged to bigness.

## The Laws Against Size

Efforts to control and limit size by specific statutes were made by the states long before 1890, when Congress passed the Sherman Law prohibiting conspiracies and combinations in restraint of trade. A few private suits had also found their way into the federal courts and some agreements in restraint of trade were invalidared because contrary to public policy. But the courts soon deflected what was the apparent purpose of Congress in passing the Sherman Act. In 1895 the Supreme Court decided that manufacturing was not commerce and was therefore not subject to federal restraints unless carried on in such a way in one state as to produce serious effects on the commerce in other states as well. ${ }^{2}$ During the next few years some of our largest consolidations were effected.

The first important break in this line of reasoning came in a 1904 case $^{3}$ in which a holding company formed for the purpose of controlling businesses that could not be controlled directly was adjudged to be in violation of the anti-trust laws.

The situation was further confused by the injection in 1911 of the famous "rule of reason," under which the Supreme Court assumed an obligation to distinguish between contracts and combinations which unreasonably restrained trade and those which were beneficial or harmless. ${ }^{4}$ This dictum lighted controversial fires that

[^49]still burn brightly today. Officials of the present administration have said that qualifications of this type have turned the anti-trust laws into "theological tracts on corporate morality." Back in 1914 agitation of the same type contributed to the passage of the Federal Trade Commission and Clayton acts.

The Federal Trade Commission presumably was intended to have power to suppress specific practices which in its opinion worked toward monopoly. But its area of discretion has been sharply limited by such rulings as: "It is for the Courts, not the Commission, ultimately to determine as a matter of law what (unfair methods of competition) include." ${ }^{5}$
The Commission's mandate under the Clayton Act to prevent corporate stock acquisitions under certain conditions was similarly circumscribed. One of the court's. pertinent rulings on this point was that it was beyond the power of the Commission to order a divestiture of physical properties. ${ }^{6}$ It therefore became possible to acquire stock in apparent violation of the Clayton Act, vote it so as to accomplish a physical merger of the assets, and then claim lack of jurisdiction of the Federal Trade Commission. Similarly, there was considerable judicial churning over the Clayton Act's prohibition of tying contracts and exclusive dealings although the eventual trend, particularly in the case of the former, was toward their condemnation if substantial injury to competition threatened. ${ }^{7}$

## Effects of the Anti-Trust Laws

For fifty years the effort to keep business units from becoming too powerful has been a comerstone of our national policy, and

[^50]for fifty years the success of business units in becoming big and powerful has been a cornerstone of our national pride.

In a perverse way the anci-trust laws themselves, as judicially construed, may have helped rather than discouraged business concentration. Large size in itself-as long as it involved no monop-oly-was declared not to be unlawful. ${ }^{9}$ But small concerns were forbidden to agree on price, output or market policies. Hence when business felt it necessary to do any of these things it became simpler to merge rather than flout the law of the land.
Most of these issues concern bigness in production. The Sherman Act has scarcely interfered with the mass distributors. That has been left for the more recent statutes imposed by hostile and sometimes desperate small dealers. Two reasons for this apparent incongruity stand out.
First, the growth of the mass distributors has been accompanied by an unceasing fanfare concerning their economies and lower prices. The public has been taught to be as tolerant toward them as it was indignant toward the producers. Under the battering of organized opposition this attitude may be changing although there has not yet been a conclusive showdown. Second, from the legal as well as economic standpoint no single mass distributor is monopolistic. No one of them controls more than a small fraction of the great retail market and their competition with each other is usually as relentless as the most wistful classical economist could desire.
But there is a deeper issue than individual monopoly. The mass distributors have taken command in many retail markets. Independent dealers are losing ground to the chains and mail-order houses and manufacturer-owned outlets in many retail fields such as automobile tires, oil and gasoline, groceries, and lately in drugs and hardware and other lines.
There is no evidence of monopoly in a legal sense in any of these situations, but neither is there that democratic swarm of small entrepreneurs that has been the dream of many of the enemies of size. They are hardly satisfied with a mere escape from monopoly. To them it is just as important to keep business open
8. United States v. United States Steel Corporation (251 U.S. 417, 451), 1920.
to new and small enterprises and to forestall the conversion of the country into a nation of employees as merely to prevent concentration. This is the issue which is being fought out not under experimental interpretations of the Sherman, Clayton, and Federal Trade Commission acts, but under the more forthright attacks embodied in anti-price discrimination, resale price maintenance, and chain store tax laws.
That individual producers and distributors are now mighty beyond the dreams of those who once thought to keep them small by law is self-evident. Unquestionably American business enterprises are big, and the only choices left open to the will of the people are to decide whether their net effects are good or ill, and if ill, whether to try to break them up, assume greater control over them, or let them alone in the fear of hampering their productivity to a greater extent than could be compensated for by the salvage of an ideal.

## b. PRICE-FIXING

Price-fixing in the sense used here means a definite agreement or understanding to maintain prices and should not be confused with "price leadership" exercised by a dominant concern. It is undoubtedly true that the price policies of a great corporation may often influence the decisions of smaller competitors in an industry in ways that do not correspond to theories of free competition. As matters now stand, however, the courts have consistently refused to condemn size per se, whatever the effects of a large corporation's price policy on competitors.
In the Steel case the Supreme Court said "the law does not make mere size an offense or the existence of unexerted power an offense . . . it does not compel competition nor require all that is possible." This senciment was repeated in the 1927 International Harvester case; ${ }^{10}$ and even in the United Shoe Machinery case ${ }^{11}$ where an overwhelming percentage of the industry's resources were controlled by the defendant. In the Steel case, moreover, was
9. United States v. Uwited States Steel Corporation, at al. (251 U.S. 417, 451), 1920.
10. United States v. International Harvester Co., ot al. (274 U.S. 693, 708), 1927.
11. United Statos v. United Sboe Marbivery Co. (247 U.S. 32).
a strong inference that dominant price leadership was not a form of monopolistic behavior; and in the Harvester case it was declared not to "establish any suppression of competition or any sinister domination." Likewise in some of the price-filing cases the court has handed down reassuring dicta that tendencies toward uniformity in price, short of agreements or understandings for maintaining them, were insufficient to constitute a violation of the Anti-Trust Law.

## The Sberman Law and Price-Fixing

Outright price-fixing or price agreements, however, fall directly under the Sherman Act's ban and the courts have been clear and consistent in their attitude toward it. At least since the passage of the Sherman Act they have always ruled that price-fixing constituted restraint of trade and was therefore illegal.
It still does not follow inevitably, however, that in terms of economic effects, or even of the law, every agreement to fix prices must mean increased costs, and every frustration of such efforts must mean decreased costs. Attention is frequently drawn to the contrasting situations and interpretations of the law presented in the Trenton Potteries ${ }^{12}$ and the Appalachian Coals ${ }^{13}$ cases. In the first of these the court held that the power to fix prices, whether reasonably exercised or not, involves the power to concrol the market and to fix arbitrary and unreasonable prices. In the second case the court appeared to be influenced by the grave economic; conditions with which the industry was beset and permitted the particular producing companies before it to pool their sales efforts even to the point of selling at agreed prices. Consumers were believed to be safeguarded by the existence of adequate comperition from other mining areas.

Any accurate measure of the effect of government control over price-fixing is impossible. Undoubtedly the laws have prevented both producers and distributors from making many agreements of this kind. Had there been no restrictions the whole picture of our

[^51]economic life might have followed a different pattern.
It is hardly to be doubted that competitors have times out of number endeavored to sustain prices cooperatively. During the last two years thitty-three suits and complaints have been initiated by the Department of Justice or the Federal Trade Commission against various forms of price control. An additional twenty-seven actions were instituted against alleged controls of distribution channels, most of which directly or indirectly included an intention to prevent prices from weakening under the pressure of competition.

These cases reflected merely the limited number of instances of supposed conspiracy that the administrative agencies were able to apprehend and attack. An abundance of circumstantial evidence indicates that price understandings of varying degrees of effectiveness are by no means uncommon. Such a statement implies neither moral nor economic judgment on the participants, for the issues as to what the law means in particular circumstances or as to when competition is economically inadequate or excessive, are still wide open in the opinion of many analysts.

## c. PRICE-FILING

The practice of open filing or posting of prices by various concerns in any line of trade has been one of the burning issues of the past decade in both the economics and the law of distribution. For better or worse it has had a real effect on prices and therefore on costs. Research has yet to trace all of the effects of the various experiments that have been made in this area.

Proponents of price-filing claim that the free and informed market of economists' prayers can be achieved in no other way and that deception and misrepresentation could thus be avoided. Critics say that if prices are brought out into the open price-filing gives too much opportunity for pressure on the seller who wants to cut, and that natural economic forces are balked even more extensively than in a system under which prices are determined by sub-surface dealings.

The Supreme Court has acquainted the public with its views on
the legality of open price plans under the anti-trust laws in five notable cases. ${ }^{14}$ A number of fine distinctions appear in the judicial treatment of the separate problems presented, so that the principles so far laid down are neither certain nor clear.

By way of rough summary, it is now widely believed that the anti-trust laws have been construed to tolerate free and full exchange of information on prices and other operating particulars, so long as (a) only past transactions are involved, (b) or general offers currently available to the trade, with no express or implied agreement to adhere without deviation to price and terms announced, and (c) the prices so filed "are made readily, fully and fairly available to the purchasing and distributing trade." This summary is oversimplified in order to indicate the general trend of judicial reasoning. By way of illustrating the liberties taken, not all observers will agree on the extent to which current prices may or may not be reported.

Such experience as the country has had with open price-filing has failed fully to sustain either case. The principle involved happened to be one of the few that the NRA accepted in the beginning and supported to the end. While the NRA's records were far from complete it is known that under price-filing prices rose in some cases and in others declined. In most instances the prices of various sellers tended to come closer together. This can be said to be proof of either collusion or perfect competition, depending on the circumstances and economic convictions of the observer.

## d. salles bblow cost

Selling below cost has become a leading issue in the feld of distribution. To a man in business for the purpose of making money such conduct on the part of competitors often seems plainly sinful, and the failure of law to deal with it, incomprehensible. The drive
14. a. Anteritan Column and Lumber Co., et al. v. United States (257 U.S. 377), 1921.
b. United States v. American Limseed Oil Co., et al. (262 U.S. 371), 1923.
c. Maple Flooring Manufacturers Association, of al. v. United States (268 U.S. 563), 1925.
d. Cement Manufacturars Protective Assaciation v. Unised Slates (268 U.S. 588), 1925.
e. Sugar Institute, Inc., of al. v. United States (297 U.S. 553), 1936.
for such a law to prohibit selling below cost filled one of the most colorful chaprers in NRA's vivid history.

Although over two hundred sales-below-cost provisions were written into the NRA manufacturing codes, only thisty-seven were actually permitted to go into effect. Most of them required administrative approval of cost-finding systems, and there seemed never to be an administrative tight of way for the systems submitted. As NRA passed from the period of necessirous and often impulsive action on an industry-by-industry basis to one of anxiety over the well-being of industry as a whole, it had little heart for the theory that a profit and loss system should be converted by law into a profit system only-even if this could be done, which few believed possible. The siguificance of the drive for prohibition of sales below cost lay not in its own fleeting impression on the American economy, but in the brief escape of an ourlaw idea from forty years of legislative disapproval.

The courts, it is true, have sometimes disapproved below-cost selling, but usually because of collateral circumstances, and rately as a principle. Thus, in United States v. United States Steel Corporation" ${ }^{15}$ the Circuit Judge-or "the trial court"-said: "when that price is so unreasonably lowered as to drive others out of business, with a view to stifling competition, not only is that wronged competitor individually injured, but the public is prejudiced by the stifling of compecition." The customary Trade Practice Conference Rule on this subject states: "The selling of goods below cost with the intent and with the effect of injuring a competitor and where the effect may be to substantially lessen comperition or tend to create a monopoly or to unreasonably restrain trade, is an unfair trade practice."

It is clear that public authority has regarded the practice of selling below cost as improper only when its intent and effect are to lessen comperition and restrain trade to the ultimate injury of the consumer. Under such conditions the buyer's immediate advantage through lower prices would be more than offset by his ultimate loss through restriction of compecition. On the other hand, it seems equally clear that an agreement among competitors which would
15. 223 Fed. 55, 81 (D.C., D.N.J.), 1915; affimed in 251 U.S. 417, 1920.
prevent any one of them from selling below cost would itself tend to restrain trade and maintain prices at higher than competitive levels.

In recent years the prohibition of sales below cost (or below cost plus a minimum mark-up) in the retail field has been lifted to an eminence of its own by the organized protests of distributors. This practice has been dealt with by distinctive legislation, such as the fair trade and unfair practice laws, which will be considered at a later point.

## e. PRICE DISCRIMINATION

For many years price discrimination has been a source of grievance to small- and middle-sized distributors, not so much in itself as because of the generous concessions which their large competitors have been able to exact. Laws and regulations to limit the size of these differentials have been advocated on the grounds that the preservation of small independent distributors is of paramount social importance and that the independent has lost ground not so much because of inefficiency as because of the bludgeoning buying tactics of his more powerful competitors. Under a discriminatory system, they say, small buyers must carry much of the distributing expenses both for themselves and for their larger rivals. Conversely, the manufacturers of less well-known brands are saddled with more than their share of the total distributing expense in mass outlets. As a result, it is claimed that price discrimination interferes with the free working of the competitive system, which should eliminate the inefficient distributor and preserve an open field for the competent merchant of whatever size.

Opponents of curbs on price discrimination say that the large buyer helps the producer to utilize his excess capacity and to maintain a more stable and predictable level of operations. From the viewpoint of the buying public the final result of price discrimination is claimed to be lower prices. The small independent can easily survive in local markets to which his adaptation is superior, while in the larger fields he can obtain the economies of largescale purchasing through retailer-owned wholesalers and voluntary chains. Economic progress should not be retarded merely to
preserve the small operator and maintain an established but ineffcient system.
Opponents also stress the technical difficulty of controlling prices by legal fiat and emphasize the difficulties of defining, detecting, and proving real price discrimination, in view of the multitude of conflicting cost practices. The technical problems involved in making prices serve doctrinaire objectives are bad enough in themselves, they say, without the risks and arbitrariness that come from entrusting such a broad idea as unfair competition to governmental definitions of cost and economies.

## Decisions Under the Clayton Act

Section 2 of the Clayton Act and its sequel, the Robinson-Patman Act have limited price discrimination. But the Federal Trade Commission and the courts have to decide how the broad prohibition shall be applied to the intricacies of a multitude of practical situations.

The first judicial argument arose over the types of customers to whom the law should apply. In Mennen Co. v. Federal Trade Commission ${ }^{16}$ the Circuit Court of Appeals concluded that the law applied merely to price discrimination that might injure competition between the seller and his competitor and was not concerned with the competitive relations of a discriminator's customers.

In 1929, however, a private suir broughr by Van Camp and Sons Co. against the American Can Co. ${ }^{17}$ resulted in a new ruling that any discrimination was unlawful which substantially lessened competition, not merely between the seller and his competitors, but also between the buyer and his compecitors. Against this background, the business world was somewhat startled by the Commission's action and reasoning in prohibiting the further operation of a long-standing contract between the Goodyear Tire and Rubber Co. and Sears, Roebuck and Co. in the spring of 1936. The outstanding feature of this long drawn-out proceeding was the Commission's meticulous sifting and allocating of overhead costs.

[^52]
## Early Decisions Under the Robinson-Patman Act

The relative ineffectiveness of the Clayton Act cannot be charged to the judiciary so much as to its own ambiguities. Debate as to how far Congress intended it to apply was common even among lay. men, who had no legal precedents to protect. In the RobinsonPatman Act, Congress tried to clarify its original intentions and also enlarged upon them.

Essentially-though not exclusively-the Sherman, Clayton, and Federal Trade Commission acts were concerned with the maintenance of arm's-length relationships between a concern and its competitors and customers and to some extent, at least, sought to accomplish this purpose by constraining fairly specific acts, such as combinations, price agreements, or tying contracts. The RobinsonPatman Act sets new precedents by dipping into the realm of internal management with controls over such discretionary intangibles as the choice of a cost-accounting system and the merchandising value of an advertising allowance.

It was inevitable that such a law would find its way to the courts. The Federal Trade Commission has already issued a number of cease and desist orders that have been appealed to the courts or will sooner or later lead to appeal. Even with sympathy for the purposes of the law on the part of the Commission and of business, it is still necessary to know what is meant by such phrases as "injury to competition," "services rendered," and "due allowances." The sentiment is frequently expressed that the drift of the Commission's reasoning to date has been toward realism and flexibility in applying the law in different circumstances.

## Rulings of the Trade Commission

As the Robinson-Patman Act bears directly on prices and distribution costs, some of the highlights of the Commission's decisions to date are of interest. The focal point on which quite a number of cases were dismissed was "lack of injury to competition" between buyers involved in the acknowledged discrimination. There could therefore be no substantial injury of the type regarded by the law as a hindrance to sound business. The fact that discounts of the type under consideration were prevalent throughout the indus-
try has also been given weight. Competing retailers did not have to sell at a loss even though they may have had to take smaller profics. In another case the Commission gave full weight to the fact that lower advertising costs and general sales expense, fewer salesmen's calls, non-use of branch warehouses and merchandising services and credit extensions, resulted in lower selling cosss to certain large buyers and therefore justified lower prices.

The Commission did indicate at one point that it felt itself empowered to follow a manufacturer's pricing policies into intrastate uransactions when he retained an active interest in the handling of his goods within such states. One of its notable decisions was that in which the Biddle Purchasing Company was ordered to discontinue passing on brokerage to its retail and wholesale customers. It was held that the Biddle Purchasing Company, though ostensibly an intermediary, was in fact their representative, and that as buyers they were receiving a brokerage to which they were not entitled under law. The Commission emphasized that one of the purposes of the law was to force price concessions into the open. This decision was sustained in the Circuit Court of Appeals, and the principle animating it was more recently upheld by the Supreme Court itself in Oliner Brothers, Inc., et al. v. Federal Trade Commission.

In its effort to be realistic, however, the Commission did not forgive a discrimination merely because it was small. In one of its decisions ${ }^{18}$ ir forbade so low a quantiry rebate as 2.25 per cent, on the ground that the item in controversy was so popular and so fastmoving that the profit margin on it was only 0.5 to 2 per cent. Distinctions of this kind illustrate the difficulty of ferrecing out justice in an endless tangle of diverse situations. In this case, however, the Commission's main objection was to the granting of volume discounts on shipments to individual chain store units.

The most advanced positions taken by the Commission have been with respect to cumulative discounts, delivered prices and brokerage. Subject to action by the courts these decisions are bound to affect common pricing practices. The intricacies of the brokerage issue have been discussed in some detail. The significance of
the Commission's ruling on cumulative discounts is that they ar really promotional rather than earned allowances, and are there fore justifiable under the "quantity discount" clause only if "sav ings develop that were not reflected in the price at the time of thi individual sales." In construing the Robinson-Pamman Act to $\mathrm{b}_{1}$ applicable to delivered prices and basing point prices, the Commis sion has somewhat unexpectedly made use of a law primarily con cerned with other practices to sustain its traditional belief tha prices constructed on other than an f.o.b. mill basis are uneconomic and unlawful.

## Effects of Curbs

Price discrimination of the extreme type, which has been the chief center of protest, has undoubtedly undergone general bul moderate shrinkage during the past two years. This may be nc revolutionary change, for despite the clamor over a few spectacular cases no one really knows how much "ruthless" discrimination existed even before the Robinson-Patman Act. It is known of course that price differentials were customary, but even the Robin. son-Patman Act concedes that they can normally be justified.
There seems no reason to doubt that direct payment of brokerage to buyers or their agents has been greatly curcailed, while payments to such intermediaries as cooperatives and voluntary groups are now less general. Rationalization of adverising allowance was also one of the main objectives of the act. Here there is sandom but fairly extensive evidence that the old loose practices in this area have been modified. Such action as has been taken, however, has been of a common sense or precautionary order as there is still no judicial definition of "proportionally equal terms." Perhaps the most useful result has been greater insistence on actual performance of services for which payments were made.
In the beginning there was a good deal of excired prediction that most distributors would either do their own manufacturing on a much larger scale than was the case before the act or that they would avoid the law by contracting for the entire output of small producers, thus removing any possibility of discrimination. Some of this may have occurred, but trade news which is still the
only available source of evidence on this point does not give very positive evidence of trends in this direction or cite many specific examples. A further stimulus to private brands was also confidently expected, but again there is no safe measure of the extent to which it has happened.

## f. RESALE PRICE MAINTENANCB

Another leading issue in distribution is resale price maintenance -by which the manufacturer or owner of a trade-marked product may dictate the price below which it may not be resold by distributors. As usual in the case of controversial issues, the arguments on both sides are a mixture of fact and emotion.

Those in favor claim: (1) that such protection is necessary to keep stnall retailers in price comperition with their large competitors on volume merchandise; (2) that it is one of the few effective ways of curbing iniquitous loss leaders and "bait" merchandising; (3) that better distribution will result because thousands of small distributors will be able to range themselves loyally and aggressively behind useful merchandise that they are now afraid to touch or are actually induced to suppress; (4) that it often costs manufacturers as much and sometimes more to build goodwill than it does to make goods, and that the one should be secured against exploitation as fully as the other is under common law and the Federal Trade Commission Act against competitors' misrepresentation; ( 5 ) that the diversion of trade into unnatural channels by price-cutting and loss leader methods is far more costly in the long run than a system under which the price of goods per se is determined by competitive demand; and (6) that a large body of prosperous distributors is necessary to a prosperous country.

As is always true in such institutional conflicts, the defense unconsciously keeps running back and forth between broad public intereses and the private desire of individuals to be saved by law.

Opponents of price maintenance rest their case on a similar mixture of noble and "me first" oratory. Being big distributors, they are outnumbered by the small, but they have powerful means of expressing their views. Through the loud-speakers of advertising, radio and artful display, they inform the world that through price

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 Dors Distrubution Cost Too Much?maintenance: (1) efficiency is being hamstrung; (2) savings from low costs must be hoarded instead of passed on to the public; (3) operating margins are so unequal in different types of outlets and different communities that only at a handful of accidental points can a fixed minimum price be appropriate; (4) that which is judicially approved in the name of the manufacturer's goodwill is really foisted upon him to his own disinterest by distributors who are already too numerous and who are literally going on "commercial relief" at public expense; ( 5 ) whatever diversion of merchandise from so-called normal channels there may be is likely to be unpleasantly cured by a further shift to private brands rather than back to higher cost operators; and (6) the legal problems of both manufacturers and distributors trying to do a straightforward business will be magnified out of all proportion to either real or theoretical benefirs.

Resale price maintenance was held illegal under the Sherman Act. It was also one of the few major practices that the Federal Trade Commission was successful in restraining under Section 5 of its own act prohibiting unfair practices in commerce. Opposition from the Commission has usually been determined and sustained, as evidenced in its letter of protest to the President against enactment of the Miller-Tydings bill. This attitude is in keeping with a long line of hostile decisions by the United States Supreme Court, which was relieved only slightly by recognition of the right of a seller to cut off a customer who refused to respect his wishes.

From the Miles decision in $1911^{19}$ to the Supreme Court's approval of the California and Illinois Fair Trade laws in 1937 adverse judicial decisions on resale price maintenance were numerous. The core of the court's logic was: (1) that when a trader bought and paid for goods they were his to dispose of as he saw fit; (2) that his merchandising costs and problems were peculiarly his own; and (3) that resale price maintenance would bring about results scarcely different than would follow an illegal conspiracy on the part of wholesalers or retailers to the same effect.

The only passage left through this barricade was the court's frequent assurance that the vendor could always refuse to sell to a
buyer who would not respect bis wishes concerning the resale price of his goods. But this narrow concession was always accompanied by the caution that the seller could not take active steps to detect and check violations.

## Legalizing Statutes

But resistance to this administrative and judicial trend against resale price maintenance never flagged. In February 1914 two bills to legalize resale price maintenance were introduced in Congress (the Stevens and Metz bills). In later years a long succession of Capper-Kelly bills were introduced, but without success until the Kelly bill passed the House of Representatives in January 1931. However, it failed to pass the Senate. The NRA finally vouchsafed the campaigners a substitute measure in the "loss-limitations" provision of the various trade codes. With the disappearance of NRA, the pressure for legislation was shifted to the states where it finally met with success.

California had enacted a "fair trade" law in 1931 exempting certain types of resale price maintenance contracts from the state anti-trust laws. This particular sanction was converted from passive to active form in 1933 by a clause requiring non-contracting buyers to abide by the prices agreed upon by sellers and contracting buyers. Approval of the California type law by the United States Supreme Court in $1936^{20}$ was the signal for a virtual flood of similar state laws.

Forty-four state laws now permit manufacturers to stipulate the prices at which their goods may be sold or resold. In the main they follow two closely related forms, the pioneer California act and a model of a state act prepared by the National Association of Retail Druggists. Only branded goods are involved; they must be in free and open competition; the proclaimed aims are to protect manufacturers' goodwill and check use of popular lines as loss leaders; and horizontal price agreements between manufacturers,
between wholesalers, or between retailers are expressly forbidden.
As these laws swept through successive state legislatures, manufacturers setting resale prices on their trade-marked goods became immune from most of the state anti-trust laws, but were still guilty of conspiracy in restraint of trade under the federal anti-trust laws. To cure this inconsistency Congress finally passed the Miller-Tydings Act which became effective August 17, 1937. This law bestows immunity from the federal anti-trust laws on manufacturers who set retail prices in interstate commerce on goods selling in the states sanctioning this practice.

## Results of Legislation

The effects of these laws have been diverse. When resale price maintenance was legalized some manufacturers started with consumers' list prices, lost trade, and lowered prices. Others, obliged to cope with loss leader sales in metropolitan areas, started with relatively low prices only to see the minimum become standard everywhere, and then raised their prices.
Some little evidence on the shifts in price levels that have resulted is being accumulated. One fairly elaborate summary appeared in an article by Reinhold Wolff and Duncan Holthausen in the July 1938 issue of Dun's Review. This was based on a voluminous collection of New York State prices filed with the New York State Pharmaceutical Association, others secured with the help of the National Independent Pharmacists, Inc., and partly checked by independent sampling by the authors.

According to this report prices of fifty fast-moving products went up 1.9 per cent in the neighborhood drugstores and 29 per cent in large price-featuring stores in New York City and Brooklyn. But in cities with population of 10,000 to $1,000,000$, prices of the same articles declined by percentages ranging from 4.4 to 5.1. In rural communities and still smaller towns there was an average decline of 6.7 per cent. Naturally there were greater individual extremes in both directions. ${ }^{21}$
21. Data on price changes under the fair trade laws have been gathered by a number of other agencies including Dr. B. T. Grether of the Universicy of California, Nelson Miller in his comprehensive article in the May 1938 issue of Corront

On speculative grounds only, it seems likely that the increase in cut-rate stores measured the rebound from "deep loss leaders" and price advertising. It seems at least credible, on the other hand, that the relief from this pressure made it more worthwhile for small neighborhood dealers to push the affected lines instead of merely carrying them as necessary convenience goods. This last possibility must certainly have been supplemented to some degree by the tendency of the minimum price to become standard.

One weakness in these returns is that there is no measure of the relation of sales volume to the different adjustments. Assuming that the total public bill for these popular goods was higher as a result of the laws, it is still an open question whether the increased cost was more or less important than its value as leverage toward better balanced competition on an efficiency basis.

There is reason to believe that the competition between manufacturers' brands and substitute goods has been more of a deterrent to reckless price hiking than the much feared "fighting" or "bait" merchandise of the big distributors.

## Limited Application of Laws

It is probably a fair assumption that resale price maintenance laws as enacted have but limited application. In the first place they apply to branded goods only. The business Census of 1935 lists some twelve groups of retailers. Of these, foods, automobiles, and general merchandise-accounting for nearly half of the total retail trade-are either not suited to such close control or have their own methods of approximating it.

So far the principal effects of the fair trade acts have been on popular items in the drug, cosmetics, book, radio, tobacco, and other rapid turnover trades. Smaller but nevertheless definite use

[^53]of them has been made in the case of the stationery, hardware, jewelry, refrigerator, rubber tire, and confectionery fields, with ochers trailing off in the distance.
In some of these trades the remedy has been successful in accomplishing its purpose and in others it has broken down dismally. Although the points of success or failure are of great importance to the trades involved and to economic estimates of the ultimate area of coverage, they are perhaps not so important as the reasons for success or failure. As far as ultimate coverage is concerned it has been estimated by a number of authorities that no more than 5 to 10 per cent of the country's retail sales will be brought within the jurisdiction of resale price maintenance laws.

Other effects of the fight to legalize price maintenance go beyond business practices into the larger field of group rivalries and alliances. The new powers of organized retailers have been effectively arrayed against the different powers of mass distributors. There are also rumors of occasional alliances berween distriburors and labor unions to force hesitant manufacturers into line. There are obvious perils of course in the determination of price levels through group warfare rather than through the automatic adjustments by which the economic system is supposed to be kept in order.
These perils are not entirely dissimilar however to those raised by other current types of corrective legislation, such as the AAA, minimum wage laws, the Guffey Coal Act, and even the Labor Relations Acc. In final judgment all of them call for imponderable risks to win imponderable benefits. The case is usually one of misgivings over untested and arbitrary controls as against an urgent demand for better economic and social balance. A great deal of history will be written before there is general agreement on the verdict.
It must also be recognized that this modern type of control over price is frequently reinforced or supplemented by companion state laws to prevent sales below cost. Although twenty-seven states have adopted these "loss leader" laws, the Nebraska, New Jersey and Pennsylvania statutes have been declared unconstitutional. These laws have been promoted in many instances by the grocery trade as a substitute for resale price maintenance, which manufacturers
of grocery products have been afraid to impose because of fear of antagonizing the chains. Dealers are prohibited by these laws from selling goods (and in some cases services, as well) below "cost," which is ordinarily defined as purchase or replacement cost plus "cost of doing business." The majority of the laws establish a minimum mark-up-usually 2 per cent for wholesale and 6 per cent for retail-to cover cost of doing business, unless lower operating costs can be proven. So far as these laws can be enforced their effect obviously is to restrict competicion and increase prices to consumers.

## g. CHAIN Store taxes

No less than twenty-two states have put into effect laws taxing chain stores. Alchough the list does not include such populous states as New York, Illinois, and California, nevertheless 38 per cent of all chain stores in the country were affected by state taxes in 1935. In the rest of the country the chain store issue seethes endlessly and the bare record of twenty-two states for and twenty-six against such taxes conceals rather than registers the actual pressure behind legislative deliberations. Passage has failed in some states for a lack of a trifling few pounds of additional pressure, while in others bills have been passed but are temporatily ineffective only because of judicial interference. The various state legislatures have not seen eye to eye on how many stores constitute an economic menace. There is virtually no uniformity of taxing methods or rates; only two states have identical rates.

The number of stores at which the tax rate reaches a maximum ranges from 30 to 501 . Disregarding the fact that the limit is low in some states and high in others, the total amount of tax that would be paid on 200 stores ranges from $\$ 112$ in Alabama to $\$ 750$ in Texas. However, the law has been enjoined in Texas, so that it might be better to fall back on the $\$ 500$ figure obtaining in Idaho. In actual practice Louisiana would run up to $\$ 550$ per store per year, due principally to its use as a base of all the stores in a chain wherever located. Some cities have also imposed chain store taxes which have been upheld by state supreme courts. In Oregon this judicial approval was underlined by a popular referendum.
In several states such tax laws have been passed, have been held unconstitutional, have been passed in another form and been sus-

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tained. Iowa, Minnesota, and New Mexico introduced a tax on gross receipts of chains which was eventually held invalid by the United States Supreme Court as an arbitrary discrimination in violation of the Fourteenth Amendment. ${ }^{22}$ Indiana graduated its tax in proportion to the number of stores within its boundaries and this method was approved. ${ }^{23}$ Louisiana thereupon went a step further and based its rates upon the total number of stores operated by a chain anywhere in the United States and was upheld in a new decision turning on this special innovation by a four to three vote. ${ }^{24}$

## Economic Effects

It is not easy to determine the economic effects of these taxes. Occasionally the number of chain units is reported to have actually increased. Sometimes the number of units has decreased while either the chains' own volume or their share of the total retail volume has increased. In some states where the rates have been high beyond any quibbling there has been drastic demobilization. Some of the petroleum distributors have been leasing their own stations to independent operators. The tax promises to rest most heavily, however, on the food and grocery chains. Some of them have intimated that they will shift to a lease or agency basis and carry on in the form of a cooperative, but so far this movement has not acquired much momentum.

