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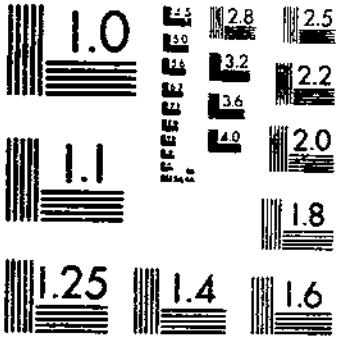

MICROCOPY RESOLUTION TEST CHART
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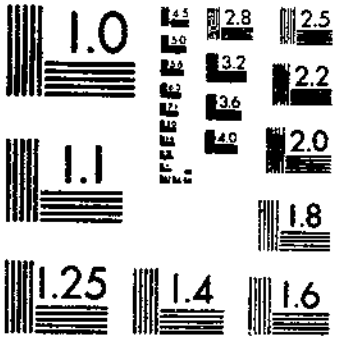

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Technical Bulletin No. 1044, June 1951

UNITED STATES
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WASHINGTON, D. C.

Marketing Dry Edible Beans and Peas

A report of ALDERSON & SESSIONS *under contract, as authorized by the Research and Marketing Act, prepared for publication in the Bureau of Agricultural Economics by* REED A. PHILLIPS *and* D. B. DELOACH [1]

CONTENTS

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FINDINGS AND CONCLUSIONS

1. The marketing margin for dry edible beans in 1949 was 52 percent of the consumer's dollar.

2. Apparently there has been a decrease in the marketing margin since 1939.

3. The stabilization of the market provided by the price-support program is generally regarded by the trade to have been a factor in reducing both the costs and the profits in distributive margins.

4. Opportunities for further reduction in costs exist at all levels in dry bean and pea marketing.

5. Three general ideas are here recommended as the basis of a program for promoting increased efficiency. (The application of these principles is set forth on pages 56–60.)

6. Marketing risk, according to the trade, has been reduced both for the growers and for the marketing agencies under the price-support program.

7. Elevators have increasingly avoided marketing risk by engaging in custom processing and storage, and buying beans only as needed to fill orders.

8. There is a tendency for intermediary distribution services to be performed by brokers rather than by dealers. This is another step toward minimizing marketing risk in distribution.

9. Elimination of marketing risk favors reduction in the cost of standardized functions and should focus attention on efficiency in the performance of them.

10. The trend away from ownership of dry beans in the years of ample supplies poses a problem as to who will undertake market expansion through active merchandising. Maintenance of a working inventory is essential if a distributor is going to carry a complete line, fill recurring orders from regular customers, put up beans and peas in consumer packages, and take responsibility for quality under a brand name.

11. Despite the apparent confusion as to who is to take merchandising leadership, progress is under way, the rapid advance in consumer packaging being one example.

12. Because of the pressure exerted through the self-service trend in retailing, packaging is being done in a variety of ways—by elevators, bean dealers, wholesalers, retailers, and specialized packagers. This mixed situation is not consistent with effective and continuous merchandising of dry beans in each market.

13. The demand for beans has been largely regional; colored classes are stronger in the South and white varieties are stronger in the North. Nationally there is a moderate shift toward white classes. There is a tendency on the other hand for the North to consume a somewhat greater proportion of colored beans than formerly.

14. Lima beans, grown commercially in California, have been merchandised nationally, selling at about the same proportion in each area in relation to the sale of all beans. An increase in domestic consumption would appear to call for a similar trend toward national distribution of other classes.

15. There are some indications that physical handling is becoming more efficient. For example, about half of the beans now move from farm to elevator in bulk instead of being bagged in the field. This is in line with changes in practices which had already occurred in major grain-producing areas.

16. The median operating cost for elevators in 1949 was 49 cents per 100-pound bag. This cost figure was achieved at a volume level of 40,000 bags.

17. Elevator operating costs, per 100-pound bag, decrease sharply as volume increases until volume reaches about 40,000 bags annually. Beyond that volume, the costs decrease, but only slightly.

18. For elevators, indirect costs are a large factor, amounting to 45 percent of total costs. The structure of costs is quite different for the dealer with indirect costs, amounting to about 29 percent of the total.

19. With one or two exceptions, the custom charges made by the elevators are in line with the costs for the elevator's function.

20. Margins of the wholesaler are rather stable for beans and peas that are bought in consumer packages but are extremely variable with respect to 100-pound bags.

Objectives, Scope, and Method

This study of the marketing of dry edible beans and peas has the general objective of promoting efficiency in the marketing of farm products. A full-scale attack upon this objective would include

some types of analysis not contemplated in the present assignment. For example, this study does not embrace a critical evaluation of alternative marketing techniques and detailed recommendations for changes in current marketing procedures.

Before recommending modifications in the marketing of dry edible beans and peas it is essential to have comprehensive quantitative information, such as that on which this report is based, as to the structure of the marketing processes directly involved. The study was designed primarily to give a descriptive analysis of the marketing of beans and peas. The information developed in this study does not cover a complete program of marketing; but it does provide the groundwork for a program of evaluation and improvement of marketing methods.

The survey dealt with the principal marketing agencies and their operations in 1949, with the flow of products through marketing channels, and with the costs and margins accruing in distribution. Comprehensive data have been obtained on these aspects of marketing through the work of staff members of the Bureau of Agricultural Economics and the usually generous cooperation of the firms that reported. The mass of data obtained from each type of marketing agency has been analyzed and fitted together to form an integrated picture of the machinery for marketing beans and peas.

Although the report's primary purpose is descriptive, it does not stop there. Several basic issues are raised concerning the nature of marketing efficiency and the problem of increasing efficiency in marketing dry beans and peas.

More specific studies of marketing techniques might now be undertaken as a basis for prescribing constructive changes.

The survey was Nation-wide in scope. From an exploratory study in a single bean-producing area, the plan was extended to cover all of the principal growing areas. It was decided to include dry edible peas as well as beans. With respect to marketing agencies, the study embraced (1) elevators, (2) brokers and dealers, (3) canners, and (4) wholesale grocers. By varieties of product the coverage included all leading types of beans under the three broad headings of white, colored, and lima.

The firms to be covered in the study were selected from each of these four fields according to established principles of sampling. The largest of these samples and, in some ways, the most fundamental, was the sample of bean and pea elevators. In all, 134 elevators were covered. These were distributed among the principal growing areas for beans and peas in proportion to production. Out of this total, 122 elevators were selected primarily as representative of bean elevators and 12 of pea elevators (table 30, Appendix). There was some overlap in the study, with 11 elevators in the sample handling both beans and peas. Thus, the total number of elevators from which information was obtained about beans was 124. Information about peas was obtained from 21 elevators.

Both large and small elevators were included in the sample. There was some tendency, inherent in the method of sampling, to get a large proportion of elevators toward the upper end of the size range. This resulted from allocating the sample among producing areas in proportion to the size of the crop rather than according to the number of

elevators. Inasmuch as elevators tend to be larger in areas of heavy production, a larger proportion of these elevators would be covered in an area in which elevators were larger than average.

The objectives of the survey were to obtain information on both the market flow of beans and the practices of individual elevators. A sampling method which gave considerable weight to the volume of beans handled was consistent with the objectives.

The second sample, covering 60 firms interviewed in the study, was designed to cover the many types of intermediaries designated as brokers, dealers, and jobbers. Such an intermediary draws its supplies from elevators or growers in the growing areas and sells to canners, wholesale grocers, and chain warehouses (table 31, Appendix).

Intermediary handlers are so diversified in character that they present great difficulties from a sampling standpoint. An attempt was made to give adequate representation to dealers and shippers who tend to be located in the growing areas on the one hand and on the other to brokers and jobbers who were located in the consuming areas. But it was not possible to prepare listings for these two groups separately because of the overlapping as to function.

The analysis, therefore, deals with one broad category of intermediary handlers, with a full recognition of the limitations inherent in such a broad classification. Some intermediaries, often known as dealers, take title and possession of the beans they handle. At the other extreme, there is the true broker who takes neither title nor possession but operates on a commission basis. It was not possible to classify all of the firms covered under one heading or the other. A considerable number of intermediaries might be described as wholesalers without stocks. They take title without taking possession. In some instances a broker may take possession without taking title. Furthermore, even individual firms may operate in different ways at different times. The intermediary who is serving as a full-fledged dealer with some of the beans he handles may act as a broker on other transactions.

The third group of firms interviewed in the study consisted of 62 wholesale grocers and chain-store organizations (table 32, Appendix). This sample was national in coverage and tended to follow consumption of beans rather than production. Firms engaged in the export business might logically be classified as wholesalers but none was included in this study. Beans grown in the United States are mostly consumed in this country, and the present attempt to trace the market flow for beans and peas was confined chiefly to the domestic market.

The fourth and smallest sample in the study covered 41 firms operating as bean canners (table 32, Appendix). Many of these firms canned other food products as well. Canners were excluded from the sample if beans did not constitute a substantial part of their total volume of business. Canners were not selected to represent the canning of peas. Peas are generally canned in the green form rather than dry, except for such special products as puree. The operations of the canners in regard to beans were not covered in as great detail as were the operations of other types of firms in the survey. In this study the canner was regarded as the ultimate destination so far as

dry beans are concerned and relatively little information was gathered about the canned product.

Schedule information was obtained from personal interviews with a representative cross section of each class of respondents. Some of the data were generally available from normal business records. In other cases, new records were compiled by such devices as tabulations from sales slips. Estimating formulas were used to meet such problems as the allocation of joint costs.

Detail in regard to costs was obtained from elevators and dealers by means of a more detailed schedule used with a subsample of respondents.

The information required by the supplementary cost schedules was pursued with an intensity that would give some of these reports almost the character of case studies. Schedules from individual respondents in some cases are supported by work sheets that were developed in filling out single items on the schedules.

Dun and Bradstreet [2] reports were drawn on many respondent firms to fill in data missing on schedules. Various rating and reference manuals were also employed, such as *Thomas' Register*.[3] A great deal of statistical information from the United States Department of Agriculture and other sources was gathered and digested. Statistical series were available for both beans and peas, covering many years. Special methods had to be adopted in dealing with such problems as costs and margins. A more detailed treatment of these devices is developed in the Appendix.

Aside from the purely factual material gathered from the cooperating firms in the bean industry and from other sources, some information was obtained concerning opinions and attitudes. The study did not include an opinion survey in the usual form of a set of definite questions to which specific answers could be obtained and tabulated. The procedure was rather that of encouraging each person interviewed to comment and make his own suggestions as to current conditions in the bean industry.

The final section of this report offers some tentative recommendations and suggests some further lines of inquiry. That section is meant to be suggestive rather than conclusive. A more intensive investigation of diverse methods employed and their relative merits would be essential in reaching final conclusions concerning marketing efficiency and the stabilization of the industry. The discussion, therefore, is intended to serve the purpose of posing issues rather than settling them.

BEAN AND PEA ELEVATORS

BASIC CONSIDERATIONS.—Dry edible beans are grown in several States which can conveniently be classified in three broad regional groups. The oldest of the major producing areas are in Michigan and New York. Another of the major areas, and the one that has shown the greatest increase in production, extends throughout the Mountain States. The most diversified area, as to varieties of beans produced, is in California. Dry edible peas are produced primarily in the wheat country of southeastern Washington and northern Idaho (fig. 1).

[2] Dun and Bradstreet, Inc.
[3] Thomas' Register of Wholesale Grocery and Kindred Trades.

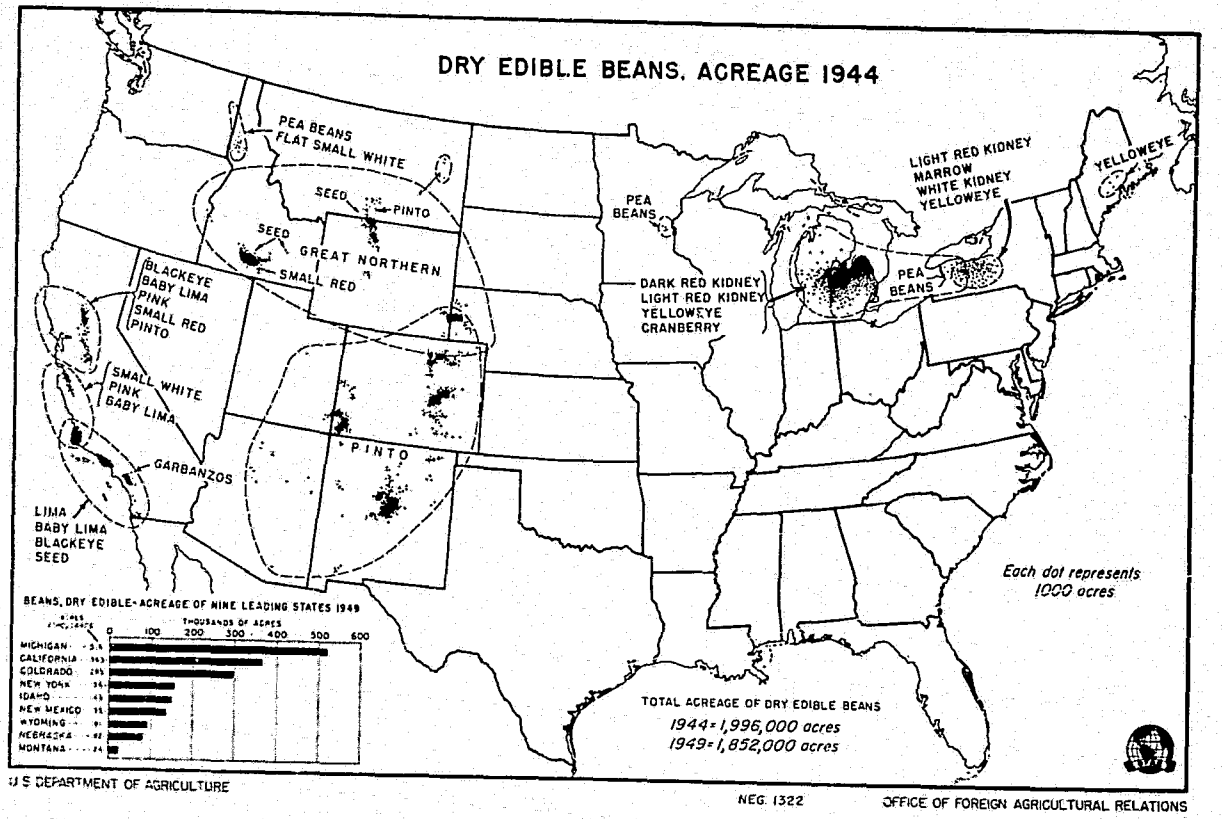
DRY EDIBLE BEANS, ACREAGE 1944
PEA BEANS
FLAT SMALL WHITE
SEED
PINTO
SEED
GREAT NORTHERN
SMALL RED
BLACKEYE
BABY LIMA
PINK
SMALL RED
PINTO
SMALL WHITE
PINK
BABY LIMA
GARBANZOS
LIMA
BABY LIMA
BLACKEYE
SEED
PINTO
PEA BEANS
DARK RED KIDNEY
LIGHT RED KIDNEY
YELLOWEYE
CRANBERRY
LIGHT RED KIDNEY
MARROW
WHITE KIDNEY
YELLOWEYE
PEA BEANS
YELLOWEYE
Each dot represents 1000 acres
BEANS, DRY EDIBLE-ACREAGE OF NINE LEADING STATES 1949
THOUSANDS OF ACRES
0
100
200
300
400
500
600
MICHIGAN
CALIFORNIA
COLORADO
NEW YORK
IDAHO
NEW MEXICO
WYOMING
NEBRASKA
MONTANA
TOTAL ACREAGE OF DRY EDIBLE BEANS
1944=1,996,000 acres
1949=1,852,000 acres
U S DEPARTMENT OF AGRICULTURE
NEG. 1322
OFFICE OF FOREIGN AGRICULTURAL RELATIONS

FIGURE 1

This study covered operations in 1949 of a sample of the elevators in all of these regions. The seven States in which these elevators were located accounted for approximately 90 percent of the crop of dry edible beans and peas in that year. In fact, these elevators processed more than half the 1949 crop. Figure 2 shows the geographical distribution of the sample of elevators; brokers, jobbers, and dealers; wholesalers; and canners.

