

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Distribution's Place in the American Economy Since 1869

Volume Author/Editor: Harold Barger

Volume Publisher: NBER

Volume ISBN: 0-87014-057-4

Volume URL: <http://www.nber.org/books/barg55-1>

Publication Date: 1955

Chapter Title: The Changing Channels Of Distribution

Chapter Author: Harold Barger

Chapter URL: <http://www.nber.org/chapters/c2698>

Chapter pages in book: (p. 65 - 79)

CHAPTER 5

The Changing Channels of Distribution

IN this chapter we shall give a preliminary account of the manner in which we reached the results in Chapter 4. We shall indicate the kind of data used, the conceptual framework, the main classifications, and the principal limiting assumptions. Our debt to the pioneer work of Simon Kuznets will be obvious, and indeed our own work in this field is in large degree no more than a revision and extension of Parts III and IV of his *Commodity Flow and Capital Formation*.¹

The scope of the analysis, as explained in Chapter 2, is confined to the distribution of finished goods and construction materials whose eventual outlet is some kind of retail store.² Of course some finished goods do not enter the distribution system at all: food produced and consumed on farms and industrial equipment built to order are examples. In any case, before being handled by a distributor, the commodity will normally incur transportation costs. The actual distributors can be fairly well divided into wholesalers and retailers. Some commodities move directly from producer to retailer; others are handled by one or more wholesalers and then by a retailer. We assume throughout that wholesalers do not sell to ultimate consumers.³

¹ Simon Kuznets, *Commodity Flow and Capital Formation*, National Bureau of Economic Research, 1938.

² The expression "retail store" is to be considered to include restaurants, bars, lumber yards, automobile salesrooms, farm-implement dealers, and other retail outlets not ordinarily called "stores." The definition is substantially that of the 1929 census of retail distribution (see Appendix Table B-7).

³ More specifically, we treat such goods (like unfinished commodities handled by wholesalers) as if they did not enter the distribution system at all. To drop this restriction would greatly complicate the analysis and could add little to the accuracy of our reconstruction of history, for we have no data wherewith to estimate any variation in the importance of wholesale sales to ultimate consumers prior to 1929. According to Kuznets, such sales of finished goods amounted to \$2.4 billion in 1929 (retail sales were \$48 billion), but most of this was industrial equipment. Our coverage of consumer goods is much higher, for we neglect only about \$700 million wholesale sales of consumables.

COST OF DISTRIBUTION

The Flow through the System, 1869–1929

The input into the distribution system consists, then, of all finished goods and construction materials eventually to be sold through retail stores, valued at a price including transportation costs from producer to original distributor. (Such costs, although estimated by us, are not to be included in the gross distributive margin.) Where the original distributor is the retailer, the goods increase in value by the retail margin alone. Where the goods are handled by one or more wholesale intermediaries, value is increased by the appropriate wholesale margin (or margins), and the cost to the retailer becomes the sales value of the (last) wholesaler. Transportation costs between wholesaler and retailer are imputed to the wholesaler and are (in principle at least) included in the wholesale margin, just as retailers' delivery costs are ordinarily a part of the retail margin. The gross distributive margin or spread, or value added by distribution, is the difference between the final or retail value and the value of the input into the distribution system.

As indicated in Chapter 4, the calculations were carried out in two segments overlapping in 1929. For 1929 and prior decennial census years we used the commodity output method. We began with producers' values and added transportation costs and distributive margins to obtain estimates of retail value. In an alternative calculation for 1929, and for 1939 and 1948, we used the volume of sales method, i.e. we began with retail sales and worked back to the value of the input into the distribution system. Use of retail census data for 1929, 1939, and 1948 made the latter procedure possible; the former was made necessary by the absence of census data prior to 1929. For both calculations, the requirements are (1) information about margins realized by different types of wholesaler and retailer and (2) knowledge as to the amounts of goods flowing through different distributive channels.

For both calculations the key classification consists of the 32 types of retail outlet through which commodities may reach the ultimate consumer. We also worked with 20 kinds of wholesaler; finished output in the hands of producers comes in 27 commodity groups; and each commodity group may be supplied by several distinct industries. The possible (and, to speak strictly, the actual) complications are therefore immense. A given channel through which a commodity is distributed will lead from an industry through a wholesaler or directly to a retail outlet. In principle, therefore, we have at least $32 \times 20 \times 27$, or 17,280 possible channels, and in fact a great many more, since many commodities are supplied by more

CHANNELS OF DISTRIBUTION

than one industry. Of course, were we to construct a table with the indicated number of cells, many of them would be nearly or completely empty.