The tax laws clearly do exert a pressure, however, toward reexamination of the possibilities of different types of stores, followed by abandonment of the less promising units. Another possibility is that the chains will divert some of their resources to supermarkets, which some retailers seem to dread more than the mere survival of a chain store movement that may already have run its natural course. It is frequently reported that super-markers have hurt the chains, as comperitive price merchandisers, more than the independents.

[^54]Naturally these taxes have to be paid by some one. They are a direct charge on distribution. But claims that such levies are entirely passed on to the consumer in the form of higher prices cannot be proved. Even if prices actually rise after the enactment of a chain store tax, there are always many other circumstances that could have been responsible. If the tax should come out of the profits of the chains the economic effects are too speculative and remote to be measured. The importance of tax receipts, moreover, lies not so much in their amount as in their effects on competing methods of distribution.

## h. barriers agninst interstate trade

The flood of state legislation restricting the free movement of goods between the states is a reflection of the world-wide trend toward economic provincialism which arose during the depression. Most of these laws have been passed by states in urgent need of additional revenue, or for the purpose of preserving home markets for home industry on the theory that by spending money at home local business and employment would benefit. The fundamental issue raised by these "buy-at-home" laws and by the resulting state legislative reprisals against them is whether the guarantee of free trade among the stares contained in the commerce clause of the Constitution can or should be evaded.
As pointed out previously state laws evading this guarantee have taken a variety of forms. Some of them, such as "use tax" legislation, and motor vehicle taxes, have had as their immediate purpose the protection of state tax revenues, but most of them have been passed to promote local industry or to protect the industries of the state against the competition of foreign products-i.e., imports from other states. Examples of this type of state tatiff are found in the misuse of quarantine regulations:

[^55]her own. With even greater lack of logic, Florida citrus fruits are barred by quarantine from northern Texas except from April 1 to September 1, although very little citrus fruit is produced in northern Texas, and Florida has none to export at that time. The obvious intent of the regulation is to preserve the market for Texas fruit.

California has quarantine regulations barring the importation of citrus fruit, except from Arizona, for the alleged purpose of keeping out citrus canker and lemon disease, although neither is prevalent in Florida. The California state entomologist proposed lifting the quarantine in 1933, but pressure from California lemon growers succeeded in keeping the regulations in effect. Florida was barring citrus fruits from neighboring southern states at the same time on the basis of exactly the same diseases which were the excuse for barring Florida fruit from California. ${ }^{2 s}$

## State Preference Laws

The most direct and effective method of favoring local industry is found in laws requiring public authorities to purchase materials from firms within the state.

Such provisions are now contained in many appropriation bills, and in advertisements for bids on government work. Similarly, at least thirty states give preference to their own residents in public employment. About the same number have laws giving preference to domestic firms in the case of public purchases. The number of laws of this type doubled berween 1930 and 1935.26

The Council of State Governments reports that thirty-one states now have laws compelling preference for made-within-the-borders products and that several other states have passed retaliatory laws preventing any public official from buying supplies produced in states which discriminate in public purchases. ${ }^{27}$
Somewhat similar in their purpose are restrictions adopted by Maine, New Hampshire, West Virginia, and Wisconsin forbidding the export of electric power in an effort to attract industries from other states.
The states have also been quick to take advantage of the exemp-
25. Charles E. Noyes, "Barriers Against Interstate Commerce," Editorial Research Reports, Washington, 1939, p. 203.
26. 1bid., P. 202.
27. Press release from the Council of State Governments, Chicago, March 29, 1939.
rion from the commerce clause granted by the Twenty-First Amendment to the Constitution to pass laws favoring their own liquor industries. Michigan imposed a special tax on out-of-state beer in 1933 and this precedent was promptly followed by other states. Indiana, Maryland, Nevada, Pennsyivania, and Washington now impose high taxes on importers of out-of-state beer; Arkansas, Michigan, Georgia, and New Mexico tax imported wine at a higher rate than that produced within the state; while several other states place special levies on liquor imported from states imposing discriminatory taxes.

Among the most annoying of state trade restrictions are laws regulating and taxing motor trucks. Originally intended to prevent tax avoidance, these regulations have become so serious as to "make interstate trucking virtually impossible in some sections of the country., ${ }^{28}$ Some states refuse to allow the entrance of out-ofstate trucks without payment of the full registration fee, others impose a temporary registration fee, and some charge a ton-mile tax higher for foreign trucks than for those locally owned. In addition the states have adopted a multicude of varied regulations as to weight, height, width, length, safert devices, lighting, and other characteristics of trucks, which constitute a serious interference to interstate traffic. "Ports of entry," where all motor vehicles entering the state were stopped for inspection and usually taxed, were established by Kansas in 1933, and neighboring states soon retaliated by adopting similar regulations. ${ }^{29}$

## Effects of Interstate Barriers

The ultimate effects of allowing this trend toward nationalism on the part of the states to go unchecked are not hard to foresee. Although local firms, especially those unable to meet outside competition, may benefir temporarily from such protective legislation there can be no doubt that in the long run both the taxpayers and consumers will be penalized. The issue was clearly stated by Governor Lloyd C. Stark of Missouri, in an address before the Fourth General Assembly of the Council of State Governments:
28. Brief issued by Editorial Restarch Reports, March 17, 1939.
29. Ibid.

Unable to establish tariff walls, a number of states have attempted tc confer advantages upon their own citizens not enjoyed by those within other states. It is this type of legislacion which we recognize as setting uf vicious trade barriers which definitely impede the normal flow of products from state to state. Experience has shown that while a few minority groups reap the benefits of trade barriers, the grear consuming public pays the bill once these barriers have been erected. In fact, these state barriers constitute 2 subsidy for organized minorities. ${ }^{30}$

These state trade barriers are a clear example of one form of government intervention which, although it may afford transitory protection to local groups, can have no other ultimate effect than to penalize consumers by increasing distribution costs and raising prices. The Council of State Governments, in announcing plans for a National Conference on Interstate Trade Barriers, passed a resolution at irs January meeting stating that "interstate trade barriers, under wharever guise, are detrimental to the economic welfare of the country." ${ }^{31}$ This action of the Council, coupled with a recent decision of the Supreme Court invalidating a Florida "inspection fee" of fifteen cents a hundredweight on cement, in which Justice Frankfurter said, "It would not be easy to imagine a stature more clearly designed . . . to circumvent what the commerce clause forbids, ${ }^{, 32}$ gives promise of a possible reversal of the trend of the last several gears.

## i. UNETHICAL PRACTICES

Business is honeycombed with practices that overstep strict standards of personal honesty. Immoral practices may do harm to other businessmen-as where a retailer is short-weighted by a wholesaler-or they may harm the consumer-as in the case of a patent medicine which contains poison or misrepresents its capacity to cure. In some cases it is difficult to make out a case against an immoral practice in such specific terrms. Some practices, however, so violate our ethical sense that they call for restraint even though no tangible damage to others can be defined or measured.

The following is a suggestive list of unfair practices which have
30. Charles E. Noyes, op. cit., pp. 191-192.
31. 1bid., p. 191.
32. Ibid., Pp. 207-208.

## come under the ban of the Federal Trade Commission. ${ }^{33}$

A. Unfair comperitive methods which affect the individual purchaser
(a) Misrepresentation

1. As to weight or quantity
2. As to composition, quality, condition or character
3. False claim to endorsement or use
4. As to business status
5. As to origin of product
6. As to price reductions
7. As to medicinal or curative value of the product
8. Misrepresentations in the sale of corporate securities
9. As to contracts and offers made
10. Misrepresentations made by correspondence schools
(b) Lotteries
(c) Harassing tactics
(d) Predatory or local destructive price-cutting
B. Unfair competitive methods which affect the individual competitors
(a) False claim of affiliation with competior
(b) Appropriation of results of competitor's efforts
(c) Interference with competitor's stock while in the hands of dealers
(d) Acquiring competitor's trade secrets
(e) Secret control of fictitious comperitor
(f) Anonymous attacks upon competitors
(g) Disparagement of and misrepresentation concerning competitors
(h) Commercial bribery and secret commissions to dealers
(i) Unfair competitive methods in the motion picture industry
(j) Destruction of competitor's catalogues
(k) Shipping goods to competitor's customers without orders
(l) Threats of litigation in bad faith
(m) Interference with comperitor's source of supply
(a) Physical interference with competitor's property
(o) Issuance of "false" complaints to the Federal Trade Commission
(p) Appropriation of comperitor's shipments
(q) Inducing breach of contract
(r) Espionage
(s) Molestation, harassing tactics, interference with competitors
(c) Trade marks and trade names-"passing off"
(u) Miscellaneous price-fixing activities
(v) Bogus independents
11. Prepared by George J. Feldman assisted by James B. Reid and J. H. Krug for the NRA Division of Review,

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## The Courts and the Trade Commission

As originally planned, Section V of the Federal Trade Commission Act, forbidding unfair methods of competition, was intended to give the Commission rather broad powers of discretion. It was supposed to be elastic enough to reach not only outright fraud but also more obscure practices whose nature was not sufficiently developed or apparent for Congressional handling. The duty of policing fraud and dishonesty has come to absorb most of the Commission's time and energy. For example, of 624 stipulations to cease and desist executed during one fiscal year by parties against whom proceedings have been instituted by the Commission, 364 involved false and misleading adverrising alone.

The Commission's discretionary powers, however, were soon challenged in several respects. In Sears, Roebuck and Co. v. Federal Trade Commission (1919) ${ }^{34}$ the court conceded that the "term 'unfair methods of competition' was not restricted to the conception of unfair methods of competition defined by common law prior to September 26, 1914," and (in 1934) that the Commission's jurisdiction was not limited to "those types of practices which happen to have been litigated before this Court." ${ }^{35}$ But in Federal Trade Commission v. Gratz (1920) ${ }^{36}$ it said that these words "are clearly inapplicable to practices never heretofore regarded as opposed to good morals because characterized by deception, bad faith, fraud or oppression, or as against public policy because of their dangerous tendency unduly to hinder competition or to create monopoly." In the same decision it went on to say that "It is for the courts and not the commission, ultimately to determine as a matter of law what they (the words 'unfair method's of comperition') include."

This view was strengthened in the Raladam case (1931) ${ }^{37}$ by a statement that the meaning of the words in question must be arrived at by "the gradual process of judicial inclusion and exclu-

[^56]sion." In this case the court also undertook to define the three prerequisites on which the Commission's jurisdiction had to rest: (1) that the methods complained of were unfair; (2) that they were methods of competition in commerce; and (3) that a proceeding by the Commission to prevent the use of such mechods appeared to be in the interest of the public.

To constitute unfair competition the practice must be shown, according to this decision, to have the tendency injuriously to affect the business of competitors. It has been argued that this dictum deprives the Commission of power to act wherever it develops that the offender has no comperitor but has a monopoly in his field or that all comperitors are equally guilty. In any event, no matter how deceptive a particular act might be per se, the Commission was obliged to go to the trouble and expense of proving injury to a competitor before it could act. Consumers, it was said, were left without protection.

It should be added, however, that in a number of cases the court did concede the right of the Commission to suppress a practice that affected injuriously a substantial part of the purchasing public even though no private right of either a competing trader or of a purchaser appeared to have been invaded.

A question also arose as to the proper definition of "public interest." In Federal Trade Commission v. Klesner, ${ }^{39}$ the court said that "to justify fliing a complaint the public interest must be specific and substantial." This point is of course closely related to the preceding one.

Still another curb on the Commission's powers arose out of judicial qualification of a declaration in the act itself that the Commission's findings should be final as to fact. In Federal Trade Commission v. Curtis Publisbing Co. ${ }^{39}$ the court said that "Manifestly the court must inquire whether the Commission's findings of fact are supported by evidence. If so supported, they are conclusive." The court's position on this issue, however, seems to have involved principally a question of degree.

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## T'be Weeler-Rayburn Bill

Rightly or wrongly the Commission, chafing under these judicial restrictions, has urged liberating amendments to its enabling act. Duting the last session of Congress its wishes were partly satisfied by the passage of the Wheeler-Rayburn Bill on March 21, 1938. In this amendment Congress yielded to the Commission's contention that the law should forbid "deceptive acts and practices in commerce" instead of merely "unfair methods of compecition."

The House Committee report declared that "this amendment makes the consumer who may be injured by an unfair trade practice of equal concern before the law with the merchant or manufacturer injured by the unfair methods of a dishonest competitor." Not all observers are happy over the change, fearing that so generous a phrase puts too much discretionary responsibility on the human beings obliged to interpret and apply it.

Another very important change lay in the area of procedure, namely, that the Commission's cease and desist orders should become final if respondents failed to petition for court review within sixty days after orders were issued, and that a $\$ 5,000$ civil penalty should be assessable for each violation of a cease and desist order after ir became final. The Commission had always complained that respondents could play fast and loose with its orders, neither obeying them nor asking the court to set them aside. Both the Commission and Congressional Committees studying the subject cited the Stock Yards Act of 1921 and the Securities Exchange Act of 1934 as precedents for the imposition of time limits and penalties.

The Amendment also provides for effective control over false advertising of foods, drugs, devices, and cosmetics. This is new emphasis on old problems. The Commission's escape from the necessity of proving injury to a competitor is expected to be parricularly helpful in this respect, as is the new liability to fine for violations of cease and desist orders. Gross offenses, such as those involving the advertising of articles injurious to health or of an intention to defraud, are now to be prosecuted as a crime and punishable by imprisonment or fine or both.

Even in those milder cases which are still subject to cease and
desist orders only, the Commission is now empowered to secure an injunction against suspect advertising until its complaint is dismissed by its own action or set aside by the courts on review, or becomes final in default of appeal. In addition, the recently enacted Copeland Bill still further strengthens the powers of the Food and Drug Administration in this general area. Violations of the type under discussion have always been punishable with criminal penalties.

## Difficulties of Administration

The appearance of simplicity in this problem is quite deceptive. Congress could never dispose of it merely by saying that after such and such a date harmful or fraudulent advertising would no longer be permitted. The crux of the issue is not whether fraud should be restrained but how it should be defined.

A quack nostrum need not contain rank poison to produce definitely harmful results. Sugar water advertised as a cure for cancer may cause the death of a buyer who postpones surgical treatment until it is too late. Nor should fraudulent advertising be confused with the advertising of harmful products. A fur coat may be made of rabbit skin; if it is advertised as seal the advertising is fraudulent although the product does not harm the purchaser physically.

In the same category is the advertising of seconds as firsts, of rebuilt as new, and adulterated products as unadulterated. The issue becomes particularly murky when it spreads into such matters as "clearance sale," "factory to you," "bankruptcy sale," "fire sale," "removal sale," and "going out of business sale." Both Senate and House spokesmen foresaw difficulties and uncertainties of interpretation, just as there have been in the case of the older provisions of the Federal Trade Commission Act, the Food and Drug Act, the anti-trust laws, and "other laws prescribing in general terms standards of conduct to be applied to innumerable factual situations." ${ }^{10}$

Despite all the ringing phrases of its sponsors and the admitted sharpening of some of the Commission's weapons of offense, a Congressional minority felt that the part of the amendment regu-

[^58]lating misleading advertising of foods, drugs, devices, and cosmetics fell far short of giving to the consuming public the protection it needed. It objected particularly to the exemption of so-called minor infractions from criminal penalties.

These critics felt that the cases of injury to health resulting from medicines themselves were unusual and that the great danger lay in the free circulation of products in themselves innocuous, such as the tuberculosis cure which was a simple liniment, or the diabetes cure which was a brew of horse tail weed. They disliked the necessity imposed upon the Commission to prove intent "to defraud or mislead," citing the difficulties encountered under other laws in proving a state of mind under the legal rules of evidence. Finally, they placed little faith in the Commission's new discretionary power to ask for an injunction and wanted the risk of penalties to be plain and definite for each offense.

## Results Not Measurable

The effects of the multitude of controls set up over unfair or immoral business practices cannot even be guessed at. Assuming their success in curbing abuses, it does not always follow that the consumer will reap any benefit in lower prices.

Fraud and dishonesty themselves can make for lower prices. The extreme example is stolen goods, which will normally be sold at nominal prices. But if the theft happens to be of an intangible value, as the imitation of some one else's established trade mark, merchandise of fully equal or even superior quality may be sold at lower prices without winning the forgiveness of the court. Should a manufacturer falsely claim affiliation with a comperitor whose similar goods may be higher-priced because of expensive promotional methods, the public does not condone the moral offense because of the lighter burden on its pocketbook. Passing off one's goods as those of a competitor has for centuries been held unlawful without much attention being paid to relative values. The pilfering of a competitor's trade secrets is very likely to sharpen price competition on the goods involved, but the maintenance of ethical standards is considered more conducive to the public good
in the long run. The public does not insist on lower prices if they are to be had only at the expense of standards of honesty.

Departing from such solid ground, it is upon a distinction between immediate and long-term values that higher prices often resulting from fair trade and similar laws are considered less important than the protection of competing efficiencies. It can even be argued that dishonesty to the point of stealing, results in no net loss to the public, for the reason that what one man loses another gains. The answer to such sophistry as chis fortunately can be allowed to rest on common sense.

## j. COMMERCIAL BRIBERY

Commercial bribery may take a variety of forms, from the lavish entertainment of buyers and the purchase of fur coats or other costly gifts for women buyers, to the payment of an outright cash "commission." Extending favors to proprietary buyers, of course, does not come under the head of commercial bribery-it is simply a part of what the proprietor gets for his money. It is when an employee is induced by means of gratuities to accept an offer that is not the most advantageous to his employer that bribery exists. Because it brings about purchases for reasons other than quality or price, bribery interferes with the free play of competition and constitutes an unfair trade practice.
The payment of bribes is not limited to payments to purchasing agents of possible customers. The same principle is also involved when manufacturers give the sales representatives of wholesalers and retailers a special commission for selling their products. This is a bribe that does not necessarily operate against the interests of the employer, but it is clearly a form of unfair compecition and may result in payments greater than should be necessary to distribute the product.
Since sales through agents or employees, rather than principals, have increased in number with the increasing growth in size of business, the sphere of bribery has widened in modern times. Commercial bribery, however, is primarily a managerial problem. Correction must come from within rather than by law from without.

Its existence proves that the higher management is not checking up on the activities of purchasing agents to see that they are driving the best bargains possible.
When once it gains a foothold, the practice spreads very rapidly through an industry. If one manufacturer offers a bribe his competitors frequently feel that they must do the same thing or lose the business. Not only is the amount of the bribe included in the price of the product, but there is a tendency to add still more because it is relatively easy to obtain a higher price when there is a friend on the inside of the customer's organization who has a financial interest in the purchase of a particular product. Evennually the consumer pays the cost.
Because commercial bribery preys on legitimate business in an underhanded fashion it is obviously impossible to estimate the toll it exacts. The various rough estimates which have been made, however, point to its excessive cost. John T. Flynn in Graft in Business, quotes Commerce and Finance as estimating that commercial bribery in the United States costs a billion dollars a year. ${ }^{41}$

## Laws Against Bribery

The common law has long recognized the illegal nature of commercial bribery and has traditionally permitted recovery or rescinding of the contract by anyone whose agent accepted the bribe. The Federal Trade Commission found that the practice was too common for cease and desist orders. In any case they found they could only proceed against the person who gave the bribe inasmuch as he was the only one guilty of unfair competition.

Seventeen states have statutes aimed at the general practice of commercial bribery. A common provision makes it a misdemeanor for a third party to "give, offer or promise any commission, gift or gratuity whatever . . . with intent to influence the action of an agent, employee or servant in relation to his principal's, employer's or master's business, or for such an agent to request or accept any commission." Juries, however, are inclined to condone the offense if evidence shows that it is customary in the industry.
41. John T. Flynn, Graft in Businass, The Vanguard Press, New York, 1931, p. 67.

Only a few of the state laws prevent admission of evidence as to whether or not such a bribe is customary.

A federal law was suggested in 1918 and again in 1920 by the Federal Trade Commission. Bills making commercial bribery a federal offense have been periodically introduced into one or both houses of Congress. One of these introduced into the 67th Congress by Representative Volstead passed the House but died in the Senate Committee.

Upon the passage of the National Industrial Recovery Act many industries attempted to legislate against commercial bribery on a nation-wide scale. One hundred and eighty-one of the first three hundred NRA codes contained provisions making commercial bribery a form of unfair trade practice. Almost universally standards adopted by trade associations ban the practice, and this attitude, coupled with the activiries of the Federal Trade Commission and the Better Business Bureau, has rended to halt the spread of the evil.

## Chapter 10

## SOME REASONS FOR HIGH COSTS

NeIther distribution nor any other part of the economic system operates perfectly. Both the need and the opportunity to improve the efficiency and lower the costs of distribution undoubtedly exist, but the same generalization could be made about the whole gamut of activities for which the consumer pays. Whether distribution is more inefficient, or takes too large a part of the consumer's dollar in comparison with other parts of the economic machine, however, is not clear. Certainly the results of this study fail to support the common assertion that costly and wasteful distribution processes alone are responsible for high living costs.

The costs of distribution come largely from the performance of essential functions in providing time and place utilities. The mere physical task of collecting, storing, transporting, selling, and finally delivering finished goods is a gigantic undertaking. While the costs of performing these tasks have probably increased over the past years, that fact alone does not necessarily prove waste. These increased costs may pay for increased services or for expanded functions. Also there may have been merely a shifting of functions and services from what we term production to distribution. Costs may be increased as a result of the normal working of the competitive system or through the growth in the demands of consumers.

It is clear that distribution today does a vastly bigger job than it did fifty years ago. Higher markering costs are largely due to fundamental changes in our economic organization such as the concentration of manufacturing in specialized areas, the urbanization of the population, the transfer of many production operations from the home to the factory, the development of a great variety of new products, smaller packaging, more frequent retail buying and other
features of a more specialized and more complex economic life.
Furthermore, distribution, as we know it today-whether it "should" do so or not-does undertake to create demand, to mold it and to attach it to brands and dealers. Because distribution is not distribution in the narrow sense, because it is so largely devoted to influencing demand and because the art of influencing demand has developed so rapidly during the last half century distribution has had to shoulder more expense than it otherwise would. Probably there has been as much discovery, as much change, as much innovation in the field of distribution as in production. But most of the ingenuity has been expended to a different end. Inasmuch as it has proved possible to influence and control consumer choice it has of ten been profitable to spend money in creating demand by advertising and promotion rather than through the reduction of prices.

It must be remembered, however, that the creation of this new and larger demand has helped to bring to the mass of the people an unprecedented array of physical comforts and conveniences. More and better goods have been made available to a vastly greater number of people at a price which the mass of consumers can afford to pay. Real wealth measured in the physical volume of goods produced and distributed increased more than nine times between 1870 and 1930, while the population little more than trebled. As a result millions of families have today conveniences which were unheard of seventy years ago.

This has come about partly through lower prices achieved largely by reducing costs of production. But lower production costs would often have been impossible without more effective distribution. A prominent food manufacturer reports that with greatly expanded markets the selling prices of his twelve most important products showed a decline of about 30 per cent between 1929 and 1938-in comparison with a drop of only 15 per cent in the index of all wholesale food prices and a drop of only 12 per cent in the total compensation received by employees the country over. ${ }^{1}$
In the six years between 1931 and 1937, the number of electric ranges in a certain utility company's territory increased from six or
seven thousand to some forty thousand-all the result of selective selling. In the last ten years the price of electric refrigerators has been reduced from between $\$ 400$ and $\$ 500$ to an average of less than $\$ 200$. Had there been a good electric refrigerator in 1920 it would have cost the consumer about $\$ 63$ a year for electricity to use it. In 1937 it cost only about $\$ 12$ or $\$ 14$ a year for electricity to operate an infinitely better one. ${ }^{2}$ Even during the depression years of 1931-1937 the increased use of residential electricity enabled the company to cut the average cost of electricity in homes by practically 30 per cent. The average residential customer increased his use of electricity for labor-saving devices by almost 40 per cent, yet his annual payments to the company at the end of the period were not much larger than they were in 1931. Obviously these lower costs and lower prices could not have been achieved without greatly increased consumprion.

Many more examples could be given of the way in which consumers have benefited by the economic system which has been evolved. On the other hand there is considerable evidence to prove that close attention to possibilities of lowering distribution as well as production costs would result in still greater benefits. The task which faces American business is to preserve the economies of mass production by preventing the added cost of mass distribution from cancelling them out.

## Criticisms of High Costs

Criticisms of the marketing structure are by no means limited to economists and students. Hard-headed industrialists and others engaged in practical business are increasingly calling attention to the urgent need of attacking the problems of distribution. The January 10, 1938 issue of Domestic Commerce, published by the Department of Commerce, contains two pertinent quotations illustrating this attitude:
The facts point clearly to the logical future of American industry-namely, a bold and vigorous selective volume production along scientific manage-
2. George E. Whitwell, "Selective Selling-Its Effects on Social and Economic Standards," an address before the Boston Conference on Distribution, September 1937.
ment lines-scientific management let us clearly understand, applied not alone to factory but to finance and marketing and distribution as well . . . there is no question but that prices of manufactured goods must go down . . . the profics in American industry must be looked for . . . in a narrow buyer's market, in specialization, research, highly developed executive management, volume at low unit profit, close management of costs and inventories, automatic production, and an organization skillfully adjusted to the market . . . and it is the principles of scientific management which today impressively corroborare the idea that the marketing function must assume supreme command. . . . As a result of scientific management in production, including, of course, scientific development of machinery and equipment, statistics indicate that unit costs of production were reduced between 1900 and 1930 some 30 per cent, while in individual operations unit costs were frequently halved or quartered. In selling, on the other hand, costs have been rising. A survey of selling costs indicates an increase of some 60 per cent in the cost of marketing by manufacturers between the same years 1900 to $1930 .{ }^{3}$

There is a tremendous opportunity to recover thousands of dollars that are now being wasted in inefficiencies in our marketing structure by the application of distribution engineering to the marketing structure and I believe also that one of the greatest chances for making big savings of all that exist in the field of distribution, exists in advertising. ${ }^{4}$
Among the most common criticisms of the present distribution system is that it supports an excessive number of outlets and' offers too many services and that excessive advertising and sales efforts put a needlessly heavy burden on the consumer's pocketbook. To answer these charges it would be necessary-but in the light of our present knowledge often impossible-to determine how many are too many and how much is too much. And then there would remain the problem of discovering what effects a reduction in this excess would have on the various persons affected.

Among these, clearly, the consumer's interest is paramount, for distribution should exist solely to satisfy his wants. How would
3. From For Top-Executives Only, a symposium by Samuel W. Reyburn, Kenneth Goode, Alfred P. Sloan, Jr., C. M. Chester, Sanford E. Thompson, and J. George Frederick, The Business Bourse, New York, 1936.
4. From an address by L. Edward Scriven, of Batten, Bartoh, Durstine \& Osborn, before the Chicago Business Papers Association, November 22, 1937.

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the consumer's interest best be served? The answer is not clear. The price he pays must be weighed against the services he wants, the conveniences he enjoys and the range of choice he gets.
It must be remembered also that the apparent existence of an excess is a fundamental characteristic of competicion. Granting that this often results in the waste of resources and human effort it is nevertheless the means whereby costs and prices are reduced. Then too, for every commodity which has found its way into common use there may be many which have failed to find their way. The time and money spent on such unprofitable promotion must also be paid by the ultimate consumer.

Such adventuring involves not only large costs but frequently wastes. It involves the right to try and fail. Many studies of distribution have overlooked this basic feature of the American economy. Our resources are such that we obviously have the capacity to develop not merely security and a "decent standard of living," but wholly new and presumably more desirable ways of living. But no one can know in advance just what these ways will be. They can be discovered only by trial and error.

## Net Balance Incalculable

No one can know definitely whecher or not the net results of the distribution system which we have today leave the balance on the asset side. But it must be granted that competitive selling and modern promotional devices have created a market for the goods which industry has turned out through mass production methods. And the low costs achieved through mass production could never have been realized had it not been for the creation of mass demand and the added expenditures which had to be made to stimulate that demand. But it must be remembered that while competition in the technique of production almost inevitably reduces costs, comperition in distribution often increases them.

While it is impossible to give any simple and final answer to the question "does distribution cost too much?", it is possible, and useful, to examine those aspects of the present distribution mechanism which seem needlessly wasteful. We may not be able to measure just how inefficient they are; but action to improve the defective
parts does not depend on any such measurement. And to point them out may lead others to examine them more closely.

In this chapter, therefore, an attempt has been made briefly to indicate some features of our distribution system which appear to be too costly-and to give what figures are available to measure them. Some of these costs are due to the very nature of a competitive economy. But to say that they arise from competition does not mean that they cannot be cut without scrapping the system. There are other costs resulting from inefficiencies of management and still others for which consumers themselves are to blame.

## 1. The Costs of Compettition

The competitive system gives free rein to all types of enterprise, and it is assumed that in the long run the more efficient type will survive. Even though each part of the process of getring goods from the producer to the consumer may function quite efficiently in its own sphere, costs may be made larger by an overlapping and pyramiding of efforts. Apparently this is what has happened in many lines of trade. Manufacturers have felt that it was necessary for them to create a consumer demand for their product in order to bring pressure on wholesalers and retailers to carry their merchandise. With the growing emphasis placed by manufacturers in recent years on the establishment and promotion of their own national brands their selling and promotional expenses have risen sharply. Witness the estimated 60 per cent increase in selling costs of manufacturers since 1900, reported earlier in this chapter.

## a. DUPLICATION OF SALES EFFORTS

Consumer goods leaving the producer's hands may either be sold directly to the retailer or pass through intermediaries. In the latter case the intermediary dealer or wholesaler also incurs substantial operating expenses. In many cases only half of the wholesale expense goes to pay for the essential physical functions of breaking bulk, storage, and delivery to retailers. The other half of it goes to pay for the effort of persuading the retailer to buy. In this way a second layer of selling costs is added to the goods.

Then the retailer, whether the merchandise is bought directly from the manufacturer or from some intermediary, adds his toll to the total of selling costs. It is difficult and often impossible to seg. regate the cost of performing the so-called "essential functions" from the expenses incurred as the result of "selling" effort. Judg. ing from sample cost studies in manufacturers' distribution and in the wholesale and retail trades, however, at least 50 per cent of the total costs of distribution are accounted for by selling and promotional activities, in contrast to the physical task of handling, storing, and delivering goods.
This is not meant to imply that such duplication of effort is wholly undesirable. The creation of demand is an essential function and it is difficult to see how our present economy could get along without it. Granting that it is necessary, however, the duplication and pyramiding of selling effort has been carried so far in many cases as to involve real economic waste.
That economies can be effected by eliminating some of the selling activities along the line has already been shown. The discussion of food and drug distribution costs in Chapter 6 showed that both corporate chains and retailer-cooperatives were able to perform the wholesaling function at lower costs than independent wholesalers. Their economies result from the fact that they do little or no "selling." It is also quite probable that the selling costs of most manufacturers supplying these large-scale organizations are relatively low. Obviously, exact information on this important question must await more realistic and careful cost analysis and allocation.

It is of immediate concern to consumers, however, that in the fields which they have invaded, the chains and retailer-cooperatives have brought lower prices resulting in part at least from a marked reduction in the combined costs of performing the wholesaling and retailing functions. The number of retail stores belonging to such integrated organizations is usually closely geared to the potential business in the area served. Thus each such retail outlet is able to enjoy a volume of business large enough to justify its existence and to insure relatively low operating expense. The same advantage is not enjoyed by vast numbers of so-called independent outlers.

## b. MULTIPLICITY OF OUTLETS

The great duplication of facilities in retail trade must result in a higher total cost of distribution than if outlets were fewer. The high rate of mortality, which continues in good years and bad, indicates that too many firms are engaged in many retail trades. Hundreds of thousands of retailers do a pitifully small volume of business. Even in 1929 over two-fifths of all the retail stores in the United States had a sales volume of less than $\$ 33$ a day. In 1935 about 60 per cent of all retail stores were in this class. Operating expenses for this group of little stores are much higher than those of larger establishments, if anything like reasonable compensation is allowed their proprietors.

Supplying these superfluous retail stores also makes for high distribution costs. Manufacturers and wholesalers obviously could operate more economically if their output could be handled exclusively by stores which do enough business to stock up with large orders, achieve a quick turnover by selling at a small margin of profit, and send in more large orders. It is obvious also that retailers could conduct their operations more economically. Fewer and larger stores would mean fewer and larger purchases and lower costs of physical handling and selling, as well as many collateral savings such as lower insurance and credit and collection costs.

But from the standpoint of consumers, it must be admitted that an ideal system of distribution from the point of view of distributors would have its drawbacks. If all stores were large they would necessarily have to be fewer and farther apart. But consumers want a system which enables them to supply many of their wants in stores which are easily accessible. While the average housewife on the outskirts of the city may go to the big shopping district for her major purchases, she does want a convenient store just around the corner. Here, as in many other phases of distribution, no sharp line can be drawn between real economies and those which would involve sacrifices in convenience on the part of consumers.