The bean and pea elevators perform several functions which only a very few larger farmers attempt to perform for themselves. Practically the entire crop moves from the farms to the elevators. In

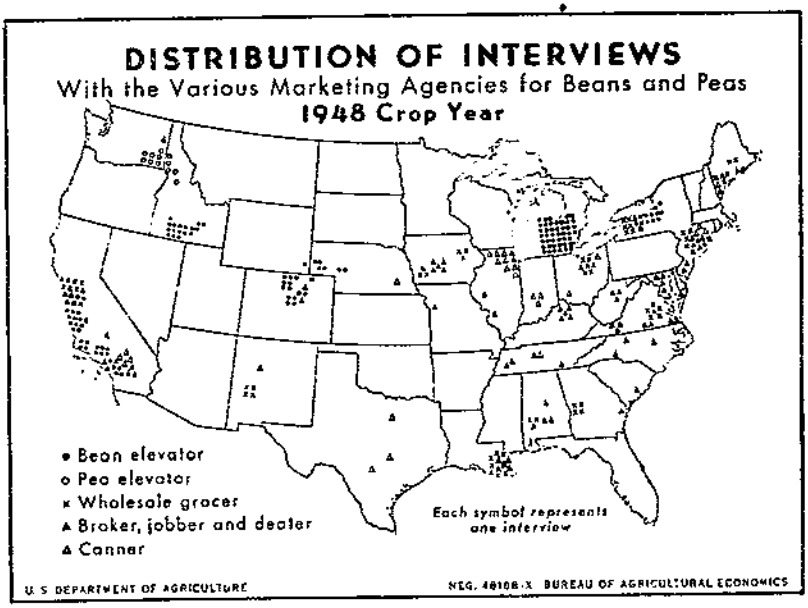

FIGURE 2

tracing the flow of cleaned beans as an article of commerce, the elevator can be taken as the starting point. This section of the report deals with the size and organization of elevators, the movement of beans and peas into them, the movement out of them, and the functions that the elevators perform. The costs and margins involved in the performance are discussed in a later section.

ORGANIZATION STRUCTURE OF ELEVATORS.—Bean and pea elevators are mainly operated by small private enterprises engaged in several activities other than the handling of beans and peas. There are large companies in the field and some operate one or more branches. The cooperative elevator is represented in both the federated and the central types. There are moderate differences in type and size of organization among the growing areas. Despite these variations the prevailing pattern is one of small or moderate-sized business with the handling of beans and peas as a seasonal side line (table 1).

TABLE 1.—*Elevators, processors, and shippers: Percentage distribution of organization respondents by volume of business in specified bean and pea areas*

Item	Area			
	Beans			Peas in northern Idaho and Washington
	California	Colorado, Nebraska, and southern Idaho	Michigan and New York	
Respondents	*Number* 29	*Number* 37	*Number* 56	*Number* 12
	Percentage of all respondents			
Volume of business:[1]	*Percent*	*Percent*	*Percent*	*Percent*
Less than $100,000	48.3	0	3.6	0
$100,000–$499,999	34.5	40.6	46.4	33.4
$500,000–$999,999	10.3	27.0	30.4	0
$1,000,000–$2,999,999	6.9	18.9	10.7	50.0
$3,000,000–$4,999,999	0	8.1	0	8.3
$5,000,000 and over	0	2.7	1.8	0
Unclassified	0	2.7	7.1	8.3
Total	100.0	100.0	100.0	100.0

[1] Based on reports from respondents, reports from Dun and Bradstreet, Inc., and estimates based on ratings from THOMAS' REGISTER OF WHOLESALE GROCERY AND KINDRED TRADES. Volume of business refers to volume arising from all types of operations.

The busy season for the processing of beans and peas lasts about 4 months after harvest. Unless an elevator has large facilities and large demands for storage, it must have other activities to obtain revenue during the other 8 months of the year. Bean elevators are divided into four roughly equal groups with respect to the size of their physical volume represented by beans. One-fourth of the elevators reported that beans make up 20 percent or less of their volume (table 33, Appendix). For another quarter the volume ranges between 20 and 40 percent of the total. More than 40 percent of the total business of about half of the elevators is in beans. At the top of the range is the one-fourth of all the bean elevators that get more than 80 percent of their physical volume from beans.

This distribution is quite different for elevators that handle peas. Nearly two-thirds of the elevators studied reported that peas account for 20 percent or less of their volume. An elevator handling peas is likely to be engaged in a more substantial way in handling beans or in handling such grains as wheat. In fact, well over half of the elevators handling either beans or peas get most of their physical volume

from other crops. In addition, many of these elevators have a substantial retail business, consisting primarily of feed, farm supplies, and implements, sold to farmers.

The corporate form of organization was reported by nearly 42 percent of the elevators. About 39 percent are individually owned or are operated as partnerships. The remaining 19 percent are cooperative elevators. Somewhat more than one-fourth of the elevators operate branches. Corporations alone made up more than half of the concerns operating branches; corporations and central-type cooperatives accounted for two-thirds of the elevators with branches. Corporations were predominant in California and they accounted for nearly half of the elevators in Michigan and New York. The Mountain States run more to individual proprietors and partnerships. Half the elevators studied in the Washington-Idaho-Oregon pea area were cooperatives. Elevators without branches predominated among bean elevators in every region, but half of the elevators in the pea area operated branches.

On the basis of total business of all kinds, the most typical elevator had an average annual volume of slightly less than half a million dollars. Volumes of half a million or more were reported by 47 percent of the elevators. Two firms had volumes in excess of 5 million dollars and four additional firms exceeded 3 million dollars. Of these six larger firms, four handled beans, one handled peas, and one handled both. None of the pea elevators reported volumes of less than $100,000 and the typical pea elevator is about twice as large in total volume as the bean elevator.

Most of the elevators handling an annual volume less than $100,000 are in California. Only 17 percent of the California elevators covered in the study reported more than $500,000 in volume compared with about half of the elevators in Michigan and New York and more than half of those in the Mountain States. Elevators with volumes of 3 million dollars and more are found in all of the areas except California.

Source of Elevator Supply.—Elevators are located close to growing areas. The maximum distance from farm to elevator was under 30 miles for 80 percent of the elevators handling beans and 94 percent of the elevators handling peas. The median distance traveled by beans to the elevator is 6 miles. This is equivalent to saying that a circle with a radius of 6 miles drawn around the average elevator would include half of the beans handled by the elevator. For peas, the median distance is 7.5 miles. These figures emphasize the highly localized character of the elevator business. A few elevators, however, draw from a somewhat greater distance. Among bean elevators, 8.8 percent say that some of their beans come from 50 miles away or more; 5.6 percent of the pea elevators reported drawing from a similar radius.

Transportation from farm to elevator is generally financed by the grower. In 1949, elevators took responsibility for only 7.6 percent of the transportation for beans and 15.6 percent for peas. The movement to the elevator is mainly by motortruck although some beans move by horse-drawn wagon. Only 3.5 percent of the elevators reported receipt of beans by rail; the corresponding figure for peas was 11.1 percent.

About half of the crop moves to the elevators in bulk. Hauling in an open truck bed has been adopted as standard practice in many grain areas and seems equally suitable for beans. When beans are bagged on the farms the bags are usually owned by the farmers.

METHODS OF PURCHASE.—An elevator that handles beans may either buy them or handle them as an agent for the farmers (table 2).

TABLE 2.—*Elevator stocks: Percentage distribution between owned and stored for growers, by classes of beans and peas, 1948* [1]

Class	Crop year 1948	
	Owned	Stored for grower
Beans:	*Percent*	*Percent*
Pea and medium white	41	59
Great northern	10	90
Small white	1	99
White marrow	4	96
Pinto	19	81
Red kidney	37	63
Pink	0	[2] 100
Small red	45	55
Yelloweye	96	4
Standard lima	0	[2] 100
Baby lima	0	[2] 100
Blackeye, California	0	[2] 100
Average	22	78
Peas:		
Alaska	45	55
White Canadian	90	10
Average	54	46

[1] Computed on basis of average of four quarterly inventories.
[2] Produced almost entirely in California, where elevators do not normally purchase beans.

The elevator takes title more commonly in the case of beans than peas. Outright purchase was reported by 58.1 percent of bean elevators but by only 26.9 percent of pea elevators. The most usual method of purchase for beans is on a spot basis rather than under contract. Payment in the great majority of cases is for cleaned beans rather than for field run. Peas, on the other hand, are more commonly bought on a field-run basis. There is also a somewhat greater tendency for peas to be bought under contract.

When an elevator does not buy the product, it may process it and store it for the account of the grower. A small proportion of the crop is processed only, under such arrangements, and not stored. Usually beans or peas handled on a custom basis are processed and are stored while awaiting their further disposition. This may be

through private channels or through Government loan or purchase. The bean and pea elevator assumes little market risk as beans are bought under contract in only 4.2 percent of the cases and peas are bought under contract 6.5 percent of the time. The elevator may decide, on the basis of market conditions, whether in making this decision to buy or merely to handle beans and peas on the grower's account. Undoubtedly, the revenues from custom charges are weighed against prospective gross margins.

If the elevator buys beans outright it is with the hope that the gross profit obtained from the sale will cover the costs and return a net profit to the elevator. Among the elevator's principal costs are the costs of cleaning and the costs of storage. Custom charges for beans handled to the grower's account, cover the expenses of cleaning and storage and presumably leave some net return for the elevator. Thus, when the elevator does not see a good prospect of buying beans and reselling them profitably, it may refuse to buy but offer to accept them on a custom basis. Under certain market conditions the elevator might rely on custom charges for its income rather than on a gross profit realized from the purchase and sale of beans.

A grower also exercises options which can help him to avoid or minimize market risk. If the market price is higher than the Government support price plus accrued charges, the grower may decide to sell. On the other hand, he may hold his beans, hoping for still higher prices, even though he can realize a profit by redeeming his loan and selling at the current market price. If the market price is lower than the support price plus accrued charges, the grower would not be likely to sell on the open market.

An elevator must meet certain standards in order to accept beans for storage under the price-support program. If the elevator operator meets these standards he can either accept beans for custom storage or offer to buy them outright, according to which appears to him most likely to turn out profitably. The general effect of the exercise of these options by growers and elevators should be to stabilize prices, regularize the flow of the product, and minimize market risk for both growers and elevators.

Functions Performed by Elevators

Processing and Preparation for Market.—The first function of an elevator is the processing or the preparation of beans and peas for the market. Several detailed steps are comprised within this function, such as cleaning, picking, and polishing. The most distinctive of these steps is that of placing the beans in consumer packages, but only a few elevators engage in packaging. All beans and peas must be processed whether the elevator buys them or does custom processing for the grower. Storing generally means that the beans or peas are being held for the grower's account if the beans are of the type grown in that area. If they are not locally grown they may have been shipped in for local distribution. Packaging is a definite indication of an elevator's interest in developing the consumer market. A comparison of these three functions provides a broad characterization of the type of business conducted by the elevators (table 3 and tables 34, 35, and 36, Appendix).

TABLE 3.—*Elevators, processors, and shippers: Percentage distribution of establishments handling beans and peas, by trade and buying policies*

Item	Establishments handling—	
	Beans	Peas
Reporting	*Number* 130	*Number* 18
	Percentage of all reporting [1]	
Policy:		
Obtains title from grower:		
With contract:		
Price when delivered:		
Contract	*Percent* 0. 6	*Percent* 3. 0
Market	3. 6	3. 5
Total	4. 2	6. 5
Without contract:		
Field-run beans on farm basis	5. 6	8. 4
Beans on cleaned basis	45. 3	2. 0
Other	3. 0	4. 0
Total	53. 9	14. 4
Total obtaining title from grower	58. 1	20. 9
Does not obtain title from grower:		
Processed for grower [2]	2. 1	. 8
Processed and stored for grower [2]	17. 8	32. 2
Processed and/or stored before delivery to Government under price support program	18. 4	34. 0
Other	3. 6	12. 1
Total	41. 9	79. 1
Grand total	100. 0	100. 0

[1] Distributed on the basis of the percentage of each elevator's total volume of beans and peas handled under each policy.
[2] Other than Government loan beans.

One hundred and thirty-one elevators in the study reported that they did processing, 122 that they did storing, and only 10 reported packaging. The percentage of elevators that process each variety follows the relative importance of varieties fairly closely; 40.5 percent for pea and medium white beans. The percentage of elevators that store follows closely the percentage that process, with exceptions that can be explained on a regional basis. Although only a few elevators engaged in packaging, they covered most of the leading types of

beans and peas. On the average, each of these 10 elevators packaged only 4 varieties of beans and peas.

In California, all of the 29 elevators interviewed reported both processing and storing. Only one reported packaging, but this one packaged some of nearly all the classes handled by California elevators. The percentages that processed and stored were identical for most classes. Storing was practiced more often than processing, in the case of peas. Presumably the elevator that stored peas without processing them had received them from smaller local elevators.

In the Mountain States, storing was undertaken by 35 elevators and 37 elevators engaged in processing. The percentages of elevators that processed and stored were similar for the different kinds of beans except for great northerns. Several larger elevators were apparently storing this class of beans processed by local elevators. The 5 elevators that reported packaging were all engaged in packaging the two principal classes grown in that region—great northern and pinto. They also packaged several other classes, including some grown only in California such as lima, pink, and blackeye.

The elevators in Michigan and New York predominantly handle beans grown in these areas. The class of largest volume by far is the pea bean, followed by red kidney, cranberry, and yelloweye. The number that reported storing exceeds the number that reported processing substantially for the cranberry and yelloweye classes. Five elevators reported storing pea beans but none reported processing. Packaging of pea beans was reported by four elevators. The only other packaging reported was of the cranberry class, packaged by a single elevator.

Processing of beans and peas may be broken down into several aspects. Eight of these are sufficiently important for elevators to quote separate charges for custom services. Two of these charges are for the cost of bags and the cost of putting the product into bags. These charges are reported from all three regions that grow beans in quantity. Three other processing charges reported from every region are for cleaning, picking, and destoning. Cleaning is the essential phase of processing, carried on by all elevators. Picking and destoning are adjuncts of cleaning. Fumigating was reported only from California. Drying and polishing were reported from the other two regions but not from California. Processing, therefore, is to be understood as including whatever it takes to prepare field-run beans for market according to the requirements by region and class.

Conceiving of functions in still broader terms, the preparation of the product for market is one of four broad phases of marketing. The second is the physical flow of goods through marketing channels, including storage and transportation costs. This study is concerned directly with these two functions: preparation for marketing and marketing flow. Most of the collected information pertains to these two functions. The study deals less directly with the other two aspects of marketing—the assumption of marketing risk and the expansion of markets. These two functions are treated only incidentally in connection with each type of marketing agency. Further consideration is given to these functions in the later analytical discussion.

DISTRIBUTION TO BUYERS.—By far the larger part of the movement from the elevators is by rail—82 percent of the beans and nearly 97

percent of the peas—moved by rail in 1949. About one-sixth of the beans moved out by truck. There was a small movement by water of both beans and peas.

Most common prevailing terms of sale are f. o. b. shipping point for both beans and peas. A considerable volume of peas and a somewhat lesser volume of beans are sold on a delivered basis.

In 1949, elevators sold 35 percent of their volume to dealers who took title. They also sold to other types of customers, most of these transactions being handled by brokers. The largest of these customer types is the wholesale grocer, who accounted for about 30 percent of the sales volume of the elevator. Smaller quantities moved to canners, packagers, exporters, and institutions. Some beans and peas went back to the growers for seed. In 1949, 7 percent of the beans and 41 percent of the peas moved from the elevators to warehouses for Government account. There are striking differences in the distribution by types of customers among the leading classes. Thus, 36.7 percent of white marrows moved to packagers as compared with 6.3 percent for all types.[4] Dealers handled a large proportion of pintos, limas, and blackeyes. Canners took more than an average share of pea beans, small whites, and red kidneys.

The typical bean elevator has three roughly equal sources of revenue. One of these major sources is from beans bought and sold. Another third of revenue comes from custom charges for processing and storing beans for the account of growers. The remaining major source is the gross margin on other sales, as seed and bags sold to growers, sales of culls and beans for feed, and the retail side of the business. The proportions were somewhat different for pea elevators. Revenue from custom charges was lower, while miscellaneous revenues such as sale for feed were relatively higher.

Subsidiary problems of distribution involve the disposal of culls and the handling of empty bags. Half of the bean culls and nearly all of the pea culls were sold to farmers for livestock feed. Bean culls were disposed of in other ways; 24 percent went into export and 11 percent was destroyed. Bags were owned by the elevator and lent to farmers in 19 percent of the cases. Bags originally belonging to the growers were handled in various ways by the elevator. More than half the time they were used for shipping beans. The next most frequent practice was to return them to the grower.

Storage to Equalize Market Supplies.—Elevators process the entire crop and store a large part of it until it moves on in the channels of distribution. Some general facts about production trends and carry-over of beans and peas are pertinent at this point. The data are drawn from published sources rather than from the survey, and they are important as background to the later stages of the analysis. The over-all facts about supply help to define the place of the elevators in the industry and to determine the economic outlook both for growers of beans and peas and for the marketing agencies.