In fact drastic simplification obviously was necessary. It was assumed (1) the distribution of sales of manufacturing plants for any product group could be approximated by the distribution of sales of some one industry or small group of industries; (2) if handled by a wholesaler, the wholesale channel was determined by the eventual retail outlet, i.e. any given type of retailer was supplied by only one of our 20 types of wholesaler.⁴ By this means possible channels involving wholesalers are reduced to 32×27 , or 864; since in each case the wholesaler may be bypassed, the possible number is twice as many, or 1,728. This is the number of cells in our basic table; however, more than half of them are empty. The flow of a commodity group from producer to final consumer is illustrated diagrammatically in Chart 3.

The full calculation, including the reclassification of commodities according to the kind of store that retails them, was carried out for census years 1869 through 1929. We began with Shaw's commodity data in producers' prices⁵ and distributed each minor commodity group into three portions: (1) amount passing to some retailer direct, (2) amount passing to some retailer through wholesale channels, and (3) amount not distributed through retail stores. Next we reclassified amounts (1) and (2) on a kind-of-store basis and summed over-all commodity groups for each kind of store. Multiplication of amount (2) by the relevant wholesale markup and addition of (1) yielded the total purchases of each kind of store; multiplication by the retail markup gave an estimate of retail sales separately for 32 types of retailer. For 1929 the threefold distribution of commodities comes (with minor modifications) from Kuznets, *Commodity Flow*, Part III, which in turn is largely based upon the Census Bureau's *Distribution of Sales of Manufacturing Plants*. The reclassification of commodities upon a kind-of-store basis makes use of the cross-classification in the 1929 retail census. The projection of these two types of data—the threefold distribution for the output of each commodity, and the commodity-store cross-classification—back to 1869 is discussed in Appendix B. The derivation of wholesale and retail margins for the entire period is explained in Chapter 6.

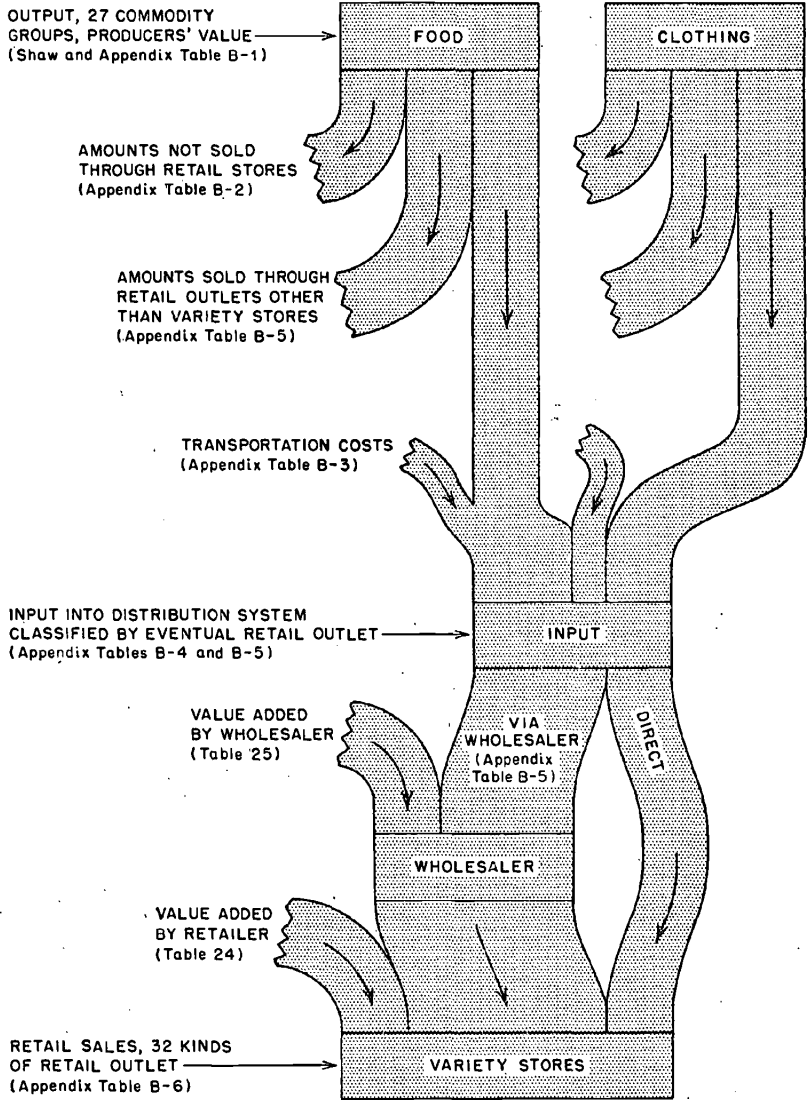
⁴ Plainly grocery stores buy little from any but a grocery wholesaler. In a few cases (e.g. country general stores) we used an average wholesale markup for the several types of wholesaler from whom purchases probably were made.