## c. SERVICES RENDERED

Much of the cost of distribution attributed to competition comes from extra services extended to buyers. These services are often in-
tangible and difficult to measure. They may be worth all they cost; but in many instances, if all the facts were known, they might well be classed as waste. We do not have the facts, however, to permit a statistical comparison between the costs and values of such services.

By greatly reducing services, costs can be cut substantially, and such savings have been made by many manufacturing, wholesaling, and retailing establishments. That such economies have not been more widespread is apparently due to the willingness of buyers to pay not only for merchandise, but for service and for freedom of choice in buying a wide range of products. Professor James L. Palmer of the University of Chicago lists some of the services which our marketing institutions might eliminate to cut the cost of distribution: ${ }^{5}$

1. They might discontinue selling for credit.
2. They might eliminate free delivery service, reduce the frequency of delivery or narrow delivery zones.
3. They might carry fewer brands of merchandise, thus restricting buyer choice.
4. They might stock smaller quantities of merchandise and refuse to handle slow-selling items, thus forcing many buyers to wait for delivery of orders.
5. They might occupy low-rent locations, thus forcing buyers to go out of their way to make purchases.
6. They might operate on an eight-hour instead of an eleven-to-eighteenhour day, thus concentrating buying in shorter periods but also restricting service.
7. They might sell only in quantity, thus eliminating small-unit purchases.
8. They might locate only in large trading centers, thus inconveniencing people not living nearby.
9. They might confine chemselves to staple merchandise instead of aggressively seeking out new merchandise and new styles, thus reducing obsolescence losses and mark-downs.
10. They mighr withdraw the returned goods privilege, thus reducing selling and handling costs and mark-downs.
11. They might reduce the number of salespeople, thus cutting labor cost but compelling customers to wait to be served.

Professor Palmer makes the guess that a retail store operating
5. The Jowrnal of Marketing, April 1937, pp. 391, 392.
under these conditions could cut the cost of retailing in two-if it had any customers left. He can see no immediate prospect of marerial reduction in the cost of marketing except through restriction in services.

If consistent effort is made to discover the facts savings can undoubtedly be effected. However, as long as the distributor does not know what it costs to sell small accounts, fill small orders, grant credit, accept returned goods or grant allowances for this or that, just so long is he apt to excuse high costs. He thinks he is compelled to render such services because his comperitors do. Thus he argues that they are merely a form of advertising or sales promotion. Such reasoning may be sound enough if he knows what the services really cost, but very few distributors do know what they cost. From the buyer's point of view it is too often true that buyers must pay for elaborate services whether they want them or not. To the buyer who does not require services it seems important to have the costs borne by those who benefit from them.

## d. MULTTPLICITY OF BRANDS

Today the consumer is offered a multitude of products unknown to his grandparents. He must choose among a bewildering array of labels; a host of different brands of cigarettes, toothpaste, shaving cream, cosmetics and breakfast foods are on sale in every retail store. The late George K. Burgess, former director of the Bureau of Standards, estimated that there are as many as 10,000 brands of whear flour, 4,500 brands of canned corn, 1,000 brands of canned peaches, 1,000 brands of canned salmon, 1,000 brands of canined peas, 500 brands of mustard and 300 brands of pineapple. ${ }^{6}$ But only a few brands of each kind of product are carried by any single store. Furthermore, the major part of the consumer's budget is still spent for a multitude of products-ranging from household furniture and hardware to cloching and many staple foodstuffs such as meat and vegetables-which are sold to him in buik or simply on the retailer's recommendation.
Four major charges of high costs due to the multiplicity of brands

[^59]have been made: (1) they confuse rather than enlighten the consumer and make his purchasing less efficient than if the number of brands were greatly reduced and each brand were identified with recognized specifications or standards of quality; (2) the large number of brands reduces manufacturing efficiency by permitting inefficient plants to survive and by preventing a concentration of production in large plants which enjoy the economies of mass production; (3) distributors, particularly retail stores, are required to tie up large amounts of capital in carrying a needed supply of each type of branded goods; (4) competitive national advertising and the promotion of almost identical products under different brands is a large and unnecessary expense which needlessly increases costs and prices.

## The Effects of Multiplicity

Mere wonderment as to which of so many brands are best suited to particular needs may not trouble consumers very much. The retail buyer may pay no attention to labels, trusting to the dealer to understand that he wants good merchandise. If there is a great difference in price between one brand and another, buyers may assume from lack of information that there is a corresponding difference in quality. Sometimes-but not always-this is true. But the consumer who values quality above everything may choose the highest-priced product, quite unaware that some distributors understand this trait of human nature and price inferior goods accordingly.

Ordinarily, however, the consumer has to consider prices. Pri-varely-branded goods are commonly sold on a highly competitive basis with price the primary consideration. Goods sold under private brands, however, can be distributed as economically as if they were not branded at all, and consumers would have to pay the same price in either case. Goods must be labeled and their contents must be identified in some way, and the additional cost of adding the dealer's name to the label is inconsequential. What is important to buyers is whether content and quality are as represented and whether the description is one which can be readily understood.

The existence of a multitude of private brands probably has little effect on the efficiency of manufacturing. Each of the 10,000
brands of wheat flour is not produced in a separate mill or according to a separate formula. Production costs for flour are little if any greater than if fewer brands existed. As a matter of fact, only 4,022 establishments in all are listed by the Census as producing flour or any other kind of grain-mill products, and 70 per cent of such products is milled by the 232 plants doing a business of more than $\$ 1$ million annually.?

Hundreds of wholesalers and chain store organizations buy identical products from a single mill, each one having his merchandise labeled with his own brand name. This practice is also common in the canning industry, in the apparel trades and in many other commodity lines and is often followed even by producers who distribute part of their output under their own nationally advertised brands. Clearly, if no advertising is involved, it costs little more for a manufacturer to produce and package the same product under a hundred brands than under a single brand or no brand at all.

Furthermore, carrying a modest assorment of private brands may add little to inventory expense. Since consumers often (but not always) attach no special value to any particular private brand the dealer's only concern is to be able to offer his buyers a sufficient assorment of sizes, styles, and qualities of the product, whether this necessitates stocking several private brands or only one. On the whole it is doubtful whether the apparent multiplicity of brands is responsible either for excessive costs in manufacture and distribution or for consumer ignorance or inefficiency in buying. The latter undoubtedily exists; but it is due chiefly to the fact that consumer goods are not available under standards and specifications, rather than to the variety of names under which they appear. This is discussed later in the chapter.

## e. COMPETITIVB ADVERTISING

What has just been said about privately branded goods does not apply to articles sold under the manufacturer's national brand. The selling of these goods, especially those of almost identical nature, involves a large amount of competitive advertising. Among the kinds of goods whose production cost and inherent qualities do not
vary greatly from one brand to another but which are advertised extensively by the manufacturer, ate cigarettes, toothpaste, shaving cream ${ }_{2}$ packaged medicines, cosmetics and many other drugstore products, bread, gasoline, and possibly automobile tires. The list of nationally advertised products is of course much more extensive and includes many products like automobiles and radios which vary widely in quality.
Wherher or not real differences exist, the manufacturer uses national advertising to create consumer demand by extolling the special virtues of his own product. Much national advertising makes no serious attempt to emphasize the supposed superior features of a product but is designed merely to create "consumer consciousness" for the particular brand. Whatever the nature of the advertising, the consumer often pays more for a nationally advertised branded article than for a similar article sold under a private brand or no brand at all. Being forced to choose among several private brands of a commadity like canned corn costs consumers lirtle or nothing, but the cost of having a choice among advertised brands of toothpaste, for example, may be appreciable.
Not only do buyers pay more for branded articles than for unbranded ones; but, curiously enough, they often pay more for the latter than if the branded article were not advertised. Because of advertising and other expenses-and often higher profits-on the advertised product, it carries a bigh price. Since this price rather than cost or inherent value establishes a standard of value in the consumer's mind, the retailer, buying an unbranded substitute at a much lower price, is able to sell it at a higher mark-up than he otherwise could.

## Pros and Cons of Advertising

Advertising as a technique of selling is clearly necessary in the marketing of many kinds of goods. It is a useful selling method which, like other selling methods, can be used for bad as well as good ends. It may, and often does, make large-scale low-cost distribution possible. It may, and usually must, result in maintaining standards of quality. And it may, and often does, create a demand not only for the advertised product but for many unadvertised sub-

## Some Reasons for High Costs

stitutes. It is not safe to conclude that even substitute brands, now able to take advantage of the "price umbrella" raised by national advertisers, would be sold more cheaply if the national advertising were to stop. Perhaps the general demand created by advertising would also stop. Moreover such by-products of advertising as the radio and magazines and newspapers may be worth more to the consumer than the added cost of the advertised commodities.
Advertising has undoubtediy widened the market for automobiles and other products so gready that the ultimate price to the consumer is far less than it would have been without advertising. Clarence Francis in 2 recent address before the American Marketing Association said: ${ }^{\text {B }}$
When General Foods first took over the Jell-O Company, Jell-O was selling to the consumer for an average of twelve cents per package. Today the prevailing price is around five to six cents per package. The whole Jell-O enterprise was developed largely through advertising resulting in large production and wide distribution, with attendant economies. The total advertising cost at present is less than one-half a cent per package.

Few will question the important social aspects of certain types of advertising. Advertising is needed to educate the consumer to use new products, particularly those of a technically complex nature. Air conditioning, hydraulic brakes on motor cars, the importance of vitamins in diet have all been made familiar to the consumer through advertising. But it is just as true that the consumer has been bombarded with bombastic claims about useful products and with a lot of nonsense about useless or harmful ones. Some advertising has undoubtedly led buyers to use foods that were not good for them. Some advertising has pushed harmful laxatives and patent medicines the sale of which to the American people is enormous. Yet a good deal of modern competitive advertising makes for better living by encouraging the use of healthful products and promoting habits that are socially desirable-such as the regular brushing of one's teeth.

Comperitive advertising deserves a critical analysis so that the more useful features may be retained and the harmful and waste-
8. From an address by Clarence Francis, President, General Foods Corporacion, before American Marketing Associacion, Washington, D.C., May 20, 1938.
ful ones eliminated. That this point of view is actually being adopted by advertisers is evident in the self-criticism apparent in trade association meetings of recent years. It is shown in a practical way by the fact that the Association of National Advertisers is sponsoring a thorough and impartial survey of the economics of advertising which is being conducted by the Bureau of Business Research of the Harvard Graduate School of Business Administration.

## 2. The Consumer and Distribution Costs

Consumers have been both the victims and the cause of higher distribution costs. The urbanization of the population, higher standards of living and the consequent refinement and elaboration of consumer tastes have been accompanied by a demand for new and costly services and a wider range of choice. Producers and distributors feel that they must cater to this demand or go out of business. On the other hand, it was some enterprising producer or dealer, perceiving the possibilities of increased sales, who first offered each one of these innovations to the public. The increasing cost of distribution which results from them cannot be set down as wholly the fault of either consumers or distributors.

## a. NEW DEMANDS AND SERVICES

Consumer insistence on purchasing small amounts of staple commodities, for example, increases the cost of packaging and selling. In part this insistence on small sanitary packages is the result of national advertising and sales promotion, which aim to attach to staple commodities intangible and often imaginary values in the form of sanitation, convenience, and so on. In part the consumer's insistence on small orders is due to changes in our housing habits. We live in smaller aparments and have less storage space than even a quarter of a century ago. As a result consumers-whether because of sales pressure, changing habits or both-have shifted to producers and distributors a service which they formerly performed for themselves-the storage and preservation of commodiries.

Illustrations of higher costs of distribution due to new commodi-
ties and new services, as well as to consumer caprice fostered by modern advertising, can be found in women's apparel. Thirty or forty years ago women bought piece goods by the yard at the store and had them made up into cloches at home. Today the typical woman consumer expects to buy a finished dress suited to her own taste and conforming to prevailing styles. This change obviously burdens distribution and increases the price of the finished product. It is more costly to distribute thousands of dresses, often with only one of a model or pattern to be sold within a given locality, than it is to sell staple yard goods. By shifting the making of dresses from the home to the factory, production costs have undoubtedly been reduced; but by making it necessary to distribute a more highly finished and individualized product through the regular channels of trade the cost of distribution has been greaty increased.

## The Cost of Variety

The consumer who has been made style conscious feels compelled to buy more arricles and to discard them or trade them in sooner than he otherwise would. Women's apparel no longer wears out before being thrown away, and the cycle of obsolescence has likewise been shortened for many other kinds of goods. The increased emphasis on color harmony as an element in style is another trend in the same direction.

Consumers demand more variety today than before. A woman who buys a dress from a deparment store and sees another dress like it at the next party she goes to feels outraged. The result is that manufacturers of medium- or high-priced dresses find it hazardous to sell more than one dress of a kind in each small town, and sales in larger towns are also limited. Clearly, distinction is a larger element in style goods than inherent quality. Or the consumer may want to "keep up with the Joneses." He buys a new automobile because the man next door has bought one; he wants something to boast about, if possible-more gadgets, more miles per gallon, more speed. His wife may buy things for the home with the same motive-desire to keep up with the neighbors or better still, to excel them.

Of course producers and distributors welcome this psychology
and do all they can to promore it. They exercise every ingenuity to invent new sales appeals-frequently irrelevant to the value of the product-which provide the appearance of individuality and originality.

The tremendous variety of styles and their rapid obsolescence raises costs all along the line. Manufacturers must carry a wider assormant of raw materials, purchase them in smaller quantities and provide increased factory capacity to fill rush orders. Wholesale and retail distributors must incur greater operating expenses in carrying larger and more varied stocks of goods and run a much greater risk of inventory loss through failure to clear stock before a style change necessitates a mark-down.

The Department of Commerce notes color obsolescence as "one of the principal factors slowing down turnover" in the women's silk and rayon hosiery field. The Holeproof Hosiery Company carried 480 items in 1920 and 6,006 in 1927. Leverett S. Lyon reports that a leading Chicago retailer of shoes increased the number of styles of men's shoes carried from 175 in 1920 to 375 in 1928 and in women's shoes, from 500 in 1920 to 1,000 in 1928. A large mid-dle-western wholesale dry-goods house estimated that " 20 per cent of all its items become obsolete before they can be sold."9

## Returned Goods

Another cause of higher costs created by consumers' buying habits is the return privilege of department and other stores. A customer who orders several articles on approval with the intention of buying only one, or who returns an article three or four times because it does not suit, adds to the costs of distribution. Moreover, she penalizes the customer who does not return goods, but who must nevertheless pay the increased retail price necessary to cover the cost of this service. Returns and allowances constitute on the average the equivalent of one day's sales out of every eight in department seores. ${ }^{10}$

A recent writer has said about this problem:
9. Robert S. Lynd, Recent Social Tronds, Vol. II, p. 879.
10. Carl N. Schmalz, Opoyating Results of Department and Specialiy Stores in 1933, Harvard Bureau of Business Research, Bulletin 92, p. 1.

One cannot be sure of tracing down all the costs that enter into the return of merchandise . . . the cost of making these adjustments, which includes the cost of handling goods at no profit, is nothing compared with the losses accompanying unsalable goods or merchandise that has to be resold at drastic mark-downs. The economic waste involved runs into millions of dollars. ${ }^{11}$

In a comprehensive survey conducted by the Department of Commerce consumers who were questioned blamed themselves largely for the returned goods evil. ${ }^{12}$ Nearly 48 per cent of the women questioned in the city of Washington reported that they were at fault, about 26 per cent said the retailer was responsible, and not quite 16 per cent laid the blame on the manufacturer of the goods. Women reported that over 56 per cent of the articles returned were intended for their own use. In most cases, therefore, greater care at the time of the sale in selecting and firting the article would have avoided the necessity for the return. Obviously this is as much the retailer's as the buyer's responsibility.
"Wrong size" accounted for over 30 per cent of the returns and of these nearly 90 per cent were attributed to "wrong size asked for by customer," according to a study made by the Bureau of Business Research of Ohio State University in 1926. This study states that for the routine handling of a typical return transaction it required not less than 23 persons to perform the necessary operations involved. The cost of each transaction varied from 31.8 cents for a "charge-take sale" to 61.6 cents for a "charge-send sale."

## b. CONSUMER IGNORANCE

Most consumers are not rational buyers. By the trial-and-error process of shopping, usually involving repeated visits to the store, the woman shopper may find something that will do. But she does not realize that she has wasted too much of her own time and nervous energy and that the services of the store in taking back unsatisfactory goods and making extra deliveries, the time of the sales person, complaints, adjustments and damage to merchandise all in-
11. Daniel Bloomfield, The Retwrned Goods Problern, Report No. 240, Alexander Hamilton Insitute, 1933.
12. Conswmor Viewpoint on Raturned Goods, Domestic Commerce Series No. 87, U.S. Bureau of Foreign and Domestic Commerce, 1934, pp. 12, 16.
crease overhead costs which she and other buyers have to pay. In other words plain consumer ignorance increases distribution costs. For this consumers must share responsibility. But the manufacturer and the distributor are also responsible insofar as they help to maintain the consumer's ignorance and exploit his indifference.

Even the careful buyer may find it impossible to learn anything at the time of sale about the actual use value of textiles. The composition of cloth can no longer be determined by the standards of sight and touch which have guided most women in buying dress goods from time immemorial. Certain synthetic fabrics now imitate wool so perfectly that even experts can hardly tell them apart; but the way they wear may be quite different. Many of these imitations are labeled inaccurately or deceptively-some not at all-and sales people frequently know no more about them than the customer.

In recent years, however, certain manufacturers have been pushing a campaign for "truth in textiles." They say that public opinion is insisting that producers and distributors tell the public exactly what they are buying. Insofar as this campaign succeeds the costs of distribution and prices can be reduced.

Differences in price often fail to reflect real differences in quality -either in the products themselves or in the services required to sell them. Although a branded article with the label of a wellknown manufacturer or distributor is usually of uniform quality the consumer has no assurance that the quality is high or low. He can judge that only after he has bought and used the arricle.
A dramatic example of the discrepancy between price and quality has been cited by Dr. Slichter. ${ }^{13}$ Twenty-four cans of corn were bought to be used as a test in a grading school. They were graded by experts according to United States Government standards. One can, judged U.S. grade A, or "fancy," cost 17 cents; fourteen cans graded U.S. grade B, or "extra standard," averaged 14.85 cents each; and nine, graded U.S. grade C, or "standard," averaged 16.92 cents. The price of the poorest corn was higher on the average than that of the medium and almost as high as the one can of "fancy" corn.
13. Sumner H. Slichter, op. cit, p. 551.

Slichter also cites strength tests of five Turkish towels, which showed that a 25 -cent towel was a better buy than one priced at 50 cents and a $\$ 1.00$ towel far superior to a $\$ 1.50$ one. In a test of five other towels the highest-priced towel was fourth in quality. Tests of the warp and filling strength of six suits of men's cotton underwear gave similar results-suits priced at $\$ 1.50$ were of stronger weave than the $\$ 2.25$ and $\$ 3.00$ suits.

## Informing the Consumer

The importance of making readily available to consumers the essential facts about merchandise is a lively issue today. But opinions differ about the best ways of doing it.

The Bureau of Agricultural Economics of the Department of Agriculture favors the grading and labeling of goods according to rigid government requirements. Grades based upon government standards arrived at by test have been officially established for all of the principal raw agricultural products which can be measured by physical test, such as tobacco, cotton, and grain. Some fifty-five kinds of fresh fruits, vegetables and nuts are also graded according to size, color, and maturity. The Bureau bases its standards on actual study of the practices of growers, packers, and shippers of agricultural crops, fruits and vegetables. The use of the government grading service is voluntary and a fee is paid for it. Many states now compel the sale of certain products on the basis of grades, although not necessarily those of the Department of Agriculture.

Some advocates of the Department of Agriculture grading system believe that it could be extended to all or most consumer goods. A bill to require government grade labeling of consumer goods was recently presented in Congress but failed of passage. Opponents of grading contend that a rigid system for all products would be impracticable and unsatisfactory. They say that the education of the buying public to use the labels would be no small task; and that it would be impossible to devise standards flexible enough to cover the infinite variety of qualities which make for consumer satisfaction.

## Descriptive Labeling

Packers have opposed the Department of Agriculture grading system for canned goods on the ground that it is not sufficiently clear and that it might encourage the advertiser to try to convince purchasers that his particular Grade A or B was superior to another packer's Grade A or B. They advocate voluntary descriptive labeling, contending that the label should be "the window of the can," permitting the consumer to find out exactly what is inside. A label used by a packer of prunes, for example, bears the following information:

| Fruit quality | Good |
| :--- | :--- |
| Sweetening | Unsweetened |
| Flavor | Full ripe |
| How canned | Whole |
| Net contents | 6 lbs. 6 oz. |
| Approved for | Table use, pies, preserves |

In the effort to open the window still further, some labels picture the exact size of the fruit or vegetable in the can-for example, the label of one brand of ripe olives which carries a full-size picture of the fruit, states: "This can contains about 46 olives this size. Net weight, 9 oz. or 255 grams. Packed and sterilized under supervision and according to regulations of State Department of Health.'

The advantage to the consumer of this sort of label over lyrical names and highly-colored pictures is obvious. Irs weakness lies in the fact that its use would now be voluntary, as there is no legal compulsion on the producer to label his goods clearly, completely and accurately.
The new Food, Drugs and Cosmetics Act, signed by the President on June 25, 1938, outlaws harmful and adulterated products and requires packaged foods to be labeled to show weight and volume. If canned fruits and vegetables are below certain legal minimum standards (which have not yet been established for most products) the label must so state. Beyond this the law merely requires that the label must not mislead or deceive the purchaser.

## Size Labeling

The need for accurate size labeling of wearing apparel is appar-
ent to every woman who buys ready-made garments, and should be to every retail merchant who complains about the returned goods problem. A shopper asks, for example, for a child's size nine dress in a particular style. Out of nines at the moment, the saleswoman shows an eight, saying that it will probably fit because "this style runs large." The customer may find when she gets home that it does not.

The standardization of sizes of children's garments is the object of an extended research project now being carried on by the Bureau of Home Economics of the Department of Agriculture with the cooperation of the American Standards Association and several associations of manufacturers of patterns and of children's clothing. It is planned to measure approximately 100,000 children of pre-school and school ages, from high, medium, and low income groups and from different racial groups. A report and statistical analysis of the data will probably be published during the present year.

This valuable work will be partly nullified, however, so long as garments are made of fabrics which shrink or stretch in laundering or cleaning. Most shoppers ask about shrinkage, and usually receive a stock answer to the effect that "there have been no complaints," or that the sales person does not think it will shrink. But the size nine becomes size eight in the wash and another dress must be bought-size ten this time, "to allow for shrinking." This prolific source of waste and inconvenience seems wholly without excuse in view of the methods now available for pre-shrinking fabrics. Many consumers now look for the "pre-shrunk" label.

## Other Consumer Aids

The Agricultural Adjustment Administration has inaugurated a Consumers' Counsel Division which publishes the Consumers' Guide, a bi-weekly bulletin. The nature of this publication is evident from a typical table of contents: "Facts for Blanket Buyers"; "Check your Vitamin C"; "Should Consumers Unite?"; "Cooperation"; "Milk Producers and the Cooperative Way." The Department of Labor has a "Standards Section" of a "Consumers' Project," successor to the Consumers' Advisory Board of the NRA and heir

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 Does Distribution Cost Too Much?to the fund of statistical data on consumers' standards collected by that organization. The Standards Section has continued to collect and assemble government standards and specifications on consumer goods.

A few private groups have organized to apply scientific tests to consumer goods and to make known the results to their members. These groups have in most cases small capital and limited laboratory facilities, but their activities have shown what can be done. Consumer's Research, Inc., and Consumers Union of U. S. Inc., undertake to make their own tests of products which they name specifically in their reports to subscribers, with detailed comparisons of ingredients, performance, quality and so forth, of the different brands of a given product. Another organization is Cooperative Distributors, Inc., which publishes information on commodities, and functions as a consumers' cooperative in the sale of standardized arricles.

Some progressive deparment stores have recognized the advantages of promoting consumer interest in quality, and have set up their own bureaus of standards. The Consumer-Retailer Relations Council, sponsored by a few of the important retail interests, has made some headway toward defining and establishing standards for various kinds of consumer goods. Women's clubs and women's magazines are also increasingly active in the field of consumer education. Much remains to be done, however, both on the part of distributors and organized groups of consumers before the retail customer can approach his task with sufficient information to be able to discharge it wisely. Ignorance on the part of consumers and their consequent failure to get the most for their money is sometimes due to sheer stupidity, but more often to lack of information rather than lack of intelligence.

## 3. The Costs of Inepficiency

Some of the high costs of distribution excused by distributors on the ground that "comperition forces me to do it" are really due to ignorance of their own costs. Distribution in the modern sense of merchandising and demand creation is of recent origin. It has de-
veloped rapidly an amazingly effective technique in selling a multitude of new and varied products. But in the hectic struggle to educate the consumer and sell more goods distribution has lagged behind in the application of scientific methods to the study of operations and the control of costs. Also, it must be recognized that the task of determining and allocating costs in distribution is much more difficult than in production. But ignorance of costs breeds high costs, or at any rate prevents high costs from deing detected and reduced.

In the early days of machine industry production was conducted with the same lack of knowledge of the cost of its various processes as is distribution today. But since then careful studies have gradually been made of most of the processes in production. The progressive manufacturer today is likely to have accurate data on how much any one of the processes in his plant coses him and how much time is consumed in performing it. This is by no means universally true, but even in the less efficiently run plants there is more genuine information about production costs than about almost any part of the distribution process.

## a. DIFFICULTY OF MEASURING COSTS

It is relatively easy to measure the material and direct labor costs in making and packaging a common article like a tube of toothpaste. Such a product is made under standard conditions and the amount of raw materials, labor and machine time required to produce a single unit can be determined accurately. Even such factory overhead costs as inspection, supervision, record-keeping, taxes, and insurance can be allocated with reasonable validity. A new enterprise could closely estimate how much it would cost to produce such a standardized product if a million customers could be induced to buy it regularly. But what it would cost to create this demand cannor readily be computed. Nor would it be easy to compute the cost of distributing and selling the product to the million potential users.

But that is not the whole story. When the manufacturer sells 10,000 tubes to a wholesaler, the wholesaler-although he may have a cost accounting system - is not likely to know how much it
costs him to handle this particular commodity. He probably knows what it costs to store this toothpaste together with all his other stock, and what it costs to distribute the whole volume of merchandise sold by him to a thousand druggists. But this is an average figure and takes no account of important differences in cost of selling different items, of filling orders of different size, of selling to different customers and of shipping goods into different territories. And these differences are the vital elements in wholesalers' costs.

So also when the toothpaste is delivered to the retailer. He adds it to his inventory, which includes hundreds or thousands of articles bought from different wholesalers or manufacturers. If he thinks about analyzing his costs at all he is confronted with a complex job. The average store is not large enough to warrant specialization of personnel or space. Hence the allocation of these costs in retailing is even more difficult than in wholesaling.

The relatively large proportion of total distribution expense represented by the costs of selling, advertising, and promotion are usually allocated to different products on the basis of their dollar volume of sales or their gross profits. In other words these expenses are charged roughly in accordance with the distributor's selling price or mark-up on each commodity. It is quite unlikely, of course, that this method will result in allocating expenses according to actual costs incurred, since the cost of selling any particular article may vary widely from the average cost of selling all products carried by the firm. Often of course there is a rough and ready recognition of these differences by charging a smaller gross margin and paying a lower selling commission on items with a rapid turnover. Margins are rarely established, however, as a result of a commodity-by-commodity and customer-by-customer analysis of actual costs incurred.

## Problem Being Attacked

But some progress in this direction has already been made, particularly in the allocation of internal handling costs in wholesale and retail establishments. A good example is furnished by the Louisville Grocery Survey conducted by the United States Depart-
ment of Commerce. In this study six different operations or functions in wholesale establishments were identified: investment, storage, checking, handling, promotion and reimbursement. ${ }^{14}$ Similar studies have been made by the department in wholesale confectionery, in retail and wholesale drugs and in the retail grocery business. Some of the larger and more progressive wholesalers and retailers have developed their own methods of cost allocation, while others are following the patterns suggested by the Department of Commerce.

The Standard Oil Company of New Jersey in recent years has applied the time study principle, long familiar in factory management, to an analysis of both wholesale and retail operations in the distribution of gasoline and other petroleum products. In making these studies, a checker with a stop-watch times and records the specific operations of each person employed in handling the firm's products. ${ }^{15}$ Detailed information has resulted from these studies on such matters as the average amount of sales, the number and type of customers, the percentage of idle time and free-service time of employees and the time required to fill orders of various kinds. These data have been extremely useful not only in establishing costs and prices but also in solving operating problems. Dr. Surface states that "the cost of these studies has been paid for several times over in the influence which they have had in reducing obviously unprofitable operations."

Another approach to the same problem has been made by the Dennison Manufacturing Company, which has developed a method of allocating the cost of handling orders. It is now engaged in establishing the basis for proper allocation of sales solicitation costs among different sales territories and types of customers. Information has been obtained from the accounting records of selling expense for the company's five major sales regions. Call-cards made out by the company's salesmen are also used. These give the amount
14. Wholesale Grocery Operations, Lowispille Grocery Survey, Distribution Cost Studies No. 14, U.S. Bureau of Foreign and Domestic Commerce, 1932, p. 10.
15. The methods and results of these studies were explained fully by Dr. Frank M. Surface in "Time Surdies in Commercial Research Work," published in The Society for the Advantememt of Management Jownal, January 1936, Vol. I, No. I.

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of the order, the length of time in making the call, and other information for each salesman's visit. ${ }^{16}$

This analysis "must be regarded only as a very initial step along the long road to the development of adequate selling costs." But it has already shown important variations in the cost of salesmen's calls on various types of customers in different regions and in the amount of the order received at each solicitation. This study is expected to provide a sound basis for computing selling costs and also to reveal opportunities for important economies.

## b. ZEAL FOR VOLUME

The emphasis on volume, so characteristic of American business in the twentieth century, has been responsible for increased costs in distribution. A wholesale house or a department store, like a factory, must meet fixed costs for taxes, rent, light, heat, etc., regardless of the volume of sales. As the sales volume increases, these fixed costs become less per dollar of sales. The temptation is great to get savings through larger volume. But these savings are often more than offset by a disproportionate increase in the direct selling costs necessary to get the added business.

Acceptance of smaller orders, doing business with smaller and less reliable customers, granting additional services, sending salesmen into more remote and less concentrated markets and the use of more advertising and promotional efforts-all these increase costs. The distributor, like the farmer, is subject to diminishing returns in extending his market into less fertile territory. It is often actually to the financial advantage of the distributor to curtail vol-ume-by eliminating unproficable lines, dropping small or unprofitable accounts, refusing small orders, and abandoning highcost sales territories.