The bumper crop of beans in 1949 was about 75 percent greater than the average crop 20 years ago (table 4). Even the average crop of the last 5 years has been about 50 percent greater than the 1929

[4] Apparently a substantial amount of additional packaging was done by wholesalers and agencies not covered in this study.

crop. Over the same period, the population of the United States increased not quite 20 percent. There has been some increase in per capita consumption during this time but this trend has leveled off in recent years.

TABLE 4.—*Dry edible beans: Supply and distribution, United States, 1929–48*

Year beginning September	Supply				Distribution		
	Stocks September [1]	Production	Imports [1]	Total	Domestic disappearance [2]	Exports [3]	Stocks end of season
	1,000 bags [4]	*1,000 bags* [4]	*1,000 bags* [4]	*1,000 bags* [4]	*1,000 bags* [4]	*1,000 bags* [4]	*1,000 bags* [4]
1929	250	11,561	1,874	13,685	12,551	204	930
1930	930	13,540	1,085	15,555	13,200	200	2,065
1931	2,065	11,970	262	14,297	12,526	109	1,662
1932	1,662	10,410	245	12,317	10,977	90	1,250
1933	1,250	12,065	271	13,586	11,505	81	2,000
1934	2,000	10,656	503	13,159	11,939	70	1,150
1935	1,150	13,333	265	14,748	13,524	104	1,120
1936	1,120	10,767	703	12,590	11,621	44	925
1937	925	14,940	199	16,064	13,510	104	2,450
1938	2,450	14,717	141	17,308	13,841	317	3,150
1939	3,150	14,254	143	17,547	13,191	906	3,450
1940	3,450	15,790	241	19,481	14,417	1,564	3,500
1941	3,500	17,100	164	20,764	14,359	1,832	4,573
1942	4,573	17,568	452	22,593	16,079	2,933	3,581
1943	3,581	19,435	1,467	24,483	15,742	4,430	4,311
1944	4,311	15,060	470	19,841	14,372	4,519	950
1945	950	11,954	186	[5]13,155	11,548	1,269	338
1946	338	14,737	147	15,222	13,053	1,469	700
1947	700	15,783	390	[5]16,992	13,533	2,729	730
1948	730	19,420	395	[6]20,685	13,198	1,917	5,570

[1] Includes dry beans and garbanzos.

[2] Includes domestic food and seed use, United States military food use, and shipments to United States territories.

[3] Includes dry beans, seed beans, garbanzos, and canned beans converted to dry beans, using 31 percent as the ratio of dry-bean content.

[4] Bags of 100 pounds.

[5] Total supply includes allowance for split beans exported for civilian feeding.

Stocks—1929–42 official estimates of U. S. D. A. Bureau of Agricultural Economics, 1943–46 stocks officially reported by B. A. E., with adjustments to allow for C. C. C. stocks, 1947–48 estimates based on Market News Service and Trade information.

Production—Official records of B. A. E.

Imports and Exports—U. S. Department of Commerce, Bureau of the Census, with adjustments for Army civilian feeding prior to 1947, when not reported by the Census.

The large crops of 1948 and 1949 were not due primarily to expanded acreage. The average planted acreage for 1935–39 was 1,914,000 acres; the 1948 planted acreage was 1,970,000 and the 1949 acreage was 1,900,000. Yields remained relatively stable during the period 1937–46 but rose sharply beginning with the 1947 crop. Im-

proved methods of production, development of better varieties, and expansion of the irrigated acreage planted to beans were among the principal influences in the increase, but for the 1948 and 1949 crops particularly, the unusually widespread favorable growing conditions constituted the most influential factor in the record yields.

The history of bean production is one of moderate growth and relative stability compared with the trends for other leguminous crops. The peanut crop in 1949 was about equal to the bean crop in number of pounds. The upward trend in production is greater in peanuts—the 1949 crop was more than twice as large as the 1929 crop.

The increase in production of these older crops is very moderate compared with the increase in soybeans. In 1949, the country produced 6 times as many pounds of soybeans as dry edible beans. The soybean crop was 24 times as large that year as in 1929. The greatest fluctuation among leguminous crops is found in edible field peas. The 1949 crop was nearly twice as large as the 1929 crop but it was less than one-third as large as the record crop of 1943.

The main point of these comparisons is to show the relative stability of the supply of dry edible beans. This stability should be favorable to orderly marketing (table 5). An analysis of production by regions and by varieties of beans reveals a high degree of internal stability. The bean-producing areas are divided into three parts in this study—California, the Mountain States, and the older producing areas in Michigan and New York. The production trend in each of these three divisions has been approximately the same during most of the last 30 years. The principal change was found in the Mountain States which moved from last place to first place in the annual volume of production.

The bumper crops of beans in 1948 and 1949 did not mean run-away increases for any one or two classes. Rather, it was a general increase in all types, whether white, colored, or lima, because of good crop conditions everywhere. These 2 years represented record production not only for beans but for field crops generally. Dry edible peas constituted one of the few exceptions. The pea crops in 1948 and in 1949 were only about half the size of the 1947 crop.

The carry-over of beans at the end of 1949 was about 5 million bags—nearly one-fourth of the entire 1949 crop. The size of the carry-over is causing considerable uneasiness in the trade. Yet the fluctuations of beginning stocks, since 1925, offer some ground for optimism. Large stocks have been disposed of before, and have been followed by periods in which carry-over was reduced to a minimum. The then current concern was that such a readjustment could not be counted on because of the Government support program. The problem of the adjustment of supply and demand is one of the topics discussed in the final analytical section of this report.

Information was gathered on several aspects of elevator operation which have not been covered in this section but are reserved for later discussion. Elevators' receipts and purchases and sales, month by month, are treated in the section on the marketing flow of peas and beans. Comparison is made with the monthly flow through distributors and wholesalers. Monthly price data are considered in the section on costs and margins along with the comparable price data

TABLE 5.—*Elevators, processors, and shippers: Percentage distribution of volume of incoming beans and peas handled, by classes and by months, 1948* [1]

Class	Percentage of total of all classes	Percentage of total for crop year 1948											
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Beans:													
Pea and medium white	78.8	28.2	15.4	8.6	4.9	5.6	6.3	2.6	7.2	11.9	6.6	2.0	0.7
Great northern	4.9	65.9	32.0	1.3	.4	0	0	.1	.1	0	0	0	.2
Small white	3.7	15.8	65.6	18.3	0	0	0	0	0	0	0	0	.3
White marrow	.2	17.4	16.0	12.6	3.6	3.3	15.3	21.4	7.7	.6	.9	.6	.6
Pinto	2.9	61.7	7.3	2.0	1.5	1.3	.6	.2	.3	.1	.1	.1	24.8
Red kidney	1.7	6.9	17.8	14.2	13.1	15.0	7.5	4.2	11.7	6.2	2.2	.4	.8
Pink	.1	29.4	68.6	2.0	0	0	0	0	0	0	0	0	0
Small red	.2	57.9	12.8	19.5	0	1.8	.9	1.8	.2	0	.1	5.0	0
Cranberry	.1	7.6	92.2	.1	0	0	0	.1	0	0	0	0	0
Yelloweye	.1	39.9	21.8	16.8	.4	1.0	2.2	0	6.0	6.5	2.7	2.7	0
Standard lima	6.3	27.5	65.2	5.9	0	0	0	0	0	0	0	0	1.4
Baby lima	.1	2.4	86.5	11.1	0	0	0	0	0	0	0	0	0
Blackeye, California	.9	57.4	2.2	0	0	.4	5.6	1.4	0	1.2	2.6	13.4	15.8
Peas:													
Alaska, other smooth green	86.4	24.0	1.4	9.3	5.7	4.1	1.7	7.0	3.6	0	43.2	0	0
White Canada, first and best, other white and yellow seeded	13.6	4.6	27.7	21.4	9.7	2.7	0	0	0	2.4	31.5	0	0

[1] Incoming volume means total volume handled by elevator, both owned and not owned by elevator.

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for other levels of distribution. All information bearing on costs is included in that part. The ultimate purpose in the treatment of costs and margins is to indicate the division of the consumer's dollar among the successive agencies in distribution and to examine the costs incurred in performing the corresponding functions.

BROKERS, JOBBERS, AND DISTRIBUTORS

The Functions of Service Agencies and Handlers

This section deals with the type and character of dealer organization, methods of buying and selling, packaging and merchandising, physical movement of goods, and seasonal trend. Consideration of costs and margins is reserved for a later chapter. Demand factors touched upon here appear again in a final treatment of the economic outlook for the bean and pea industry.

Organization of the Trade Structure.—Intermediary distribution is primarily a field of proprietary-type enterprise with only limited participation by the cooperative-type marketing associations. About one-fourth of the firms that reported have branches. Most of the firms with branches are organized as cooperatives. Firms without branches are mostly individual proprietorships or partnerships.

Firms among the brokers, jobbers, and distributors are larger, on the average, than those that operate elevators. About 37 percent have an annual volume worth 1 million dollars or more each (table 6).

Table 6.— *Brokers, jobbers, and distributors: Percentage distribution of respondents, by volume of business and commodity handled*

Item	Commodity		Total
	Beans	Beans and peas	
Respondents	*Number* 36	*Number* 24	*Number* 60
	Percentage of all respondents		
Volume of business:[1]	*Percent*	*Percent*	*Percent*
Less than $100,000	33.4	16.7	26.7
$100,000 to $499,999	11.1	12.5	11.7
$500,000 to $999,999	8.3	25.1	15.0
$1,000,000 to $2,999,999	19.5	20.8	20.0
$3,000,000 to $4,999,999	8.3	8.3	8.3
$5,000,000 and over	8.3	8.3	8.3
Unclassified	11.1	8.3	10.0
Total	100.0	100.0	100.0

[1] Based on reports from respondents, reports from Dun and Bradstreet, Inc., and estimates based on ratings from Thomas' Register of Wholesale Grocery and Kindred Trades. Volume of business refers to volume arising from all types of operations.

This is true of both bean and pea dealers but there is a decided difference in degree of specialization. Three-fourths of the pea dealers reported that peas accounted for 20 percent or less of their volume. Only half of the bean dealers report so low a percentage of bean business. At the other end of the scale, 29.3 percent of the bean dealers reported that 81 percent or more of their volume was in beans.[5]

On the average, brokers and dealers handle seven or eight classes of beans and peas. The number handling any particular class of bean is not always in proportion to the relative importance of that class in total bean production. For example, a greater number of intermediaries were handling great northerns, pintos, baby limas, and blackeyes than were handling pea beans, which is the largest class of bean, by volume.

TYPES OF MARKETING AGENCIES.—The movement of beans and peas from the elevators into the channels of distribution generally calls for the services of intermediaries. An elevator, generally speaking, is not equipped to handle transactions with wholesale grocers, canners, or exporters who are located mainly at a great distance from the growing areas. Many variations in type of organization and in functions performed are required to meet the different operating situations. Some brokers do nothing but negotiate sales transactions, taking neither title nor possession of the goods, and charging a brokerage fee to the elevator or other principal. There are dealers and jobbers who take title but do not take possession (table 7). Other dealers buy beans or peas and have them delivered to their own warehouses. Some of these send the beans and peas on in the form in which they were received but others receive them in 100-pound bags and repackage all or part of them in consumer containers. In some cases an independent packaging firm performs a custom service for the dealer.

These differences in function represent adjustments to such variables as distance from the growing area to the market, average size of operations of suppliers and of customers, and relative importance of such merchandising factors as high-quality consumer packaging, and the offering of a complete line of beans and peas. These intermediaries participate in some degree in all of the four major marketing functions previously described—the preparation of the product for market, the movement through the marketing channels, the assumption of marketing risk, and the expansion of markets. Of greatest interest in connection with this study is their part in the expansion of markets. This is the one point in the marketing channel at which effective efforts at market expansion will take place if at all. This statement applies to dry beans and peas as canned beans may be looked upon as a different product.

Some canners have spent, and continue to spend, substantial sums to promote the sale of the canned product. The dry commodity

[5] The term "bean dealer" is used by many in the industry in a different sense than in this study. In the industry, a "bean dealer" is generally considered to be an organization which obtains supplies from elevators and growers and merchandises the beans to distributors and wholesalers in the consuming areas. He may or may not take title and physical possession, usually depending on the individual transaction. "Bean dealer" as used in this publication includes all intermediaries between the elevator and the wholesaler who take title to the commodity.

still represents much the larger part of the sales to consumers. A wholesale grocer cannot be expected to promote the sale of dry beans and peas as they are relatively small items for him, and usually carry moderate margins. Elevators are not generally in a position to gage demand and to carry out promotional plans for expanding it.

TABLE 7.—*Brokers, jobbers, and distributors: Percentage distribution of respondents, by relative importance of functions performed and commodity handled*

Item	Establishments handling—	
	Beans	Peas
Respondents [1]	*Number* 60	*Number* 24
	Percentage of all respondents	
Brokerage functions:	*Percent*	*Percent*
20 percent and under	6. 7	16. 7
21 to 40 percent	8. 3	12. 5
41 to 60 percent	1. 7	0
61 to 80 percent	1. 7	0
81 percent and over	43. 3	37. 5
Total	61. 7	66. 7
Dealer and jobber functions:		
20 percent and under	5. 0	0
21 to 40 percent	3. 3	0
41 to 60 percent	0	0
61 to 80 percent	10. 0	12. 5
81 percent and over	36. 7	50. 0
Total	55. 0	62. 5

[1] Some respondents specified both functions.

METHODS OF BUYING AND SELLING.—The larger proportion of distributors act as brokers without taking title. A second group are jobbers and dealers who take title. A third group operates in both ways. For bean distributors the break-down is: Brokers, 45 percent; dealers and jobbers, 38.3 percent; both, 16.7 percent. For distributors of peas, there is a greater overlap in the two ways of operating, the break-down being as follows: Brokers, 37.5 percent; dealers and jobbers, 33.3 percent; both, 29.2 percent. For those who operate as brokers, the brokerage fees have been fairly well standardized at 10 cents per 100-pound bag or 5 cents or 6 cents per case of 24 consumer packages (table 8).

The source of supply for brokers and dealers reported in this study was the elevator in about six times out of ten. This was true for both

bean and pea distributors. Terms of sale were usually f. o. b. shipping point. Other dealers were mentioned as suppliers to a smaller extent. Roughly, one-fourth of the beans and peas were obtained from other sources, as the growers, for instance. Dealers, in turn, usually sold on the basis of f. o. b. shipping point, although a substantial part of the business called for delivery to the warehouse of the purchaser (table 9).

TABLE 8.—*Brokers, jobbers, and distributors: Number reporting and brokerage charges, by method of charging and by commodity handled*

Methods	Establishments handling—			
	Beans		Peas	
	Reporting	Charges	Reporting	Charges
	Number	*Dollars*	*Number*	*Dollars*
Regular operation charges:				
Per 100-pound bag	35	0. 10	12	0. 10
Per case of packaged goods	23	. 05	8	. 06
Under contract with shippers: [1]				
Charge per 100-pound bag	10	. 10	4	. 10

[1] Seventeen firms handling beans had shipper contracts, while six firms handling peas had contracts.

TABLE 9.—*Brokers, jobbers, and distributors: Percentage distribution of all reporting, by suppliers of beans and peas and by buying policy*

Item	Establishments handling—	
	Beans	Peas
	Number	*Number*
Reporting	30	14
	Percentage of all reporting [1]	
Policy:	*Percent*	*Percent*
Elevators:		
F. o. b. shipping point	47. 3	43. 9
Delivered	11. 7	15. 0
Other dealers:		
F. o. b. shipping point	12. 5	5. 4
Delivered	5. 3	7. 1
Government	0	0
Other sources	23. 2	28. 6
Total	100. 0	100. 0

[1] Distributed in proportion to the percentage of total beans or peas which were purchased from each supplier. See Appendix for discussion of methods used.

By far the greater part of the total sales of brokers and dealers, or 82.9 percent, were to wholesale and chain grocers. Of the several other types of customers, the one handling the largest volume was packagers, with 4.1 percent.

DISTRIBUTION BY BROKERS AND DEALERS.—The distribution of broker and dealer sales by type and area provides some measure of the national and regional consumer market for dry beans and peas. The types of beans are here arranged under four broad groups—white, colored, lima, and other. Their relative importance in national sales, in terms of volume, is in the order named. Colored classes account for about one-third of the total. Similar data for 1939 showed that 37.5 percent of the total was colored beans and that the proportion was still higher in 1929. The percentage of whites is higher than for the earlier years. The shift from colored beans to whites marks a significant change in consumer demand over the 20-year period (table 10).