⁵ William H. Shaw, *Value of Commodity Output since 1869*, NBER, 1947.

COST OF DISTRIBUTION

Chart 3

THE CHANNELS OF DISTRIBUTION



For 1929, 1939, and 1948 a simpler procedure could be used, for retail sales by kind of store for these years are furnished by the census. Division by the markup yields retailers' purchases; for each type of store the latter were separated between purchases direct

from producer and purchases from a wholesaler; the second amount was divided by the wholesale markup and added to the first amount, yielding the input into the distribution classified by eventual retail outlet. For 1939 and 1948 we did not carry the calculation beyond this point, so that we do not have figures for these years on a commodity basis.

The magnitudes of the various flows in current (and in 1869 in paper) dollars are shown in Table 20. More detailed results by type of store are given in Chapter 7.

Rise and Decline of the Wholesaler

Among trends reflected in Table 20, perhaps the most interesting is the rise and decline of the wholesaler. Wholesaling reached its fullest scope during the early years of our period, and most of the story to be told here relates to its decline.

Although we do not offer any figures for years prior to 1869, there is abundant evidence that during the first half of the nineteenth century wholesaling in the United States grew more rapidly than commodity production in general or than retailing.⁶ The first wholesalers were importers and were largely confined to the eastern seaboard. In the early days of the republic, domestic production for sale, if not actually undertaken by the retailer himself, was for the most part so highly localized that no middleman between producer and retailer was necessary. As the scale of production grew, as markets expanded geographically, and as commodities became more specialized, the scope for wholesaling was correspondingly enlarged. Frequently firms that had originally combined wholesaling and retailing in a single operation, selling both to consumers and to the trade, came to specialize in one branch or the other.⁷ By the opening of our period the distinction between the two branches of distribution already was tolerably clear cut.

To neglect many crosscurrents, we may say that as producers grew bigger they had more need of wholesalers. For the manufacturer, the task of selling at greater and greater distances to ever larger numbers of retail outlets—the task, that is, of himself exercising the wholesale function—grew more and more burdensome. To cope

⁶ See for instance Theodore N. Beckman and N. H. Engle, *Wholesaling*, Ronald, 1937, Chap. iv.

⁷ Such specialization probably was hastened by the retail trade associations which became common in the 1880's. They pressed their members not to buy from jobbers who sold at retail and normally excluded such firms from membership. However, as late as 1885 the Retail Grocers Association of Grand Rapids failed to exclude one Arthur Meigs for the sin of jobbing on the side, and at that date several members of the local retail druggists' association were wholesalers (*Michigan Tradesman*, December 9, 1885, p. 4).