## High Costs of Small Orders and Small Accounts

A number of studies made by distributors and by various research organizations give striking evidence of the high cost of selling

[^60]small accounts and handling small orders. In 2 study of wholesale jewelers, made by the Department of Commerce for the years 19281930, various expense items were found to be from two to four times as great per $\$ 100$ of sales when the average annual sales per customer were less than $\$ 250$ as when they were $\$ 750$ or more. Travel expenses, for example, were $\$ 3.81$ compared to $\$ 1.91$; packing and shipping wages were $\$ 1.25$ compared to $\$ .27 .{ }^{17}$
One wholesaler made a careful study of his costs and found that nearly half his customers were unprofitable to him. These customers were dropped, sales territory was reduced about 33 per cent, with savings in traveling salesmen's expenses, and slow-moving lines were dropped. As a result, the volume of sales was reduced by a third. But after a three-year operating test in the restricted sales area with a reduced line of goods it was found that net profits had increased 35 per cent. Operating costs were reduced to a level below the average for similar firms in this particular field. ${ }^{18}$

A study by the Deparment of Commerce of the operations of manufacturing confectioners in certain western states reveals the unprofitability of items with a small average value per order. Items ordered by customers over fifty times in a six-month period, with an average value per order of only $\$ 2.78$, showed a net loss of two cents per order. Items ordered less frequently were bought in larger quantities up to an average of $\$ 5.89$ and showed appreciable profits and relatively lower distribution expenses per order. The unprofitable part of the business, however, amounted to nearly threefourths of total sales. The same study revealed that a 40 per cent gross margin was required to enable the distributor to break even on a $\$ 2$ order, while only a 25 per cent margin was needed on a $\$ \$$ order. ${ }^{19}$

Eliminating unprofitable customers and reducing advertising expenses turned a deficit into a profit for the Chicago mail-order

[^61]house of Spiegel, May, Stern \& Co. After severe losses during the depression, the concern reorganized its sales plan. It cut down the number of catalogs mailed to prospective customers from 2.7 million to a more selective list of 1.8 million. It concentrated its efforts on lines with the greatest profit margins and it refused orders under $\$ 5$. This policy of selling more goods to fewer customers helped to turn a loss of $\$ 300,000$ in 1932 into a profit of $\$ 1.3$ million in $1933 .{ }^{20}$

Analysis of his business by one electrical products distributor showed that 309,000 orders out of 772,000 , or 40 per cent, averaged over $\$ 25$ per order. The average profit on these was $\$ 10.12$ per order, while orders under $\$ 25$ showed an actual average loss of $\$ 1.64$ per order. ${ }^{21}$

Although selling small accounts and accepting small orders are frequently expensive practices in an otherwise profitable business it is not necessary to conclude that the only remedy is to eliminate the small customer. As Professor Elder says: "The answer to the small account, small order problem is not always to drop the small customers. Sometimes they can be made profitable by a special method of handling them. Dennison has installed a small order department which solicits business by mail from customers too small or too isolated for salesmen to call on. The Western Electric Company does not decline small orders, but handles them by a different routine which involves only about 25 per cent of the usual clerical labor. The scattering market involves in the aggregate a tremendous volume. The man who can work out a method for selling goods economically to the 50 per cent of the population living in towns of less than $\mathbf{2 5 , 0 0 0}$ population will make millions.' ${ }^{22}$

## C. POOR MANAGEMENT IN RETAILING

Our system of free comperition insures the right of anyone to enter business whether he is qualified or not. A relatively small amount of capital is required to start a retail business. As a result thousands of store owners poorly equipped by background, train-

[^62]ing and financial resources have been brought into the field. Because of these fundamental deficiencies and because of the small amount of business available for the vast majority of newcomers, the death rate of small stores is enormous.

## Retailer Mortality

The average life of American business concerns, inclusive of manufacturers and wholesalers, is only five years. Although separate and comprehensive data are not available for retailing alone it is safe to conclude that the life expectancy of retailers is certainly no longer-and probably shorter-than the average for business in general.

A number of detailed studies ${ }^{23}$ of retailer mortality have been made over the last twenty-five years. All of them show the seriousness of the problem. In Pittsburgh, for example, between 1925 and 1934, an average of 20 per cent of the grocery stores studied by Professor Boer went out of business every pear. In other words one out of every five stores in business at the beginning of a year passed out of existence before the end. Of course new entrants came into the field, so that the total number at the end of the year was about the same as at the beginning. The annual mortality rates in the shoe, hardware and drug trades were respectively 16.3 per cent, 10.1 per cent, and 9.4 per cent.

In a comprehensive study ${ }^{24}$ made in Buffalo for the period from 1918 to 1928 the ranking of these four trades was the same, but the percentages of mortality were higher than those in the Pittsburgh study. The mortality of grocery stores was 35.9 per cent; shoes, 21.8 per cent; hardware, 16.2 per cent; and drugs, 12.6 per cent. These were sample studies, however, and the difference in the figures may be the result of somewhat different methods of research.
The first year in business, of course, is the hardest. Of the grocery stores studied in Pittsburgh, nearly 47 per cent were unable to complete one year of life. Nearly 40 per cent of the newly-opened

[^63]shoe stores went out of business before the end of one year, while the "infant mortality" of drugstores was 31 per cent, and of hardware stores, 28 per cent. In three out of the four trades in Buffalo it was somewhat higher.

These figures show withdrawals from business, not necessarily failures. Business may be discontinued for many other reasons than failure, such as death, ill health or retirement of proprietors, loss by fire or changes to other lines of business. But Professor Nystrom estimates that only about 25 per cent of the withdrawals are due to these miscellaneous causes. Most, or all, of the remaining 75 per cent must be due to failure. ${ }^{2 s}$

He also states that the rate of failures according to the various causes were about the same over a forty-one year period. Direct competition with other stores, popularly thought to be a common cause of failure, accounted for a little less than 3 per cent of all the failures reaching the bankruptcy courts in 1931. Furthermore, failures due to comperition do not seem to change much irrespective of prosperity or depression. He concludes that a very large part of all business failures are due to poor management, even though ascribed to undue competition, changes in business conditions, lack of capital, or other reasons. In most cases these are only symptoms of the more deep-seated difficulty of weak or poor management. Parenthetically it may be said that such terms as "competition" and "poor management" are relative and not subject to strict definition. It would be very difficult to determine the causes and degree to which each is responsible for a failure.

Retailer mortality entails a heavy loss for the economic system. Not only is the capital of proprietors wiped out but losses are also often sustained by creditors. In addition to direct money losses are many other undesirable effects. For example, stable competitors are injured by the fact that failing proprietors cut prices in an effort to stave off the evil day; and then, when the business is closed out, the inventory is often sold at sacrifice prices.

## Tangible Improvements

Concrete evidences of poor management in retailing are almost
25. Paul H. Nystrom, op. cif., pp. 150-154.
too numerous to mention. Among the more apparent are poor location of stores, bad layout, display and lighting, improper selection of merchandise, slow turnover of stock and inadequate inventory control, excessive credit losses, losses from returned goods and costly services, poorly trained personnel, inefficient advertising and promotion, improper pricing policies, and last, but most general of all, inadequate knowledge of costs.

Studies by the Department of Commerce and other agencies reveal many instances of these sources of high costs and show the savings which have come from intelligent efforts to reduce them. The Louisville Grocery Survey, conducted by the Department of Commerce in cooperation with the grocery trade, developed various improved merchandising methods which have been of great help to the grocers there and elsewhere. It was found, for example, that many stores were clogged with slow-moving goods. This retarded business, tied up capital, and increased expense. To quote from a summary of results from improving merchandising methods in this respect alone:
A direct result of inventory improvement reported in one store was to jump sales from $\$ 80,000$ to $\$ 96,000$. Another increased its volume 20 per cent. A third store maintained business at the former level but handled it with reduced expense. A fourth, though suffering a drop in sales due to general conditions, has been able to ring up profits at the normal rate. One store which lost money during the survey has since, by improved operation of its meat department, become able to meet all competition and turn a net profit. ${ }^{26}$

In discussing the work of this survey in general and its results for local storekeepers, the Louisville Board of Trade made the following comment some time after the completion of the survey:

[^64]commodities and customers' orders to the end that they maintain smaller inventories, turn them over more frequently and are gradually eliminating unprofitable items and customers. Credit practices are being improved markedly. In fact the Louisville Grocery Survey has made known to hundreds of our tradesmen the essentials of successful merchandising and has brought to them inestimable benefits.
It is significant chat during 1929 fifteen groceries were forced into bankruptcy while in this first full year following the Survey only four suffered a similar fate, in spite of the most severe financial depression Louisville has experienced in a generation. We believe that this remarkable improvement duting these very trying times to be a direct result of the Survey. ${ }^{27}$
A survey conducted in Alabama by the Department of Commerce in cooperation with the University of Alabama showed a close relationship between efficiency and profits on the one hand, and proper store arrangement and display of goods, adequate record systems and modern merchandising systems, on the other. This study covered various kinds of retail business. The report of the survey makes the following among many interesting comments:

As examples of extremely poor business methods encountered, it might well be pointed out at this time that eight merchants were found who had never taken a physical inventory of their merchandise, or else had not done so for several years. From information obtained, it was indicated that all of these merchants were losing money. It was also found that eight merchants had never prepared a financial statement of their business. Seven of these were losing money and the other was just breaking even. The fact that practically none of these merchants was making money is direct evidence that unintelligent business methods go hand in hand with poor business.

It is not surprising that 83 per cent of the profitably operated stores kept well up-to-date accounts, and that 88 per cent of the proprietors were able to locate without delay the detailed information required by the questions asked by the reporter. ${ }^{28}$

The examples cited above can hardly be regarded as typical of conditions prevailing throughout the retail business but they un-
27. Letter to the Department of Commerce.
28. F. K. Hall, Survay of Retall Managoment Practices, Domestic Commerce Series No. 81, U.S. Bureau of Foreign and Domestic Commerce, 1933, p. 78.
doubtedly reffect factors responsible for widespread inefficiency and failure among retailers. Students of distribution as well as the leaders in retail merchandising agree that one of the prime causes of waste and loss in retailing is the lack of training and incompetence of the individual merchant.

## d. POOR PLANNING

High selling costs are sometimes due not so much to inefficiency in performing distributive operations as to attempting an impossible task. If the product is poorly designed, inherently weak or ineffectively packaged, or if the market is too small to support the needed organization, distribution is bound to be costly. Although distribution deals with many imponderable factors, unnecessarily high costs are often incurred which could have been avoided by adequate planning in the light of easily obtainable facts.

The waste in trying to market something that people do not want-or cannot be made to want-reflects a fundamental failure on the part of management to size up the desirability of its producr. For example, an inventor developed a clothing accessory which he believed would have a large marker if consumers were acquainted with its merits. When clothing manufacturers were approached with the suggestion that they incorporate the device in their garments they denied its general appeal and refused to buy. The owners of the patent then decided to build up consumer demand and thus indirectly force manufacturers to use the product. Thousands of dollars spent on advertising were wasted, however, since the product did not have inherent appeal and consumer demand could not be created. If a fraction of the money spent on advertising had been used to determine consumer reaction before the product was put on the market this waste might have been avoided.

A food manufacturer added a new line of products comparable with that of a compering manufacturer who had made a success in the field. The new product was unsatisfactory, however; it spoiled more readily, was not as attractively packaged as his competitor's and sold at a higher price. In spite of the obvious disadvantages of his product he attempred to promore larger sales by advertising
direct to the consumer. But advertising was not enough. It could not offset the fundamental deficiencies of his product and enable him to market it profitably.
A careful cost and market analysis by a large jobber of a woman's apparel accessory revealed a whole series of wastes which had brought the company almost to bankruptcy. The firm had carried 230 designs of this accessory; but the analysis disclosed that 80 per cent of its sales and a still larger share of its profits were accounted for by 30 of these designs. It was also discovered that losses involved in trying to cover certain territories ate up the profits made in other territories. Unprofitable territories as well as many unprofitable small accounts were abandoned, with favorable results. Increasing the volume of sales normally reduces costs, but increasing the number of too-costly sales obviously does not.

## Knowing the Market

Even though a product has consumer appeal, is attractively packaged and satisfactorily priced, a selling program which does not rest on a thorough knowledge of the market is likely to be costly. A sound selling program requires an analysis of the buying habits of purchasers-the time, quantity, and frequency of their purchases. Moreover, the characteristics of the potential users must be determined. What is their purchasing power, occupation, age, sex, taste, and educational level? To what size family do they belong, what income class, what language or racial group? Where are they located, in town or country, and in what region of the United States? And lastly, in what trade areas and from what sources do they buy? All of these facts are essential to sound planning in marketing a new product.

Progress toward the solution of these problems is being made. Research methods for determining consumer reactions and acceptance in advance of adding a new item to the line have been developed, and many manufacturers never try to market new products without pre-testing them. By establishing sales quotas through market and statistical research many progressive manufacturers and wholesalers are able to establish a factual basis for sales and advertising budgets. Current or periodic analysis of sales makes it
possible for such distributors to keep a continuous check on the efficiency of their efforts.

## e. PRICE POLICIES

The price policies of most manufacturers and distributors follow a conventional pattern. In the case of manufactured goods uniform percentage mark-ups are often applied to cover all expense and profit except direct factory costs. Because it costs twice as much to make one article as it does to make another, it seems to be assumed that it will cost twice as much to distribute it. Actually, it may, or it may not. If it does not, the purchaser pays more for the product than he should. For him, at least, the cost of distributing that particular article, measured by the price he pays, is certainly too high.

Under this conventional mark-up system, for example, one dress may be priced at $\$ 19.75$ and another at $\$ 39.50$. Since the women who have $\$ 20$ to spend far outnumber those who have $\$ 40$, selling the lower-priced garment involves less effort and expense. In the first case, as shown by the cost analysis in Chapter 2, the woman pays $\$ 7.17$ for the making of the dress and $\$ 12.58$ for its distribution. In the second case $\$ 12.50$ of the $\$ 39.50$ purchase price goes for making the dress and $\$ 27$ for distributing it.

Whether it actually costs more than twice as much to sell the better dress is something the retail merchant does not know. The chances are that the retailer is merely following a practice which will enable him to cover costs and profits in general, but which has no reference to the actual cost of distributing a particular article. Even if it does cost $\$ 27$ to distribute the better dress, this only means that it costs that much to distribute it at the price quoted. What it would cost to distribute the better dress at a lower price, with the larger volume a lower price might evoke, is usually no more than guesswork. Conceivably the better dress could be sold in much larger volume and therefore with lower unit costs of distribution at the price of the cheaper dress. On the other hand, it is a well-known fact that many retail articles sell in better volume at a conventional price which buyers are accustomed to paying than they would at a lower price. The point is that little is known about the whole question of pricing policy.

## As one department store official recently said:

We know that in both manufacturing and distribution $t 00$ much pricing is wholly conventional and traditional, but we are not always willing to recognize the need for a more scientific approach to the problem of pricing. Too often we set a price first and then start out to find the facts or theories which justify our action. Correct pricing may be somewhat of an art, but there are few business arts which cannot be improved by scientific experiment and observation. The biggest job ahead of us in marketing is the promotion of a more intelligent art of pricing. 29

## Pricing for the Market

Obviously an accurate knowledge of manufacturing and distributing costs is essential to sound pricing. The cost of making and selling a product is the long-run determinant of the price at which it can be sold. But other important factors may fix a price above or below cost plus a reasonable profit. A manufacrurer or distributor selling a variety of products may introduce a new article at a price involving a temporary loss in order to expand consumption to a profitable volume. On the other hand, patents, the goodwill of a trade mark, control of supply or some other advantage may enable him to set a price which more than covers costs and a reasonable profit. Where demand falls off or an over-supply exists goods may have to be cleared at a loss in order to reduce overhead or replenish cash reserves. On the other hand a boom demand and shortage makes possible prices which yield more than normal profits.
Competitor's prices for an identical or comparable product, of course, establish price limits for a product irrespective of its costs of production and distribution. Market conditions are so important in derermining the possible sales volume at different price levels that merchandise managers frequently contend "that correct pricing cannot begin at factory door cost and 'work backwards' to the consumer price." Instead, it is claimed, market analysis must be employed to reveal the final price which will bring maximum sales volume. The product must then be designed to sell profitably

[^65]at that price. But whatever the determinants of price may be it is clearly essential that the manufacturer and distributor have a detailed knowledge of production and distribution costs-if for no other reason than to eliminate an unprofitable article or to redesign it.

## Lower Prices and Higher Sales

The social and economic desirability of passing on to the consumer in the form of lower prices the fruits of business economies has recently been emphasized by the studies of The Brookings Institution. ${ }^{30}$ It is futile to argue of course that under a competitive system, with self-interest the guiding motive, the price of an article should be reduced for the general welfare. The manufacturer or distributor cannot be expected to set a price to yield less than maximum profit on his entire volume. Nor can he be expected to lower prices unless he expects them to result in a larger volume of sales and an increase in his total profits. But the dead hand of traditional and orthodox pricing may prevent the individual businessman, or indeed an entire industry, from realizing where self-interest really lies.

Competition is supposed to bring about a close adjustment between costs and prices. But the process of adjusment may be long delayed by the powerful influence of convention, inertia, and blind imitation. The businessman, no less than the consumer, is too often the blind imitator of what his neighbor does. Unreasoning conformity with the policies and practices of others in the trade is too often a substitute for imagination, knowledge, and initiative. A radical departure from "the line of least resistance" in pricing policies often results both in lower prices to the consumer and larger profits to the distributor.

Frederick B. Heickamp, addressing the American Management Association, presented some vivid testimony from the sales of a single company on the effect of price reduction upon sales volume.
a. Sales of a camp chair increased five times when prices were decreased one-third. b. Fishing reel sales almost tripled when prices were decreased
30. Income and Economic Prograss, The Brookings Instirution, Washington, D.C., 1935, Chapter VIII, pp. 117-127.
about 25 per cent. c. Sales of thermos jugs increased six times when the price of the jug was decreased one-fifth. d. Baseball sales increased 25 per cent when selling price was decreased 15 per cent. e. Shoe sales tripled when price was cut one-third. f. Play tents doubled when price decreased one-fifth. g. Outboard motor sales increased more than three times when the price decreased one-fifth. h. Stencil duplicator sales almost doubled when the price decreased one-third. i. Radio sales for one model increased one-third when the price was decreased 10 per cent. j. One manufacturer shows a constant increase in sales volume in the face of seventeen price reductions in eleven years, the cost to the user going from $\$ 2.65$ per pound to 36 cents per pound in gradual stages. 31

Such figures, of course, are not conclusive. It does not follow, from the experience of one company that the total consumption, and therefore the total production and distribution in all these lines, was similarly increased. It is clear, however, that there is a demand for a vastly greater volume of things than the American people have ever bought. Although production may be so illdirected as to result in more than is needed of certain products, and the price of these products may fall below actual production costs, general over-production has never occurred. The American market is and always will be far from saturation. But it can become an active market only as the price of goods and the incomes of the people are adjusted to full volume sales and consumption.
31. Paper by Frederick B. Heikamp before American Management Association Marketing Conference New York, October 1935, published in Consumer and Industrial Marketing, Series No. 18, American Management Association, New York, 1935, p. 25.

## Chapter 11

## CONCLUSIONS AND RECOMMENDATIONS OF THE COMMITTEE ON DISTRIBUTION

## 1. Conclusions and Assumptions

Frmaly rooted in the minds of many people is the conviction that distribution costs too much and that its wastes and inefficiencies are chiefly responsible for the high prices which consumers have to pay. What seem to be evidences of waste abound in every direction. In the judgment of many critics, there are "too many" retail stores; "too much" advertising and high-pressure merchandising; "too many" similar products among which the consumer must make his choice; "too much" duplication of facilities and services. The mark-up or price spread between what the farmer or producer receives for his goods and what the consumer has to pay appears to be "too high" and to reflect unnecessary waste or excessive distributive profits, or both. To the consumer it seems unreasonable that he should be denied the economies arising from a steady and often spectacular lowering in the cost of making goods, by the rising cost of distributing them.

## a. DISTRIBUTION COSTS AND PROFITS

Before trying to decide whether distribution costs too much, it is important to know how much it costs, what services it comprises, and where the money the consumer pays for distribution goes. It is of some significance to know the price spreads or mark-ups for individual articles, but these vary widely according to the nature of the products and methods used, and at best furnish only a rough indication of the costs involved. In addition to the costs of specific operations it is important to measure the total amount paid by consumers for all distributive services. Distribution commences
with the storage of raw materials and their transportation from mines and farms to factories, where they are processed and fabricated into finished products, continues with the sale and resale, shipment and re-shipment of goods through the channels of intermediary and wholesale trade, and ends with the final sale and delivery of finished articles to the tens of millions of household consumers and hundreds of thousands of consuming institutions in the United States.

## The Large Totals

Taking the year 1929 as a basis-when a larger volume of goods was produced, distributed and consumed in the United States than in any other year before or since-the research staff has estimated that the total amount paid by household consumers and other terminal buyers for finished goods in that year was nearly $\$ 66$ billion. This is what the finished goods bought in that year cost the buyers. It is not, of course, the same thing as the total costs incurred by producers and distributors including their profits. To ger such a figure adjustments would have to be made for inventory changes, depreciation charges and net losses.
How much of this $\$ 66$ billion was paid for making the goods, and how much for distributing them? Answering this question involved a considerable amount of estimating on the basis of inadequate statistical data, but available evidence seems to indicate that slightly more than $\$ 27$ billion out of the total of nearly $\$ 66$ billion was the cost of producing goods and somewhat less than $\$ 39$ billion was the cost of distributing them. Of this latter sum nearly $\$ 13$ billion was paid for retail distribution, about $\$ 7$ billion was the cost of intermediary trade, somewhat less than $\$ 9$ billion represented transportation costs, another $\$ 1$ billion was accounted for by national advertising, instalment selling and other charges, and a little more than $\$ 9$ billion was the cost of distribution incurred by manufacturers, exclusive of national advertising.
How much significance should be attached to the fact that about 59 cents out of the consumer's dollar goes for the services of distribution and only 41 cents for the services of production-that it costs considerably more on the average to distribute goods than it
does to make them? To many persons this fact in itself appears scandalous. Actually it does little more than measure the area in which possible economies in distribution may be sought and possible wastes eliminated. It provides no evidence that distribution is a more wasteful and inefficient process than production.

## Are Profits High?

Certainly there is little evidence of general high profits being made in the field of distribution considered as a whole. Some firms, it is true, and some of the newer branches of distribution, have been conspicuously profitable. But for every outstandingly successful and profitable organization there are many that barely break even and some which operate at a loss, even in good years. In relatively prosperous 1936, for example, half of all the trading or distributing corporations in the United States showed a loss on the year's operations. Taking into account both the unprofitable and profitable, the net profits of the entire group of corporations engaged in trade amounted to little more than 2 per cent on their sales. For every one of the 149,805 trading corporations reporting to the Treasury, the Census shows there are perhaps ten individuals and partnerships in the field of distribution. These are smaller on the average, and probably less successful than the corporations. Considering the fact that published figures on distributors' profits are probably somewhat over-weighted with the larger and more successful firms, the research staff estimated that the elimination of the net profirs of distribution all along the line from primary producer to consumer would result in an average saving of no more than three cents out of every doliar paid by consumers for finished goods.

## Other Costs

It is safe to conclude, therefore, that if distribution does cost too much it is not primarily because of "profiteering" but for other reasons. As a matter of fact the research findings show that most of what distributive agencies receive for their services in getting goods into the hands of buyers is represented by payments of wages and salaries. A large part of what the consumer pays for the wholesale
and retail processes goes for wages and salaries of workers directly employed by distributive agencies. And most of the remainder, paid for rent and maintenance, beating, light and power, taxes, supplies, etc., also finds its way into the payrolls of the agencies supplying these services.
It must be remembered that distributors have little or no control over many of the ultimate or real costs of distribution. Taxes paid by distributors-as well as by the general public-go to support government activities, such as those of the Federal Trade Commission, the Department of Commerce and various state and local agencies, which are concerned with the promotion or regulation of distributive agencies and operations. Consumers themselves bear part of the costs of distribution involved in the time and energy they spend in shopping for goods.
So far as distributors are concerned, however, it is clear that if distribution costs are to be reduced, the largest economies will have to come from savings in expense, which means chiefly payments for services rendered to their customers directly or indirectly by persons employed by distributive agencies. Obviously reduction of distribution costs by drastic cutting of wages and salaries is not administratively possible, socially desirable, nor politically practicable. Hence if the cost of distribution is to be reduced economies must be gained either by eliminating functions and services now offered by distributors or by performing these functions more economically and efficiently.

## b. Changing roles of production and distrbution

In this connection, distribution is often compared unfavorably with production. Production costs have been reduced steadily, and in some cases sensationally, over the past several decades, while there is good reason to believe that distribution costs have been rising.

Since 1870 , for example, the number of persons engaged in the production industries-farming, mining, manufacturing, etc.-in the United States has much less than trebled, while the number of persons engaged in distribution has increased nearly nine times. The whole process of producing and distributing goods is, of
course, vastly more efficient today than in 1870. We are now producing and consuming more than nine times as large a physical volume of goods as we were seventy years ago, with a population only three times as large. Taking these figures at their face value, it appears that there has been more than a threefold increase in the output of goods produced per worker, while the amount of goods distributed per worker in the distribution industries has increased only slightly. This comparison is often regarded as a mark of the failure of distribution to improve its merhods and reduce its costs. But it is questionable whether this impeachment is a sound one.

Producers, distributors and consumers all played different roles in 1870 than they do today. Every household was to some extent a factory, baking bread, making clothes, canning fruits and vegetables, and doing a multitude of other things which today the consumer expects the factory and retail store to do for him. Distributing goods was a simpler task than it is today, partly because the consumer bought more bulk goods and fewer specialized products —piece goods instead of women's dresses, sugar by the barrel insread of in pound packages, etc.-and performed more services for himself; and partly because specialized distribution agencies have had to assume more of what was formerly the responsibility of the manufacturer. Large-scale production, which is necessarily specialized production, has lengthened the path between producer and consumer.

Before the days of large-scale factory production the producer carried on a larger part of the entire task of getting raw materials first into fabricated form and then into the hands of the consumer than he does today, while the role the organized distributor is called upon to perform is vastly larger. The development of shoemaking from the village shoemaker's shop to the mass production factory of today illustrates what has happened. The shoemaker made shoes by hand in an inefficient way, but he had limited problems of distribution, because the consumer usually came to his shop, was measured for a pair of shoes and when they were ready carried them home on his feet, probably leaving his old shoes to be repaired. To the extent that the village shoemaker did expend
his time and energy in selling, rather than making, shoes he failed to distinguish between the two functions. Though a single individual, he played the combined role of entrepreneur, worker, and distributor.

Today the functions of production and distribution are sharply separated. Shoes are made in a far more efficient way than they were by the village shoemaker. But in order to gain this greater efficiency production has to be concentrated in a few centers separated by hundreds or thousands of miles and by weeks and months and even years between production and consumption. Distribution has to fill this gap in space and time and supply the personal service of firting a pair of shoes to the feet of each customer. And without the system of distribution we have built up to do these things, modern efficiency in making shoes would be impossible. In other words, the spectacular development of modern mass production methods in making things is due just as much to the creation of an elaborate and necessarily costly distribution system as it is to the invention of labor-saving machinery.
c. COMPETITION AND THE CONSUMER

In comparing the methods of distribution with those of production it should be recognized that comperition in distribution is not as likely to lead to drastic economies in the use of labor-saving machinery and methods. While the mechanical and automatic methods which have been so successful in lowering production costs can be applied to some extent to the operating procedures of distribution, they are not equally applicable in selling. The idea of a push-button factory, wholly automatic in operation, is no longer fantasric. But, while there are a few "automat" restaurants and cigarette dispensers, the idea of a slot-machine department store is far from practicable so long as human beings remain what they are today. Personal service and convenience usually mean more to the customer than mere mechanical efficiency.

[^66]creasing costs as the pressure for lower prices spurs mechanization and improved operating methods. But in distribution competition frequently tends to increase costs. Success often comes to the manufacturer or distributor who spends the most on advertising, fancy packaging, delivery and a whole range of expensive personal services demanded by his customers. Efforts to cut costs, on the other hand, are balked by the inherent difficulties (so long as consumers demand individualized service) of mechanizing and standardizing distributive processes. This cost of more and more intensive competition for customers is an important part of the mounting bill for distribution.

These growing costs have raised serious difficulties-both for the distributor and for the buying public. Decades ago the businessman's main problem was to make goods; today his primary problem is to sell them. Capacity to produce appears to have outstripped purchasing power. This means that goods cost too much -largely because of increased services and increased distribution expenses-for the public to buy them as freely as if they cost less.

The consumer himself can properly be charged with a part of the responsibility for the higher distribution costs which have resulted from competition for his favor. The buyer expects-or has been led to expect-from the distributor a multitude of costly privileges and services which cannot be dispensed with until the buyer's attitude itself has been changed.

To say that consumers expect and demand increased services from distributors, however, is nor the same thing as saying that the consumer is responsible for the higher costs they involve. To a very large extent the consumer expects more because he has been led by modern advertising and promotional efforts to expect more. He is the victim as well as the beneficiary of modern merchandising.

Moreover, not all of the higher costs of distribution result from increased services. A large part of what is paid for modern discribution goes for selling expense, for educating the consumer, for inducing him to buy one product instead of another, or sometimes for encouraging him to buy something which on sober second
thought he decides he did not want to buy in the first place. All of these-as well as the very real services offered by distributorsare reflected in the costs of distribution.

## The Costs of Variety and Convenience

Among the costs of modern distribution is that paid by the consumer for the privilege of free choice and variety. So long as tastes vary it will be impossible to standardize consumer goods in the same way as paving-bricks or steel rails can be standardized. It would be far more efficient in the narrow meaning of the term to dress all the men of the country in a uniform of olive drab and all the women in a standardized costume of navy blue. But this economy cannot be gained under our present system. This means that the retailer or wholesaler is denied one of the privileges which has made many modern factories so efficient in production-that of concentrating efforts on a single article or a limited range of standardized products. Unless the distributor offers a wide range of choice among a variety of brands and sizes and shapes and kinds of goods his customers will go elsewhere.

Another cost which is inevitable so long as human beings remain what they are today is the cost of immediacy. Not only does the consumer want what he wants but he also wants it when he wants it, which is usually now. If a million consumers were willing to place their orders and pay their money today for hats or shoes of a particular design and size, to be delivered next spring or next fall, the cost of distributing these products from the factory through wholesale and retail channels could be greatly reduced. Since consumers are not willing to do this the cost of immediacy means that manufacturers and distributors must assume the risks and incur the costs of forecasting what consumers will buy six months or a year hence. All of this means possible losses to distributors and greater cost to the consumer.

Another privilege-and another cost-is that of convenience. Consumers want to be able to supply at least some of their needs by running around the corner to the drugstore or grocery store. So long as they indulge this desire we shall have hundreds of thousands more retail outlets than we would need under a different
system of living. Again, retail customers do not like to wait too long to be served. Hence, the retailer must maintain a working force to care for capacity demand rather than average demand.

Another costly service which has become a serious problem with the trend toward shorter working hours, is the demand of consumers for convenient shopping hours, long enough to accommodate their needs. This means that the distributor, unlike the producer, cannot organize his working hours in the most efficient way to suit himself and his employees. Here again it is the buyer rather than the seller who is in ultimate command.

Then too, consumers-and commercial buyers as well-have been led to expect from the distributor all that is embodied in the term personal service. The producer can turn out identical articles by the thousand, but the advantages of standardization cease when distribution commences. Each order filled by the distributor is a special order requiring the personal attention of himself or a salesman. One customer in a retail store may take up an hour of a salesman's time in making a two-dollar purchase, and another, only five minutes. Each buyer, of course, pays the same price, but together they and the other customers must meet the cost of the personal services which the buyers, collectively, require. The same thing is true of retailers in buying from wholesalers or of wholesalers buying from producers. Small orders and "fussy buyers" take more time and energy and add to distribution costs.

## Extra Services Add to Costs

Another privilege demanded by many retail customers is free delivery service. Delivery service, of course, cannot be free in any real sense to either the consumer or the retailer. The woman who buys a pair of silk stockings and insists upon delivery to her home in the suburbs does not pay the full cost of that service for that particular purchase; but in the long run she and other consumers have to pay for that service if they want it. And whether the customer wants delivery service or not, he must pay for it if he patronizes a store that offers it.

Another costly retail service is the returned goods privilege. So long as it remains true that, as one deparment store executive said
recently, "it is necessary to sell three women's dresses in order to have two of them stay sold," the customer in the long run will have to meet this cost. Coupled with the returned goods privilege is the privilege of charging goods and paying for them a month or so later, and of buying on the instalment plan. Interest and service charges paid by consumers for instalment purchases alone probably amounted to almost as much as total retailing profirs in 1929.

All this might be taken to imply that the consumer-or the commercial buyer, for many of the costly services demanded by the retail customer are also required by the retailer in buying from the wholesaler and by the latter, from the manufacturer-is the real "villain of the piece" and that there is no hope for improvement until the buyer becomes more reasonable in his demands. But the consumer, for many years, has been the beneficiary, or the victim, depending upon the point of view, of a high-powered and effective program of what is described by the merchandising profession as "consumer education." This has taught him to expect and demand more and more services, conveniences, and privileges from distribution, all of which he has had to pay for, and without always being aware of what they cost him. Obviously the rising cost of personal services in the present-day system of distribution cannot be "blamed" exclusively on either the buyer or the distributor; it is a joint responsibility and the problem-short of state controlcan only be solved by their cooperative effort.

## d. Variety and change in distribution

Furchermore, it should be remembered that the consumer is not compelled to patronize the kind of store that offers the most elaborate and costly services. Free choice for the customer means not only a variety of products, but 2 wide range of services and prices. The department store offers him a large selection of articles under one roof and the advantages of a charge account and delivery service. But if he prefers a small establishment and the personal attention of the proprietor, he can patronize the specialty shop. On the other hand, if price is more important than convenience and personal service, the customer may save money by performing some of these services himself by making his purchase from a super-
market, a cash-and-carry store, or from a mail-order house.
In considering the distributive system itself, one cannot help but be impressed by the extraordinary variety which now exists in its institutions-variations between the large and the small, the urban and the local, the specialized and the general, the independent and the interlocking unit. The grocery super-market, the country general store, the automobile dealer, and the woman's specialty shop have little in common beyond the fact that they are all known as retailers. Furthermore, even with these institutions, there is variety in the number of channels through which goods flow, sometimes passing through many hands and sometimes short-circuiting completely by going directly from producer to consumer.