Comparison with the earlier studies[6] also shows that there has been a substantial change in the character of demand by regions. The Northeast has traditionally been the largest market for whites and the Southeast for colored beans. A degree of leveling out has been going on, with the Southeast taking more whites and the Northeast more colored. Lima beans continue to be sold quite generally throughout the United States. A pattern of national distribution has been established here which may eventually be approached by some of the other classes.

These changes in relative position in production by classes of bean are consistent with the known production figures by classes. Thus, the shift in demand in the Southeast can be related to production trends on the principal classes of whites and colored consumed in this region. These are, respectively, great northern and pinto. The former has come ahead rapidly in relation to the latter. At the same time there has been some broadening of the areas in which many classes were traditionally marketed. This would appear to be one of the principal factors which might make for market expansion. Familiarity with a greater number of classes and the special uses and merits of each should promote greater total consumption of beans.

Dry peas are alternatives to some extent for beans, in consumer purchases. They are grown in a restricted area and marketed all over the country in somewhat the same pattern as lima beans. There is some evidence that dealers are carrying and promoting more complete lines of beans and peas for sale in every part of the country.

[6] Item 21 in Bibliography.

TABLE 10.—*Brokers, jobbers and distributors: Percentage distribution of volume of sales of beans and peas, by classes and by kind of buyer, in specified areas* [1]

Item	Buyer								
	Other dealers or brokers	Canners	Wholesale and chain grocers	Packagers	Exporters	Institutions	U. S. Government	Other	Total
Beans: [2]	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Northeast:									
Whites	0	0.4	16.2	1.8	0.5	0.7	0	0	19.6
Colored	0	.3	8.7	1.1	.3	.4	0	1.0	11.8
Lima	(3)	(3)	3.8	.3	(3)	.2	0	0	4.3
Others	0	.1	1.3	.2	.1	.1	0	0	1.8
Total	(3)	.8	30.0	3.4	.9	1.4	0	1.0	37.5
Southeast:									
Whites	0	0	15.8	0	0	0	0	.6	16.4
Colored	(3)	0	9.4	0	0	0	0	.9	10.3
Lima	.4	0	4.1	(3)	0	0	0	.1	4.6
Others	0	0	1.4	0	0	0	0	0	1.4
Total	.4	0	30.7	(3)	0	0	0	1.6	32.7
North Central:									
Whites	.2	.2	9.6	0	0	0	0	.6	10.6
Colored	.1	.2	6.8	0	0	0	0	1.9	9.0
Lima	(3)	.1	2.1	(3)	0	0	0	.1	2.3
Others	.2	0	2.6	0	0	0	0	.3	3.1
Total	.5	.5	21.1	(3)	0	0	0	2.9	25.0

See footnotes at end of table.

TABLE 10.—*Brokers, jobbers and distributors: Percentage distribution of volume of sales of beans and peas, by classes and by kind of buyer, in specified areas*—Continued

Item	Buyer								
	Other dealers or brokers	Canners	Wholesale and chain grocers	Packagers	Exporters	Institutions	U. S. Government	Other	Total
West:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Whites	0	0	.1	0	0	0	0	.7	.8
Colored	0	0	1.0	.5	0	0	.2	.8	2.5
Lima	.1	(3)	0	.2	0	0	.2	.4	.9
Others	.4	0	0	0	0	0	0	.2	.6
Total	.5	(3)	1.1	.7	0	0	.4	2.1	4.8
All areas:									
Whites	.2	.6	41.7	1.8	.5	.7	0	1.9	47.4
Colored	.1	.5	25.9	1.6	.3	.4	.2	4.6	33.6
Lima	.5	.1	10.0	.5	0	.2	.2	.6	12.1
Others	.6	.1	5.3	.2	.1	.1	0	.5	6.9
Total	1.4	1.3	82.9	4.1	.9	1.4	.4	7.6	100.0
Peas:									
Northeast	0	.7	20.7	2.8	.7	1.1	0	0	26.0
Southeast	0	0	14.1	0	0	0	0	0	14.1
North Central	0	0	37.0	0	0	0	0	7.5	52.0
West	0	0	.5	0	0	0	0	14.9	7.9
Total	0	.7	72.3	2.8	.7	1.1	0	22.4	100.0

[1] Distributed in proportion to the percentage of total sales of this class of bean or pea which was sold to each type of buyer. The totals were then weighted by importance of each class of bean or pea (according to 1948 and 1949 United States production) before grouping into whites, colored, lima, other beans, and peas. See Appendix for discussion of methods used.

[2] *Whites* include pea and medium whites, great northern, small whites, white marrow, and white kidney beans. *Colored* includes pinto, red kidney, pink, small red, cranberry, and yelloweye beans. *Lima* includes both large and baby lima. *Others* includes blackeye and garbanzo. For definition of areas, see Census Division map.

[3] Less than 0.05 percent.

About 40 percent of the beans handled by distributors was sold in consumer packages. The percentage was somewhat greater for peas (table 11). The proportion of the crop so handled is even greater than these figures suggest as a considerable part of the sale in 100-pound bags does not move directly into domestic consumption as bulk dry beans and peas. Packagers, canners, and exporters are among the customers who buy from the dealer in 100-pound bags. Other dealers constitute another kind of customer which would necessitate further packaging. Including the packaging by chain stores and some of the larger wholesalers, it is clear that more than half of the dry product must reach consumers in packaged form. The continued success of open-display retailing will probably mean that this proportion will increase steadily in the direction of making consumer packaging a regular practice.

TABLE 11.—*Brokers, jobbers, and distributors: Percentage distribution of sales of beans and peas in packages and 100-pound bags, by class of buyer*

Item	Establishments handling—	
	Beans	Peas
Reporting	*Number* 54	*Number* 21
	Percentage of all reporting	
Disposition: [1]		
Packaged:	*Percent*	*Percent*
Other dealers	4. 5	1. 6
Wholesale grocers	30. 7	33. 3
Retailers	4. 5	8. 8
Total	39. 7	43. 7
100-pound bags:		
Other dealers	12. 2	4. 6
Wholesale grocers	31. 8	27. 8
Retailers	3. 5	6. 0
Packagers	5. 1	5. 6
Canners	4. 5	3. 0
Exporters	. 6	1. 0
Others	2. 6	8. 3
Total	60. 3	56. 3
Grand total	100. 0	100. 0

[1] Distributed in proportion to percentage of total beans or peas which were distributed to each agency. See Appendix for discussion of methods used.

Beans and peas put up in consumer packages are generally of high quality. A substantial proportion is top grade, although the largest quantity is U. S. No. 1; very little of the packaged product is of lower

quality than that. The types and relative importance of packages reported are shown in table 12. These findings are consistent with those of a 1949 packaging study made by the United States Department of Agriculture.[7]

TABLE 12.—*Brokers, jobbers, and distributors: Percentage distribution by type of container used for consumer-size packaging, 1949*

Item	Establishments	
	Beans	Peas
Reporting [1]	*Number* 18	*Number* 11
	Percentage of all reporting	
Containers:		
Cellophane bags	*Percent* 83.3	*Percent* 72.7
Cardboard package	5.6	0
Window-front package	10.7	27.3
Kraft bags	11.1	18.2
25-pound containers	11.1	9.1

[1] Some respondents reported more than one type.

PACKAGING AND MERCHANDISING.—The greatly increased attention to consumer packaging has contributed significantly to market expansion. Dealers and even elevators have often been forced by competition to package goods; some complain of it as an expensive complication in the marketing of beans. This tendency appears to be an inevitable adjustment to the merchandising requirements of the modern open-display store. Many chains and supermarkets have installed their own prepackaging departments to increase their sales on such products as dry beans. Wholesale grocers ordinarily are not equipped to undertake packaging but are influenced to purchase beans in consumer packages, because of the competitive merchandising needs of their customers.

MOVEMENT OF BEANS AND PEAS.—Shipment in carload lots represents a minor part of sales by distributors. In 1949, 28.4 percent of the beans distributed were moved in straight carloads and 16.2 percent of the peas. An additional fraction of the volume moves in mixed carloads. The mixed car is an interesting feature of bean and pea marketing. An average of about four classes of beans are transported in the mixed car. The high rate for truck transportation as compared to rail freight rates practically precludes the use of trucks for long-distance shipments of beans. The situation is different for peas; 63.8 percent of the crop is reported moving by truck. The movement by water is negligible.

[7] Item 22 in Bibliography.

STORAGE AND EQUALIZATION OF SUPPLIES.—The monthly business of dealers for the period September 1948 to August 1949 is shown in tables 37 and 38, Appendix. Nearly half of the purchases of beans were made in the first 3 months. The monthly totals dropped off steadily, and reached their low point at the end of the crop year. Only 8.9 percent of the total was purchased in the last 3 months of the crop year (June-August). This general pattern prevailed for most classes of beans. The principal exception was in the case of large limas. A much larger percentage of total purchases of these beans took place in the first 3 months. Purchases of peas, on the other hand, scarcely got started in the first 3 months. The second 3 months, beginning with December, accounted for nearly two-thirds of the total purchases.

The seasonal pattern in the sale of beans closely followed that for purchases. This was generally true month by month and for each main class. The turn-over is very rapid; dealers sold each month practically all the beans they bought that month. The situation was substantially the same for peas except that there appeared to be a slight delay in moving some classes such as yellow and green split peas.

The monthly variations in prices were somewhat different for different classes. In most cases the variations are not large. The principal exceptions were represented by the fluctuations that appear to be something other than seasonal variations. An example is blackeye which started at $9.95 per 100-pound bag in September, reached a low of $4.25 in June, and came back to $5.25 in August.

Selling prices seemed somewhat more stable than purchase prices. There was a tendency for the year to close with higher prices than it began. There were several exceptions, including blackeye which suffered a decline in selling prices proportionate to the decline in purchase prices.

RISKS.—There seems to be little interest in speculative profits, although comments received during the study indicate that speculative gains were once a principal incentive for the bean dealers. The almost immediate turn-over indicates that dealers and brokers now function chiefly to meet current demand.

There is little evidence of speculation, and little is done to reduce the risk inherent in price fluctuation. Nearly two-thirds of those interviewed said they did nothing at all to offset risk. Others mentioned such expedients as "small and frequent purchases." Some dealers acted primarily as buying agents, buying only against orders already in hand. One respondent expressed a wish for the establishment of a futures market in beans, presumably to permit hedging. Such a development might encourage dealers to build up larger inventories as part of a steady drive for expanding business. As it is, they operate on such narrow margins that they try to avoid the risk of even the present moderate fluctuations in price.

Distributors do not go very far in assuming marketing risk through preharvest purchases for future delivery. The great majority do not engage in this practice at all. A few reported that 5 to 10 percent of their business was done on this basis. Where this practice persists it may represent the survival of a more general practice going back to

the period before price supports. A similar possibility has been pointed out with respect to the contract purchases of elevators.

The distributors who act as both dealers and brokers no doubt exercise an option in some cases as to which procedure to follow. This option may serve as a partial hedge against market risk. It is somewhat similar to the position of an elevator in exercising the option of making purchases or performing custom services of processing and storing. It would appear difficult for a firm that operates in this way to maintain any consistent or continuous merchandising program.

The most hopeful signs from a merchandising standpoint are the extent to which dealers are taking the initiative in packaging and the increased tendency to carry a complete line of beans and peas. Dealers did not show operating margins that would permit large promotional expenditures.

BEAN CANNERS

A minor part of the crop of dry edible beans reaches the consumers in the precooked and canned state. Canning of peas in the dry state is so negligible in extent that it can be ignored for the purposes of this study. The canner is treated here as an additional intermediary for that part of the crop which he handles. From another point of view the canner may be regarded as the producer of finished products such as pork-and-beans, the dry bean constituting one of the raw materials that he buys. It was not within the scope of the study assignment to break down the costs of canning in the way that was attempted for the operation of the elevator and the bean dealer. The canner, for the purposes of this study, constitutes one element in the marketing channels for dry edible beans. The discussion here relates to the size and structure of firms that can beans, the beans bought by canners, and the buying and selling policies of canners.

Size and Structure of the Canner Industry.—The sample used in this study included 41 canners. All those who reported having branches were corporations. The corporate form was also dominant among firms without branches. Only one cooperative cannery was included in the sample.

There was a bimodal distribution of firms by size. That is to say, there was one cluster of firms whose total sales of all products was less than $500,000, which accounted for 41.5 percent of the total of all firms in the canner sample. At the other end of the size range were 31.7 percent of the firms with volumes worth more than 3 million dollars each.

Only one of the firms reported that its bean-canning business accounted for more than 80 percent of its total business (table 13). More than two-thirds of the canners reported that less than 20 percent of their total volume of business was in canned beans. Most of the leading classes of beans were represented among those handled by canners. Some of these classes probably were used in moderate quantities in soups and were not canned in substantial quantities.

Purchases of Beans by Canners.—Of the annual purchases of beans reported by canners, 81.7 percent was accounted for by four classes. One class was first by a wide margin, namely pea and medium white, with 46.1 percent of the total. Red kidney beans were second

with 15 percent. The low months in volume of bean purchases were July, August, and September, which together accounted for 8.9 percent of the annual total of purchases. Otherwise, purchases by months were fairly evenly distributed. The patterns were quite different by classes. The two leading classes, pea beans and red kidneys, followed the pattern for all beans. Small reds had no off season, as purchases were distributed evenly throughout the year. In sharp contrast was the picture for pintos, nearly all purchases by canners being made in the 4 months November to February, inclusive.

TABLE 13.—*Bean canners: Percentage distribution by volume of business, classes of beans handled, and suppliers of beans*

Item	Establishments reporting	Percentage of all reporting
Volume of business:	*Number*	*Percent*
20 percent and under		67.7
21 to 40 percent		14.7
41 to 60 percent		8.8
61 to 80 percent		5.9
81 to 100 percent [1]		2.9
Total	34	100.0
Classes of beans handled:		
Pea and medium white		31.7
Great northern		19.5
Small white		22.0
White marrow		2.4
White kidney		12.2
Pinto		14.6
Red kidney		48.8
Pink		14.6
Small red		36.6
Cranberry		2.4
Yelloweye		7.3
Large lima		19.5
Baby lima		22.0
Blackeye, Calif.		7.3
Garbanzo		12.2
Other [2]		7.3
Total	41	(3)
Suppliers of beans:		
Brokers		68.3
Dealers		46.3
Elevators		22.0
Total	41	(3)

[1] Includes only one canner; his entire volume of business is derived from canning of beans.
[2] Includes fava beans, black turtle beans, and others not specified.
[3] Many respondents specified more than one class or supplier.

Similarly, the data for 1949 did not indicate a standard pattern with respect to monthly variations in prices. Prices reported paid

for pea beans were higher toward the end of the crop year. Some classes such as pinks and small reds showed remarkable price stability throughout the year, according to these reports. In other cases there were random fluctuations with no clearly marked seasonal trend.

The distribution of canners' purchases by grades was very similar to the distribution of beans put up in consumer packages. U. S. No. 1 ranked highest, being bought by 85.4 percent of those reporting. Next came Choice which was bought by about one-third as many canners. Canners reported a total of 1.8 percent of loss or waste in bean purchases.

BUYING AND SELLING POLICIES.—Canners buy from brokers, dealers, and elevators, in that order of volume (table 13). The number buying from dealers was about twice as large as the number buying from elevators, according to reports in this study. The number buying from brokers was three times as large as those buying from elevators. All canners engaged in on-the-spot buying. A few also bought on annual contract. The prevailing terms were f. o. b. shipping point. A large proportion of canners also bought on a delivered basis.

Spoilage of beans apparently was not a serious problem in the industry. To the extent that it was a problem, spoilage was met in two principal ways. Dry storage was the principal reliance of 44.8 percent of the canners. Another 39.5 percent said they bought beans only as used. In fact, only a minority of canners or 18.4 percent said they hold beans for an average of more than a month before canning. At the other extreme was 21 percent who reported holding them 7 days or less.

Canners sold to various groups of customers, including institutions and exporters. In terms of volume, sales to institutions and exporters were accounted for almost entirely by direct sales to wholesale grocers and chains, including a small quantity handled for the canner by brokers.

Beans are canned in several sizes of cans, ranging from "picnics" to No. 10 cans. About 30 percent of the net weight of a can of beans was originally dry beans. Thus a case of 48 picnic (or 24 No. 2 cans) contains the equivalent of about 9½ pounds of beans. Allowing for loss and wastage, a 100-pound bag of dry beans holds enough beans for 10 cases of canned beans. The costs of cans and labor largely determines the selling prices for canned beans. Thus the average price for a case of picnic cans was $5.25, compared with $2.78 for the same quantity of beans in the No. 2 cans.