Table 20

THE FLOW THROUGH THE DISTRIBUTION SYSTEM, 1869-1929^a

	1869	1879	1889	1899	1919	1929
Values:	(billions of dollars)					
1. Output in producers' prices, relevant commodities ^b	3.6	4.1	5.9	7.4	13.3	39.4
2. Of which, amount sold through retail stores	2.6	3.1	4.6	5.9	10.7	31.8
3. Freight charges, producer to initial distributor	0.2	0.3	0.3	0.4	0.6	2.6
4. Input into the distribution system (lines 2 + 3)	2.8	3.4	4.9	6.4	11.3	34.4
5. Of which { via wholesalers	1.9	2.4	3.5	4.3	7.4	20.5
6. { direct to retailers	0.9	1.0	1.5	2.0	3.9	13.9
7. Value added by wholesalers	0.4	0.5	0.7	0.9	1.6	4.4
8. Retailers' purchases (lines 5 + 6 + 7)	3.2	3.9	5.7	7.3	12.9	38.8
9. Value added by retailers	1.0	1.2	1.9	2.6	4.9	15.8
10. Retailers' sales (lines 8 + 9)	4.1	5.1	7.6	9.8	17.8	54.7
	(per cent)					
Percentages:						
11. Sold through retail stores (line 2 ÷ line 1)	71	77	78	80	80	81
12. Via wholesalers (line 5 ÷ line 4)	69	70	70	68	66	60
13. Wholesale markup (line 7 ÷ line 5)	20.5	20.8	20.9	21.0	21.4	21.6
14. Retail markup (line 9 ÷ line 8)	30.3	31.8	33.5	35.5	38.1	40.7
15. Combined markup (lines 7 + 9 ÷ line 4)	48.6	50.9	53.1	54.8	57.5	58.8

^a For sources, breakdowns of data, and methods of estimation, see Tables 24 and 25 and Appendix B.

^b All commodity groups, any part of which is distributed through a retail outlet; i.e. consumables plus office furniture, business vehicles, tools, farm implements, and construction materials. Data comprise output for domestic consumption plus imports (William H. Shaw, *Value of Commodity Output since 1869*, National Bureau of Economic Research, 1947), adjusted to include federal liquor taxes, state gasoline taxes, and firewood (items omitted by Shaw).

CHANNELS OF DISTRIBUTION

with the task, either he opened branch warehouses and organized a more or less autonomous sales division or he sold through wholesalers. Since we follow census practice in counting manufacturers' sales branches as a form of wholesaling, the outcome in either case was a growth of wholesaling.

So much for the growth in the size of the producer. By contrast, the growth in the size of the retailing unit at a somewhat later date had the opposite effect. Any retailer who sold a very large quantity of a single line of goods tried sooner or later to buy direct from the factory. Thus the rise of the department store, the specialty outlet, and the chain store checked the growth of wholesaling. Large-scale retailing—and above all specialty retailing—is an urban affair, so we may say that urbanization restricted the scope for wholesaling.

At what date wholesaling reached a peak and started to decline is a matter for speculation. Of the flow of goods through the distribution system, a larger fraction passed through wholesale channels and a smaller fraction went direct to the retailer in 1879 than before or after that date, according to our figures (Table 20). But a perusal of Appendix B will reveal both how uncertain is the date quoted and how various are the trends to which individual kinds of wholesaling were subject.

Certainly the peak of wholesaling came in the less industrialized West—and especially on the Pacific Coast—later than in the East. Study of the business history of middle western cities shows how, in their early growth, retailing and wholesaling were combined; how retail functions of the bigger merchants were sloughed off as they specialized at jobbing; how in some trades (e.g. shoes) jobbers became manufacturers; how, as the city grew, the larger retailers began to buy direct from the factory; how the appearance of chain stores and mail order houses also reduced the scope for jobbing.⁸

Since the Civil War, indeed, the independent wholesaler has himself become more specialized. The early jobbers were "general-line" firms that handled staples and specialties alike. As the range and variety of products increased, "specialty" wholesalers appeared, handling only some of the items that their retail customers might need. Many engaged in minor manufacturing, e.g. the roasting of

⁸ Sometimes we can date these phases. For instance, in 1864 the first Grand Rapids grocer gave up retailing in favor of the wholesale business; by 1866 the city had wholesale dry-goods and wholesale shoe houses as well (*Michigan Tradesman*, April 18, 1888, p. 4). Again, in 1880 St. Louis was still a center for the wholesale distribution of shoes made in New England, but by 1900 most St. Louis jobbers had become manufacturers (*Leather Gazette*, 1886-1888, *passim*; *Shoe and Leather Gazette*, February 20, 1902, p. 17; March 30, 1903, p. 22).

COST OF DISTRIBUTION

coffee, the grinding of spice, the making of baking powder, jams, jellies, extracts, and even soap.⁹ Since their prime function remains that of wholesaling products made by others, the census counts such activities as a form of distribution, and so must we.