Within this complicated pattern continuous competition between different kinds of enterprises is causing a vast amount of shift and change. The whole system of distribution appears to be in a revolutionary state of flux. Not only is there a high turnover of individual enterprises, but countless experiments are going on with different methods of distribution, new types of enterprise, new arrangements of functions, and new methods of performance. During the short period of the last twenty years, the distributive pattern has greatly changed under the impact of..such relatively new developments as chain stores and voluntary groups, instalment selling, and radio advertising. There is no evidence of slackening in this evolutionary process.

## Mass Retailing and Its Advantages

Changes in the retail field have been especially striking. Some of these changes have been in the direction of offering more elaborate service and greater convenience to consumers, with the result that costs and prices have increased. Others have involved mass purchasing, more efficient procedures and the elimination of unnecessary or costly services, with the result that operating economies have been passed on to consumers in the form of lower prices. Which of these new forms can be said to represent real improvements over older ones cannot be decided unless one applies the simple test of survival and concludes that new methods and forms of retailing which survive are necessarily better than those they
displace. From this point of view, of course, improvement often spells ruin for the individual firms or groups of firms. The public welfare was served by the introduction of taxicabs even though the horse hackmen were eventually wiped out.
The research findings suggest that certain forms of retail distribution can be said to be improvements in the sense of providing goods at lower prices and with greater operating efficiency. While our investigation could not cover the enormous field of comparative prices and costs of the various forms of retail outlets, the figures on relative growth raise a strong presumption in favor of the corporate chains, the big mail-order concerns, the newer supermarkets, and certain types of voluntary group organizations.
One of the principal contributions offered by the chains so far as consumers are concerned is lower prices. They have been achieved partly by better methods of control and management, partly by elimination of certain services, such as free delivery and the stocking of as wide a variety of commodities and brands as those offered to customers by other types of retail distributors, and partly by concentrating their activity in urban areas and on a suffcient scale to get the economies of volume. In large part, of course, the lower chain prices have been made possible by the cost advantages of large-scale buying. In addition to the real economies of mass purchasing, the chains have also been accused of "improper" use of their bargaining strength in dealing with their suppliers.
Chains have centralized the costly activities of administration, accounting control and buying, all of which each independent merchant performs for himself. Although multi-plant operations can increase costs, the chains have eliminated many of the costs of duplication of effort. The chains have also introduced many improvements in store management, such as better selection, arrangement and display of goods, improved lighting, cleanliness, and refrigeration. Compecition has forced the independent retailers, in turn, to adopt many of these improved methods of management, while the economies of large-scale purchases have been gained by the independents through the formation of voluntary group buying agencies. Thus the vigorous competition offered by this new form
of retailing, while it has injured many individual independents, has brought widespread improvement of methods and lowering of costs and prices throughout retailing.

## Trend Away from Independent Middlemen

At the same time that retail distribution patterns have been changing, important shifts have taken place in the relative position of agencies engaged in intermediary trade-an important link in the system whereby retailers and ultimate buyers are supplied with goods from thousands of different sources. The middleman's function must be performed by someone, either by the independent wholesaler, by various specialized types of agents, brokers, and assemblers, by the manufacturer himself, or by "captive" intermediaries controlled by retailers or manufacturers.
The trend in recent years seems to be away from the traditional independent middleman. The intermediary function is being taken over more and more by manufacturers, retailers, and to some extent by consumers-either directly or through agencies they own or control. The independent wholesalers' share of intermediary trade decreased from 36.8 per cent in 1929 to 32.2 per cent in 1935, while other types of intermediaries gained during the period.

A comparison of operating costs suggests that one of the reasons for this shift away from the conventional wholesaler is lower costs. Intermediary trade as a whole showed expenses of 9.5 per cent of net sales in 1935 as against 13.2 per cent for "wholesale merchants." This meant that other agencies were performing intermediate functions more economically or that they were able to achieve lower costs by sharply limiting services and functions.
The research findings show that the essential wholesale functions of breaking bulk, storage, and delivery make up less than half the cost for many types of independent wholesalers. Selling and credit costs account for most of the remainder. To the extent that newer types of wholesalers set up by retailers or manufacturers can eliminate these latter functions and their costs, real savings and economies in intermediary distribution are possible. There will always be a need, of course, for service wholesalers to

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 Does Distribution Cost Too Much?handle slow-moving items and to serve the small retailer who has to buy on credit; but this service should be made to bear its own cost.

## e. ASSUMPTIONS UNDERLYING THE REPORT

It is not enough for our purpose merely to measure the costs and describe the character of the distributive system. But any attempt to make judgments about it runs into basic difficulties. There is no easy test to be applied. As we have seen, there is little évidence of a high general level of profits in this economic area. Nor does the fact that distribution costs frequently exceed production costs have any significance in itself except to show the relative economic importance of the two functions. The fact that it may cost five times as much to get cabbages into consumers' hands as it does to grow them originally, does not necessarily indicate that there are any legitimate grounds for complaint. In such a case, growing is relatively simple and inexpensive compared with transportation and marketing.

The main difficulty in determining whether excess cost or waste exist is that of establishing a workable criterion. The most satisfactory procedure might be to prepare a blueprint of the potential efficiency of an imaginary, perfectly functioning planned economy, and draw a contrast. On such a basis there is no doubt that the demonstrable waste of our present system would be tremendous. But would we want such an economy even if we could have it? Much of the waste that would appear on the basis of such a comparison must be regarded as the price paid for our particular type of economic system, which, waste and all, most of us prefer. We accept and adhere to certain social and political principles coming under the general terms of democracy and freedom of opportunity.

## Free Choice versus Rationing

In the last analysis, however, it is these very principles which permit the establishment of a filling station on each of four corners of the crossroads. Here, the efficient use of resources clashes with freedom of opportunity. Another basic principle in the present sys-
tem is that of freedom of choice for the consumer-as well as freedom for the use of all kinds of blandishments by those who are trying to persuade him to buy. Much of our present distribution cost, due to the "frivolous" demands of consumers and their resistance to standardization, must be charged against this principle.
Any basic evaluation of our distribution system must begin with consideration of the social desirability of a system based upon the individual's freedom of opportunity to waste. On the one hand, stand all the arguments for a planned and controlled society; on the other, faith in progress by trial and error with a maximum of individual freedom. We have not regarded the function of this Committee as one of trying to evaluate the kind of economic system we have. Such an approach would raise problems far beyond the area of distribution itself, although some of the most pertinent considerations appear in this wider area.
We have assumed in framing our recommendations that the people of the United States do not want an economy where all goods are rationed as they are in the army. We have assumed that what we want in this country is an economy which guarantees the greatest amount of individual freedom-consistent with the public welfare- to set up a business, to operate it, and even to fail if we cannot make a go of it. In so doing we want a minimum of interference from the government. But at the same time we recognize that absolute freedom in business is as impracticable as absolute freedom to erect any kind of building in a big city. With the growing complexity of our economic life a certain amount of government regulation and control has come to be accepted as no longer a subject worthy of debate.

## Three Criteria

The Committee's conclusions and recommendations are based, therefore, on three objectives which seem to be generally accepted as underlying "the American system":
(a). Free choice for the consumer, with the inevitable costs which the consumer's demands for variety, immediacy and convenience necessitate;
(b). Freedom of opportunity for the distributor, which means opportunity to develop new methods and techniques that will yield him a profit, but which also means-at least up to a certain point-the opportunity to fail and in doing so to injure his own and others' intereses; and
(c). A system of competition which, although not entirely free and untrammeled, should be regulated with two ends in view: (1) the promotion of the long-run interests of consumers and (2) the protection of the public interest; not merely to preserve the status quo or defend the position of particular groups of distributors.

## f. is distribution too costly?

Even with all the reservations and assumptions which have been made the answer to the question posed in the title of this book"does distribution cost too much?"-is "yes." The research findings prove this in two ways. First they show many features of the distribution process which reveal opportunities for savings: duplication of sales efforts, multiplicity of sales outlets, excessive services, multitudes of brands, and unnecessary advertising-all caused by competitive conditions; unreasonable demands and misinformed buying on the part of consumers; and, among distributors themselves, lack of a proper knowledge of costs, too great zeal for volume, poor management and planning, and unwise price policies. Second, the research findings show how newer distribution agencies, through economies of standardized and large-scale operation, have proven the inefficiency of those which they have displaced; and how other distributors have improved methods and lowered costs through a better understanding of their problems.

Taking the field of distribution as a whole the process undoubtedly costs too much. But how much too much is impossible to say. In other words we can say with confidence that there is waste in distribution, but we cannot reduce it to a percentage figure-as a whole, or in any of its parts. Nor can we say that distribution is more or less wasteful than production.

We can, however-even with limited statistics that we havepoint out specifically many ways in which the costs of distribution
can be reduced or its efficiency increased through improvements in the design and operation of the present mechanism. The following pages summarize the suggestions of the Committee.

## 2. Recommendations

Turning now to possibilities of improvement in distribution, there are three general areas where the problems of distribution costs should be attacked: first, consumer knowledge; second, efficient performance; third, legislative restrictions and regulations.

## a. CONSUMER KNOWLEDGE

Under our present economic system the main directing source of all economic activity is expenditure by consumers. To the extent that their choices are irrational and uninformed, the system fails to reach its optimum performance. The variety of products now in the market, the importance of qualities not readily susceptible to sensory test, complications in service and convenience and the fact that consumers spend most of their time and energy as producers, all contribute toward making individual purchasing an inefficient process. Added to this is the incessant pressure of modern adver-tising--sometimes illuminating, but too often obscuring the facts which the consumer requires to enable him to buy intelligently.

But the problem of assisting consumers is not as simple as might at first appear. Until recently, at any rate, the great majority of them have not shown any great interest in becoming better informed. And there is always the danger of imposing uncertain and incomperent judgments upon them. Our recommendations in the field of better consumer information, therefore, are made with the uncomfortable realization that, so far, consumers have not made very effective use of the facilities already available. Even now, most of us can stretch our purchasing power considerably by more caucious and intelligent spending. Standard brands of toothpaste, shaving cream, and a multitude of other trade-marked commodities can often be bought for less money from a mail-order catalogue than in the corner drugstore, but this is inconvenient, involving as it does the annoyance of filling out an order blank and
two or three days' delay in waiting for delivery of his purchase.
There are a multirude of other examples-for instance, instalment buying. Goods bought on instalment frequently cost consumers from 12 to 18 per cent interest on their money-a cost which they could avoid if they were willing to lay aside enough each month and wait to buy an automobile at the end of the year, or to use some other form of credit. But this requires will power and means waiting, and the consumer wants his automobile now. Consumers could make greater use of the consumer services now provided by government departments and by various other agencies. Even without special aids, consumers could buy more intelligently and more cautiously than they do now, by comparing quality and cost from one store to another.

Even though consumers have thus far been slow to take advantage of buying aids, however, we believe that such aids should be greatly increased and that an intensified effort should be made by government and private agencies to stimulate their more effective use. We recommend the following specific policies:
(1). The expansion and better coordination of government agencies to provide in adequate and popular form information which consumers need for more efficient buying.

We strongly support the tendency, already apparent, for govern-ments-federal, state, and local-to establish agencies primarily concerned with consumer problems. The inauguration under the Department of Agriculture of the Consumers' Guide, which aims to inform consumers on methods of testing the qualities of products, is a step in the right direction. The Standards Section in the Department of Labor, which is continuing the work of assembling government standards and specifications on consumer goods commenced by the Consumers' Advisory Board of the NRA, can aid consumers in making a more intelligent choice. The work of these and other official agencies can never yield maximum returns, however, until it is made more widely available in popular and understandable form.
(2). Further progress in the elimination of fraud and misrepresentation in printed and verbal descriptions of products.

Although the federal government has taken increasing responsibility for the prevention of misrepresentation, and legislation to that end has recently been strengthened, the protection is not yet adequate. We urge strong support for and further strengthening of such laws.
Distributors themselves, if they want to, can also do a great deal along these lines without legislation; and some of them, through such agencies as Better Business Bureaus, have made commendable progress in this direction. We urge further action of this voluntary kind.

## (3). The development of informational labeling.

We urge the extension, by voluntary action of business and by legislation of adequate descriptions of goods on the labels attached to them. Such descriptions should cover both the physical components of products which are capable of measurement, the grade or quality of the goods, and the components of their price-as suggested in the following recommendation.
(4). The establisbment of a differentiated pricing system for retail goods.
We urge careful study of the feasibility of adoption of a pricing system that would clearly differentiate separate prices for each article according to the amount of services involved in its sale-such as credit, delivery, return privileges, etc. This would mean in practice that a purchase paid for by cash, carried out of the store by the buyer and not returned, would cost less than if any or all of these services were required. Whether they actually avail themselves of these services or not, consumers pay for them whenever they buy goods at a store which offers them. Since the consumer pays for such services he is inclined to demand them on the theory that he is entitled to all that he pays for. All of this increases the total volume of such services, and therefore their cost, and hence the price which the consumer must pay. If service costs were separately charged, it would probably reduce their volume. Such a practice would also permit those consumers who wanted to do so to eschew these services and get the advantage of lower prices. We recognize
the difficulties of establishing a differentiated retail pricing system, however. Experience shows that the difficulties are especially seri-ous-if not insuperable-when one retail store attempts to adopt the policy without the cooperation of its comperitors.
The same principle of differential charging in accordance with the amount of service supplied and the distributive costs involved, is followed in many cases by manufacturers, and might well be widely applied to intermediary transactions between retailers and wholesalers.
(5). The wide extension for public use of the facilities of government and private agencies for testing and appraising consumer goods.

We urge that the kind of services so effectively performed for government buying by the United States Bureau of Standards be made widely available to consumers in the United States. This kind of testing service can and should be supplied by both government and private organizations.

We believe that the Bureau of Standards should make tests of leading products for specific qualities and that the results should be made public. At the present time the Bureau of Standards does test certain types of consumer goods, but the results of these tests do not become widely available to consumers.

We also recommend the extension and more effective use of voluntary, private, non-profit testing and reporting agencies. The record of such agencies is not perfect and there is serious question as to whether their present limited facilities permit them to do an adequate scientific job of appraising and rating consumers' goods. This is particularly true of complex fabricated products like automobiles and radios, or articles in which style and taste are more important than physical qualities. But the principle behind these efforts is sound and should be encouraged. With sufficiently wide support from consumers these agencies would be able to get enough revenue to permit them to function more effectively.
(6). The further organization of consumer cooperatives and consumers' group buying agencies.

In spite of their spectacular success in Great Britain and other European countries the record of consumer cooperatives in the United States, as shown in the research report, is not impressive. Accounting for much less than one per cent of total retail sales, consumers' cooperatives are mostly small stores, dealing in staple products and operating in small communities. Although no wide statistical appraisal has been made of the relative cost, price, and service advantages of cooperatives in the United States, it is clear that inefficient management may easily wipe out the advantage to consumers in securing for themselves the profits of retail operation.
With sound management, however, cooperative ownership can offer much to the consumer, as has been demonstrated in the economical distribution of such products as milk, gasoline, and farm supplies. Cooperative enterprises, moreover, serve an important educational purpose in arousing the interest of consumers in the problems of economical buying; and their very existence may have a significant influence on the price policies of private distributors. We therefore urge the extension of consumer cooperatives.

A specialized form of consumer cooperation is found in various kinds of group buying organizations which are able to effect economies and secure lower prices for their members. Many large organizations, such as banks and insurance companies, for example, have fostered group buying organizations among their employees. These organizations, by concentrating purchases and by short-circuiting many of the costs involved in individual buying, have effected real economies for their members. Sometimes, however, the savings they achieve arise partly from what amouncs to a subsidy offered by the free use of the purchasing facilities of the employing corporation. Sometimes, too, buying an article at wholesale involves no real saving in distribution cost. When the prospective purchaser of a radio or a refrigerator, for example, takes up the time of a department store salesman in examining different articles, and then places his order through his employer's purchasing department, retail distribution costs have not been eliminated, but merely shifted. When group buying organizations of consumers are able to consolidate the demands of individual buyers into large orders for specific products, however, real economies in distribution can be
achieved, for large orders make possible lower operating costs.
(7). The extension and further development of courses on con" sumer problems in educational institutions.

We recommend the wide extension of courses in high schools and other educational institutions designed to promote better and more intelligent buying and to educate the consumer in the functions and problems of distribution. Much work of this kind is being done, but more could be done, particularly in connection with courses in chemistry and physics and home economics.
(8). The vigorous prosecution of federal family budget and expenditure studies.
We urge that the budget and expenditure investigations of the bureaus of Labor Statistics and Agricultural Economics be expanded. This program should, in the course of time, help to inform the consumer on the wisest distribution of his expenditures. Naturally the prosecution of these studies is closely related to the general consumer education functions of various government agencies.

## b. OPERATING INPORMATION AND MORE EFPICIENT PERFORMANCE

The Committee is convinced that the system of distribution can be made considerably more efficient than it is today. Costs of distribution and the prices consumers pay for commodities can be substantially reduced. The Committee believes that these results can be achieved largely through the voluntary efforts of individual distributors, aided and assisted by government research agencies.

In discussing this area of possible reform it should be recognized that competition compels many distributors to offer services and to sell accounts which they know are not profitable. In many cases, however, a distributor imitates his competitors, not because he is driven to it by comperition but merely because he is uninformed as to his own best interests. Among entrepreneurs there is a great deal of blind imitation, quite similar to the "keeping up with the Joneses" of consumers, and many of the most wasteful business
practices are the result of this blind imitation. Every once in a while, however, some enterprising distributor discovers that he can do things in an entirely different way and make money in doing it. The growth of chain stores, super-markets and mail-order houses are illustrations of this process of evolution.

It is of the utmost importance, therefore, to keep the field of distribution reasonably open for bold experimentation. After all, the greatest hope for improved efficiency lies in the inventiveness, imagination, and business ability of distributors themselves. By far the greatest improvements of the past have come this way. Those of the future will also-if the field is kept open and free.

In addition to the elimination of laws which prevent the full development of new and improved forms of distribution we strongly recommend concerted efforts by distributors themselves, aided by government agencies, to achieve greater efficiency of operation. These efforts can be both posicive-in improving the technique of those already in business-and negative-in preventing or persuading those who are unfit from entering business in the first place.

To some degree efforts to improve the efficiency of distribution must await wider knowledge about its nature and costs. Not only must individual distributors learn more about the costs of their own operations and the effectiveness of the methods they employ, but more information about the functioning of various parts of the distribution system and the system as a whole is needed in order to chart the areas in which economies and improvements offer the greatest promise. Our recommendations in this field, therefore, look primarily toward the provision of better information which should help to avoid losses and lead toward improvement of methods and lowering of costs.

Specifically we recommend the following:
(1). The development and adoption through government research and organized commercial efforts of improved methods of distribution cost accounting and analysis.

Much progress in reducing production costs has come from the widespread adoption of systematic and accurate cost accounting methods. In distribution, because of the complicated and diverse
nature of the function and the variety of products involved, cost accounting must involve a great deal of arbitrary allocation. A manufacturer is able to measure with a high degree of accuracy the direct costs of every unit operation that goes into the production of a product-and such direct costs bulk larger in production-but from the time the product leaves the factory door until it goes out of the retail store, much less is known about the unit cost of performing the various distributive operations.

The retail store owner may know what it costs to operate his store and, with reasonable accuracy, the cost of operating various departments. But little is known about unit selling costs for specific commodities or for purchases of varying amounts, or the cost of specific functions like that of extending credit, collecting overdue accounts or rendering special services. Until costs are more accurately measured, retail and wholesale distributors will not be able to determine, except in a very rough way, what lines of goods are most profitable, what size purchases can be supplied at the smallest expense and which accounts cost more than they are worth.

Pricing practices, which are often arbitrary and unscientific, can also be improved with better knowledge of how distribution and other overhead expenses should be allocated. As pointed out in the research report the arbitrary percentage mark-ups now applied in many cases may often lead to prices which do not result in maximizing sales volume and profits.
(2). The establishment of an institute for research in consumption and distribution, under independent auspices with a liberal endowment.

The field of distribution and consumption economics has been sadly neglected, both in universities and in private and governmental research. Such an institute would not concern itself with the commercial type of market research, or the purely statistical field of government agencies, but with exploring the broader and more important social implications of the kind of distributive system (which means the kind of economic system) we have. It could do a great deal to promote the collection of better information in this uncharted area and to foster the objective study of many of the more
or less controversial issues, such as chain store taxes, resale price maintenance, etc., which have too often been avoided, except by interested parties to the controversy.
(3). The provision by government agencies of more comprebensive, accurate, and promptly available statistics on distribution.

One of the reasons for our inability and failure to improve methods, increase efficiency and reduce costs in the field of distribution is the lack of basic statistical information in this important area. Distribution statistics are far less satisfactory than those in the field of production. For instance, the first Census of Distribution was not taken until 1929 while the Census of Manufactures was first taken more than a century ago, and for many years has been on a biennial basis. It is reasonable to expect that improvement of the statistical background for planning distributive operations will result in the gradual improvement of distributive methods, not only because individual distributors will be better informed, but more important, because public policy can be more intelligently formulated.
We urge consideration of the following suggestions looking toward provision of better information on distribution:
(a). Census of Distribution at Five-Year Intervals

A complete Census of Distribution should be taken at fiveyear intervals coordinated with a complete Census of Manufactures and of other phases of business. It is desirable that unless the Census of Distribution is taken at the same time as the Census of Manufactures, the former should include reports from manufacturers as distributors since they are an integral (but little known) part of the whole system of distribution.
(b). Annual Sampling Reports

An annual Census of Distribution on a sampling basis covering the largest units should be taken for intervening years.
(c). Occupational Distribution Census

The decennial Census of Population should provide information on occupations of gainful workers in terms comparable with the statistics on employment obtained in the

Distribution, Manufactures, and other business Censuses. Occupational data on persons engaged in distribution should establish clear distinctions among them in terms of (i) economic status [e.g., employee, employer, self-emplojed, etc.]; (ii) industry, trade, or phase of distribution [e.g., wholesale by types of commodities, retail by types of stores, etc.]; and (iii) occupation or kind of work [e.g., selling, clerical work, bookkeeping, etc.].
(d). Commodity Reports

Statistics on production of specific commodities obtained in the quinquennial and annual Censuses and the statistics on distribution of the same commodities should be made comparable.
(e). Current Statistics

Current statistical series (e.g., monthly statistics compiled by Department of Commerce) on key commodities and lines of trade should be improved and expanded with special emphasis on the measurement of inventories held at various stages throughout the productive-distributive process.
(f). Financial Statistics

Income and balance sheet data compiled by the Bureau of Internal Revenue and the SEC should be made available in detail for various specific trades and branches of distribution.
(4). The widespread expansion of analytical studies of distribution costs, methods, and results.

The amount of research in the field of distribution is negligible as compared with the funds and energies devoted to research in the field of technology and production-in spite of the fact that distribution, in all its phases, represents a more important area in our total economy than does production. The studies made to date by government agencies, particularly the Bureau of Foreign and Domestic Commerce, and by many universities, have been extremely helipful in the improvement of distribution methods. On the whole, however, such research has been on a very limited basis and its
value would be vastly increased if it could be made to cover much larger samples and wider areas. Many of the more progressive and successful individual distributors have found that analysis of their own methods and results yields handsome dividends in the form of lower costs and larger profits. The effectiveness of such self-analysis will be greatly enhanced by more general studies conducted by other agencies.

Among the kinds of investigation which we believe merit serious study are the following:
(a). Prices and Price Spreads

Very little reliable statistical information exists on the comparative spreads between the cost of production (or factory price) of commodities and the price paid by the ultimate consumer. Many of the statistics presented in the research report were obtained on a confidential basis by direct inquiry from distributors. Price spread figures should be made available not only for various goods, but more especially for different distribution agencies handling the same lines in localities where conditions are similar. Of even greater interest would be a study of the prices of comparable goods sold through various kinds of outlets-small independents, department stores, chains, mail-order houses, super-markets, and cooperatives.
(b). Cost Relationships

Studies are urgently needed of the effect on the cost of distributing comparable items of various important variable factors such as additional services of various kinds-credit, deliveries, etc.; size of store; population of locality; stock turnover; etc.
One great advantage the manufacturer has over the retailer is that he can usually determine with some degree of accuracy the unit costs of specific operations in producing specific commodities. The retailer, on the other hand, may know his total costs (although many of them do not), but he knows very little about the cost of selling an alarm clock for example, compared with the cost of selling a tooth-
brush. This is important if he is to maintain a balanced stock of goods best adapted to the size and location of the store, and to achieve a profitable rate of turnover. In some cases such a study might indicate that many lines should be eliminated because of slow turnover, wastage, obsolescence loss, and high cost of selling, while perhaps other lines of goods might profitably be added.
(c). Advertising Costs and Results

Such studies should be made for specific products, lines of trade, and advertising media. We probably know less about the results of advertising than about almost any other phase of business, and yet it has appreciable and increasing effects on the total costs of distribution.
(d). Effects of Lower Prices on Volume of Sales

Other things being equal, the lower the price the greater the consumption. But commodities vary widely in the elasticity of the demand for them. Many manufacturers and distributors could undoubtedly increase total profits for goods with an elastic demand by lowering prices and widening markets. By this procedure both the consumer and the entrepreneur benefir because the consumer gets more goods for less money and the seller gets larger total profirs, although possibly smaller unit profirs. Surdies should be made of the effects of increased volume through lowered prices for specific commodities. As pointed out in the research report, pricing policies in many cases appear to be based on conventional percentage mark-ups without consideration of the effects of prices on volume of sales. Better information on demand elasticity for various types of commodities should lead to more intelligent price policies.
(e). Causes and Effects of Business Mortality

All available figures point to an excessively high rate of business mortality in the distribution field, but we know very little about the causes of failure in this field and of the effects on individuals who have incurred losses in the retail business. Also we know little of the losses to property
owners through vacancy, to labor through unemployment, etc., resulting from an excessive mortality rate in distribution. The Commitree recognizes that the evils of too many retail outlets and excessive business mortality might be attacked through the device of licensing retail outlets either on the basis of economic need or on the basis of proven competence and adequate capital requirements. Such regulations have been established in foreign countries. We believe, however, that there are real dangers in the adoption of licensing policies and that in any event more information about the causes and effects of business mortality in distribution is needed before such drastic policies should be considered.
None of these studies is worth making, however, unless the results are made widely available, in clear and simple language, to schools and students in the field and to those who can profit by them-to those who have any direct or indirect influence over the policies of distribution agencies. We urge that government and private research organizations devote a considerable part of the resources available for this work to the proper dissemination of their findings.
(5). The wide establishment of training courses for distributors.

We urge the development of courses in high schools and other educational institutions to train retailers and distribution managers for various kinds of retail store management and operation and also to fit rank and file workers to carry on the routine processes more effectively. Some of this is being done, but much more can be done. Such training should be available not only for persons prior to entering the field of distribution, but for active retail owners and executives as well. Training courses of this kind might also be effective in deterring many unqualified persons from making unprofitable ventures into the field. Certain foreign countries have long recognized in a practical way the urgent need for better preparation for the bazards of retailing and other types of distribution.
(6). The dissemination by government agencies and educational institutions of information about the difficulties of survival in retail trade.

We recommend that the proper government and educational agencies make widely available in simplified and understandable form information on the hazards and difficulties of small-scale distribution and on the minimum requirements of capital, knowledge, and training required for different trades. This should be of some help in getting more efficient distriburion and reducing business mortality. This proposal would be parallel in a sense to our recommendation that the government and other groups engage in more vigorous and effective consumer education.
(7). Development of cooperative research and educational programs between the Department of Commerce and university schools of business.

For many years agricultural experiment stations maintained at .various state universities in cooperation with the Department of Agriculture have been an important influence in the development of more scientific and profitable agricultural methods. Comparable facilities and assistance have not been available for distribution and other business organizations, which means that small businesses, particularly, have been denied the educational and research advantages enjoyed by farmers. We believe that a cooperative program of research and education involving collaboration between the Department of Commerce and qualified university schools of business such as is now being considered by Congress deserves support. Such a program would go far toward effectuating many of the detailed suggestions made above.

## C. COMPETIIIVE RESTRICTIONS AND REGULATION

The Committee believes that the field of distribution has not yet reached a point where it is possible for any one to determine its ultimate outlines, much less to decide what its ultimate forms should be. The evolutionary process has been very much in evidence in recent years. Under the driving force of competition all kinds of ex-
periments are constantly being made. In this situation, new legislation which tends to freeze the distributive structure into its present mold will probably interfere directly with the ultimate lowering of costs in the field. This is likely to be particularly true of "fractional" legislation, enacted in the interest of some special group without regard to eliminating competitive abuses or establishing fair compecition.

We, therefore, strongly recommend:
(1). The immediate repeal of all laws which are designed merely to preserve, or to destroy, some special group in the distribution structure, without regard for the general public interest.

The outstanding illustration of this type of legislation is the chain store tax law, in most cases unjustifiable on economic grounds. Attempts to freeze the structure already in existence, or to control the process of its development, or to tax certain types of distributors out of existence, or to give special governmental financial aid to others, are similar illustrations of measures which are unjustifable, as a rule, on economic grounds.
(2). The prompt repeal of all state legislation designed to discriminate against the products of other states and to restrict the free movement of goods between the states.

Comparable to laws designed to promote the interests of one group of distributors at the expense of other groups is the flood of state legislation passed in recent years for the purpose of protecting the business organizations of one state against the comperition of products from other states. The Committee believes that this growth of sectionalism on the part of the states is a serious threat to the interests of consumers throughout the United States.

As pointed out in the research report these state legislative and tax barriers to interstate trade have taken many forms. In some cases restrictions arise from the legitimate exercise of state quarantine powers. In the vast majority of cases, however, these laws have been passed for the obvious purpose of discriminating against the use within the state of competing products from other states, in the
effort to promote local industry. As such they are in effect tariff barriers erected within the borders of what has always been proudly regarded as the "greatest free-trade area in the world." Even their immediate advantages are dubious since they promote prompt retaliation on the part of neighboring states. In the long run there can be no doubt of their harmful effects in stimulating the uneconomic development of industry, in increasing production and distribution costs, and in raising prices to the consumer. In condemning legislation of this character, however, the Committee recognizes that real advantages are to be gained in some instances through further decentralization of industry. The advantages of a high degree of concentration of production in favored areas are sometimes offset by the resulting higher transportation and distribution costs. And in some cases geographic concentration of industry has been due as much to the artificial influence of railroad rate structures as to the natural advantages of location. We believe that these artificial barriers to economically desirable decentralization are just as harmful as is state legislation designed to protect local industries.
(3). The strengthening and more effective administration of existing laws designed to prevent and destroy private monopoly, to eliminate price-fixing, and to prevent other monopolistic prattices, except under government sanction and supervision.

The Committee recognizes that although competition plays a vital role as a regulator of our economy, it is nevertheless responsible for a considerable part of the cost of our distribution system. The necessity for establishing some limits to the destructive effects of some forms of competition has long been recognized. The civil law has long branded certain unethical competitive practices as unfair. In addition various statutes establish limits beyond which competition may not go, for example, into the adulteration of goods, or the cutting of wages below some established minimum. Such types of competition are already outlawed.

Less concern has been given to the fact that competition may be so excessive in other directions as to greatly increase costs far beyond any corresponding benefit to consumers. In many phases of
distribution compecitors must meet each other's efforts on an everrising comperitive spiral, or quit the contest. Many results of this situation are obvious, for example, multiplicity of brands and outlets, and comperitive advertising. If present trends continue, this type of competitive cost gives promise of mounting even higher. Some device must be developed to establish limits to the cost-increasing excesses of marketing comperition if we are to prevent a breakdown of the competitive system through too much competition. In the face of this danger the public welfare requires that certain limits be placed upon unbridled competitive warfare so as to preserve that healthy competition on which a free economic society must be based.

As competition will be limited in various ways it is important that we should prevent improper limitations which would injure the interests of consumers, and that we should foster only such limitations as will make for the long-ron interests of the community as a whole in promoting security, stability and efficiency, and a steadily increasing standard of living in terms of more and better goods available to consumers.