Taking the No. 2 can as the standard, it appears that in 1949 the canner received $27.80 for 100 pounds of beans in this form. This is three times as much as he paid for a 100-pound bag of beans, excluding canning costs. The margin is wide enough to allow some leeway for promoting canned beans. On the other hand, the resulting price differentials at the retail level make the canned product not very competitive with dry beans for consumers who are interested in economy.

The total output of canned dry beans continues to be a minor factor in the total picture. There is little indication of further marked shifts in consumer demand toward the canned product. Evidently the great bulk of the crop will continue to be marketed in the dry

state for some time. The canners offer only a partial answer to market expansion. At the same time the canners will continue to be a major outlet for some of the most important classes of beans.

THE WHOLESALE GROCERY TRADE

For the purposes of this section the term "wholesaler" includes all warehouse operators who are primarily engaged in serving retail grocery stores. Independent wholesale grocers, retailer-owned wholesalers, and chain stores, are included. Thus, the volume of beans and peas moving through the wholesale grocery trade practically coincides with the quantity destined for domestic human consumption. The principal exceptions are the relatively small quantities moving from elevators and dealers directly to institutions. So far as this study is concerned, the wholesalers are closest, among the agencies discussed, to the consumers of dry edible beans and peas. Their operations are most directly affected by demand, as those of the elevators are most directly affected by supply.

The topics discussed in this section include organization structure of wholesalers, buying policies, sales policies, and seasonal movements. The seasonal movements are treated only in summary fashion as the movements are taken up again in the next two sections.

Seasonal movement of beans and peas is covered in the discussion of the marketing flow. Seasonal changes in prices are considered in the section on prices and margins.

STRUCTURE OF INDUSTRY AND METHODS OF WHOLESALERS.—About 60 percent of the wholesalers covered in the study were organized as corporations. Among those that had branches, 100 percent were corporations. About 10 percent of all units covered were chain warehouses. More than 6 percent were retailer-owned wholesalers and the other 84 percent were completely independent.

The annual dollar volume of all business done by the group of wholesalers reported here is indicated in table 14. The majority were in the middle ranges, with a median of slightly less than 1 million dollars. Wholesalers handling both beans and peas were likely to be somewhat larger than those handling beans only. Beans and peas formed only a minor part of the business of the wholesalers. Fifty-three and nine-tenths percent of the wholesalers reported that beans constituted less than 2 percent of their annual volume. About 7 out of 8 said it was less than 4 percent. About 9 out of 10 wholesalers said that peas accounted for less than 20 percent of their volume, while 19 out of 20 said it was less than 4 percent. No class of dry beans or peas was handled by every wholesaler. The most widely distributed classes were great northern, baby lima, red kidney, and pea beans all carried by over 60 percent of wholesalers (table 15).

METHODS OF BUYING AND SELLING.- The prevailing method of buying followed by wholesalers was on a delivered basis. When transportation is handled in this way, the freight is usually prepaid but is added to the invoice to be paid by the wholesaler. Freight enters into the purchase price paid by the wholesaler but is not counted in the selling price of his supplier. A substantial part of the business (less than 40 percent for both beans and peas) is bought f. o. b. shipping point. Nearly all purchases by wholesalers are in

less than carload lots. Even the small percentage of carload shipments was of mixed cars rather than straight cars (table 16).

TABLE 14.—*Wholesalers: Percentage distribution, by volume of business attributable to handling of beans and peas*

Item	Establishments handling—		
	Beans	Beans and peas	Total
Respondents	*Number* 26	*Number* 36	*Number* 62
	Percentage of all respondents		
Volume of all business: [1]	*Percent*	*Percent*	*Percent*
Less than $100,000	23. 1	2. 8	11. 3
$100,000 to $499,999	15. 4	25. 0	21. 0
$500,000 to $999,999	15. 4	30. 5	24. 2
$1,000,000 to $2,999,999	30. 8	25. 0	27. 4
$3,000,000 to $4,999,999	7. 7	2. 8	4. 8
$5,000,000 and over	3. 8	11. 1	8. 1
Unclassified	3. 8	2. 8	3. 2
Total	100. 0	100. 0	100. 0

[1] Based on reports from respondents, reports from Dun & Bradstreet, Inc., and estimates based on ratings from THOMAS' REGISTER OF WHOLESALE GROCERY AND KINDRED TRADES. Volume of business refers to volume arising from all types of operations.

Wholesalers bought from various types of suppliers, including direct from elevators (table 17). Intermediaries were of three principal kinds, with those performing a straight brokerage function accounting for about one-third of the purchases of beans and a somewhat larger proportion of peas. Dealers who held title to beans in 1949 and maintained stocks accounted for about 14 percent of the wholesaler's purchases of beans and 21 percent of his purchases of peas.

TABLE 15.—*Wholesalers: Number handling beans and peas by class and area*

Item	Establishments by area										Total
	I	II	III	IV	V	VI	VII	VIII	IX	X	
	No.	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*	*No.*
Reporting	7	4	6	7	7	7	6	6	6	6	62
Beans:											
Peas and medium white	4	1	3	4	4	4	5	4	6	3	38
Great northern	6	3	5	6	3	7		4	4	5	43
Small white	5	3	1		1	4	6		1	1	22
White marrow	2			4				1	5		12
White kidney	1					2			2		5
Pinto	6	4	2	1	4	6		1	1	4	20
Red kidney	6	3	3	3	3	5	5	4	6	3	41
Pink	6	4						1	1		12
Small red	4	2	1	1				1	1		10
Cranberry	5			2			1		2	2	12
Yelloweye	2						5		2		9
Large lima	6	2	1	6	5	6	1	4	2	3	36
Baby lima	6	3	2	3	4	6	2	5	6	6	43
Blackeye, California	5	3		2	5	6		4	3	6	34
Garbanzo	5	1				1			3	1	11
Other	1		1					1			3
Peas:											
Alaska, other smooth green	6		2	6		2	5	5	3	3	32
White, Canada, first and best, other white and yellow seeded	4			1			4	2	4		15
Other	1		1	1							3

The most frequently used type of intermediary for marketing beans is a kind of cross between a broker and a dealer. This type might be called a dealer without stocks or a broker holding title. This type of agency assumes some marketing risk through the ownership of beans and peas but does not take possession of them. Beans are shipped on its order from its sources of supply to its customers. Wholesalers typically buy frequently and in small quantities, as shown by the predominance of less-than-carload purchases. Somewhat more than half of those interviewed said that hand-to-mouth buying is employed to avoid the risk of fluctuations in price. Most of the remainder do not use any particular method to reduce marketing risk.

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TABLE 16.—*Wholesalers: Percentage distribution, by size and make-up of beans and peas purchased*

Item	Establishments	
	Beans	Peas
Reporting [1]	*Number* 58	*Number* 33
	Percentage of all reporting	
Size and make-up of purchases:	*Percent*	*Percent*
Less than carload lots	98. 2	97. 0
Carload lots in straight cars	(2)	0
Carload lots in mixed cars [3]	1. 8	3. 0
Total	100. 0	100. 0

[1] Distributed in proportion to the percentage of total bean or pea purchases accounted for by each class of size and make-up reported. See Appendix for discussion of methods used.
[2] Less than 0.05 percent.
[3] Average and frequent number of classes of beans and peas in mixed carload lots was reported in too few cases to be significant.

TABLE 17.—*Beans and pea wholesalers: Percentage distribution by suppliers of beans and peas*

Item	Establishments handling—	
	Beans	Peas
Reporting	*Number* 62	*Number* 36
	Percentage of all reporting [1]	
Suppliers:	*Percent*	*Percent*
Brokers holding title [2]	40. 2	34. 6
Brokers not holding title [3]	32. 0	36. 2
Dealers	13. 8	20. 8
Country shippers or elevators	10. 7	2. 8
Others	3. 3	5. 6
Total	100. 0	100. 0

[1] Distributed in proportion to the percentage of total beans or peas purchased from each supplier. See Appendix for discussion of methods used.
[2] The term "brokers" holding title is used here to designate that kind of agent which legally takes title to the goods but does not take physical possession of the goods.
[3] These are brokers in the formal sense of the word—those who merely bring buyers and seller together, charging a commission for the service.

The most important change in demand now affecting the wholesaler is the steady trend toward the use of consumer packages. Of the beans sold by wholesalers, nearly 40 percent are in consumer packages; with peas it is 53 percent. The difference in beans and peas begins back at the elevators which are apparently more accustomed to packaging peas than beans (table 18).

TABLE 18.—*Bean and pea wholesalers: Volume handled by types of containers*

Item	Establishments	
	Beans	Peas
Reporting	*Number* 41	*Number* 25
	Percentage of all reporting	
Containers:	*Percent*	*Percent*
100-pound bags	60. 5	46. 9
Consumer-size package:		
Cellophane	22. 8	2. 8
Cardboard	1. 6	3. 7
Window-front packages	15. 1	46. 6
Total	100. 0	100. 0

Window packages are the prevailing form for packaged peas. For packaged beans, cellophane bags exceed window-front packages in frequency of appearance among wholesalers. About three-fourths of the wholesalers handle beans in 100-pound bags and almost as many handle beans in consumer packages. For peas, the ratios are different, with over half the wholesalers handling peas in 100-pound bags and two-thirds in packages.

Most wholesalers typically hold beans in stock for about 1½ months. About 10 percent hold beans for 3 months or more and about 14 percent hold peas for that length of time.

The grades of beans purchased by wholesalers presumably are fairly representative of the quality of the entire marketing of the crop. The bulk of purchases, or about 79 percent, was U. S. No. 1; nearly all the remainder were U. S. Choice, according to reports. While this applies to purchases in 100-pound bags, the proportions are similar to the proportions of grades packaged by both elevators and dealers. Much the same proportions obtained with respect to grades bought by canners. Thus beans bought by the consumers seem to be divided in about the same way by grade, whether bulk, packaged, or canned.

In making prices to retailers, two-thirds of the wholesalers reported that they followed the practice of fixing a standardized percentage of mark-up over cost. Approximately another sixth said they were guided by "cost and competition." The remainder mentioned market

price and handling charges, what the traffic will bear, and quick turn-over. The proportions among these answers were not very different for peas.

A large proportion of the wholesalers said they absorbed the cost of delivery to the retailers (table 19). Thus the wholesaler's selling price covered a transportation cost in contrast with the separate identification of transportation charges at other levels. Other services to retailers were specified by a minority of the wholesalers. Most of these services have to do with selling and advertising. Most frequently mentioned was the service of supplying free advertising material, mentioned by about one wholesaler out of eleven.

TABLE 19.—*Wholesalers: Percentage distribution, by operational services extended to retailers*

Item	Establishing handling—	
	Beans	Peas
Reporting [1]	*Number* 61	*Number* 35
	Percentage of all reporting	
Operational services:	*Percent*	*Percent*
Free of charge delivery	73. 8	68. 6
Supply advertising	11. 5	8. 6
Supply display	1. 1	2. 9
Other [2]	11. 5	0
None	21. 3	31. 4

[1] Some specified more than one service.

[2] Includes such services as cash-and-carry plants, advice to retailers, advertising programs.

Purchases and sales by wholesalers were comparatively stable month by month during 1949 (fig. 3). This was true of both bulk and packaged goods and for nearly every class. Sales of both beans and peas fell off slightly in June, July, and August of the 2 years studied, but there was no special period of peak sales by wholesalers for these year-round foods. Purchases are almost equal by months. In a few classes there tends to be a slightly greater purchase at the beginning of the season. The principal example is pea and medium whites.

Both purchase and selling prices of the wholesalers are rather stable, according to this study. This is particularly true of prices on packaged goods.

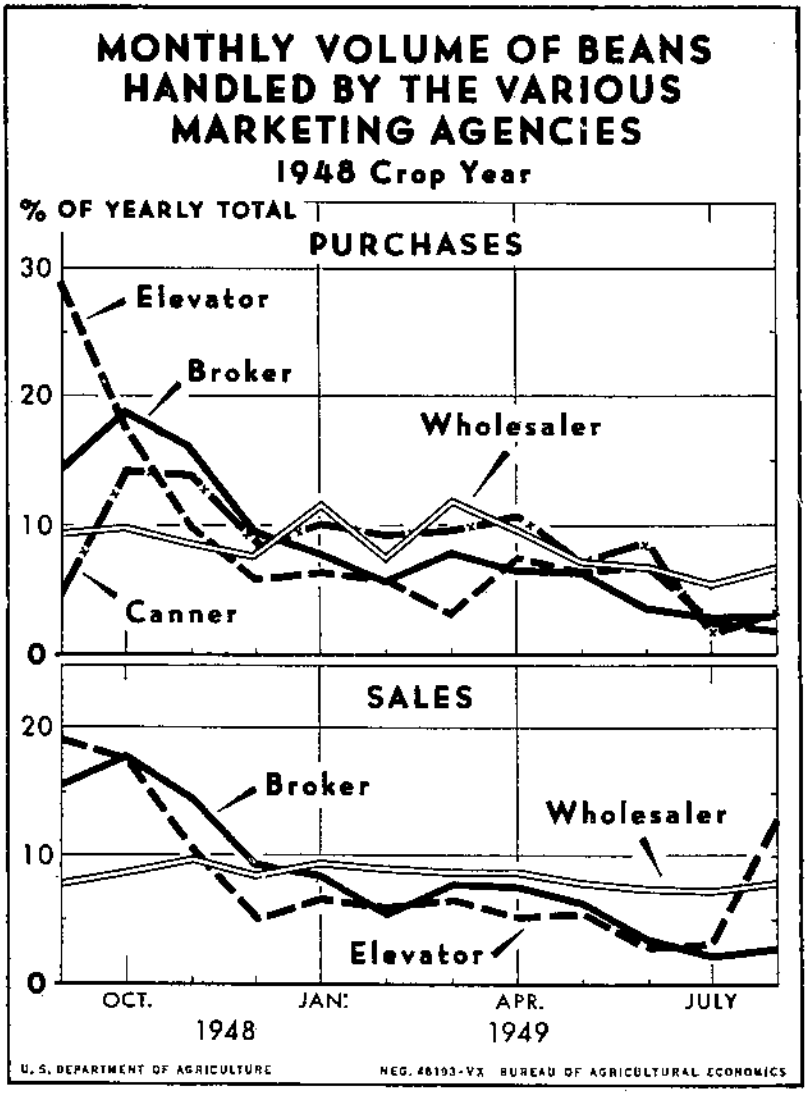

FIGURE 3

THE MARKETING FLOW OF BEANS AND PEAS

One objective of this study was to describe the flow of beans and peas through marketing channels. This flow begins with the receipt of beans by the elevator, the agency which deals directly with the growers. It ends with the retail store which sells to the consumers. The retail step was omitted in this investigation, but this restriction did not mean too serious a loss in comprehensiveness as the ultimate regional pattern of distribution is fairly well established at the wholesale level. The marketing flow is here considered in terms of three

major aspects: by regions, by channels, and by the movement over time from one marketing agency to the next in the series.

INTERREGIONAL MOVEMENT OF BEANS AND PEAS.—Most classes of beans and peas are fairly well localized with respect to the areas in which they can be grown most effectively. There are marked regional preferences in consumption of some classes, whereas others are marketed with some uniformity across the United States. For the purposes of this section of this report the United States may be divided into four broad regions, combining the consideration of production and consumption. These four regions are derived from the nine census geographic divisions which in some cases have been grouped together.

Figure 4 shows these four regions and briefly notes their special character. The region here designated as the South is a major con-

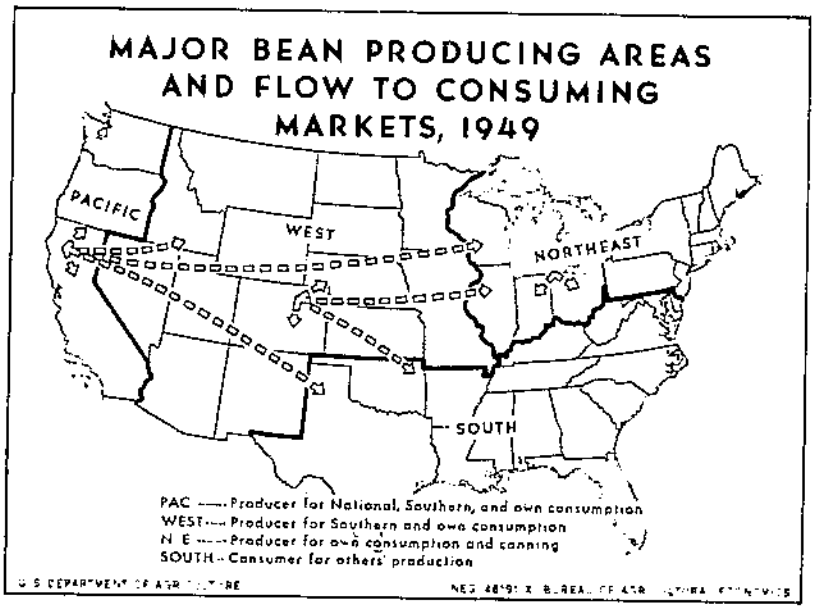

FIGURE 4

suming region and has the highest per capita consumption. It has little or no commercial production so that a basic factor in interregional movement is the flow of beans from other of these regions into the South.