The movement toward specialty wholesaling was also stimulated by the growing use of brand names and the abandonment of packaging by the retailer. Sometimes the brand name and the package were designed by the factory but sometimes too they were the invention of the wholesaler. Specialty wholesalers' margins generally are higher than those of general-line wholesalers, a fact which complicates the derivation of margins for wholesaling at large.¹⁰

The disappearance of the independent wholesaler has frequently been predicted.¹¹ Although he is still with us, his decline has been somewhat more rapid than might be inferred from the data in Table 20. For in many trades—notably manufactured food products, shoes, vehicles, and farm implements—factories have established branch warehouses during the past five or six decades that have taken the place of the regular jobber.¹² Since we count such branches as a wholesale channel, the decline in wholesaling reported in Table 20 means that the rise of manufacturers' sales branches failed to compensate fully for the decline of the independent wholesaler. Retailers bought a larger fraction of their needs direct from the factory, as well as through sales branches. The evidence for these generalizations and many individual exceptions to them will be found in Appendix B.

For department stores, chain stores, and mail-order houses to bypass the wholesaler was not clear gain: some wholesaling functions they had themselves to assume. Yet the competitive advantage they derived, either from buying direct or from economies in retailing, were sufficient soon to give them a growing share of the market and to astonish merchants engaged in more traditional types of trading. It is worthwhile to examine the differential impact of the newer methods of distribution and to observe the reaction of inde-

⁹ *American Grocer*, March 13, 1907, p. 8; *Confectioners' and Bakers' Gazette*, December 1909, p. 23.

¹⁰ See note *b* to Table 25 in Chapter 6 and Appendix B. On specialty wholesaling in general, see Beckman and Engle, *op.cit.*, Chap. 11.

¹¹ "Years ago the jobber was a necessity; now, business methods, we all know, have changed, so much so that the time is not far distant when the jobber's necessity will cease to exist, and he will, of course, have to take a back seat among the has-beens" (*Grocery World*, April 24, 1899, p. 20).

¹² Branch houses, like direct selling from factory to retailer, were partly motivated by the unwillingness of jobbers to pioneer new brands (see *American Grocer*, July 12, 1905, p. 8; *New England Grocer*, February 2, 1906, pp. 14-16; *Hardware Review*, June 1909, pp. 32-33).

CHANNELS OF DISTRIBUTION

pendent wholesalers and retailers to their changing environment. We shall limit the discussion to the four areas which once were the traditional preserve of the independent wholesaler—drugs, dry goods, groceries, and hardware.

Already during the opening years of the present century, dry-goods merchants felt the competition of the department store, and the hardware trade complained bitterly of the wickedness of "catalog houses." Hence came efforts to impose special taxes on department stores and to prevent the introduction of parcel post. Neither the drug trade nor the grocery trade were seriously disturbed by merchandising innovations until after World War I. During the 1920's, however, competition of the private brands of department stores and drug chains, neither of which used regular jobbing channels, became a serious matter for the independent druggist. During the 1920's, also, the impact of grocery chains first was seriously felt by the independent grocery store.¹³ As before, the independents reacted by pressing for legislative curbs upon the interlopers—especially chain-store taxes and resale price maintenance.

Another reaction to the impact of the newer competition was a partial imitation of its methods. Since about 1890 small retailers have from time to time experimented with cooperative buying; buying exchanges, groups, or syndicates; and even cooperatively owned warehouses. The motive was to buy cheaper, by buying in quantity and by eliminating the jobber's selling expense. Naturally such moves were no help to the jobber. But wholesalers reacted too, by opening cash-and-carry departments and by organizing their retailer customers into "voluntary groups" or "voluntary chains." The latter plan usually involved cooperative advertising of jobber-sponsored brands. In addition, wholesalers seem to have pressed upon their retailer customers the need for better accounting and the introduction of self-service.

The 1929 census of distribution did not collect data on these activities, but the sales of wholesalers with stocks are reported for 1939 in Table 21. Cash-and-carry wholesalers resemble regular wholesalers except that they do not furnish credit or delivery. Wagon distributors carry a limited line and usually sell only for cash. Voluntary group wholesalers are jobbers who have organized their retailer customers into voluntary groups or chains; commonly they continue to furnish both credit and delivery. Retailer-cooperative warehouses are owned by groups of retailers and normally deliver but do not supply credit. Among the categories just mentioned, at least the first,

¹³ These statements rest upon a survey of the trade press. Specific documentation within reasonable compass is difficult, but some references are given below.