The Committee knows that the problem of monopoly is not a simple one. Available evidence is not wholly revealing as to the kinds of concentration, or monopoly, that have advanced the American standard of living and those that have limited it. Economic judgment should enter into administration of the anti-trust laws to a greater extent than their real or imagined formalism has so far permitted. Instances of bald collusion on price or on production for private benefir should be prosecuted systematically and the facilities of the Deparment of Justice strengthened to that end. On the other hand those instances of collusion contrary to the letter of existing statutes, but embraced for the purpose of mitigating demonstrable distress or maladjustment, should be judged in terms of their ascertainable effects. Common recognition that there can be both use, and abuse, of tariffs and patents, and of administrative and financial interlocking relationships, implies the need for discrecionary appraisal.
The Committee does not at this time presume to suggest the structural changes in our administrative machinery which would be
necessary for such discriminating treatment of the problem. Muct can be said for a business court, and a separation of prosecuting and judicial functions. There is something to be said at the othes extreme for a merely advisory economic committee as a part of the Attorney General's staff. The Temporary National Economic Committee has already addressed itself to these problems, and final judgment will properly await the conclusion of its fact finding and deliberative program.

The instinctive reaction to legislative sanctions for resale price maintenance and for mandatory retail mark-ups is that they run counter to the fundamental principle of a free market with prices competitively determined. An authoritative study of the actual effects of these laws is still lacking, and as long as a departure from a time-honored principle has been made by a large number of the states as well as the federal government, the country's opportunity to inform itself on actual consequences might well be utilized before a return to conventional policy is blindly insisted upon. But because these laws are a departure from principle, a heavy burden of proof rests upon their sponsors. Nevertheless it is not likely that any political solution that denies them in this dynamic stage the opportunity to make their case is likely to settle the issue. It is too late or too early for positive opinions.
(4). Permission by appropriate government agencies, under specific statutory awthority, for distributors to agree on the limitation of certain costly excesses in competition where the result will be to reduce the cost to the consumer.

Examples of some ways in which this might be done in the interest of the public are:
(a). Agreements between instalment finance companies on more conservative contract terms;
(b). The control. of advertising expenditures by agreement among advertisers in particular lines;
(c). Agreement among department stores to charge separately for delivery, credit and returned goods privileges;
(d). Agreement among distributors on credit terms to be ex-
tended to buyers, e.g., that accounts overdue more than a month should carry interest at a reasonable rate, etc.; and (e). Agreements by distributors on standardization of costs and charges which are concealed in the price of the goods they sell, providing it is possible to prevent an agreement on the price itself.
If such special services and advantages, most of which are a form of concealed price-cuting, could be standardized, the price of a commodity itself would have a much higher "visibility." Permission to do these things might sharpen and focus competicion on the place where it should be focused, on price. If a comperitor wants to get additional business and he cannot do it by extending costly and frequently harmful services, such as over-extension of credit, he will be compelled to get the additional business by cutting prices; and this, from the immediate standpoint of the buyer, would be desirable. On the other hand when prices are somewhat frozen, as under resale price maintenance, it would be unwise to limit other ways in which competition might operate.

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APPENDIX

## Note I

## Sources of Data and Methods Used for Flow Chart and Table 10

This effort to show the flow of goods largely represents an analysis of data collected in the U.S. Census for 1929 covering manufacturing, wholesaling, retailing, construction and several of the primary industries, supplemented by figures from other official sources. A complex system of balance sheets showing amounts sold and purchased or retained at the source by each branch was constructed on a commodity basis in most cases, but in others only the total flow out of the particular branch of industry or trade could be allocated. In this way obvious weaknesses in one set of data (such as the oversight of contract work in the purchase account of manufacturers and shortcomings in the distribution of sales of grain, livestock, tobacco, and dairy products in wholesale trade) were corrected by reference to data in other parts of the same general system of official figures. The purchases of goods for capital account and replacement by manufacturers (not shown by the Census of Manufactures) and by ather industrial buyers were estimated.

The allocation of transportation costs (totaling $\$ 8.8$ billion as shown in Table 10) to the various streams of movement is based largely on the value of the goods, modified in some instances by considerations of bulk and weight in relation to value.
The following sections refer to the rectangles shown on the Flow Chart and to data shown in Table 10.

## 1. Primary Sources and Imports

(a). Agriculture

Value from Income from Farm Production in the United States-1933 (reprinted from Crops and Markets, U.S.D.A.), plus value of livestock transfers from U.S.D.A. files. Distributed on basis of data from U.S. Bureau of Agricultural Economics, Census of Manufactures (purchases) and Census of Distribution (country buying of wholesalers and retailers).

## (b). Mines and Quarries

Census of Mines and Quarries, 1930; distributed according to purchases by industries as indicated by Census of Manufactures, Census of Distribution, Report of Board of Engineers, U.S. Army, Interstate Commerce Commission, and reports of U.S. Bureau of Mines.
(c). Oil and Gas Wells

Based upon reports of U.S. Bureau of Mines, supplemented by Census of Manufactures.

## (d). Fishing and Trapping

Value of fish catch- $\$ 123$ million (U.S. Bureau of Fisheries) plus estimate of $\$ 20$ million for hunting and trapping (Census of Distribution, 1930, Vol. II, p. 4). Thirty million dollars distributed to manufacturing by reference to Census of Manufactures, 1929, Vol. II, P. 95; balance assumed to go through intermediary trade.

## (e). Forestry

Based upon production figures appearing in Present and Potential Timber Resources, Senare Document No. 12, 1933, supplemented by data from Census of Manufactures and Interstate Commerce Commission-values calculated from information supplied by U.S. Forest Service. Distributed according to indicated use of various commodities by specific industries.

## (f). Imports

Statistical Abstract, 1931, p. 495. Distributed to intermediary trade upon basis of value of goods sold by wholesale importers and import agents (Census of Distribuston, 1930, Vol. II, p. 85). To obtain the estimated value of the goods as they entered the country it was necessary to deduct the estimated mark-up of such dealers as well as the estimated transportation charges. The $\$ 100$ million shown as going to retailers is a purely nominal figure to represent an unknown amount of goods imported direct by retailers. The residual amount was allocated to manufacturing.

## 2. Manufacturing

Based on Distribution of Sales of Marufacturing Plants, 1929, Census of Distribution; although the figures covered only 84 per cent of the total volume, the outlets for most of the remaining 16 per cent were evident from the characteristics of the commodities and industries involved. In order to determine net sales it was necessary to deduct the estimated cash discounts earned ( $\$ 1.1$ billion) from the gross value of products sold by manufacturers. Discounts, estimared on the basis of data in An Analysis of the Distribution Costs of 312 Manufacturers, Association of National Advertisers, 1933, were allocated to the various outlets in accordance with the value of products assigned to them.
Two adjustments were made in the source figures showing sales to intermediary trade. The first of these represented a deduction of $\$ 3.1$ billion estimated as moving directly from manufacturers to the export market without the intervention of any intermediary. This estimate was calculated by subtracting from the total value of exports (Statistical Abstract, 1934,
p. 412) the value of goods handled by exporters and export agents and estimated transportation costs.

The second adjustment represents an addicion to the volume moving through intermediaries and a corresponding reduction in the amount reported as going direct to retailers. An analysis of the sales of manufacturers to their own wholesale branches of $\$ 10$ billion, reported in the Distribution of Sales of Manufacturing Plants, 1929, p. 43, shows that about $\$ 1.6$ billion worth of petroleum refining products was reported moving through wholesale branches in 1929, whereas the Wholesale Census considered such sales as moving through bulk-tank stations. Deducting petroleum sales from the toral reported sales through manufacturers' own wholesale branches of $\$ 10$ billion leaves $\$ 8.4$ billion worth of sales through wholesale branches, in the sense of the word as used in the report of the Census of Distribution. But this $\$ 8.4$ billion falls far short of the $\$ 16.3$ billion reported for 1929 (Wholesale Distribution: 1933, p. A-1) as the volume of sales of manufacturers' sales branches, indicating that all manufacturers, in reporting their distribution of sales for 1929 , did not recognize their wholesale branches as such.

The difference-or $\$ 7.9$ billion-represents goods which moved through sales branches not only to retailers, but also to all other types of outlets. Fortunately the 1933 Census furnishes a clue as to the share of the $\$ 7.9$ billion which went to retail outlets. An analysis of the distribution of sales of manufacturers' wholesale branches in 1933 applied to the 1929 data by kind of business and type of establishment indicates that about 43.6 per cent of such sales went to retail outlets. Accordingly, it is estimated that $\$ 3.5$ billion worth of sales which actually went through manufacturers' branches was presumably concealed in the $\$ 12.8$ billion reporred in 1929 as sales to retail organizations in the publication Distribution of Sales of Manufacturing Plants.

It was also considered that the volume of sales handied by manufacturers' agents, selling agents and chain store warehouses for ultimate distribution to retailers was reported as going direct. The amount ( $\$ 2.9$ billion) handled by these intermediaries for retail distribution was calculated in the same manner as that handled by manufacturers' sales branches. The total of these items, or $\$ 6.3$ billion, was deducted from the reported sales to retailers to arrive at the estimated direct sales of manufacturers to tetailers. The $\$ 6.3$ billion had to be added, on the other hand, to the reported sales of intermediaries to approximate the actual volume passing through middlemen, including manufacrurers' own wholesale branches, selling agents and chain store warehouses, as well as wholesalers proper.

## 3. Intermediary Trade

Based on data appearing in bolesale Distribution, 1930, p. 78, Census

## Appendix

of Distribution; the figure for sales to industrial consumers ( $\$ 15$ billion) was increased by $\$ 2.4$ billion estimated to represent the movement of goods which were not shown in the distribution of sales. The resulting total value was then allocated to manufacturing and to other industrial consumers, such as the extractive industries and public utilities, in accordance with the indicated ourlets for the various commodities covered. Intermediary sales to the export market were assumed to equal the sales of exporters and export agents (Wholesale Distribution, 1930, Summary, p. 85). Livestock transfers, valued in the U.S. Department of Agriculture files at $\$ 468$ million, were considered to have been handled by intermediary dealers and were shown as sales to agriculture.

## 4. Retail Trade

Based on data appearing in Retail Distribution, 1930, Vol. I, Pp. 15, 85, 87; total sales were increased by sales of milk dealers not reported herein. The $\$ 3.3$ billion of sales to agriculture is intended to cover farmers' purchases of supplies, feed, equipment, etc., used for production and includes an unknown amount of goods actually purchased from intermediary dealers. The total amount was based on the estimated operating expenses of farmers (Income from Farm Production in the United Slates, 1933, p. 1, a reprint from Crops and Markets).

## Note II

## Sources and Methods Used for Estimating National Bull for Distribution

## Retail Trade

Total operating expense, including imputed compensation of proprietors (U.S. Census of Distribution, 1930, Vol. I, p. 51) plus dividends, corporate savings and business savings of individuals in retail trade (Senate Document No. 124, National Income, 1929-1932, p. 113).

## Wholesale Trade

Total operating expense (U.S. Census of Distribution, 1930, Vol. II, p. 65) plus withdrawals of entrepreneurs, dividends, corporate savings and business savings of iadividuals in wholesale trade (Senate Document No. 124, National Income, 1929-1932, p. 113).
Manufacturers' Distribution.
Based upon data appearing in An Analysis of the Distribution Costs of 312 Manufacturers, covering 1931-1932, by the Association of National Advertisers in coilaboration with the National Association of Cost Ac-
countants. The average distribution cost for each of twenty-nine industry groups included in the study was applied to the sales of the appropriate industry classification reported by the Census of Manufactures for 1929; the cost tatio for all of the industries not represented in the study was assumed to be the average expense ratio (weighted according to sales) of the industries that were represented.

The expense ratios (based upon 1931 reports) were modified in accordance with the estimated change in cost of wholesale and retail trade between 1929 and 1931 on the assumption that manufacturers' distribution costs followed the same trend as that of other distributors. Income tax figures published by the United States Treasury Deparment furnished the basis for estimating the change in the latters' costs.

The cost figures based upon the Association study were further modified by the elimination of three items of expense incurred by manufacturers: transportation charges on outgoing shipments (included in the estimate of the total cost of transportation) ; the expense of maintaining sales branches (included in the cost of wholesale trade); and expenditures for national advertising (included in "other costs"). (See Chapter 7, section 2, for further discussion of these data and the figures relating to manufacturers' distribution costs appearing in the report of the 1935 Census of Business entitled Distribution of Manufacturers' Sales.)

## Transportation

Rail freight-Freight revenue plus milk service revenue (included in passenger service). These amounts as reported in the I.C.C. statistics are limited to Class I carriers. The estimated figure for all carriers is based upon the ratio of the sum of freight and milk revenue to total operating revenue of Class I carriers. This figure is only slightly larger than the reported figure for Class I carriers.

Water freight-Based on data on "income produced" in water transportation as reported in National Income, 1929-1932, Senate Document No. 124, p. 96. This "income produced" figure being primarily wages and interest, was first increased to a "gross income" figure on the basis of the ratio of "employee compensation" to "total operating revenues" as reported in I.C.C. Carriers by Water with lines carrying less than 25 per cent of passengers. This "gross revenue" figure is reduced to a domestic freight basis by eliminating foreign water service elements (using dara in The Balance of International Payments of the United States) and by also eliminating the total passenger revenue of domestic water carriers, as reported in the I.C.C. statistics.

Railway Express-I.C.C. statistics.
Electric freight, motor trucking and pipe line transportation-National Income, 1929-1932, Senate Document No. 124, P. 93.

Parcel post-Annual report of the Posmaster General.
(a). National advertising-Data for newspapers from Bureau of Advertising, American Newspaper Publishers Association; for magazines, farm publications, and radio, from National Advertising Records; for trade publications, from Associated Business Papers, Inc.; and for outdoor and street-car advertising, from Commerce Yearbook, 1932.
(b). Distribution of nasural gas-Represents the difference between the value at the well and the value at the point of marketing (Mineral Resources of the United States, 1929, Part II, p. 320, U.S. Bureau of Mines).
(c). Finance cbarges on consumer instalment purchases-Lacking any authoritative statistics, an admittedly rough estimate has been made. In making the estimate it was assumed that the average amount of instalment credit outstanding was about half the estimated instalment sales for the year ( $\$ 6.5$ billion) and that the average interest and carrying charge was 10 per cent. The estimated cost is probably on the conservative side in view of the 15 per cent rate which was used in Table 35, Chapter 8.

TABLE A
Distribution of Gainful Workers in the United States, 1870-1930
(In Per Cent of the Total for Each Year)

|  | 1870 | 1880 | 1890 | 1900 | 1910 | 1920 | 1930 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Distribution and clerical |  |  |  |  |  |  |  |
| Trade | 6.8 | 7.9 | 8.8 | 10.6 | 9.7 | 10.0 | 12.5 |
| Transportation and communication | 4.2 | 4.8 | 6.0 | 6.7 | 7.1 | 7.3 | 7.9 |
| Clerical | 0.6 | 0.9 | 2.0 | 2.5 | 4.6 | 7.3 | 8.2 |
| Service |  |  |  |  |  |  |  |
| Public | 0.7 | 0.8 | 0.9 | 1.0 | 1.2 | 1.7 | 1.8 |
| Professional | 2.6 | 3.2 | 3.8 | 4.1 | 4.6 | 5.1 | 6.7 |
| Domestic and personal | 9.7 | 8.8 | 9.6 | 9.7 | 10.1 | 8.0 | 10.1 |
| Production |  |  |  |  |  |  |  |
| Agriculture | 53.0 | 49.4 | 42.6 | 37.5 | 31.0 | 27.0 | 21.4 |
| Forestry and fishing | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 |
| Mineral ertraction | 1.4 | 1.7 | 1.9 | 2.4 | 2.6 | 2.6 | 2.0 |
| Manufacturing and mechanical industries | 20.5 | 22.1 | 23.7 | 24.8 | 28.5 | 30.3 | 28.9 |

a. Adapted from 'Industrial Distribution of the Nation's Labor Force: 1870 to 1930," Bureau of the Census, October 23, 1938.

TABLE B
Distribution of Ganffur Workers in the United Statrs, 1870-1930
(In Thousands)

| 1870 | 1880 | 1890 | 1900 | 1910 | 1920 | 1930 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toral 12,925 | 17,392 | 23,318 | 29,073 | 37,371 | 42,434 | 48,830 |
| Discribution and clerical |  |  |  |  |  |  |
| Trade 878 | 1,371 | 2,050 | 3,085 | 3,633 | 4,258 | 6,081 |
| Transporrarion and communication $\quad 540$ | 828 | 1,395 | 1,952 | 2,665 | 3,104 | 3,843 |
| Clerical 82 | 160 | 469 | 737 | 1,719 | 3,112 | 4,025 |
| Service |  |  |  |  |  |  |
| Public 90 | 138 | 201 | 284 | 431 | 739 | 856 |
| Professional 342 | 550 | 876 | 1,181 | 1,711 | 2,171 | 3,254 |
| Domestic and personal $1,253$ | 1,524 | 2,234 | 2,819 | 3,756 | 3,380 | 4,953 |
|  |  |  |  |  |  |  |
| Agriculure 6,850 | 8,585 | 9,938 | 10,912 | 11,592 | 11,449 | 10,472 |
| Forestry and fishing 60 | 97 | 182 | 210 | 242 | 270 | 251 |
| Mineral extraction 187 | 298 | 447 | 694 | 965 | 1,090 | 984 |
| Manufacturing and me- |  |  |  |  |  |  |
| a. Adapted from "Industrial 1930," Bureau of the Census, | Distribu Ctober | $\begin{gathered} \text { ion of } \\ , 1938 . \end{gathered}$ | Natio | 's Labo | Force: | 1870 to |

TABLE C
Estimated Allocation of Ganful Workers to Production, Distribution and Service; and Population, 1870-1930a
(In Millions)

| Year | Estimated Number of Gainful Workersb |  |  |  |  | Population |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Production and Distribution |  |  | Service |  |
|  |  | Total | Production | Distribution |  |  |
| 1870 | 12.9 | 11.2 | 9.7 | 1.5 | 1.7 | 38.6 |
| 1880 | 17.4 | 15.2 | 12.9 | 2.3 | 2.2 | 50.2 |
| 1890 | 23.3 | 20.0 | 16.2 | 3.8 | 3.3 | 62.9 |
| 1900 | 29.1 | 24.7 | 19.1 | 5.6 | 4.4 | 76.0 |
| 1910 | 37.4 | 31.3 | 23.7 | 7.6 | 6.1 | 92.0 |
| 1920 | 42.4 | 35.9 | 26.2 | 9.7 | 6.5 | 105.7 |
| 1930 | 48.8 | 39.4 | 26.5 | 13.0 | 9.4 | 122.8 |

a. Based on "Industrial Distribution of the Nation's Labor Force; 1870 to 1930," and Popnlation, 1930, Vol. V, p. 408, Bureau of the Census; Slatistical Abstracs of the United States, 1937, Bureau of Foreign and Domescic Commence.
b. Estimated number of gainful workers in "production" computed by adding to the rotal number in "agriculture," "foresery and fishing," "mineral extraction," and "manufacturing and mechanical industries," in each year, 16.1 per cent of the number of clerical workers in the same year, as shown in Table B. Number of workers in "distribution" estimated in same wry by adding to the cotal number in "trade" and "transportation" and "communication," 76 per cent of the number of cierical workers. Number of workers in "service" estimated by adding to the rotal number workers, Number of workers in service escimated by adding to the total number
of "domestic and personal," "professional" and "public" service workers, 7.9 per cent of the number of clerical workers. Percentage pallocation of clerical workers to cent of the number of clerical workers. Percentage allocation of clerical workers to
production, distribution and service based on the difference between the number of workers in each occupation (except clerical). as shown in "Industrial Distribution of the Nation's Labor Force: 1870 to 1930' (Bureau of the Census, October 23, 1938), and the total number of workers in each industrial division as shown on p. 408 of Population, Vol. V (Bureau of the Census). The resulting figures do not purport to be accurate estimates of the actual numbers engaged in each branch of activity in each Census year, bur ir is believed that they provide a reasonable basis for estimating employment trends es shown in Table D.

TABLE D
Index Numbers of Estimated Number of Gainful Workers in
Production and Distribution and Volume of Goods Produced and Distributed, 1870-1930a

| Year | PopuLation* | Cainful Worters in Production and Distribution ${ }^{-1}$ |  |  | Volume of Goods Produced and Distributed |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{gathered} \text { Per Capita } \\ \text { Total of Popur } \\ \text { Volumeb Intions } \end{gathered}$ |  | Per Worker ${ }^{\text {a }}$ |  |  |
|  |  |  |  |  |  |  | In Produc- |
|  |  | In Production | In Distribution | Combined Total |  |  | In Production | In Distribution | tion and Distribution Combined |
| 1870 | 100 | 100 | 100 | 100 |  |  | 100 | 100 | 100 | 100 | 100 |
| 1880 | 130 | 132 | 157 | 135 | 176 | 135 | 133 | 112 | 130 |
| 1890 | 163 | 166 | 257 | 178 | 240 | 147 | 145 | 94 | 135 |
| 1900 | 197 | 196 | 378 | 120 | 343 | 174 | 175 | 91 | 156 |
| 1910 | 239 | 243 | 513 | 279 | 508 | 213 | 209 | 99 | 182 |
| 1920 | 274 | 268 | 657 | 320 | 745 | 272 | 278 | 113 | 233 |
| 1930 | 318 | 271 | 877 | 351 | 910 | 286 | 335 | 104 | 259 |

2. Computed from data in Table C.
b. "Annual Inder of Physical Production," Resench Department of the Federal Reserve Bank of New Yort, March 1939.
e. Derived fram datia presented in first five columns of the table.

TABLE E
Average Price Spreads of Unprocessed Food Products, 1935a

| Product Pr | Price Received by Farmerb | Retail Price | Spread Between Price Received by Farmer and Recail Price |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount | Per Cent of Farm Price | Per Cent of Retail Price |
|  | ( In Cents) | (In Cents) | (In Cents) |  |  |
| Cabbage, per pound | ad .7 | 4.0 | 3.3 | 471.4 | 82.5 |
| Currots, per bunch | . 1.0 | 5.5 | 4.5 | 450.0 | 81.8 |
| Celery, per bunch | 2.3 | 10.3 | 8.0 | 347.8 | 77.7 |
| Onions, per pound | d 1.3 | 5.2 | 3.9 | 300.0 | 75.0 |
| Oranges, per dozen | - 8.7 | 31.8 | 23.1 | 265.5 | 72.6 |
| Beans, per pound | 3.5 | 12.0 | 8.5 | 242.9 | 70.8 |
| Sweet potaroes, per pound | 1.3 | 4.4 | 3.1 | 238.5 | 70.5 |
| Lemons, per dozen | - 8.6 | 27.3 | 18.7 | 217.4 | 68.5 |
| Apples, per pound | d 1.9 | 5.8 | 3.9 | 205.3 | 67.2 |
| Leruace, per head | 3.0 | 8.8 | 5.8 | 193.3 | 65.9 |
| Spinach, per pound | d 3.1 | 7.9 | 4.8 | 154.8 | 60.8 |
| Potatoes, per pound | d 16.8 | 1.9 | 1.1 | 137.5 | 57.9 |
| Hens, per pound | 16.5 | 29.2 | 12.7 | 77.0 | 43.5 |
| Eggs, per dozen | 24.1 | 36.6 | 12.5 | 51.9 | 34.2 |

a. Adapted from Richard O. Been, Jr. and Frederick V. Waugh, "Price Spreads Between the Farmer and the Consumer," U.S. Bureau of Agricultural Economics, July 1936, Table 2, p. 9.
b. Equivalent form value-represents the estimated amount which farmers received on the average for the given quantity of products purchased at retail by the consumer. In practically all cases the farmer receives somewhat less of the consumer's retail doller than these figures indicate. This arises from the fact that no allowance was made for shrinkage losses or waste between the farmer and the consumer; actually, of course, such losses occur but are impossible to estimate.

TABLE F

## Distribution of Consumer's Dollar Pado to Chan Stores for Selected Agricultural Products Sold in Certain Large Citibs

(In Cents)

|  | Proceeds <br> to <br> Growers | Packing and Loading Cosks | Margins of Merchapt Sbippers and of Brokers for Growers | Transportation and Other Transit Costs | Wholesalens and Intermediate Dis tributors' Margins | Retail Margin | Total Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maine potatoes | 46.0 | $8.3{ }^{\circ}$ | 0.4 | 18.9 | 3.2 | 23.2 | 100.0 |
| Idaho potatoesb | 35.3 | 7.7 | 1.7 | 27.2 | 1.9 | 26.2 | 100.0 |
| California navel mrangesa | 33.2 | 10.2 | 1.7 | 23.0 | 0.9 | 30.9 | 100.0 |
| Georgia and Carolina peaches ${ }^{\text {a }}$ | 31.2 | 12.05 | 2.5 | 21.7 | 2.1 | 30.5 | 100.0 |
| Florida tomatoes* | 30.0 | 7.4 | 1.3 | 8.5 | 7.3 | 45.3 | 100.0 |
| Florida oranges? | 29.6 | 19.69 | 1.5 | 14.4 | 2.4 | 32.5 | 100.0 |
| Califormia table grapegr | 28.0 | 10.95 | 2.9 | 28.2 | 4.4 | 25.5 | 100.0 |
| Florida grapelfuit ${ }^{\text {a }}$ | 23.7 | 20.69 | 0.5 | 17.7 | 3.8 | 33.7 | 100.0 |
| California tomatoes ${ }^{\text {a }}$ | 23.1 | 11.0 | 2.6 | 17.6 | 1.4 | 44.3 | 100.0 |
| Pacific Northwest apples' | 21.4 | 17.60 | 2.7 | 23.3 | 3.7 | 31.3 | 100.0 |
| Pacific Coast iceberg leturek | 19.9 | 14.4 | 0.6 | 26.4 | 5.2 | 33.5 | 100.0 |
| Texas cabbage ${ }^{1}$ | 14.5 | 10.2 | 0.7 | 35.9 | 2.2 | 35.5 | 100.0 |
| Teras onions ${ }^{\text {m }}$ | 12.2 | $11.6 \pm$ | 3.4 | 28.0 | 3.1 | 41.5 | 100.0 |
| Florida cabbage ${ }^{\text {E }}$ | 11.3 | 14.74 | 1.2 | 27.5 | 4.9 | 40.2 | 100.0 |

Source: Agricultural Income Inquiry, Feieral Trade Commission, June 10, 1937, Part II, Chap. Sold in New York City, Philadelphia, Boston and Baltimore-October 1935 to Decermber ${ }_{1036}{ }^{\text {a }}$.
b, Sold in New York City, Philadelphia, Chicago, St. Louis, Kansas City, Detroit, Minneapolis, Dallas and New Orleans-October 1935 to December 1936.
e. Sold in New York City, Philadelphia, Boston, Chicago, Baltimore, St. Louis, Kangas City, Detroit and Dallas-October 1935 to December 1936. d. Sold in New York City, Philadelphin, Boston, Chicago, Baltimore, St. Louis and New Or-leans-during the peach season, 1936.
e. Sold in New York City, Philadelphin, Boston, Chicago and Balcimere-November 1935 to December 1936 .
f, Sold in New York City, Philadelphia, Boston, Chicago, Baltimore, Atlanta, St. Louis, Kanas City and Detroit-October 1935 ta December 1936.
g. Sold in New York City, Philadelphia, Boston, Chicago, Baltimore, St. Louls, Kansas City ad Dallas-October 1935 to December 1936.
h. Sold in New Yort City, Philadelphia, Boston, Chicago, Baltimore, Atlanta, St. Louis, Tansas City and Detroit-October 1935 to December 1936
i. Sold in New York City, Philadelphia, Boston, Chicago, Baltimore, St. Louis, Kansas City and Dallas-Oetober 1935 to December 1936.
J. Sold in New Yorls City, Philadelphis, Boston, Chicago, Atlants, St. Louis, Kansas City, New Orieans and Dallas-October 15, 1935 to December 15, 1936
k. Sold in New York City, Philadelphis, Boston, Chicago, Baltimore, Atsnts, St. Louis, Lansas City and Dallas-October 1935 to December 1936.
L. Sold in Nem York City, Philadelphia, Boston, Chicago, Baltimore, Kansas City and St. Louis-Deceaber 1935 to June 1936.
m, Sold in New Yort City, Philadelphis. Boston, Chicago and Baltinore-duriag the onion harvesting year, 1936.
n. Sold in New York City, Philadelphis, Boston and Baltimore-December 19.35 to December 1936.
o. Includes sorting and inspection costs and a storage cost of 1.6 cents.
p. Includes harvesting and inspection costs.
q. Includes packing costs.
. Includes storage of 0.09 cent.
3. Includes a storage cost of 2.9 cents.
. Includes hauling cost.
u. Includes cutting costs.

TABLE G
Average Pricks and Price Spreads of Milk in Chicagoa

| Year | Producer's Price | $\begin{aligned} & \text { Retail } \\ & \text { Price } \end{aligned}$ | Dealer's Spread | Per Cent of Retail Price Received by Producer |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \left(\text { Cents Per }^{\text {Puart }}\right. \text { ) } \end{gathered}$ | $\begin{gathered} (\text { Conts Por } \\ \left.Q_{\text {wart }}\right) \mathrm{C} \end{gathered}$ | $\begin{gathered} \text { (Cents Pey } \\ \text { Qwart } \end{gathered}$ |  |
| 1917 | 3.1 | 10.0 | 4.9 | 51.0 |
| 1918 | 6.2 | 12.5 | 6.3 | 41.6 |
| 1919 | 7.0 | 14.2 | 7.2 | 49.3 |
| 1920 | 6.8 | 14.9 | 8.1 | 45.6 |
| 1921 | 4.5 | 13.3 | 8.8 | 33.9 |
| 1922 | 4.0 | 12.0 | 8.0 | 33.3 |
| 1923 | 5.5 | 13.5 | $8.0{ }^{\text {e }}$ | 40.7 |
| 1924 | 5.4 | 14.0 | 8.6 | 38.6 |
| 1925 | 5.3 | 14.0 | 8.7 | 37.9 |
| 1926 | 5.4 | 14.0 | 8.6 | 38.6 |
| 1927 | 5.4 | 14.0 | 8.6 | 38.6 |
| 1928 | 5.4 | 14.0 | 8.6 | 38.6 |
| 1929 | 5.8 | 14.0 | 8.2 | 41.4 |
| 1930 | 5.7 | 14.0 | 8.3 | 40.7 |
| 1931 | 5.0 | 13.0 | 8.0 | 38.5 |
| 1932 | $4.0{ }^{\text {d }}$ | $11.2{ }^{\text {d }}$ | 7.2 | 35.7 |
| 1933 | 3.7 d | 9.9d, | 6.2 | 37.4e |
| 1934 | 4.3 | 9.4 | 5.1 | 45.7 |
| 1935 | 4.5 | $10.8{ }^{\text {a }}$ | 6.3 | $41.7 e$ |

a. Based on Sala and Distribusion of Milk and Milk Prodncts-Chicago Sales Area, Federal Trade Commission, April 15, 1936, p. 57.
b. Prices paid producers for class 1 milk. Producers received much lower prices for milk sold in other classes.
c. Average of monthly prices in quart bottles delivered to homes. Does not take into consideration prices for milk in pint bottes or wholesale prices.
d. Due largely to the activities of independent dealers purchasing from non-members of the Pure Milk Association.
e. Figures slightly adjusted to take account of apparent inconsistencies.

TABLE H
Retail Stores and Sales by Size of Busnness, 1935, 1933, and 1929:

| Sixe of Business (Annual Net Sales) | Per Cent of Total Number of Storesb |  |  | Per Cent of Total Salesc |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1933 | 1929 | 1935 | 1933 | 1929 |
| United States Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| \$1,000,000 or more | 0.1 | 0.1 | 0.1 | 10.1 | 9.7 | 12.3 |
| 500,000 to 999,999 | 0.2 | 0.1 | 0.3 | 5.0 | 3.7 | 6.3 |
| 300,000 to 499,999 | 0.3 | 0.2 | 0.6 | 5.5 | 4.5 | 6.5 |
| 100,000 to 299,999 | 2.3 | 1.6 | 4.1 | 17.6 | 15.0 | 20.1 |
| 50,000 to 99,999 | 4.4 | 3.7 | 8.4 | 15.1 | 15.0 | 17.8 |
| 30,000 to 49,999 | 7.3 | 5.8 | 11.5 | 13.9 | 13.4 | 13.7 |
| 20,000 to 29,999 | 7.9 | 7.1 | 11.2 | 9.5 | 10.4 | 8.6 |
| 10,000 to 19,999 | 17.7 | 17.1 | 20.3 | 12.3 | 14.5 | 9.0 |
| Less than 10,000 | 59.9 | 64.4 | 43.6 | 11.0 | 13.8 | 5.7 |

a. Census of Business: 1935, Retail Distribution, Vol. 1, p. 1-31.
b. Toral number of srores: $1935-1,653,961 ; 1933-1,526,119 ; 1929-1,543,158$.
c. Toual seles: $1935-\$ 33.2$ billion; $1933-\$ 25.0$ billion; 1929-\$49.1 billion.