The Northeast region contains the primary areas of production for such important classes as pea beans and red kidneys. It is also the major domestic consumer of all classes in canned or dry form. Pea and medium white beans are the leading beans used for canning, and the Northeast leads in the consumption of canned beans. This class also finds better than average consumption in the dry beans in this region. Some minor classes, such as yelloweye and cranberry, are almost exclusively produced and consumed in the Northeast.

Pinto and great northern are the two important classes in the western area. While both classes are favorites in the areas in which they are grown, they are also in great demand in the South. The most significant stream in the entire interregional flow is the movement of these two classes from the West to the South. Aside from domestic consumption, this stream is augmented by the fact that New Orleans is a principal point of export for beans.

The situation on the Pacific coast is the most complex. This region is a relatively small consumer of beans that are grown elsewhere. California produces the blackeye for sale largely in the South. It produces the large and baby limas, which find a market very much in line with total bean consumption in every part of the country. It produces pink beans for consumption almost exclusively on the Pacific coast and Puerto Rico. Small white beans are produced in California and are largely consumed in other States.

The State of Washington leads in the production of peas, which are marketed throughout the country in the same ways as lima beans. While there are many small marketing streams and "rivulets," the main movements of interregional flow are those already described.

Freight rates as of July 1949 for beans originating in the few widely separated States of New York, Michigan, Colorado, and California are given in table 20. It will be seen that the rates are generally more favorable when the movement is west to east. That is a direct consequence, no doubt, of the fact that the principal movement is in that direction. Favorable rates are usually established for those routes over which the greatest movement is taking place.

TABLE 20.—*Freight rates per 100-pound bag of beans and peas from leading producing States to certain cities, July 1950*

Destination	Rate per 100-pound bag from State of origin			
	New York	Michigan	Colorado	California
	Dollars	*Dollars*	*Dollars*	*Dollars*
Boston	0. 65	0. 65	1. 38	1. 48
New York	. 51	. 75	1. 37	1. 48
Chicago	. 67	. 46	. 71	1. 13
St. Louis	. 79	. 65	. 61	1. 02
Charleston	1. 13	1. 30	1. 48	1. 48
Birmingham	1. 35	1. 20	1. 00	1. 42
Dallas	1. 10	. 98	. 58	. 98
Salt Lake City	1. 79	1. 79	. 25	1. 17
Los Angeles or Seattle	1. 79	1. 79	. 60	. 90

MOVEMENT BY CHANNELS.—The flow chart in figure 5 is believed to reflect the main outlines of the flow of beans and peas as of 1949. So many different kinds of transactions occur that any flow chart is bound to be an oversimplification. The best that can be done is to indicate the relative importance, in terms of bean marketings, of major marketing agencies. The figures on the chart stand for approximate percentages of the total crop moving along each flow line. The

line from the grower to the elevator is omitted because it is assumed that practically all of the crop comes to elevators for processing. Thus the chart shows 100 percent of the supply at the elevator level and divides up thereafter throughout the distribution flow.

The figure indicates physical movement except with respect to the lines showing the flow to and from dealers. Some dealers operate without stocks, and do not take physical possession of the goods. Some dealers operate in both ways and also act merely as brokers in some

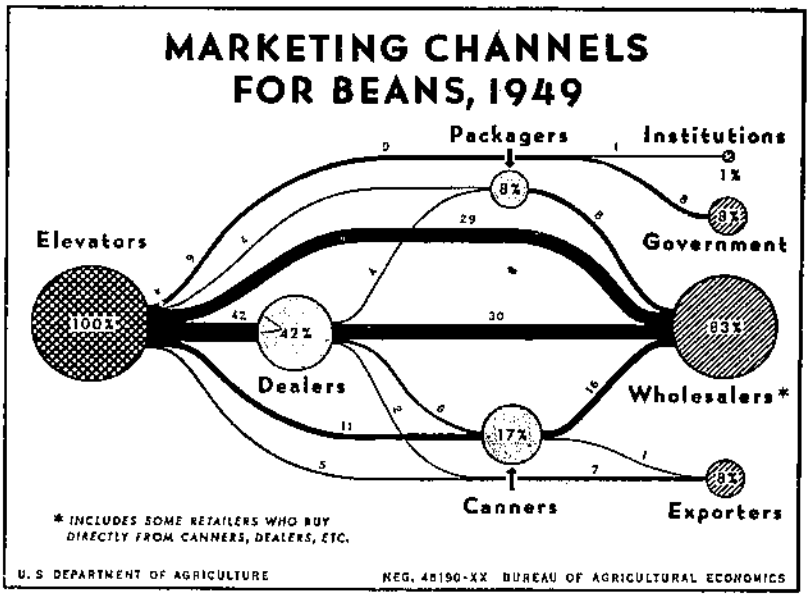

FIGURE 5

instances, taking neither title nor possession. The information on schedules turned out to be scarcely adequate for the separation of these categories of the dealers' business, so that one block for all types of dealers is shown on the chart.

The normal brokerage operation is not shown in figure 5, as the broker simply acts as a sales agent for the elevator or other principals. It is believed that most of the sales transactions of elevators other than those with dealers are handled by brokers. As compared with the marketing flow depicted in a study made in 1939,[8] one of the major shifts is the increased importance of the broker as compared with the dealer.

The elevator typically minimized its market risk by limiting its buying at harvest time primarily to what it needed to fill orders immediately in prospect. The remainder of the crop was taken in for storage, but bought from the farmer only month by month as needed. Presumably beans and peas usually belonged to the elevator or to the marketing cooperative owning the elevator at the time they were shipped out. The chief exception would be the beans and peas moving

[8] Item 14 in Bibliography.

to Government warehouses. These shipments represent sales by the growers to the Commodity Credit Corporation without intermediate ownership by the elevators. It can also be assumed that brokers have not appeared in these deals, as there is no commission on Government purchases.

At the other end of the line the wholesale grocer, including retailer-owned and chain warehouses, accounted for much the larger part of the total 1948 crop or 83 percent. Of this amount, nearly one-fifth represented canned beans. In years in which the total crop is not abnormally large, canned beans might make up a somewhat greater proportion of the total.

Beans bought by the wholesaler in the dry state come to him from dealers or packagers or from elevators through brokers. Beans received from the packager probably amounted to less than one-third of the packaged beans bought by the wholesalers. Of the remainder, the larger part came from dealers who undertake packaging, and the remainder from elevators. Canners buy directly from elevators or through dealers. Exporters buy from elevators and dealers.

Monthly Transaction by Marketing Agencies.—Data were collected from agencies that handle dry edible beans and peas, showing monthly purchases and sales. Detailed tables of these data for canners and wholesalers are found in the statistical Appendix (tables 39–47). To analyze these seasonal movements, it is necessary to consider one class at a time and make monthly comparisons by marketing agency. Comparative tables for five principal classes of beans and one class of peas are found at the end of this section.

The main table in each case covers the crop year beginning in September 1948. Purchases are shown for canners and purchases and sales for wholesalers, the monthly figures being expressed as percentages of the annual totals. In the case of the wholesaler, separate figures are shown for 100-pound bags and for consumer packages. In the case of the total for elevators, elevator receipts are shown as well as purchases and sales. Receipts include beans and peas cleaned and stored for the growers' account, as well as beans purchased. A supplementary table for each class shows elevator receipts, purchases, and sales, for the first 7 months of the crop year, beginning September 1949. The tables cover selected classes in the following order: Great northern, pinto, large lima, red kidney, pea beans, and Alaska peas. Certain general tendencies hold throughout, but there are also some important differences from one class to another.

Elevators handling great northern beans received 98 percent of the 1948 crop in the first 2 months of the crop year. It took 9 months before they completed the same proportion of their purchases, and 11 months to reach the same point in sales. Dealers made only 14.7 percent of their purchases in September, compared to 33 percent of elevator purchases. Dealer sales closely paralleled purchases, month by month. The same thing was true for wholesalers with respect to both bags and consumer packages. The wholesalers' business done in bags was spread more evenly through the year than their package business.

There was a more moderate tendency for elevator receipts and purchases to anticipate sales in 1949. This situation was probably the result of the strain put on the facilities of the elevators by the

succession of two bumper crops. There was a marked change in elevator stocks between September 1, 1948, and September 1, 1949, (table 21). There were few great northern beans in storage at the first date. A quantity about equal to half the average stock for the year was on hand at the later date. This upward movement in beginning stocks was similar but not quite so large for all classes of beans combined.

The picture is rather similar for pinto, except for an apparent difference in the timing of the crop year. The harvest begins in August rather than September. The pinto is generally grown farther south than the great northern. There is somewhat more evidence of anticipatory buying on the part of dealers, and in the bag purchases of wholesalers. Wholesalers' purchases of consumer packages run directly parallel. Outright ownership by elevators, compared with beans stored for growers, was somewhat greater in the case of the pinto than the great northern.

Apparently the elevators were through buying large limas for the season, except for storage, by the end of November, and dealers had bought their requirements by the end of December. Wholesalers, on the other hand, had only an average business during the first 4 months, and continued to buy and sell at a fairly steady rate throughout the year. It appears that, from January on, wholesalers must have been buying largely from the marketing cooperative organizations that represent the growers. These transactions would not appear as elevator sales, but the beans would move from the elevators where they had been stored for the growers' account.

In the case of red kidney, elevator receipts do not show such a sharp peak at harvest time. The large elevators which store the beans often have several smaller subsidiaries engaged chiefly in processing. This results in some smoothing out of the receipt of beans at the storage elevator. It would also seem that the harvest may be somewhat later and more protracted. Elevator sales, mostly direct or through brokers, continue in a substantial way during 10 months of the year. Wholesalers' sales, both in bags and consumer packages, are remarkably even throughout the year.

The table for pea beans appears last because of the incompleteness of the data regarding this class. Figures were inadequate on both elevator sales and dealer purchases. The available evidence indicates that handling pea beans is a year-round business for each type of marketing agency engaged in it. There is little difference month by month between elevator receipts and purchases. All agencies, including wholesalers, buy a substantial part of their year's requirements in September and October.

With respect to canners of beans, monthly figures are available for their purchases only. Canners bought only a small part of their annual supply during September, the first month of the crop year; and again during July and August, the last 2 months. Otherwise, canners bought dry beans fairly steadily throughout the year. The two principal classes bought by canners are pea beans and red kidney beans. The seasonal pattern for all beans which have been described, applies to both of these classes.

TABLE 21.—*Elevators, processors, and shippers: Relative size of elevator stocks of beans and peas on hand, by classes, specified dates, 1948*

Class	Elevator stocks on hand, crop year 1948									
	Average stocks as percentage of all classes		As percentage of average stocks							
			Sept. 1, 1948		Jan. 1, 1949		Apr. 1, 1949		Sept. 1, 1949	
	Owned	Stored [1]	Owned	Stored [1]	Owned	Stored [1]	Owned	Stored [1]	Owned	Stored [1]
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	87. 1	38. 9	58. 3	0. 1	285. 9	161. 9	53. 2	226. 0	2. 6	12. 0
Great Northern	4. 0	11. 5	0	. 9	254. 1	200. 1	141. 3	149. 6	4. 6	49. 4
Small white	. 1	12. 8	284. 7	7. 4	115. 3	212. 8	0	153. 0	0	26. 8
White marrow	. 9	[2]	42. 8	0	171. 7	274. 5	159. 5	89. 3	26. 0	36. 2
Pinto	3. 7	4. 9	18. 2	27. 8	329. 3	79. 3	24. 6	160. 4	27. 9	132. 5
Red kidney	3. 7	2. 0	52. 2	6. 9	206. 3	169. 9	119. 5	217. 7	22. 0	5. 5
Pink	0	. 6	0	30. 7	0	187. 4	0	177. 6	0	4. 3
Small red	. 3	. 1	72. 8	60. 2	153. 6	157. 5	153. 7	156. 6	19. 9	25. 7
Yelloweye	. 2	[1]	6. 3	0	249. 0	186. 0	136. 0	186. 0	8. 7	28. 0
Large lima	0	25. 3	0	26. 1	0	169. 6	0	134. 1	0	70. 2
Baby lima	0	1. 8	0	. 7	0	149. 9	0	127. 9	0	121. 5
Blackeye, California	0	2. 1	0	21. 2	0	132. 9	0	123. 1	0	122. 8
All classes	100. 0	100. 0	54. 3	9. 9	281. 6	170. 1	59. 5	177. 0	4. 6	43. 0
Peas:										
Alaska, other smooth green	65. 7	95. 6	70. 8	131. 7	96. 7	141. 6	58. 6	117. 0	173. 9	9. 7
White Canada, first and best, other white and yellow seeded	34. 3	4. 4	88. 5	133. 3	107. 7	133. 4	108. 3	133. 3	95. 5	0
All classes	100. 0	100. 0	76. 9	131. 7	100. 5	141. 1	75. 6	117. 5	147. 0	9. 7

[1] Not owned by elevators. [2] Less than 0.05 percent.

Alaska peas and other smooth green peas are harvested in July and August. Elevator receipts are also largest in those months. Elevator purchases occurred during the first 8 months of the crop year beginning in September, and elevator sales during the last 8 months. Dealer operations took place during the middle of the crop year.

Wholesalers bought on a regular basis throughout the year. The erratic movements at the elevator and dealer levels were probably partly caused by drastic changes in the supply situation and by a curtailment of the price-support program on peas (fig. 3). The 1948–49 pea crop was about half as large as the preceding crop.

MARKETING MARGINS AND COSTS

One of the objectives of this study was to learn the margins obtained by each marketing agency. Another was to try to determine what were the typical costs for elevators and dealers. In each case studied, attention was directed to the small subdivisions of operating costs as well as to the average total costs for the bean and pea operations. Figures on margins were obtained from wholesalers for dry edible beans and peas. Price data were obtained from canners for their monthly purchases. Sales prices of canners were obtained in terms of annual averages. It was impossible to estimate accurately the margins on canned beans because of the lack of data on sales by classes and the variations in the conversion factor from dry beans to canned beans. Analyses of the costs of canners and wholesalers were not within the scope of the study.

This section deals with the division of the consumer's dollar between the grower and the various marketing agencies, monthly price trends and margins by classes, concurrent versus lagged margins, elevator costs, dealers' costs, transportation costs, and selling costs. Variations in cost in relation to such factors as region and size of firm also are indicated. Possible means for reducing costs are considered in the next section of the report.

Division of the Consumer's Dollar.—The dollar paid for dry beans by the consumer covers the charges of successive market agencies as well as the prices received by the farmer. Beans reach the consumer through various combinations of steps in the marketing channels. An important channel is from the elevator to the wholesaler through a broker, and thence to the retail store which sells to the consumer. A second channel is from the elevator to the bean dealer to the wholesaler to the retailer. The part of the crop that is canned also moves through alternative channels. The most typical seems to be sales from the elevator to the canner through a broker, and thence to the wholesaler and the retailer. Of nearly equal importance is the channel in which the dealer appears in place of the broker. The dealer-wholesaler method is generally followed in sales to the average wholesaler. The farmers' share of the average dollar spent by consumers for dry beans when they are marketed through this channel is 52 cents. Transportation cost accounts for about 5 cents out of the dollar. The wholesaler and retailer charges together account for 27 cents. The elevator and dealer charges together account for 16 cents (fig. 6).