COST OF DISTRIBUTION

third, and fourth represent attempts to cut the cost of wholesaling— attempts induced by the competition of mail-order houses, chain stores, and other such innovations. Especially in large cities, retailers have also rather frequently combined in buying groups or syndicates without regular warehousing facilities. Thus far no census has attempted to cover groups of this character, many of which are quite informal.

Table 21

DISTRIBUTION OF WHOLESALE SALES, FOUR KINDS OF BUSINESS, BY TYPE OF OPERATION, 1939 ^a

	<i>Drugs</i>	<i>Dry Goods</i>	<i>Groceries</i>	<i>Hardware</i>
	<i>(millions of dollars)</i>			
Total sales, wholesalers with stocks ^b	780	958	6,387	614
	<i>(per cent)</i>			
Percentage distribution of above:				
Regular wholesalers ^c	69.5	78.1	49.0	92.5
Manufacturers' sales branches	25.9	21.9	36.5	3.9
Cash-and-carry wholesalers	0	0	1.1	0
Wagon distributors	0	0	0.5	0
Voluntary group wholesalers	0.8	0	10.4	2.1
Retailer-cooperative warehouses	3.8	0	2.5	1.5
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	<i>(millions of dollars)</i>			
For comparison:				
Retail sales of stores in classifications named above	1,563	713	8,210	782

^a All data from *Census of Business, 1939*.

^b Except chain store warehouses.

^c General line and specialty, including importers.

The data in Table 21 offer sharp contrasts whose significance we shall now attempt to assess. In the case of drugs the branding of proprietary goods has long rested rather securely with the manufacturer on the basis of national advertising. This fact deprived jobbers of one motive for organizing voluntary chains. Retailer-cooperative warehouses have played a somewhat larger role in the drug business, although their history has been a chequered one. Prior to 1907 they were practically unknown, for the National Wholesale Druggists Association, founded in 1876, introduced the "rebate contract" plan in 1881. The Association induced manufacturers of proprietary goods to respect its black list of jobbers who cut prices, or sold to retailers who cut prices, fixed by the factory. In some instances, at least, jobbers were held in line through deferred payment of rebates or trade discounts. The contracts further provided that the

CHANNELS OF DISTRIBUTION

manufacturer might not sell direct to retailers or retailer cooperatives. The rather tight control of wholesaling by the Association at this period is to be explained by the plethora of manufacturers and of retailers in comparison with the paucity of jobbers.¹⁴ Indeed the jobbers even induced the National Association of Retail Druggists, soon after its foundation in 1899, officially to condemn cooperative buying by retailers.¹⁵ However, in 1907 the contracts had to be abandoned in consequence of a consent decree under the Sherman Act signed in the United States District Court at Indianapolis.¹⁶ The retailers' association promptly reversed itself, now encouraged cooperative buying by its members, and four years later heard its president claim that "the growth and development [of the National Association of Retail Druggists] has largely made possible the success of the many cooperative associations for buying goods."¹⁷ Certainly independent druggists, especially in the Midwest, found "cooperative wholesale houses" a weapon with which to fight the department store, and they seem to have risen rather rapidly to something like their present modest position.¹⁸ After World War I the further growth of cooperative wholesaling seems to have been checked by the partial success of the jobbers in again inducing manufacturers to discriminate against cooperatives as they still did against individual retailers: such discrimination was upheld in the unsuccessful prosecution of the Mennen Co. under the Clayton Act.¹⁹

Table 21 shows that in 1939 independent wholesalers and manufacturers' sales branches still covered the entire dry-goods field. The absence of voluntary chains or cooperatives reflects the decline of the traditional dry-goods store: dry goods had ceased to be a distinct trade whose dealers might be organized into chains or cooperatives. Most stores classified as dry goods in 1939 actually were general merchandise stores which bought from many kinds of wholesalers. Dry-goods jobbers in turn sold to country general stores and to some extent to department, variety, and clothing stores, as well as to dry-goods stores.