TABLB I

## Relative Importance of Different Kinds of Retall

Business, 1935 and 1929a


TABLE I (Continued)

| Eind of Business | Net Sales |  |  |  | Stores |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | Per Cent of Total Sales |  | Number |  | Per Cent ofTotal Number |  |
|  | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 |
| Farmers' supplies and country general group | (Ia Millions) |  | (In Thousamds) |  |  |  |  |  |
|  | 1,709 | 3,690 | 5.1 | 7.5 | 87 | 131 | 5.3 | 8.5 |
| Country general stores Farmers' supply stores | 1,110 599 | $\begin{aligned} & 2,571 \\ & 1,119 \end{aligned}$ | 3.3 1.8 | 5.2 2.3 | ${ }^{67}{ }^{67}$ | 104 27 | 4.1 | 6.7 1.8 |
| Fursiture and household group | 1,290 | 2,755 | 3.9 | 5.6 | 45 | 59 | 2.7 | 3.8 |
| Furniture stores Houschold applinate stores | 695 | 1,510 | 2.1 | 3.1 | 17 | 25 | 1.0 | 1.6 |
|  | 381 | 380 | 1.1 | 0.8 | $14^{\circ}$ | 9 | 0.8 | 0.5 |
| Radio stores <br> Other furniture and household | 57 | 562 | 0.2 | 1.1 | 4 | 16 | 0.3 | 1.1 |
|  | 157 | 303 | 0.5 | 0.6 | 10 | 9 | 0.6 | 0.6 |
| Miscellaneove group |  |  |  |  |  |  |  |  |
| Restaurants and exting places | 2,391 | 2,125 | 7.2 | 4.3 | $251{ }^{\text {a }}$ | 134 | 15.2 | 8.7 |
| Fuling stations | 1,968 | 1,787 | 5.9 | 3.6 | 198 | $122^{\circ}$ | 11.9 | 7.8 |
| Drugstores | 1,233 | 1,690 | 3.7 | 3.4 | 57 | 58 | 3.4 | 3.8 |
| Fuel and ice dealers | 859 | 1,013 | 2.6 | 2.1 | 354 | 19 | 2.1 | 1.2 |
| Jewely stores <br> Cigar stores and <br> cigar stands <br> Other retail stores | 235 | 536 | 0.7 | 1.1 | 12 | 20 | 0.8 | 1.3 |
|  |  |  | 0.6 | 0.8 | 15 | 33 | 0.9 | 2.2 |
|  | 1,179 | 1,913 | 3.6 | 3.9 | 90 | 89 | 5.4 | 5.8 |

a. Census of American Business: 1933, Retail Dintribution, Vol. I, p. A-13; 1935, Vol. I, p. 2-04. B. Includes hay, griin, feed stores (both with and without groceries).
c. Includes appilinnce-snd-radio stores.
d. Includes 98,005 drinking places with $\$ 723$ million sales not reported in 1929.
e. Includes fuel-oil dealers reported under "fuel and ite dealers" in 1935.
f. Includes fuel-oil dealers reported under "filling slations" in 1929.

TABLE J
Index Numbers of Sales and Patronage Refunds of Consumers' Cooperatives ${ }^{2}$

| Year | Retail Store Associations |  | Petroleum Associations |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Sales | Patronage Refunds | Sales | Patronage Refunds |
| 1925 | 82.3 | 88.1 | 38.6 | 30.3 |
| 1926 | 88.3 | 82.6 | 54.0 | 54.8 |
| 1927 | 93.0 | 91.5 | 62.9 | 51.0 |
| 1928 | 98.1 | 97.3 | 79.4 | 57.4 |
| 1929 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1930 | 97.4 | 93.1 | 114.6 | 146.6 |
| 1931 | 76.7 | 82.7 | 103.5 | 120.4 |
| 1932 | 59.7 | 83.3 | 95.0 | 101.3 |
| 1933 | 55.5 | 58.1 | 93.4 | 101.6 |
| 1934 | 64.2 | 81.8 | 114.9 | 122.1 |
| 1935 | 75.2. | 92.5 | 142.9 | 142,7 |
| 1936 | 87.5 | 129.8 | 168.8 | 173.9 |

a. Florence E. Parker, Consumerr' Cooperation in the United Siater, 1936, Bullein No. 659, Bureau of Labor Statistics, 1938, p. 14.

TABLE K
Distribution of Intermediary Trade by Principal Commodities, 1935 AND 1929

| Kind of Business | Net Sales |  |  |  | Establishments |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | Per Cent of Total Sales |  | Number |  | Per Cent of Total Number |  |
|  | 19354 | 1929 ${ }^{\circ}$ | 1935 | 1929 | 19354 | 19200 | 1935 | 1929 |
|  | (In Billions) |  | (In Thousands) |  |  |  |  |  |
| United States Total | \$44.7 | \$68.9 | 100.0 | 100.0 | 177.2 | 169.7 | 100.0 | 100.0 |
| Groceries and foods (except farm products) | 8.0 | 11.7 | 18.0 | 16.9 | 22.1 | 21.7 | 12.5 | 12.8 |
| Farm products-raw materials | 5.8 | 11.7 | 12.9 | 17.0 | 19.5 | 29.6 | 11.0 | 17.5 |
| Farm products-consumer goods | 33.7 | 5.7 | 8.2 | 8.3 | 23.8 | 20.8 | 13.4 | 12.3 |
| Petraleum and its products | 3.0 | 3.2 | 6.7 | 4.7 | 28.2 | 23.0 | 15.9 | 13.6 |
| Dry-goods | 2.4 | 3.8 | 5.4 | 5.5 | 4.9 | 5.2 | 2.7 | 3.0 |
| Machinery, equipment and supplies (except electrical) | 2.2 | 3.1 | 5.0 | 4.4 | 13.5 | 11.8 | 7.6 | 7.0 |
| Automotive products | 2.2 | 2.3 | 4.8 | 3.3 | 7.1 | 4.6 | 4.0 | 2.7 |
| Metals (except scrap) | 1.7 | 4.4 | 3.9 | 6.4 | 1.9 | 2.3 | 1.1 | 1.3 |
| Tohacco and its products (ercept leaf) | 1.5 | 1.6 | 3.4 | 2.4 | 2.5 | 2.0 | 1.4 | 1.2 |
| Clothing and furnishings | 1.5 | 2.1 | 3.2 | 3.1 | 5.7 | 5.5 | 3.2 | 3.2 |
| Electrical goods | 1.1 | 2.4 | 2.5 | 3.5 | 3.8 | 3.8 | 2.1 | 2.3 |
| Beer, wines, and liquors | 1.1 | , | 2.4 | - | 6.0 | - | 3.4 | , |
| Chemicals and paints | 1.0 | 1.2 | 2.2 | 1.7 | 2.6 | 2.2 | 1.5 | 1.3 |
| Lumber and building materials (other than metal) | . 9 | 2.1 | 2.0 | 3.1 | 4.1 | 5.5 | 2.3 | 3.2 |
| Coal and coke | . 8 | 1.2 | 1.8 | 1.7 | 1.2 | 1.3 | 0.7 | 0.8 |
| Paper and its products | . 7 | 1.1 | 1.6 | 1.6 | 3.2 | 3.1 | 1.8 | 1.8 |
| Drugs and drug sundries | . 6 | . 8 | 1.4 | 1.1 | 2.0 | 1.7 | 1.1 | 1.0 |
| Furniture and house furnishings | . .5 | 1.0 | 1.0 | 1.4 | 2.8 | 3.0 | 1.6 | 1.7 |
| Eardware | . 5 | . 9 | 1.1 | 1.3 | 1.5 | 1.8 | 0.9 | 1.1 |
| Farm supplies | . 4 | . 9 | 1.0 | 1.3 | 2.3 | 2.0 | 1.3 | 1.2 |
| Waste materials | . 4 | . 5 | 1.0 | 0.8 | 4.9 | 4.0 | 2.8 | 2.4 |
| General merchandise | . 4 | .6 | 1.0 | 0.9 | . 3 | 4 | 0.2 | 0.2 |
| Plumbing and heating equipment and supplies | . 4 | ${ }_{5}$ | 0.9 | 1.2 | 2.7 | 2.8 | 1.5 | 1.6 |
| Arnusement and sporting goods | . 4 | . 5 | 0.8 | 0.7 | 1.7 | 1.4 | 1.0 | 0.9 |
| Jewelry and optical grods | . 3 | . 5 | 0.6 | 0.7 | 2.2 | 2.4 | 1.2 | 1.4 |
| All other products | 1.3 | 2.9 | 3.0 | 4.2 | 6.2 | 7.2 | 3.5 | 4.2 |
| Total, excepting chain store warehouses | 42.8 | 67.0 | 95.8 | 97.2 | 176.7 | 169.1 | 99.7 | 99.7 |
| Chain store warehouses ${ }^{\text {a }}$ | 1.9 | 1.9 | 4.2 | 2.8 | . 5 | . 6 | 0.3 | 0.3 |

a, Census of Businesa: 1935, Wholesale Distribution, Vol, V, pp. 27, 28.
b. Census of American Business: 1933, Wholarale Distribution, Vol. I, pp. a-2, a-3. (These are revised figures for 1929.) Sales of chain store warehouses reported on p. a-17 have been deducted from each classification to make the figures comparable with 1935.
c. Not avaikgle in 1929.
d. Census of Business: 1935, Retall Chains, p. 39.

TABLE 1
Percentage of Manufacturrrs' Salbs Made Through Various Channrls of Distribution, 1935 and 1929a

| Industry Group | Own Wholesale Branches |  | Wholesalers and Jobbers |  | Industrial Users |  | Retailers |  | Own Retail Stores |  | Houschold Consumers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 |
| All Industries | 20.6 | 18.0 | 27.3 | 31.8 | 24.6 | 26.0 | 22.9 | 20.0 | 2.2 | 2.4 | 2.4 | 1.8 |
| Petroleum and coal products | 64.3 | 60.1 | 19.6 | 18.6 | 10.0 | 8.5 | 1.6 | 5.2 | 4.4 | 7.6 | 0.1 | b |
| Rubber | 43.0 | 41.7 | 15.9 | 16.1 | 29.3 | 25.9 | 9.0 | 15.6 | 2.7 | 0.5 | 0.1 | 0.2 |
| Stone, clay, and glass products | 28.3 | 4.9 | 18.8 | 49.8 | 31.6 | 36.3 | 16.9 | 6.2 | 0.3 | 0.1 | 4.1 | 2.7 |
| Food and kindred products | 21.3 | 24.6 | 28.5 | 31.6 | 7.9 | 6.9 | 33.2 | 29.2 | 3.8 | 3.2 | 5.1 | 4.5 |
| Iron and steel and their products | 21.3 | 5.9 | 13.4 | 34.1 | 59.8 | 55.8 | 4.8 | 3.9 | 0.3 | 0.3 | 0.4 | b |
| Leather and its manufactures | 20.4 | 21.3 | 16.7 | 25.0 | 18.4 | 14.5 | 41.6 | 35.1 | 2.7 | 3.7 | 0.2 | 0.4 |
| Chemicals and allied products | 20.2 | 12.2 | 31.0 | 39.1 | 30.9 | 33.5 | 15.3 | 12.7 | 0.3 | 0.5 | 2.3 | 2.0 |
| Machinery | 20.1 | 17.8 | 24.6 | 29.0 | 44.5 | 41.9 | 7.4 | 6.7 | 2.9 | 4.4 | 0.5 | 0.2 |
| Transporcation equipment | 19.4 | 17.0 | 26.3 | 27.5 | 21.8 | 24.3 | 31.4 | 29.1 | 0.4 | 1.9 | 0.7 | 0.2 |
| Nonferrous metals and their products | 6.8 | 5.9 | 20.6 | 27.8 | 61.1 | 56.3 | 10.4 | 8.2 | 0.2 | 0.3 | 0.9 | 1.5 |
| Forest products | 5.9 | 4.5 | 27.1 | 30.2 | 32.0 | 38.8 | 29.6 | 24.5 | 1.3 | 1.2 | 4.1 | 0.8 |
| Paper and allied products | 5.8 | 3.8 | 32.4 | 39.1 | 54.9 | 51.8 | 6.8 | 5.3 |  |  | 0.1 | b |
| Texciles and their products | 4.8 | 5.8 | 15.3 | 22.4 | 16.9 | 13.0 | 55.3 | 50.8 | 5.1 | 4.6 | 2.6 | 3.4 |
| Miscellaneous | 4.4 | 5.9 | 72.6 | 67.0 | 6.6 | 9.0 | 13.9 | 14.8 | 0.6 | 0.6 | 1.9 | 2.7 |

[^67] comparable in 1935 and 1929.

TABLE M
Operating Expenses of Various Kinds of Retail Business, 1935, 1933, AND 1929a
(As Per Cent of Net Sales)

| Kind of Business | Total Operating Expense |  |  | Wages and Selariesb |  | Rents |  | All Other <br> Expenses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1933 | 1929 | 1935 | 1929 | 1935 | 1929 | 1935 | 1929 |
| United States Total | 27.5 | 32.2 | 24.8 | 15.5 | 14.3 | 3.9 | 4.2 | 8.1 | 6.3 |
| Restaurants, cafeterias, lunchnooms | 52.0 | 51.0 | 39.9 | 24.9 | 24.2 | 6.8 | 7.1 | 20.3 | 8.6 |
| Jewelry stores | 41.9 | 53.3 | 35.5 | 22.2 | 19.4 | 6.6 | 6.8 | 13.1 | 9.3 |
| Furniture stores | 34.7 | 41.6 | 31.1 | 17.5 | 15.6 | 4.5 | 4.8 | 12.7 | 10.7 |
| Women's ready-to-wear | 31.1 | 33.1 | 29.1 | 15.3 | 14.3 | 6.2 | 6.2 | 9.6 | 8.6 |
| Shoe stores | 30.8 | 33.6 | 29.4 | 14.0 | 13.7 | 7.5 | 7.6 | 9.3 | 8.1 |
| Men's clothing and furnishings | 30.4 | 35.5 | 28.9 | 14.9 | 14.2 | 6.0 | 6.9 | 9.5 | 7.8 |
| Department stores | 29.2 | 32.7 | 28.4 | 14.2 | 14.3 | 3.0 | 2.8 | 12.0 | 11.3 |
| Hardware stores | 28.0 | 34.3 | 26.6 | 16.8 | 16.2 | 4.2 | 4.4 | 7.0 | 6.0 |
| Drugstores | 27.6 | 32.1 | 27.1 | 15.5 | 15.9 | 5.3 | 5.6 | 6.8 | 5.6 |
| Variety stores | 27.1 | 29.3 | 25.0 | 12.2 | 11.1 | 6.6 | 6.2 | 8.3 | 7.7 |
| Cigar stores | 27.0 | 32.4 | 31.4 | 15.1 | 18.2 | 7.7 | 9.3 | 4.2 | 3.9 |
| Filling stations | 26.4 | 32.5 | 23.8 | 17.3 | 15.3 | 5.0 | 5.4 | 4.1 | 3.1 |
| Meat markets | 24.9 | 30.8 | 19.6 | 15.3 | 12.4 | 3.6 | 3.2 | 6.0 | 4.0 |
| Groceries (without meats) | 20.1 | 24.4 | 17.4 | 13.0 | 10.9 | 2.8 | 2.8 | 4.3 | 3.7 |
| Combination (groceries and meats) | 18.4 | 21.4 | 16.1 | 10.8 | 10.0 | 2.3 | 2.3 | 5.3 | 3.8 |
| Motor vehicle dealers (tew) | 16.3 | 21.40 | 17.7* | 9.3 | 9.6 | 1.2 | 1.7 | 5.8 | 6.4 |
| General stores (with food) | 15.9 | 19.9 | 13.6 | 10.5 | 9.1 | 1.6 | 1.5 | 3.8 | 3.0 |

a. Census of Business: 1935, Retail Distribution, Vol. V, Pp. 14, 22; Retast Operaling Expense, pp. 8, 16. Census of American Business: 1933, Retail Disifibution, Vol. 1. p. -5. Census of Digtribution for 1929, Vol. I, Pp. 47, 51
b. Includes compensation imputed to proprietors as well as expenses reported an payrolly.
c. Includes used-car dealers,

TÄble N
Sales and Expense Ratios of Various Types of Retnil Operation, 1935, 1933, AND 1929a

| Type of Operation | Net Sales as Per Cent of Total Net Sales |  |  | Operating Expenses as Per Cent of Net Salesb |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1933 | 1929 | 1935 | 1933 | 1929 |
| United States Toral-all sypes | 100.0 | 100.0 | 100.0 | 27.5 | 32.2 | 24.8 |
| Independents | 73.1 | 71.3 | 77.5 | 28.4 | 33.9 | 25.6 |
| Single-store | 65.2 |  | 64.1 | 28.7 |  | 26.4 |
| Two-store | 5.3 | ... | 6.1 | 25.6 |  | 25.5 |
| Three-store | 2.3 | ... | 2.6 | 25.9 | $\cdots$ | 26.3 |
| Local-branch systems | 0.3 | ... | 0.1 | 32.4 | ... | 28.2 |
| Retailers-country buyers | ... | ... | 3.6 | ... | ... | 14.4 |
| Retailers-wholesalers |  | ... | 1.0 | ... | ... | 17.5 |
| Cheins | 22.8 | 25.4 | 20.0 | 25.0 | 27.2 | 23.3 |
| Sectional and national | 19.3 | ... | 12.5 | 24.0 |  | 22.6 |
| Local | 3.1 | ... | 6.7 | 29.6 | $\cdots$ | 23.5 |
| Manufacturer-controlled | 0.4 | . ${ }^{\text {. }}$ | 0.8 | 39.5 | $\ldots$ | 31.6 |
| All ocher types | 4.1 | 3.3 | 2.5 | 26.2 | 31.9 | 25.8 |
| Mail-order houses | 1.3 | 1.0 | 1.1 | 25.4 | 28.1 | 23.4 |
| State liquor stores | 0.5 |  |  | 8.3 |  |  |
| Utility-operated stores | 0.4 | 0.3 | 0.3 | 35.6 | 40.0 | 29.1 |
| Direct selling (house-to-house) | 0.4 | 0.4 | 0.2 | 45.7 | 44.4 | 46.0 |
| Leased departments, chain | 0.3 |  | 0.3 | 34.2 |  | 39.9 |
| Commissaries and company stores | 0.3 | 0.4 | 0.2 | 14.9 | 15.5 | 11.7 |
| Leased departments, independent | 0.1 |  | 0.1 | 31.4 |  | 32.5 |
| Other types | 0.8 | 1.24 | 0.3 | 25.2 | 30.50 | 15.7 |

a. Census of Business: 1935, Retail Distribution, Vol. IV, p. 13; Vol. V, p. 14; Census of American Business: 1933, Retail Distribution, Vol. I, p. a-12; Census of Distribution for 1929, Vol. I, p. 68.
b. Operating expenses include impured compensation of proprietors and firm members computed on basis of average annual earnings per full-time employee for all types of operation. Data are available for both 1929 and 1933 by which it is possible to compute the proprietors' compensation for the individual types of operation, but since the 1935 figures do not permit of this, general averages were used for all chree years. The average annual earnings in 1935 were based on the average weekly wage for all kinds of business for a representative week.
c. Includes "Leased departments, independent", and "Leased departments, chain" which were reported separately in 1929 and 1935.
Note: Blank spaces denote that data were not available for comparison with 1935 figures.

TABLE 0
Operating Expenses and Average Annual Sales prr Store in Cities of Various Sizes, 1929a

| Kind of Business | Operating Expenses as Per Cent of Net Sales |  |  |  |  |  | Average Annual Sales Per Store |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exclusive of Proprietors' Compensation |  |  | Inclusive of Impured Proprietors' Compensation |  |  |  |  |  |
|  | Cicies More than 30,000 | $\begin{gathered} \text { ith Popul } \\ 10,000 \\ \text { to } \\ 30,000 \end{gathered}$ | $\begin{gathered} \text { cion of: } \\ \begin{array}{c} \text { Less } \\ \text { than } \\ 10,000 \end{array} \end{gathered}$ | $\begin{aligned} & \text { Cities } \\ & \text { More } \\ & \text { than } \\ & 30,000 \end{aligned}$ | $\begin{gathered} \text { ith Popul } \\ 10,000 \\ \text { to } \\ 30,000 \end{gathered}$ | Lof of: <br> Less <br> than <br> 10,000 | Cities More than 30,000 | $\begin{gathered} \text { ith Popul } \\ 10,000 \\ 10 \\ 30,000 \end{gathered}$ |  |
| All Groups | 24.7 | 20.3 | 14.5 | 27.7 | 23.7 | 20.2 | \$41,707 | \$35,266 | \$21,345 |
| Restaurants and eating places | 36.7 | 31.5 | 26.8 | 41.2 | 34.0 | 37.2 | 22,994 | 14,463 | 7,559 |
| Furniture and household group | 31.9 | 28.3 | 21.4 | 33.9 | 31.4 | 27.1 | 69,228 | 41,937 | 21,413 |
| Jewelry stores | 30.3 | 28.7 | 21.7 | 34.9 | 37.2 | 36.7 | 40,967 | 20,576 | 9,136 |
| Apparel group | 29.0 | 23.7 | 17.8 | 31.6 | 27.6 | 25.0 | 46,465 | 29,458 | 17,281 |
| General merchandise group | 27.9 | 23.3 | 18.4 | 28.4 | 24.0 | 20.9 | 218,808 | 94,567 | 36,839 |
| Lumber and building group | 26.8 | 24.5 | 18.5 | 29.0 | 27.1 | 21.6 | 64,306 | 52,844 | 38,633 |
| Drugstores | 25.0 | 23.0 | 18.5 | 28.3 | 26.8 | 24.7 | 34,689 | 34,990 | 20,776 |
| Hardware stores | 23.1 | 22.7 | 17.5 | 28.5 | 25.7 | 24.0 | 28,807 | 45,198 | 23,633 |
| Automocive group | 21.5 | 18.1 | 15.3 | 23.6 | 20.6 | 17.5 | 60,522 | 52,050 | 22,828 |
| Food group | 15.9 | 13.9 | 12.0 | 21.0 | 18.4 | 18.6 | 24,886 | 25,921 | 17,672 |
| General stores | 11.8 | 11.3 | 8.9 | 15.9 | 15.1 | 13.8 | 21,046 | 28,775 | 24,710 |

a. Derived from Census of Distribution for 1929, Vol. I, pp. 969, 972, 975.

TABLE $P$
Average Wbekly Wages of Full-timb Employees in Chain Stores and All Types of Storesa
(Based on Census Sample for Week of October 26, 1935)

| Kind of Business | Total Full-time Employees |  |  |  | Selling Employees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Type Storesb |  | Chain Stores |  | All Type Storesb |  | Chain Stores |  |
|  | Number of $\mathrm{Em}-$ ployees | Average Weekly Wage | Number of Employees | Average Weekly Wage | Number of Emplojees | Average Weekly Wage | Number of Employees | Average Weekly Wage |
| United States Total | 2,641,041 | \$19.56 | 137,563 | \$23.80 | 1,230,132 | \$19.65 | 84,983 | \$23.65 |
| Accessories, tire, battery | 37,273 | 23.61 | 1,443 | 27.88 | 16,010 | 25.11 | 965 | 25.88 |
| Cigar stores | 10,691 | 19.20 | 632 | 25.04 | 7,787 | 19.96 | 497 | 23.00 |
| Department stores | 270,284 | 21.24 | 3,201 | 23.59 | 123,218 | 18.39 | 1,858 | 21.63 |
| Drug (with fountain) | 77,612 | 18.43 | 11,496 | 21.03 | 48,974 | 19.36 | 7,085 | 23.58 |
| Drug (without fountain) | 21,836 | 21.27 | 499 | 24.66 | 15,339 | 21.57 | 256 | 22.95 |
| Filling stations. | 142,920 | 17.37 | 11,044 | 35.52 | 116,267 | 17.34 | 9,074 | 35.21 |
| Food stores | 451,345 | 19.66 | 40,345 | 25.09 | 324,014 | 20.26 | 34,972 | 24.58 |
| Candy and confectionery | 22,974 | 14.08 | 1,302 | 19.26 | 11,845 | 14.50 | 702 | 16.90 |
| Combination stores | 206,996 | 18.92 | 28,711 | 25.88 | 163,341 | 19.54 | 26,804 | 25.76 |
| Dairy products and milk | 55,358 | 28.05 | 2,805 | 29.48 | 28,634 | 31.17 | 858 | 22.73 |
| Grocery (without meats) | 88,397 | 18.05 | 5,540 | 21.03 | 69,788 | 18.70 | 5,339 | 20.68 |
| Mear markets | 32,627 | 21.89 | 930 | 26.60 | 22,604 | 23.04 | 619 | 26.63 |
| Fuel and ice dealers | 46,009 | 23.71 | 3,644 | 33.34 | 7,174 | 22.28 | 720 | 38.64 |
| Furniture | 59,437 | 25.61 | 3,149 | 26.76 | 21,665 | 25.65 | 875 | 30.24 |
| Household appliance and radio | 36,474 | 23.78 | 3,251 | 29.03 | 22,384 | 23.32 | 2,175 | 27.90 |
| Jewelry stores | 18,935 | 28.76 | 632 | 30.06 | 8,934 | 26.92 | 188 | 32.58 |
| Lumber and building materials | 59,050 40,537 | 25.14 | 2,881 815 | 28.79 32.27 | 11,738 $\mathbf{2 4 , 3 8 5}$ | 24.96 24.67 | 1,111 | 29.38 32.10 |
| Millinery | 11,426 | 18.11 | 748 | 18.51 | 9,333 | 17.41 | 647 | 16.02 |
| Motor-vehicle dealers (new) | 226,895 | 24.90 . | 2,844 | 28.93 | 64,370 | 25.86 | 776 | 31.19 |
| Restaurants and cafeterias | 369,639 | 13.06 | 16,789 | 15.16 | 29,760 | 15.07 | 1,670 | 14.72 |
| Shoe | 29,969 | 24.15 | 3,496 | 26.79 | 23,782 | 23.01 | 2,873 | 24.27 |
| Variety | 57,761 | 13.53 | 20,783 | 18.98 | 42,103 | 12.16 | 13,998 | 12.98 |
| Women's specialty | 73,638 | 20.49 | 1,038 | 24.73 | 46,655 | 17.82 | 678 | 20.19 |

. , a. Census, of Business: 1935, Retail Distribution, Vol. V, pp. b. Including employees of chains.

TABLE Q
Stock-Turn Compared with Expense Ratios for Chains and All Other Types of Stores for Various Kinds of Business, 1935

| Kind of Business | Total Sales | Stocks on Hand at End of Yeara | Stock-Turn: Total Sales Divided by Stocks at End of Year | Total Expenses as Per Cent of Net Salest |
| :---: | :---: | :---: | :---: | :---: |
| (In Millions) |  |  |  |  |
| U.S. Total | \$33,161 | \$4,298 | 7.7 | 27.5 |
| Chains | 8,461 | 860 | 9.8 | 25.0 |
| All others | 24,700 | 3,438 | 7.2 | 28.3 |
| Groceries (without meats) | 2,203 | 192 | 11.5 | 20.0 |
| Chains | 300 | 19 | 15.8 | 15.6 |
| All others | 1,903 | 173 | 11.0 | 22.8 |
| Combination stores |  |  |  |  |
| (groceries and meats) | 4,150 | 258 | 16.1 | 18.4 |
| Chains | 2,184 | 113 | 19.4 | 17.5 |
| All others | 1,966 | 145 | 13.5 | 19.0 |
| Deparment stores | 3,311 | 495 | 6.7 | 29.2 |
| Chains | 1,216 | 197 | 6.2 | 24.7 |
| All others | 2,095 | 298 | 7.0 | 30.9 |
| Variety stores | 781 | 106 | 7.4 | 27.2 |
| Chains | 701 | 90 | 7.8 | 27.2 |
| All others | 80 | 16 | 4.9 | 26.5 |
| -Women's ready-to-wear | 795 | 108 | 7.4 | 31.1 |
| Chains | 210 | 19 | 11.0 | 28.8 |
| All orhers | 585 | 89 | 6.6 | 31.8 |
| Shoe stores | 511 | 128 | 4.0 | 30.8 |
| Chains | 283 | 51 | 5.5 | 29.6 |
| All others | 228 | 77 | 3.0 | 32.0 |
| Drugs (with fountain) | 950 | 194 | 4.9 | 27.6 |
| Chains | 257 | 30 | 8.6 | 26.1 |
| All others | 693 | 164 | 4.2 | 28.1 |
| Filling stations | 1,968 | 74 | 26.8 | 26.4 |
| Chains | 433 | 15 | 28.7 | 29.9 |
| All others | 1,535 | 59 | 26.3 | 25.4 |

a. Census of Business: 1935, Retail Distribution, Vol. I, p. 2-28; Retail Cbains,
pP. 33-37.
b. From Table 17.

Note: "All other" stores are composed largely of independents.

TABLE R
Net Sales and Operating Expenses of Various Types of Intermedary Establishments, 1935, 1933, and 1929a

| Type of Establishment | Net Sales |  |  | Operating Expenses as Per Cent of Net Sales |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1933 | 19296 | 1935 | 1933 | 19296 |
| (In Millions) |  |  |  |  |  |  |
| United Stares Total \$4 | \$44,667 | \$32,151 | \$68,950 | 9.5 | 11.5 | 8.9 |
| Wholesalers proper | 17,662 | 12,997 | 29,288 | 12.6 | 15.0 | 11.7 |
| Wholesale merchants | 14,372 | 11,303 | 25,371 | 13.2 | 15.8 |  |
| Importers | 1,068 | 776 | 1,809 | 9.2 | 10.5 |  |
| Exporters | 571 | 558 | 1,508 | 9.1 | 6.1 |  |
| Industrial distributors | 445 | . . . | ... | 16.4 | ... | $\cdots$ |
| Drop shippers or desk jobbers | 366 |  | $\ldots$ | 6.6 | $\ldots$ | $\cdots$ |
| Converters | 284 | ... | ... | 8.8 | ... | $\ldots$ |
| Wagon distributors | 213 | ... | ... | 14.6 | . . | $\cdots$ |
| Retailer-cooperative warehouses | 153 | $\cdots$ | $\cdots$ | 5.9 | . | $\ldots$ |
| Voluntary-group wholesalers | 101 | ... | $\ldots$ | 8.9 | ... |  |
| Cash-and-carry wholesalers | ars 74 | ... | ... | 4.1 | ... |  |
| Mail-order wholesalers | 14 |  |  | 21.4 |  |  |
| Manufacturers' sales <br> $\begin{array}{lllllll}\text { branches } & 11,066 & 7,557 & 16,336 & 10.1 & 12.5 & 9.8\end{array}$ |  |  |  |  |  |  |
| With stocks | 7,446 | 5,145 | 16,336 | 11.8 | 14.9 |  |
| Without stocks | 3,620 | 2,413 |  | 6.6 | 7.4 |  |
| Agents and brokers | 8,908 | 6,502 | 14,257 | 2.9 | 3.2 | 3.2 |
| Brokers | 2,890 | 2,088 | 4,038. | 1.3 | 1.7 | ... |
| Commission merchants | 2,662 | 2,225 | 4,695 | 2.5 | 3.2 | $\cdots$ |
| Selling agents | 1,440 | 988 | 2,623 | 4.4 | 4.2 | ... |
| Manufacturess' agents | 769 | 574 | 1,775 | 5.7 | 6.8 | $\cdots$ |
| Other agencs, including export and import | 1,147 | 627 | 1,126 | 3.7 | 3.4 |  |
| Bulk-tanik stations (perroleum) | 2,704 | 1,889 | 2,390 | 14.5 | 19.7 | 11.3 |
| Assemblers and country |  |  |  |  |  |  |
| Cooperative marketing associations | 956 | 686 | 1,458 | 6.3 | 9.6 | ... |
| Assemblers of farm produc | ducts 646 | 719 | 2,304 | 5.1 | 10.8 |  |
| Elevators | 600 | 338 | 987 | 5.0 | 7.5 | $\cdots$ |
| Packers and shippers | 231 | 3 | ... | 1.8 |  |  |
| Cream stations | 30 | 31 |  | 3.3 | 15.6 |  |
| Chain store warehouses | 1,864 | 1,432 | 1,930 | 4.1 | 4.5 | 4.3 |

a. Census of Business: 1935, Wholesale Distribution, Vol. 1, p. 56; Retail Cbains, p. 13: Census of American Business: 1933, Wholesale Distribution, Vol. I, p. a-1, b. These are revised figures for 1929. The data previously issued included a number of concerns dealing in grain and petroleurn and its products that were erroneously reported and classified in the Wholesale Census.