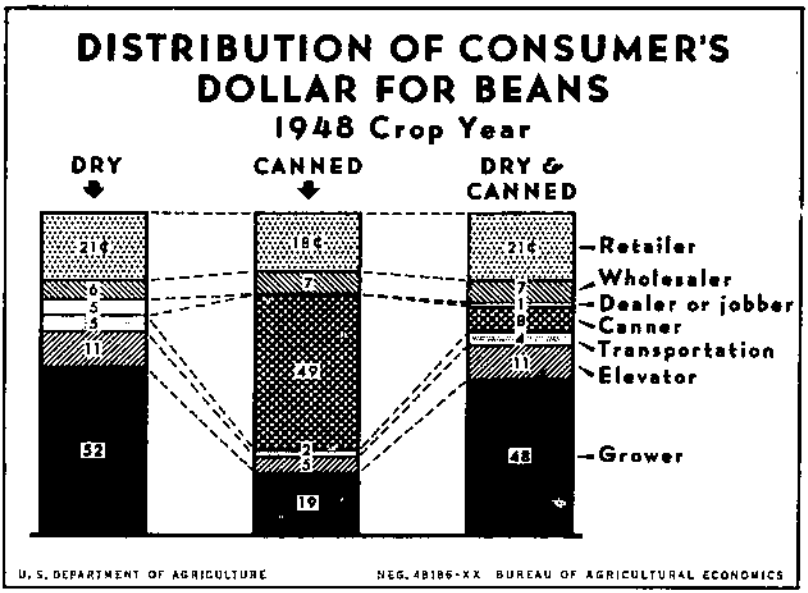

FIGURE 6

An estimated break-down of the consumer's dollar pertaining to 1939 showed that the farmer received 43.8 cents compared with 52 cents recorded in this study for 1949. The biggest single difference between those earlier estimates and the present figures is the decrease in the amount absorbed by retail margins. Food retailers apparently took substantially lower average margins in 1949 than formerly.

In addition, marketing margins for dry beans have tended to become average rather than above average among the products handled by the retailer. Margins are typically smaller on packaged products than on bulk products and a steadily increasing proportion of dry beans have been reaching the consumers in packaged form.

Figure 6 shows the best available estimate of the breakdown of the consumer's dollar spent for canned beans in 1949. Nearly half of the total was taken by the canner alone. A large part of the canner's margin went for the cost of cans and labor and a moderate part for other ingredients that are combined with the beans. The price paid by the canner for dry beans was somewhat less than one-third of the price he received for canned beans. This calculation is based on the beans required for a case of 24 cans of the No. 2 size. Beans make up a smaller proportion of the volume of other packs but the No. 2 can was the prevailing size.

Figure 6 shows an estimated weighted average for beans reaching the consumer by the three remaining methods. Compared with a similar chart appearing in the study of margins in 1939, it seems clear that the farmer's share of the total has increased.[9] Any comparisons from year to year for the total bean crop must be interpreted with caution. The farmer's share would tend to be higher in a bumper-

[9] See item 21 in Bibliography.

crop year since the proportion reaching the consumer in the dry state might be increased somewhat. The year 1939 was marked by moderate production relative to 1949. The break-down of the consumer's dollar spent for dry beans only, probably constitutes a better index to margins from year to year.

Dealer's margins on great northern beans were small but were less variable than elevator margins. The most variable series is the wholesalers' margins on 100-pound bags. The least variable is the wholesalers' margins on cases of consumer packages. It should be remembered that a case contains only 24 pounds so that the margin in cents per unit is not directly comparable with the margin on 100-pound bags.

Dealers' margins on the pinto were higher than the margins of the elevators, in several months. In October 1949, elevators were buying pinto at $7.12 per bag even though the average sales price during that month was $7.00. That disparity in price must have put a damper on sales even though beans bought in October were later sold at substantially higher prices.

Wholesalers' margins on large lima beans which are highly stable with respect to cases of packaged goods and very unstable with respect to 100-pound bags, show a remarkable contrast. A somewhat similar situation is found in the case of red kidney beans. Wholesalers' margins on both bulk and packaged goods are unusually stable in the case of Alaska peas.

Concurrent Versus Lagged Margins.—Agricultural economists have frequently discussed the desirability of calculating lagged margins at each step in the marketing process. Various devices have been discussed, such as tagging individual lots and ascertaining the actual prices at which they change ownership as they move through marketing channels. A possible way of making such calculations is illustrated in this section. First, however, the respective merits of different ways of computing margins are considered.

One of the great advantages of using concurrent margins is simplicity. They can be calculated without utilizing inventory data. If turnover is rapid enough there is little difference between concurrent and lagged margins. That is true, for example, in the wholesalers' purchases of beans in consumer packages. Purchases and sales correspond closely month by month so that a wholesaler has little to gain or lose through changing prices.

Even when there is a considerable lag between purchase and sale, concurrent margins undoubtedly influence the viewpoint of the trader (table 22). In a time of rapidly rising prices a buyer may be concerned as to whether he can replace inventory at the prices at which he is selling. His buying interest may be stimulated but his selling becomes sluggish. The fact that his true or lagged margin is larger than his concurrent margin is not much comfort to a merchant who must go on buying in a rising market to serve an established clientele.

The lagged margin as usually conceived is equivalent to the "first in, first out" principle of accounting. It has been frowned upon by many accountants as tending to exaggerate apparent profits in periods of rising prices and apparent losses in times of falling prices. Trade pressures that are favorable to Government purchasing and are not favorable to Government selling would probably be enhanced by the general

adoption of this attitude toward margins in the bean and pea industry.

Several leading accountants have advocated the reverse method of evaluation which is known as "Lifo" or "last in, first out" principle. In a period of rising prices the tendency would be to minimize the computed margin by using the latest purchase price for the item sold. In times of falling prices this method results in a greater margin than might be computed under other methods. One of the arguments for this method of computing margins was its presumed advantage in making out income-tax returns. This advantage has not always been borne out by experience. A general adoption of this point of view in the bean industry might produce more temperate attitudes toward

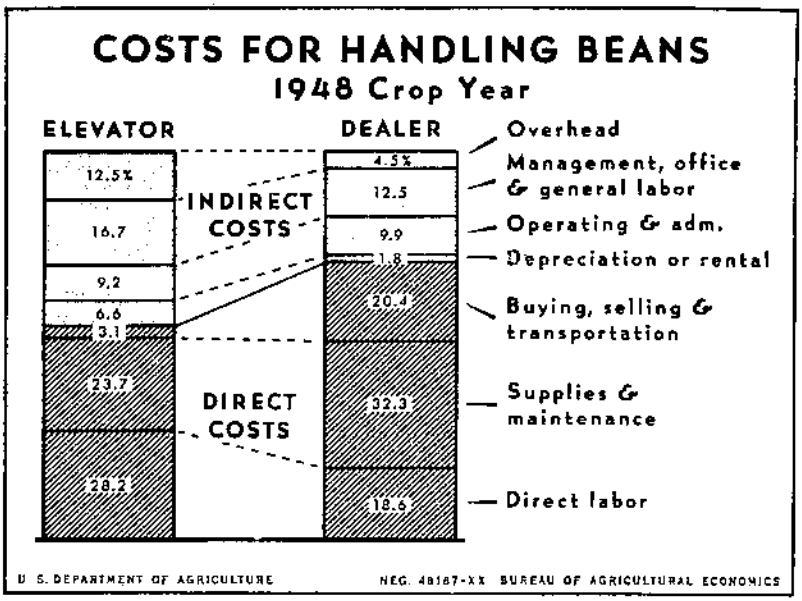

FIGURE 7

price fluctuations. The point of this discussion is to show that emphasizing lagged margins is equivalent to adopting a principle of inventory valuation.

Concurrent margins for great northern were more variable than lagged margins during the 1948–49 crop year (table 23). There is no special reason for anticipating this result as a regular thing. There is no particular consistency of relationship between the two series except that the divergence between them tends to increase as the year proceeds. The average margin for the year is the same, either way. Nothing less than a crop year seems to be an adequate, or meaningful, period for computing margins.

ELEVATOR COSTS.—In attempting to show the general tendencies as to costs, several statistical devices have been used including the mean, the median, and the inter-quartile range. The most satisfactory way of getting a representative figure for all elevators was by means of developing a curve in which costs are related to volume (fig. 7). From this curve it was possible to read off the cost figure

TABLE 22.—*Percentage distribution of elevator sales of great northern beans, and corresponding month of purchase as percentage of annual volume, by months, 1948*

Year and month sold	Elevator sales												
	As percentage of yearly sales	Monthly purchases as percentage of annual sales volume											
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1948–49:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Sept.	11.7	11.7											
Oct.	25.2	21.3	3.9										
Nov.	13.1		13.1										
Dec.	8.0		8.0										
Jan.	6.2		1.0	5.2									
Feb.	7.7			5.3	2.4								
Mar.	8.5				4.3	4.2							
Apr.	4.4					3.7	0.7						
May	5.4						3.0	2.4					
June	4.4							2.1	2.3				
July	3.5								1.0	2.2	0.3		
Aug.	1.9										1.0	0.5	0.4

for the average firm. This figure turned out to be 49 cents per 100-pound bag. The curve has the further value of providing a yardstick which varies with volume and hence can be used for large and small firms. The curve shown in figure 11 was fitted statistically to the values reported by individual elevators. The next illustration

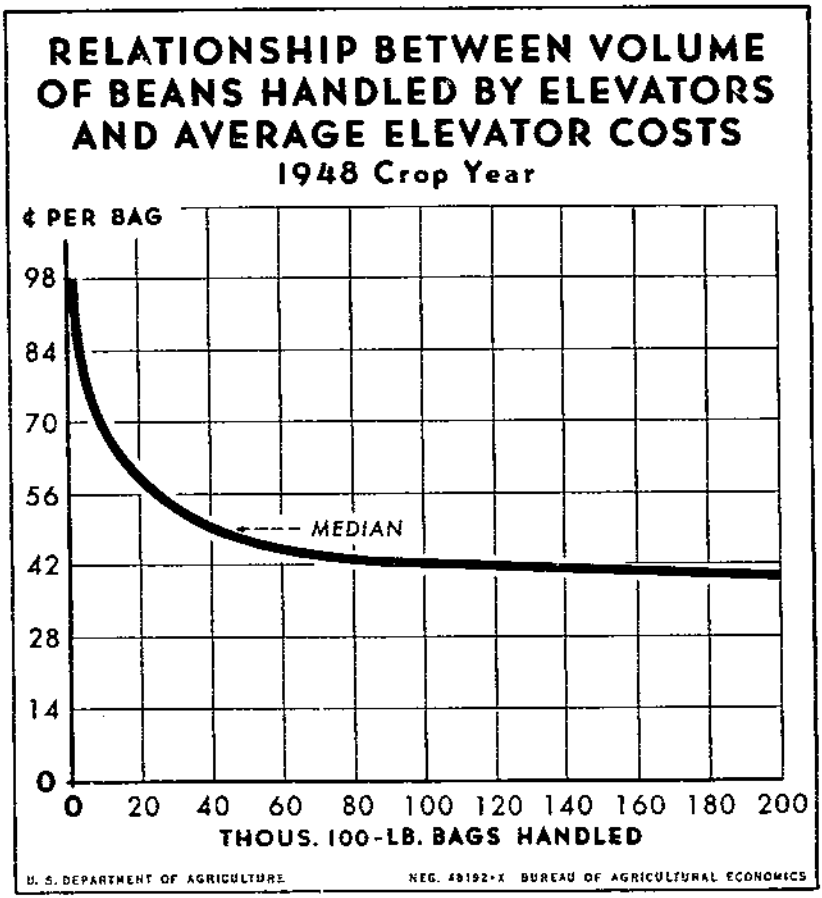

FIGURE 8

(fig. 8) gives the break-down of elevator costs by functional cost groups. The largest single item is labor at the elevator, which makes up 28.2 percent of total costs. All direct costs, including labor, make up 55 percent of total costs for the typical firms. Indirect costs are 45 percent of sales at this volume, but they rise sharply as a percentage of sales of smaller firms. Median figures and the interquartile range for several items of elevator expense are listed in tables 24 and 25.

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TABLE 23.—*Margins per 100-pound bag for great northern beans handled by elevators, 1948*

Margin	Year beginning September 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Lagged	0. 96	0. 73	0. 74	0. 70	0. 50	0. 69	0. 82	1. 02	0. 80	0. 57	0. 99	0. 93
Concurrent	. 96	. 75	. 55	. 83	. 79	. 98	. 39	. 85	1. 06	1. 03	1. 21	. 18

TABLE 24.—*Bean and pea elevators: Cost of operations for beans*

Item	Reporting	Median [1]	First quartile [1]	Third quartile [1]
Cost:				
Direct:	*Number*	*Dollars*	*Dollars*	*Dollars*
Elevator labor	48	0. 153	0. 038	0. 313
Elevator supplies and maintenance	47	. 129	. 013	. 262
Buying, selling, and transportation	25	. 017	. 004	. 031
Total		. 299	. 055	. 606
Indirect:				
Depreciation or rental	46	. 036	. 016	. 147
Operational and administrative	48	. 050	. 024	. 113
Management, office, and general labor	45	. 091	. 026	. 252
General overhead	48	. 068	. 033	. 175
Total		. 245	. 099	. 687

[1] Individual medians and quartiles have been adjusted to add to total medians and quartiles which were independently computed.

TABLE 25.—*Bean and pea elevators: Cost of operations for peas*

Item	Reporting	Median [1]	Mean [1]
Cost:			
Direct:	*Number*	*Dollars*	*Dollars*
Elevator labor	6	0. 201	0. 181
Elevator supplies and maintenance	6	. 157	. 222
Buying, selling, and transportation	5	. 010	. 022
Total		. 368	. 425
Indirect:			
Depreciation or rental	6	. 043	. 071
Operational and administrative	6	. 111	. 102
Management, office, and general labor	5	. 133	. 178
General overhead	6	. 051	. 085
Total		. 338	. 436

[1] Individual medians and means have been adjusted to add to total medians and means which were independently computed.

TABLE 26.—*Bean and pea elevators: Average cost of performing specific functions (cost per 100-pound bag)*

Cost item	Beans		Peas	
	Reporting	Average cost (median)	Reporting	Average cost (median)
	Number	*Dollars*	*Number*	*Dollars*
Transportation to elevator	22	0. 067	2	0. 055
Processing:				
Drying	3	. 200	0	
Cleaning	85	. 100	15	. 150
Destoning	21	. 050		(1)
Fumigating	15	. 050	7	. 070
Hand picking	16	. 363		(1)
Machine picking	15	. 080	0	
Polishing	15	. 025	2	. 020
Bagging:				
Sacking	42	. 050	14	. 060
Cost of sack	86	. 250	14	. 265
Storing costs	49	. 055	13	. 150
Loading out costs	45	. 040	13	. 055
Inspection fees	61	. 020	11	. 010
Miscellaneous inspection expenses	16	. 045	6	. 075

[1] Insufficient data obtained.

An attempt was made to prepare a consolidated operating statement for elevators but this method of combining the figures was not practicable. There are too many variations in the kinds of functions performed and the kinds of costs incurred.

Median costs are also provided for the types of processing and other functions performed by elevators. Cleaning beans is found to cost 10 cents a bag, on the basis of 85 replies among the elevators studied, and cleaning peas cost 15 cents. Some of the special operations are more expensive, such as drying, 20 cents, and hand picking, 36 cents.

Most of these functions are also performed on a custom basis. Figure 11 compares costs and custom charges for them. In most cases there is a moderate margin for profit. The reported custom charge seems out of proportion to the cost of service in the case of destoning and polishing. Cleaning appears to have been more expensive in the Mountain States than elsewhere but several other functions cost most in California.

DEALER COSTS.—It was more difficult to obtain data on operating costs for dealers than for elevators. One problem was the great diversity of types of operation among brokers, jobbers, and distributors. So far as brokers were concerned the complete story apparently consists of the typical brokerage fees reported—10 cents per 100-pound bag and 15 cents per case of packaged goods.

TABLE 27.—*Bean and pea elevators: Average cost per 100-pound bag of beans for various functions performed by elevators, principal producing areas*

Cost items	California		Colorado, Nebraska, and southern Idaho		Michigan and New York	
	Reporting	Average cost (median)	Reporting	Average cost (median)	Reporting	Average cost (median)
	Number	*Dollars*	*Number*	*Dollars*	*Number*	*Dollars*
Transportation to elevator	2	0. 055	3	0. 060	17	0. 075
Processing:						
Drying	0	-------	0	-------	3	. 200
Cleaning	25	. 100	20	. 175	40	. 050
Destoning	11	. 040	4	. 050	6	. 050
Fumigating	14	. 050	0	-------	1	. 010
Hand picking	14	. 392	0	-------	2	. 080
Machine picking	2	. 375	0	-------	13	. 080
Polishing	5	. 020	7	. 030	3	. 050
Bagging:						
Sacking	15	. 025	16	. 050	11	. 080
Cost of sack	21	. 260	28	. 275	37	. 250
Storing	22	. 080	20	. 020	7	. 075
Loading out	14	. 040	17	. 040	14	. 050
Inspection fees	2	. 010	22	. 010	37	. 020
Miscellaneous inspection expenses	0	-------	9	. 075	7	. 010

Dealers' costs differed according to whether or not dealers took possession of the product. Warehouse labor is a substantial cost item for dealers who have stocks. Packaging cost is probably the largest single item for the dealers who undertake packaging. Details concerning dealer costs for both beans and peas are shown in tables 27–28 and the break-down of dealers' cost is given in figure 9. Direct costs make up a substantially greater part of the total than is true for elevators. Selling and transportation is much more important relatively. Depreciation is much smaller, probably reflecting a lesser amount proportionately of equipment and machinery.