Table 21 shows that voluntary chains and cooperatives are most

¹⁴ See *Proceedings of the National Wholesale Druggists Association* (annual), *passim*.

¹⁵ *National Druggist*, October 1905, p. 313.

¹⁶ *American Druggist*, September 23, 1907, p. 197.

¹⁷ *American Druggist*, September 25, 1911, p. 42.

¹⁸ Trade estimates placed the sales of cooperative drug wholesalers at \$40 million in 1919 (*American Druggist*, September 1921, pp. 11-13) and in 1926 somewhat higher (*New York Pharmacist*, June 1927, p. 18), compared with only \$30 million for 1939 (in Table 21): but the earlier estimates may have included buying syndicates without stocks.

¹⁹ National Wholesale Druggists Association, *Proceedings*, 1923, pp. 270-273.

COST OF DISTRIBUTION

prominent in the grocery trade. The San Francisco Retail Grocers Association ran a jobbing department as early as 1895,²⁰ and buying syndicates were popular with retail grocers by 1910. Yet most of the growth, especially of jobber-organized chains, appears to have occurred after World War I. Trade sources are agreed that cooperative buying and voluntary chains were a reply during the 1920's to the spread of the grocery chain and during the 1930's to the advent of the supermarket. Large-scale buying by the corporate chains could be matched, in part, through cooperative purchases by the independents. But self-service to match the supermarket meant re-equipping the store: the jobber could help with pressure, advice, and credit, if need be. The growth of the voluntary group of retailers, jobber organized, in preference to the retailer-owned cooperative is partly to be explained on this score. Its other main attraction for the jobber is the opportunity it affords him to exploit his private brand. Only in the grocery trade were jobber-controlled brands effective.

With respect to the minor role played by cooperative buying and group wholesaling, hardware resembles the drug trade. Group buying seems to have begun shortly before World War I. To judge from trade discussion, the lack of staple lines seems to have been the main obstacle. Thus hardware items are so specialized that few retailers would trust their buying to an agent: staples, such as nails, do not apparently play a large enough role to make cooperative buying worthwhile. Again, except in a few items like tools, brand names have never meant much to the buyer of hardware; hence the wholesaler was scarcely tempted to group his retailer customers in order to promote his own brand.²¹

To summarize: We have suggested that the large variety of commodity lines involved somewhat discouraged voluntary chains or cooperatives in the case of drugs and hardware, and that the tight hold of wholesalers over the distribution of proprietary articles made innovation difficult in the former field. It seems likely too that the competitive pressure of the grocery chain upon the independents in the grocery field was not matched elsewhere—for we have noted that drug chains had no striking advantage, and (although variety chains spread rapidly) hardware chains were unknown.

Data for 1948 can be assembled only for the grocery trade. Table 22 shows that group wholesaling and cooperative warehouses had grown still further, at the expense of manufacturers' sales branches.

²⁰ *American Grocer*, January 22, 1902, pp. 36-38.

²¹ See, e.g., *National Hardware Bulletin*, 1909-1914, *passim*.

CHANNELS OF DISTRIBUTION

Table 22

DISTRIBUTION OF WHOLESALE GROCERY SALES, BY TYPE OF OPERATION, 1935, 1939, AND 1948 ^a

(per cent)

	1935	1939	1948
Regular wholesalers ^b	57.8	49.5	50.5
Manufacturers' sales branches	37.9	36.5	30.1
Cash-and-carry wholesalers	0.9	1.1	1.2
Voluntary group wholesalers	1.6	10.4	13.4
Retailer-cooperative warehouses	1.9	2.5	4.8
Total	100.0	100.0	100.0

^a All data from *Census of Business, 1935, 1939, and 1948*. The table includes all forms of wholesaling in which stocks are carried, except chain store warehouses. Data are from the census of distribution. Table does not include wholesaling of meat or dairy products.

^b General line and specialty, including importers and wagon distributors.