Note: Blank spaces deoote that data were not available for comparison with 1935 figures.

TABLE $S$
Operating Expensbs of Wholbsale Merchants and Distributors in Various Kinds of Business, 1935a

| Eind of Business | Operating Expenses as Per Cent of Net Sales |  |  |  |  |  |  | Number of Eatablinhments | Net Sals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Selling | Administrative | Ocenpancy | Warehouse | Delivery | Other |  |  |
|  |  |  |  |  |  |  |  | (In Thonvands) |  |
| Total-24 Kirds of businesa | 12.1 | 3.6 | 3.3 | 1.4 | 1.3 | 1.2 | 1.3 | 8,200 | \$4,564,916 |
| Automotive equipment | 25.2 | 8.4 | 7.8 | 3.0 | 2.3 | 1.3 | 2.4 | 514 | 122,407 |
| Books, periodicals, newspapers | 21.6 | 7.3 | 7.1 | 1.7 | 1.8 | 2.7 | 1.0 | 68 | 20,586 |
| Auto cires and tubes | 21.1 | 7.0 | 6.1 | 2.8 | 1.3 | 1.9 | 2.0 | 76 | 18,969 |
| Furniture | 20.7 | 6.5 | 6.5 | 2.8 | 1.9 | 1.2 | 1.8 | 62 | 18,391 |
| Builders' supplies | 19.4 | 4.0 | 5.6 | 2.8 | 2.7 | 2.4 | 1.9 | 96 | 26,461 |
| Industrial equipanent and supplies | 18.7 | 6.3 | 5.6 | 2.1 | 1.9 | 1.1 | 1.7 | 102 | 54,122 |
| Plumbing and heating equipment | 18.7 | 4.6 | 6.0 | 2.4 | 2.0 | 1.2 | 2.5 | 206 | 64,218 |
| Electrical household appliances | 18.6 | 9.4 | 4.6 | 1.3 | . 9 | . 8 | 1.6 | 250 | 187,545 |
| Iron and steel (except structural) | 18.5 | 4.5 | 6.4 | 2.3 | 2.3 | 1.8 | 1.2 | 105 | 40,911 |
| Hardware | 17.7 | 5.8 | 5.6 | 2.1 | 2.1 | . 8 | 1.3 | 326 | 257,316 |
| Jewelry | 17.2 | 6.3 | 6.2 | 1.8 | . 4 | . 4 | 2.1 | 65 | 27,578 |
| Dairy products | 15.2 | 3.2 | 2.7 | 2.4 | 1.6 | 3.8 | 1.5 | 309 | 186,053 |
| Dry-grods | 14.7 | 5.4 | 3.9 | 1.6 | 1.2 | . 6 | 2.0 | 146 | 135,312 |
| Electrical merchandise (except appliances) | 14.6 | 4.9 | 4.7 | 1.6 | 1.7 | . 7 | 1.0 | 421 | 187,773 |
| Petroleum and products | 14.2 | 4.2 | 4.1 | 1.7 | 1.1 | 1.8 | 1.3 | 97 | 54,350 |
| Clothing and furnishings | 13.9 | 5.4 | 4.7 | 1.4 | . 5 | .7 | 1.2 | 108 | 34,208 |
| Shoes and footwear | 13.9 | 5.8 | 4.1 | 1.0 | . 8 | . 8 | 1.4 | 146 | 87,010 |
| Drugs | 13.6 | 3.4 | 4.7 | 1.0 | 2.0 | .7 | 1.8 | 194 | 238,006 |
| Lenther and leather goods | 12.3 | 3.7 | 4.1 | 1.6 | . 9 | . 9 | 1.1 | 127 | 44,122 |
| Meat and products | 11.3 | 2.3 | 2.8 | 1.6 | 1.4 | 1.3 | 1.9 | 643 | 278,714 |
| Fruits and vegetables (fresh) | 11.0 | 2.2 | 2.6 | 1.4 | 1.4 | 2.3 | 1.1 | 1.379 | 523,277 |
| Groceries | 9.3 | 2.5 | 2.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1,857 | 1,250,377 |
| Automobiles | 9.0 | 3.5 | 2.3 | 1.5 | . 6 | . 2 | . 9 | 163 | 206,966 |
| Tobacco and products (except leal) | 5.2 | 1.6 | 1.5 | . 5 | . 5 | . 5 | . 6 | 740 | 490,244 |

a. Census of Business: 1935, Whotarale Ditribution, Val, VI, Table 5. These are combined figures for wholesale merchants and ladustrial distributors having sales of more than $\$ 100,000$.

TABLE T
Ophrating Expbnses of Wholesale Merchants and Distributors for Seven Selectid Kinds of Business by Size-Groups, 1935a
(In Per Cent of Net Sales)

| Size of Business (Anamal Net Sales) | Kind of Business |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drugs | Hard ware | Furnitare | Electrical Goods | Groceries <br> and <br> Foods | DryGoods | Clothing |
| Under \$10,000 | 29.7 | 27.5 | 26.0 | 25.3 | 19.5 | 18.4 | 17.7 |
| \$10,000 to \$49,999 | 25.7 | 22.8 | 24.0 | 24.0 | 16.9 | 16.7 | 15.8 |
| \$50,000 to \$99,999 | 22.9 | 24.1 | 21.4 | 22.5 | 14.4 | 16.1 | 15.0 |
| \$100,000 to \$199,999 | 21.5 | 21.2 | 19.7 | 19.3 | 12.6 | 15.2 | 13.9 |
| \$200,000 to \$299,999 | 19.4 | 19.7 | 18.1 | 17.9 | 10.6 | 14.8 | 14.4 |
| \$300,000 to \$499,999 | 17.9 | 18.6 | 16.4 | 16.4 | 9.5 | 13.7 | 12.9 |
| \$500,000 to \$999,999 | 15.8 | 17.7 | 14.6 | 16.8 | 9.7 | 12.5 | 13.8 |
| $\$ 1,000,000$ to <br> \$1,999,999 | 13.0 | 17.1 | 14.1 | 16.8 | 9.9 | 12.1 | 12.9 |
| \$2,000,000 and over | 13.2 | 17.5 | 14.9 | 15.9 | 11.1 | 12.7 | 12.2 |

a. Census of Business: 1935, Wholesale Distribution, Vol. VI, p. 32.

TABLE U
Distribution Costs or 312 Manufacturers, $1931^{\wedge}$
(In Per Cent of Net Sales)

|  | Tozal | Direct <br> Selling Costs | Adverrising and Promotion | Transporcation and W/arehousing | Credit and Financial | Administration and Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Consumer products |  |  |  |  |  |  |
| Drugs and toilet articles | 38.8 | 11.3 | 18.4 | 3.7 | 2.6 | 2.8 |
| Paints and varnishes | 38.6 | 17.1 | 7.5 | 5.5 | 4.1 | 4.4 |
| Furniture | 33.1 | 14.8 | 6.1 | 5.1 | 4.0 | 3.1 |
| Heating equipment Office equipment and | 32.9 | 15.8 | 7.9 | 3.1 | 1.8 | 4.3 |
| supplies | 32.2 | 21.3 | 3.2 | 3.0 | 2.4 | 2.3 |
| Confections and bottled beverages | 31.6 | 11.5 | 6.7 | 6.8 | 3.3 | 3.3 |
| Petroleum products | 31.0 | 10.9 | 6.0 | 7.8 | 1.0 | 5.3 |
| Jewelry and silverware | 28.7 | 11.5 | 6.3 | 0.8 | 5.6 | 4.5 |
| Grocery products | 27.1 | 11.1 | 6.2 | 6.0 | 2.3 | 1.5 |
| Household appliances | 26.5 | 12.8 | 6.8 | 1.4 | 1.7 | 3.8 |
| Automotive | 24.7 | 12.9 | 4.0 | 2.9 | 2.9 | 2.0 |
| Clothing | 22.6 | 11.2 | 3.7 | 1.1 | 3.7 | 2.9 |
| Home furnishings | 21.7 | 12.4 | 2.9 | 2.0 | 3.0 | 1.4 |
| Shoes | 21.2 | 8.7 | 3.7 | 2.2 | 4.2 | 2.4 |
| Hardware | 18.9 | 9.1 | 2.2 | 1.9 | 3.2 | 2.5 |
| Agricultural supplies | 18.4 | 8.2 | 1.6 | 4.8 | 2.6 | 1.2 |
| Tobacco products | 18.3 | 3.2 | 8.2 | 1.1 | 3.8 | 2.0 |
| Sporting goods | 18.2 | 8.4 | 3.6 | 1.9 | 3.6 | 0.7 |
| Radio equipment | 16.5 | 5.4 | 5.3 | 1.4 | 2.6 | 1.8 |
| Industrial products |  |  |  |  |  |  |
| Machinery and tools | 25.8 | 14.6 | 4.4 | 1.8 | 2.3 | 2.7 |
| Building materials | 23.7 | 11.8 | 3.0 | 2.4 | 4.7 | 1.8 |
| Stone, clay, and glass | 21.7 | 10.0 | 3.1 | 2.7 | 3.1 | 2.8 |
| Paper products | 20.4 | 9.4 | 2.5 | 3.6 | 2.0 | 2.9 |
| Chemicals and allied |  |  |  |  |  |  |
| Electrical equipment | 19.7 | 12.0 | 3.0 | 1.9 | 1.7 | 1.1 |
| Iron and steel | 19.0 | 9.0 | 2.0 | 1.9 | 2.8 | 3.3 |
| Nonferrous metals | 18.5 | 10.2 | 1.1 | 2.4 | 2.2 | 2.6 |
| Transportation equipment | 15.5 | 8.8 | 1.7 | 2.1 | 1.9 | 1.0 |
| Textiles | 9.2 | 5.1 | 1.3 | 0.7 | 1.5 | 0.6 |

A. An Analysis of the Distribution Cosses of 312 Manufaczurers, Association of National Advertisers and the National Association of Cost Accountants, New York, 1933, pp. 64, 106.

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[^0]:    2. The Census Bureau has, in addition, recently published the findings of a limired distribution survey covering the year 1937 and the first half of 1938. The survey was made by mail on a voluntary basis and was intended to provide an indicator of trends rather than to present a complete picture such as was attempted in the Census of 1935.
[^1]:    Figurr 2. The increase in the number of workers engaged in distributing goods has almost kept pace with the nine-fold expansion in physical volume which occurred berween 1870 and 1930, while the number of worirers required in production in 1930 was less than three times as great as in 1870. (Sowre: Table D.)

[^2]:    5. Agricultwral Income Inquiry, Federal Trade Commission, March 2, 1937, Part
[^3]:    6. Paul D. Converse, The Elemonts of Marketing, Prencice-Hall, Inc., New York, 1935, p. 8.
    7. Adapred from Converse, op, cit., p. 8.
[^4]:    10. "Distriburion and Sale of Milk and Milk Products, Boston, Balumore, Cincinnati, St. Louis," Federal Trade Commission, June 1936, p. 9.
    11. 1bid., pp. 172, 173.
[^5]:    12. "Consumer Analysis of the Greater Milwaukee Market," compiled by The Milwayher Jowrwal, 1937, p. 13.
    13. "Milk Parade," Conswmers' Guide, August 23, 1937, p. 12.
[^6]:    14. Faring the Tax Problem, The Twentieth Century Fund, New York, 1937, p. 20.
[^7]:    15. Census of Business: 1935, Distribution of Mankfacturars' Sales, p. 123.
    16. P. W. Litchfield, Notes on Amorica's Rubber Industry, No. 8, The Goodyear Tire and Rubber Co., September 1, 1938.
[^8]:    2. This "increment of value" should not he confused with "value added" as shown in the Census of Manufactures for 1929. The latter is defined as the difference between the cost of materials, fuel, etc., used or consumed, and the value of products manufactured, but "materials, supplies, etc." was defined by the Census in such a way as to exclude machinery and equipment and other products ordinarily constituting a capital expenditure, which are included in the purchases of manufaccuring industries as shown in the Chart. Certain other items which art taken account of in the Chart are omitted in arriving at the Census "value added" figure.
    Thus in the Census of 1929 , there is an amount of $\$ 2.3$ billion in concract work which is entered twice on the sales side of the ledger, but ignored in the offsetting expenses. Also, owing to the inclusion of printing and publishing in the Manufacrures Census, there is an amount of over $\$ 600$ million in edvertising in the $\$ 69$ billion of sales without any offseting item being introduced to arrive at what should be the net production of manufacturing in the value added figure.

    Corrections for these shortcomings, and careful estimates of necessary revisions in material purchases based upon the analysis of datz for the Flow Chart resulas in a total of $\$ 22.4$ billion for "value increase" by the menufacturing industry, cornpared with the Census figure of $\$ 31.9$ billion for "value added."

    Nor should the value increment for manufacturing industries (or for other branches of production and distribution), as shown in the Chart, be confused with "income produced" as defined by the Bureau of Foreign and Domestic Commerce in its report on National Income. The latter figure is arrived at by deducting from the gross sales (or gross income) of a particular branch of industry or trade all "expenses" in the form of payments to another branch for materials or services purchased, e.g., payments for insurance, tares, telephone service, ecc., and also amounts chargeable to depreciation. The Chart and table in this study are concemed solely with physical movable commodities sctually purchased during the year, not with "income produced" or with "value added."

[^9]:    1. This total includes only goods, not services, but a meal bought in a horel dining room is such a mixture of goods and services that one must make an arbitrary classification. Consumers paid $\$ 358$ million for such meals in 1929, but horels, in the Flow Chart, were listed as consuming institutions, although meals bought in drugstores, deparment stores, and filling stations could nor be segregated and were included in consumer purchases of goods.
[^10]:    4. Downstic Commerce, U.S. Bureau of Foreign and Domestic Commerce, Decem-
[^11]:    11. Cooperative Drag and Hardware Chaiws, Federal Trade Commission, 1932, pp. 3, 18.
    12. Census of Business: 1935, Wbolesale Distribution, Drkg Wbolasaling, p. 41.
    13. Gordon C. Corbaley, op. cit., p. 62.
[^12]:    15. Ibid., pp. 4, 6.
    16. 1bid., pp. 145, 146.
    17. "Consumers' Cooperatives in 1937," U.S. Bureau of Labor Statistics, 1939, pp. 2, 12.
[^13]:    22. Ibid., pp. 3, 12.
    23. Prepared by V. H. Pelz, Director of Sales Research, General Food Sales Company, Inc., 1939.
[^14]:    1. It is not an exact measure, for one reason because part of the moner spent by factories for marerials and supplies in 1929 was paid for new equipment which could be used in future years. Not all of the money paid for this new equipment, therefore, should be charged as a cost against 1929 operations. Offsetring this error, however, is the fact that depreciation should be charged for the use of equipment purchased in previous years, but still being used in 1929.
    2. See Chaprer 3 for definition of commodity as used in this analysis.
[^15]:    3. See Appendir Note II for sources.
[^16]:    12. Compiled from Annual Sratistics of Income, U.S. Buxeau of Internal Revenue, by the National City Bank of New York, March 1938.
    13. Debts and Recovery, 1929 to 1937, The Twentieth Century Fund, New York, 1938, p. 192.
[^17]:    17. Julius Hirsch, Suandard Figures for Pwrposes of Business Research (unpublished mimeographed manuscript), pp. 19, 27, 28, 29, 174.
[^18]:    1. Assumed to be equal to the average earnings per full-time employee for each particular line. It is estimated on the besis of a special Census tabulation that as many as $\mathbf{4 0}$ per cent of all retail stores are operated entirely by proprietors and their families, who get no stated payment for their services.
[^19]:    Cbains contains expense ratios which have been employed in arriving at the data for the year. Applying these ratios to net sales as reported in Volume 1, p. 71 of the 1929 Census, expense figures in dollars were computed for the chains, which were then deducted from the total operating expense reported in Volume I, pp. 51-53, to obtain a figure for the "All others" classification. To these operating expense figures were then added the imputed proprietors' compensation figured on the basis of the average annull earnings per full-time employee obtained from Volume I, Table $1 \mathbf{A}$. The 1935 figures were computed by adding to the operating expense figures reported The 1935 figures were computed by adding to the operating expense fgures reported
    in Volume IV, P . 13, imputed proprietors' compensation based on the average annual earnings per full-cime employee derived from average weekly earnings as re ported in Volume V, p. 14 of the 1935 Census.

[^20]:    2. A Lilly Digest of the 1936 Statomonts of 514 Rouril Drug Stores, Eli Lilly \& Company, Indianapolis, pp. 26-30.
    3. Census of Distribution for 1929, Food Retailing, pp. 79-80.
[^21]:    a. Derived from Census of American Business: 1933, Retail Distribution, Vol. I, p. a-12. b. Includes imputed proprietors' compensition.
    c. Includes proprietors and full-time employees.

[^22]:    a. Derived from Census of American Busineas: 1933, Rolal Distribution, Vol. I, p. w-12.
    b. Includes imputed proprietors' compensition.
    c. Includes proprietocs and full-time enployees.

[^23]:    11. Carl N. Schmaly, Expenses and Profits of Food Chains in 1934, Harvard Bureau of Business Research, Bulletin 99, pp. 19, 20.
[^24]:    16. Published by the National Retail Hardware Association in the Hardware Roanilor as annual studies of margin, expense, and profit. The results from 1929 to 1936, inclusive, are the basis for the cabulations and tert of this section.
[^25]:    17. Retail Sboe Stoyes and Leased Shoe Departments, prepared by Dun ak Bradstreet for the National Shoe Retailers' Association, July 1937, pp. 13, 20, 25.
[^26]:    a. Census of Business: 1935, Wholesale Distribution, Vol. I, Table 1, Vol. VI, Table 1; Census of American Business: 1933, Wbolesale Distribuction, Vol. I, Table 2 b .

[^27]:    5. Census of Business: 1935, Wholesale Distribution, Vol. IV, p. 10.
    6. 1bid., p. 27.
[^28]:    11. The combined volume of all sizes of wholesale merchants and industrial distributors represents only about one-third of the total for intermediary trade. Consequently, it should not be assumed that these figures or propontions are necessarily typical of all inrermediary business.
[^29]:    12. Wholesale Grocers, Report No. 1, Ausomotive and Equipment Wboleselers, Report No. 2, Dry Goods Wbolesalers, Report No. 3, Confectionery Wholesalers, Report No. 4, Bahers' and Conjectioners' Supply Hoases, Report No. 5, Flaor Couering Wholesalers, Report No. 6, Pains and Varnisb Wbolesalors, Report No. 7, 1937, Wholesale Survey, Dun \& Bradstreet, Inc.
    13. Operating Expenses is the Wbolesals Grocery Bariness in 1922, Bullecin No. 34, Operating Expenses in abe Wholesale Drug Businers in 1924, Bulletin No. 50, Operating Exponses in the Wholesala Ausomotive Equipment Business in 1924, Bulletin No. 51, Opspating Expenses in the Wholesale Pajnt and Varnish Business in 1926, Bulletin No. 66, Oporating Expenses of Plumbing and Heating Supply Wholesalers in the Central States in 1927, Bulletin No. 71, Operating Expenses of Wall Paper Wholosalors in 1927, Bullecin No. 73, Bureau of Business Research, Harvard University.
    14. Hardwara Distribution in the Gulf Sowibwest, Domestic Commerce Series No. 52, 1932, p. 40, and Furniture Distyibution in the TFast Mid-Continent, Domestic Commerce Series No. 68, 1932, p. 137, U.S. Bureau of Foreign and Domestic Commerce.
[^30]:    16. Operating Results of Obio Wbolesale Grocers-Yewr 1934, Ohio Smate University Bureau of Business Research, 1936, p. 17.'
    17. See above.
    18. Ausomotive axd Equipment Wholesalert, Report No. 2, 1937 Wholesale Survey, Dun \& Bradsureet, Inc., p. 15.
[^31]:    21. See above.
    22. Wholesals Grocery Operations, Lowisville Gracary Survey, Discribution Cost Studies, No. 14, U.S. Bureau of Foreign and Domestic Commerce, 1932, pp. 9, 13.
    23. Wholesale Grocers, Report No. 1, 1937 Wholesale Surver, Dun \& Bradstreet, Inc., p. 18.
[^32]:    a. Federal Trade Commission Report on Chain Stores, Drug Trate, Documens No. 94, 1934, p. 4; Grocery Trade, Document No. 89, 1934, P. 4; Tobacco Trade, Document No. 86, 1934 , p. 49.

[^33]:    28. Census of Business: 1935, Distribusion of Manufacturors' Sales, p. 20. These percentages are based on comparable data for the two years.
[^34]:    29. An Analysis of the Distribution Costs of 312 Manufactmyers, Association of National Advertisers, Inc., in collaboration with the National Association of Cost Accountants, New York, 1933.
[^35]:    32. Since the Census reports excluded costs of sales offices maintained by manufacturers, this item, together with transportation, warehousing and storage expenses, has been deducted from the figures reporred by the Association of National Advertisers to arrive at the ratios shown in Table 33. Hence the expenses from the Association study given in the table are lower than the totals appearing in the original source and shown in Figure 19. Nevertheless, in the majority of instances it will be observed, the expenses reported from this study are higher than those from the other two sources. This does not necessarily imply that the expenses of manufacturers reporting to the Association were greater than the average for manufacturing. In comparison with the confidential study, it is certain that the Association study included more items of expense since figures in the confidential study do not include collection coses or any allocation of financial and administrative expense; while many firms reporting to the Census probably did not furnish complete data.
[^36]:    1. Simon Kuznets, Commodity Flow and Capisal Formation, National Bureau of Economic Research, New York, 1938, Vol. I, p. 228. Percentages derived from data reported in four mimeographed releases of the Inrerstare Commerce Commission.
[^37]:    8. Lumber Distribution and Cowrmmption, Forest Service, United States Department of Agriculture, 1932.
    9. R. J. McFall, Transconsinental and Intercoastal Trade of the Pacific Sowthwast in 1926, Domestic Commerce Series, No. 25, U.S. Bureau of Poreign and Domestic Commerce, p. 5.
[^38]:    19. 174 ICC 373 (383).
    20. Inland Water Transportation, Committee Reports, U.S. Chamber of Commerce, April 1932, pp. 24-25.
    21. Moulton, of al., op. cis., pp. 456, 457, 459.
    22. 1bid., p. 460.
[^39]:    25. Report of the President's Committee, op. cif., p. 72. Figures from U.S. Bureau of Agricultural Economics.
    26. Moulton, at al., op. cif., p. 519.
    27. Census of Business: 1935, Moror Trucking for Hira, p. 12.
[^40]:    28. Fortune, February 1936, p. 127.
    29. Ibid., pp. 124-127.
    30. Moulton, et al., Report of the National Transportation Committec, op. cit., p. xxxiii.
[^41]:    32. L. D. H. Weld, Printers' Ink, June 16, 1938, pp. 21, 22.
    33. Census of Business: 1935, Advorbising Agewtios, pp. 3, 4. Based on the revenue receipts of the agencies reporting to the Census.
[^42]:    34. Chapter 2.
    35. Data from Media Records, Inc., quoted in New York World-Telegram, May 20, 1938.
    36. "Advertising-Is Ills, Pills and Bills," an address delivered before the Advertising Club of Boston, Pebruary 13, 1934.
[^43]:    38. The figures in this paragraph are based on estimares of the Department of Commerce for total sales and volume of credit business for 1936.
[^44]:    39. From a table by Wilford L. White, U.S. Bureau of Foreign and Domestic Commerce. Domestic Commerce, June 30, 1937, p. 372.
[^45]:    43. Students of marketing are cognizant of "the virtually complete absence of accurate cost accounting data on department store instalment operations" and aware that the carrying charges generally applied by department and specialty stores recently entering the field in an aggressive manner are insufficient to make the instalment purchaser pay his own way. This means that the cash customers pay part of the cost of sales to instalment customers. Clyde William Phelps, Ths Jowrnal of Marketing, January 1938, p. 221.
    44. Retail Credis Survey, 1936, Domestic Commerce Series No. 98, U.S. Bureau of Foreign and Domestic Commerce, pp. 6, 7.
    45. Credit Exsension and Busizess Failures, Trade Information Bulletin No. 627, U.S. Bureau of Foreign and Domestic Commerce, 1929, p. 1.
[^46]:    47. Refinancing or consolidation of debt accounted for 24 per cent-borrowing to pay off a number of charge accounts past due. "Non-durable consumers' goods" made up some 16 per cent and "durable consumers' goods" 14 per cent. Sickness and deachs (15 per cent), payments on mortgages, taxes, inverest, insurance ( 13 per cent), educational and travel, moving and assisting relacives (II per cent) were the chief reasons for borrowing other than the purchase of consumer goods. Only 7 per cent were declared to be for business purposes.
[^47]:    48. From an address by Dudley Cates, Commercial Invesment Trust Company, before the American Management Association, New York, December 15, 1937.
    49. Even a very efficient lender of small loans-The National City Bank-finds a departuaent of 580 men and women necessary to handle its yearly volume of $\$ 70$ million. This means one employee for each 400 customers, or one for every two applications that 80 completely "through che wrorks" every day.
[^48]:    a. Retail Crecit Survey, 1937, Department of Commence.
    b. No direct charge. Indirect cost to consuma uncertain.
    c. Le Baron R. Foster, "Credit for Consnmers," Public Affairs Pamphet No. 5, 1936, p. 21.
    d. Assuming half without interest and half at 6 per cent net (some may charge more but not collect it).
    e. Consumer Credit Institute of America, Inc., estimated from reports of 234 industrial banks together with survey of the American Industrial Bankers Association indicating total nomber of banks and rate of tumover.
    f. Congumer Credit Institute of Amerien, Inc., estimated from reports of states having personal finance laws.
    g. Weighted average rate charged by all personal finance companies in states reperting 54 per cent of outstanding loans.
    h. Fstimated by Consumer Credit Institute of America, Inc., on the basis of incomplete surveys.
    . Average nate charged by 256 banks listed by Sutclifie (The Banhars Mogerine, August 1938)
    j. Consumer Credit Institute of America, Inc., estimated from reports to slate banking departments from a majority of all credit unions, and from Farm Credit Administration for non-reporting credit unions.
    k. Annual report of National Association of Remedial Loan Associations, Detroit, Michigan,

    1. Spectator Life Insurance Yeer Booh, 1037, pp. 1036-1037.
    m . This estimated yearly cost of consumer deferred payments does not include war veterans' bortowings on government insurance, or the cost of deferred credit on the purchase of real estate, which may represent an additional two bllion dollars yearly ( 6 per cent on $\$ 34.5$ billion mortgage debt).
[^49]:    2. Uniled States v. E. C. Knight (156 U.S. 1), 1895.
    3. Nothorn Securities v. United States (193 U.S. 197), 1904.
    4. Standard Oil Co. v. United Siates (221 U.S. 1), 1911; Uwited States v. American Tobacco Co. (221 U.S. 106), 1911.
[^50]:    5. Federal Trade Commission V. Gratz (253 U.S. 421, 427), 1920.
    6. Thatcher Mansuactwring Co. v. Federal Trade Commission and Swift \& Co. v. Federal Trade Commission (272 U.S. 554), 1926.

    Arrow Hart \& Hegeman Elactric Co. v. Federal Trade Commission (291 U.S. 387), 1934.
    7. Henry v. A. B. Dick Co. (224 U.S. 1), 1912.

    United States v. Winslow (227 U.S. 202), 1913.
    Motion Pictave Patemts Co. v. Universal Film Co. (243 U.S. 502), 1917.
    United Sbow Marbinery Corporation, at al. v. United States (258 U.S. 451), 1922.
    Standard Pasbiow Co. v. Magrawe-Honston Co. (258 U.S. 346), 1922.
    Bunterich Co. v. Federal Trade Commission (4 F 2d 910) (CCA 2d 192s); certiorari denied (267 U.S. 602), 1925,

[^51]:    12. United States v. T'renton Potsories Co., et al. (273 U.S. 392), 1927.
    13. Appalachian Coals, Inc., of al. V . United States (288 U.S. 344), 1933.
[^52]:    16. 288 Fed. 774 (CCA 2d 1923) ; certiorari denied 262 U.S. 759, 1923.
    17. George Van Camp and Sons Co. v. American Can Co., ef al. (278 U.S. 245), 1929.
[^53]:    Brsiness entitled "The Present Status of Fair Trade Iaws," the National Association of Retail Druggists, R. H. Macy \& Co., the business magazine, Sales Management, The Drug Trade Credit Exchange of Chicago, the Federal Wholesale Druggists Association, The California Pharmaceutical Association, and a consumers' magazine. The results of these several inquiries naturally varied according to areas, types of stores studied, and the interests of the surveyors, but in the main they confirm at least the existence of conflicting trends similar to those pictured by Wolff and Holchausen.

[^54]:    22. Valentine, at v. Great Allantic and Pacific Toa Co., at al. (299 U.S. 32), 1936.
    23. Stato Boasd of Tax Commissioners of Imdiana, of al. v. Jackson (283 U.S. 527), 1931.
    24. Great Atlantic and Parific Tee Co., ot al. v. Grosjean, ot al. (301 U.S. 412), 1937.
[^55]:    Since 1915, Florida has maintained a quarantine against citrus fruits from California for the declared purpose of preventing the introduction of brown rot, although California fruit has long been free from brown tot. In 1932 the Florida quarantine regulations were modified to permit the importation of Califorinia lemons throughout the year, and of California oranges from May 1 to October 1-when Florida has no oranges of

[^56]:    34. Sears, Roebuck and Co. v. Federal Trade Commission (258 Fed. 307) (CCA 7th), 1919.
    35. Federal Trade Commission v. R. R. Keppel and Bro. Inc. (291 U.S. 304, 309, 310), 1934.
    36. Federal Trado Commission v. Gratx, ef. al. (253 U.S. 421, 427), 1920
    37. Federal Trade Commission v. Raladam Co. (283 U.S. 643, 648), 1931.
[^57]:    38. Foderal Trade Commirsion v. Klesner (280 U.S. 19, 28), 1929.
    39. Federal Trade Commission v. Carris Publishing Co. (260 U.S. 568, 580), 1923.
[^58]:    40. House Committee report, filed August 19, 1937.
[^59]:    6. Sumner H. Slichter, Modern Economic Society, Henry Holt and Company, New York, 1931, P. 553.
[^60]:    16. F. J. Naumann and A. C. Farrell, report on Field Solicitution Costs prepared for the Dennison Manufacturing Company, Framingham, Massachusetts, and issued February 1934.
[^61]:    17. John Hall, Jewelry Distribution by Wholesale Jewelons, U.S. Bureau of Foreign and Domestic Commerce, 1933, Part I, p. 49.
    18. J. W. Millard, Analyzing Wholesale Distribution Costs, Distribution Cost Series No. 1, U.S. Bureau of Poreign and Domestic Commerce, 1928, p. 11. Based on data of the Western Electric Company.
    19. S. L. Kedzierski and C. B. Hughes, "Meeting the Small Order Problem in the Confectionery Industry," U.S. Bureau of Foreign and Domestic Commerce, 1933, pp. 8, 9, 10.
[^62]:    20. Time, December 14, 1936, pp. 76-78.
    21. Reported by Domestic Distribution Department of the Chamber of Commerce of the United States.
    22. Letter from Robert F. Elder, February 17, 1939.
[^63]:    23. These studies are reviewed by Paul H. Nystrom in the American Marheting Jowrnal for April 1936, and by A. E. Boer in the Joxenal of Marketing for July 1937, pp. 53, 54.
    24. E. D. McGarry, Mortality in Retail Trade, University of Buffalo Studies in Business, No. 4, 1930, p. 52.
[^64]:    A recent check-up showed wholesale and retail grocers in this territory are profiting grearly by putting into practice fundamental marketing principles developed by it. Many grocers have changed the outside appearance of their stores, have installed proper lighting and shelving fixtures within and have learned to make acceptable goods accessible. They are now taking inventory and keeping up-to-date records, which they had not done previously; chey have learned how to analyze the cost of handling individual
    26. Aids to Retail Grocery Profits, Domestic Commerce Series, No. 71, U.S. Bu* reau of Foreign and Domestic Commerce, 1933, P. 3.

[^65]:    29. Statement by Q. Forrest Walker, R. H. Macy \& Co., Inc., at American Management Association Marketing Conference, New York, October 23, 1935, published in Consumer and Industrial Marketing, Series No. 18, American Management Association, New York, 1935, p. 30.
[^66]:    Competition Increases Costs
    Competition in production generally has had the effect of de-

[^67]:    a. Census of Business: 1935, Distribution of Manvfactureys' Sales, $\mathbf{p}$. 20. The table is limited to industries which are directly