The Flow through the System, 1929-1948

The story told in Table 20 for the period prior to 1929 is brought up to date in Table 23. As already explained, the method here is reversed, figures in upper lines of the table being derived from figures in the lower, and not (as in Table 20) lower lines from upper. Thus "retailers' sales" in Table 23 are essentially as shown in the census of distribution, and "retailers' purchases" and components of input

Table 23

THE FLOW THROUGH THE DISTRIBUTION SYSTEM, 1929-1948 ^a

	1929	1939	1948
	<i>(billions of dollars)</i>		
Values:			
1. Input into the distribution system	29.4	25.5	78.9
2. Of which { via wholesalers	17.3	14.5	45.4
3. { direct to retailers	12.2	11.0	33.6
4. Value added by wholesalers	3.7	3.1	9.7
5. Retailers' purchases (lines 2 + 3 + 4)	33.1	28.6	88.6
6. Value added by retailers	13.3	12.1	37.4
7. Retailers' sales (lines 5 + 6)	46.4	40.6	126.0
	<i>(per cent)</i>		
Percentages:			
8. Input via wholesalers (line 2 ÷ line 1)	59	57	57
9. Wholesale markup (line 4 ÷ line 2)	21.4	21.3	21.3
10. Retail markup (line 6 ÷ line 5)	40.1	42.2	42.3
11. Combined markup (lines 4 + 6 ÷ line 1)	57.6	59.5	59.7

^a For sources and breakdowns of data and methods of estimation, see Tables 24 and 25 and Appendix B.

COST OF DISTRIBUTION

are derived from them by applying relevant markdowns. No use is made of commodity output, nor can the data in Table 23 readily be placed upon a commodity basis (e.g. in order to segregate consumables).

Table 23 illustrates the inflation of dollar values consequent upon World War II. But changes in the position of the wholesaler and in the cost of distribution since 1929 have been slight.²²

Accuracy of the Results

Before leaving the summary findings of the margin study, offered in Tables 20 and 23, it seems appropriate to note the leading heads for a discussion of the accuracy—or inaccuracy—of the results, especially for early years. To appraise the figures carefully requires perusal of Chapter 6 where the margin data are discussed; and of Appendix B which describes the projections back to 1869 of the reclassification of commodities and their allocation by channel. This chapter will merely conclude with a brief summary of what appear to the author to be the weak and strong points of the estimates.

The Problem of Absolute Size. The most alarming feature is perhaps the discrepancy shown between the estimates of dollar volume for 1929 in Tables 20 and 23. For instance, retail sales in 1929 are \$54.7 billion when obtained by the commodity output method (Table 20) but only \$46.4 billion by the volume of sales method (Table 23). These estimates use the same margin data and the same distributions for the relative importance of wholesaling. They differ only because one works forward from the (Shaw) commodity data and the other backward from the retail census totals.

The reconciliation of totals obtained by the two methods in 1929 and other years never has been easy. It is discussed at length by Kuznets,²³ and it is discussed again in Appendix B of this book. We may believe that the "true" magnitudes lie between the two estimates. If so, our figures for years prior to 1929 certainly overstate absolute magnitudes; it seems equally probable that our estimates for 1939 and 1948 understate them. Fortunately the error in our figures for distribution cost as a markup or percentage of sales need not be so great: if the dollar totals are uniformly overstated (or understated) the percentages will not be distorted. Despite the large differences in dollar totals, the combined markup is nearly the same by

²² Whether or not the decline in wholesaling has been arrested is uncertain, for the Bureau of the Census has not collected information about the distribution of manufacturers' sales since 1939, so that many of the ratios for apportioning input among channels in 1948 are necessarily the same as in 1939.

²³ *Op.cit.*, Part III, pp. 171-176.

CHANNELS OF DISTRIBUTION

the two methods. The two estimates for 1929 are 58.8 per cent (Table 20) and 57.6 per cent (Table 23).²⁴

The Understatement of Trends. In projecting back retail and wholesale margins, distributions of commodity sales, and the commodity-store cross classification, we naturally found numerous dark corners and conflicting clues. Our bias throughout was conservative. That is to say, unless we had evidence that things were different in 1899, say, or in 1869, we used the 1929 ratios. Where we lacked evidence of a trend for some particular cell of the table (e.g. in the importance of wholesaling or in the size of a margin), we assumed there was no trend. This conservative approach means that where we report trends, their magnitude is probably understated. For instance, the upward movement in the distribution cost percentages probably was more rapid than appears in Table 20.

Summary. Our estimates in dollars are less trustworthy than those in percentage form. Figures for later are better than for earlier years.

²⁴ Cf. the corresponding differences between figures reported for 1929 in Tables 17 and 19, in Chapter 4.