TRANSPORTATION COSTS.—Transportation is generally by motor-truck from grower to elevator and from wholesaler to retailer. Rail shipments predominate for the longer movements in between. It has been pointed out that freight charges make up about 5 percent of the consumer's expenditure for dry beans. That does not constitute the whole story with respect to transportation. Elevators reported a typical shipping cost of 2 cents on a bag and dealers about 7½ cents. The majority of wholesalers reported that they provide free transportation for their retail customers so that transportation actually accounted for a part of the wholesaler's margin. A farmer generally finances the movement of his beans from farm to elevator.

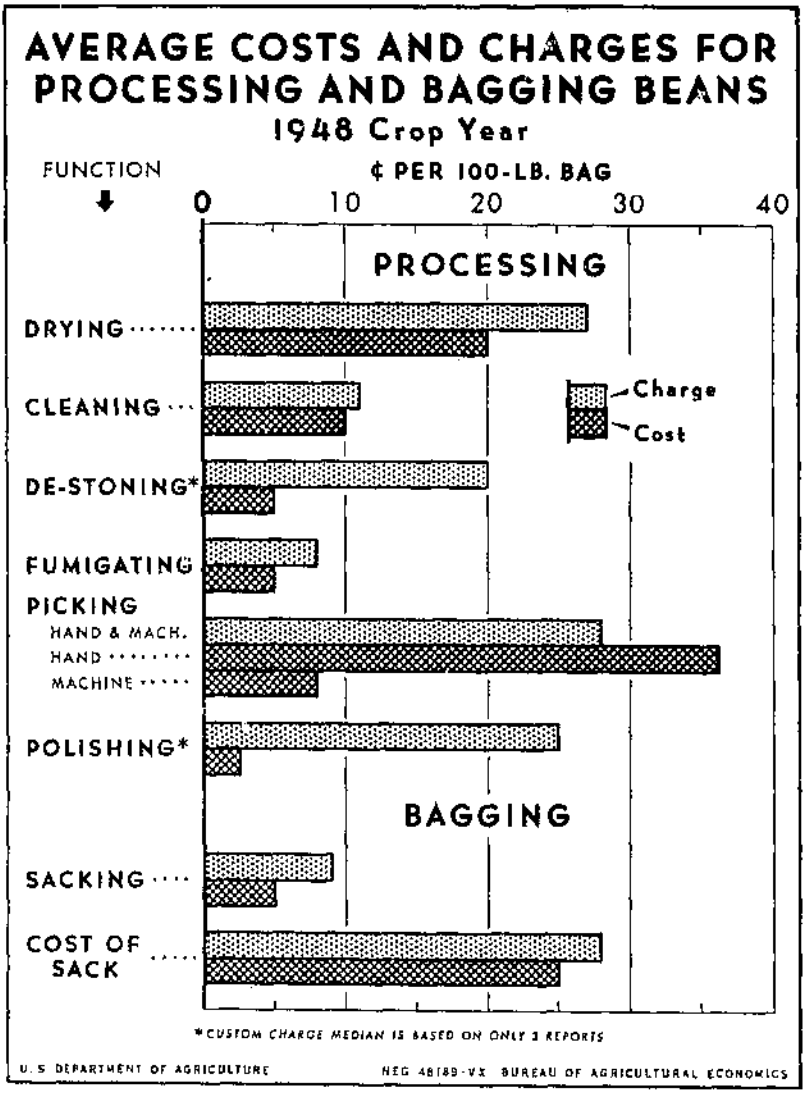

FIGURE 9

The cost of trucking might be deducted from the price received by the grower and added to the transportation account if the full transportation story were to be told.

An apparent paradox is the fact that nearly all freight movement was reported as less than carload lots, yet trucking rates appear to have been prohibitive on the longer runs. There would seem to be a place for terminal warehouses in the principal market centers with a larger part of the crop moving in straight carloads and with truck delivery routes radiating from the warehouses.

TABLE 28.—*Bean and pea brokers, jobbers, and distributors: Cost of operations for beans*

Item	Reporting	Median [1]	First quartile [1]	Third quartile [1]
Cost:				
Direct:	*Number*	*Dollars*	*Dollars*	*Dollars*
Labor	10	0. 062	0. 083	0. 146
Supplies and maintenance	5	. 108	. 012	. 243
Selling and transportation	8	. 068	. 042	. 146
Total		. 238	. 137	. 535
Indirect:				
Depreciation or rental	10	. 006	. 003	. 006
Operational and administrative	10	. 033	. 020	. 038
Management, office, and general labor	5	. 042	. 004	. 058
General overhead	9	. 015	. 013	. 055
Total		. 096	. 040	. 157

[1] Individual medians and quartiles have been adjusted to add to total medians and quartiles which were independently computed.

TABLE 29.—*Bean and pea brokers, jobbers, and distributors: Cost of operation for beans*

Item	Reporting	Median	Mean
	Number	*Dollars*	*Dollars*
Direct costs	5	0. 136	0. 446
Indirect costs	4	. 394	. 495

SELLING AND ADVERTISING.—Costs of selling are dispersed throughout the channels of distribution. Some firms that handle beans are nothing more than sales agencies. All of their costs might be regarded as selling costs. From the viewpoint of their service to the industry the retailers may also be regarded as entirely engaged in selling. Ordinarily they are not involved in processing, packaging, or transportation, which form a substantial part of the costs of other marketing agencies that handle beans and peas.

There are also selling costs that account for part of the margin of both elevators and dealers. In 1949, salesmen's salaries typically cost the dealer 7½ cents a bag, according to replies received in this study. Dealers also reported spending an average of ½ cent a bag for advertising. Travel and communication expense exceeding 2 cents a bag is probably incidental to selling for the most part.

Identifiable sales expenditures are not nearly so large in the case of the elevators. Nothing was reported for salesmen's salaries. Advertising, travel, and communications all combined took less than 1½ cents a bag. The corresponding items reported for the dealer added

up to more than 10 cents a bag. This happens to be about the same as the standard brokerage fee.

All of the reported identifiable selling costs added together would be small compared with the selling expenditures on many competing foods. Market expansion was suggested as a desirable goal by several respondents. Real accomplishment in that direction would require sales expenditures of an entirely different order from those now being made.

OBSERVATIONS ON STABILIZATION AND MARKETING EFFICIENCY

Some of the limitations of this study were pointed out in the introduction. The findings of the study will help in promoting improvement in marketing efficiency; but its primary use will be as a background for intensive study of specific problems. Such general points as may be raised at this stage may well be related to trade comments. Respondents were asked for their opinions concerning the effect of the Government's price-support program and of any recent developments in trade practices. Many had very definite opinions as to what is wrong with the bean and pea business. The authors of this report are perhaps entitled to have an informed opinion on some of these issues although they do not presume to settle them on the basis of the data at hand.

It may be said that the net reaction to the Government price support program in 1949 was favorable although few were completely satisfied with it as it then stood. The comments on this point were too varied to tabulate, and verbatim reproduction would not be justified. There does appear to have been a definite consensus, although there was also a vigorous dissenting opinion on most points. The comments received from bean and pea elevators and dealers came from every growing area and presumably represent all conditions in bean marketing.

The fundamental point on which practically all agreed was that the Government program had reduced the marketing risk for the entire industry as well as for the growers. A few dissenters did not think that stabilization had been promoted even for the growers. This group said that the program inevitably leads to overproduction; hence, to erratic price fluctuations. The great majority asserted the contrary, and repeatedly used such expressions as "Has eliminated gambling," "No speculative element left," etc.

A somewhat smaller majority are sure that the evening-out of price trends promoted by the Government marketing program is a good thing. Those with opposite views said that the chance for speculative gains was a valuable incentive which has now been eliminated. Others say that price supports have led to hand-to-mouth buying, to unduly expanded production of some varieties, and to inadequate attention to the improvement of quality. The favorable majority said that their business is more profitable and less hazardous than before; that the support program has benefited them as well as the growers.

The really fundamental issues which emerge from these comments concern the relation of stabilization to marketing efficiency on the one hand and to consumer demand on the other. The discussion in this section centers on several basic questions related to these issues: Is the trade correct in the prevailing opinion that the support program has eliminated or minimized marketing risks? What about the contrary opinion that it has merely changed the character of risk or shifted it from one party to another? If stabilization has genuinely been attained, how has it affected marketing efficiency? In what directions may further improvements in efficiency be sought? Would active efforts to stimulate consumer demand be in the public interest or should emphasis be placed upon serving the established demand as efficiently as possible? If active effort to stimulate demand is to be undertaken, what type of marketing agency in the bean and pea industry is best equipped to do it?

ASPECTS OF MARKETING RISK.—The statistical evidence from the present survey and from other sources indicates that market hazards have at least been moderated for the growers of beans and peas. Prices were low throughout the 1930's but have stood at a decidedly different level during World War II and later. Prices declined as the result of two record crops in succession. But the degree of the decline seems to have been moderate in view of the magnitude of the adverse factors. Not only were these 2 years marked by bumper crops of beans, but they were also record years in total agricultural production with large surpluses of foods which compete with beans. There was a decrease in per capita domestic consumption of beans without a corresponding offset in terms of increased exports. Under these circumstances, the bean and pea industry has exhibited remarkable stability in the face of the large carry-overs.

The main point here is not to prove that stabilization has been achieved but to show that the statistical evidence lends support to the majority of trade opinion on this subject. It seems remarkable that comments should have been so favorable in the spring of 1950. Although the trend of prices had been generally downward for several months, the general view was that they would have dropped farther and faster without the support prices.

The indirect stabilizing effects were mentioned earlier. Elevators have moved in the direction of processing and storing beans on a custom basis, assuming the risks of ownership only as beans were needed to fill orders. Dealers have functioned increasingly as brokers. Those who bought outright were buying for immediate use or resale. Some respondents recognized these indirect stabilization effects upon the industry. A few thought that price protection for the farmers reacted to the disadvantage of the elevators and dealers. It was claimed that, as farmers were able to withhold their beans from the market, adequate supplies were not always available to meet normal trade.

The severest critics of price supports were those who acknowledged that they appeared to be working effectively but who did not see how they could continue to work. They are pessimistic with respect to both private and governmental action. They said that, on the one

hand, acreage expands and surpluses rise because of the inducement of price protection. On the other hand, Government must call a halt eventually to the accumulation of surpluses, with disastrous effects upon the market. They maintained, in effect, that market risk has not been eliminated but merely deferred in such a way as to become a more serious threat.

The majority opinion was more optimistic. The middle ground taken by some was that price supports should be continued but that the Government should pursue a more vigorous program for disposing of surpluses through relatively noncompetitive channels.

STABILIZATION AND EFFICIENCY.—The majority view was that stabilization of the industry had tended to lower costs rather than increase them. It is apparent that elevator operations might proceed on a more orderly basis and with fewer peaks and lulls. Sales organizations, such as dealers and brokers, would be active throughout a greater part of the year. Sales volume and fixed costs might have a more favorable relationship under these circumstances.

Several exceptions were noted to this general tendency toward lower costs. Some said office overhead has been increased because of additional red tape. Others said that storage costs had increased because of the length of time that a grower may hold his beans under a support loan. This comment is not entirely valid as beans have to be held somewhere between harvest and the time when they move into consumption. If they were not held at the elevator, the cost of storage would simply be passed along to the dealer, canner, or wholesaler. As it is, the cost is passed back to the grower who continues to own the beans and the elevator gains an additional revenue from custom storage charges.

On the subject of the effect of stabilization on profits, the general view was that profit was probably somewhat less, on the average, but did not vary as much as formerly. The combination of lower average costs and net profits should mean a contraction in gross margins. From the public viewpoint, gross profit may be regarded as the cost of getting a job accomplished.

METHODS FOR INCREASING EFFICIENCY.—Specific recommendations for increasing efficiency could come only from a comparative study of techniques employed within the industry. Some general ideas are listed here for use in identifying opportunities for improvement. The first is to postpone each change in the product to the latest possible point in the marketing flow. Leaving the product in an unrefined and undifferentiated state facilitates mass movement and leaves the way open for alternative uses.

Some trends can be observed that are in line with this idea. Not long ago the general farm practice was to bag beans in the fields to be hauled to the elevators. Now about half of the crop moves to the elevators in bulk. This means the growing adoption of a method which has rapidly become standard practice in leading grain-producing areas. It is to be expected that this tendency will be carried much farther in regard to beans. If they can be transported satisfactorily in bulk, it is premature to put them in bags, when they have to be emptied for processing.

If beans can move to the elevators in bulk, it may not be long before more are transported across the country in bulk rather than in bags. This method also is foreshadowed by what has happened in regard to grains. True, the receiving point would have to be another elevator, and the elevators at both places would have to be equipped for mechanical loading and unloading.

The bulk shipment of field-run beans would not be contemplated. Beans in the growing area should be brought up to a minimum grade before shipments are made to distant points. Furthermore, it is not contemplated that all beans should move to their ultimate destination in bulk. The suggestion assumes the existence of proper handling facilities in the terminal markets, or an adequate market incentive for adding such facilities. The additional tare that would be shipped under this plan would probably increase the cost of transportation slightly. This tendency would be offset to some extent by saving the weight of bags involved in the present method of shipping. There would also be a saving in the cost of loading and unloading with the use of proper bulk-handling facilities.

The advantages of bulk shipment would be greatest if phases of processing were also postponed The elevator receiving the ungraded beans from the grower might process them only up to the requirements for a U. S. No. 2 grade. Shipment to market would be simplified by shipping only a single grade. The number of straight carload lots should be increased greatly by this practice. Further processing at the terminal point would bring the beans up to U. S. No. 1 grade to the extent needed to satisfy the local market. Electric-eye and hand picking would also be employed to bring the beans up to a condition that would qualify them for the U. S. No. 1 grade or to meet other requirements.

Change of ownership might also be postponed if the elevators in the terminal markets were operated by cooperative associations based in the producing areas. Such an arrangement might be less complicated with respect to continued reliance on CCC loans by the growers. The support prices for beans in the terminal markets might appropriately be higher than in the growing areas, at least to the extent of covering the cost of transportation. The cooperative, under this plan, would process and store on a custom basis in the terminal markets and would act as broker for the growers in the sale of the beans.

There are other ways in which this result might be accomplished, rather than through the extension of cooperative activities. Existing elevators which are handling locally grown classes of beans may be strategically situated for the intermediate distribution of other classes. This is particularly true of the elevators in New York State. At least one such organization, that has ample connections in the western growing area, is advertising and selling a full line of beans and peas in its own consumer packages. Others were discussing similar plans when visited during the course of the survey.

The program involves postponing consumer packaging until beans reach the terminal market. One advantage of this is to facilitate the packaging and merchandising of complete lines rather than only the class grown in a producing area. Packaging machinery could be kept

running steadily, turning out packaged goods as required by local demand. Packaging machinery is expensive for elevators in the producing areas to own and operate because of the irregular schedules.

The second basis for reduction in costs is to lay the various methods of internal operation on a scale related to volume of business. Each piece of equipment has its individual break-even point above which it begins to pay for itself. There are methods of organizing the working force and of laying out a flow of work which would represent overspecialization below minimum volume figures. A separate scale of techniques should be established on each of the more important functions, showing all the points along the scale at which efficiency demands a change from one method to another.

Each operation in elevators, for example, would have to be studied, using firms that represent various volume levels, so that a volume scale could be constructed. The benefits of such a study could be put into effect only through intensive educational work with a simple manual which the individual operator could use in applying the results of the study in his own establishment.

A third step in promoting marketing efficiency is the adjustment of sales effort and expenditure to feasible marketing goals.

The application of this idea would require an advance study of consumer demand which would evaluate the possibilities for effective expansion. Market expansion reduces some fixed costs automatically by putting a larger volume through the same facilities. This usually acceptable statement is subject to the condition that the cost of achieving the increased volume is not great. Sales expenditure spent against sales targets that are not realistic is usually a waste. But failure to promote sales is wasteful if the reduction in other costs per unit, resulting from volume, would more than offset the increased cost of sales.

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APPENDIX

Tabulation Methods Used

1. Wherever possible in this study, the median rather than the arithmetic mean was used in an effort to present a typical cost not affected by extreme cases. In addition to the median, some indication of the range of reports is shown—sometimes by giving the first and third quartiles and sometimes by giving the medians of the costs reported in each area. In other cases, both the median and the arithmetic mean are presented, especially where there are too few cases to allow sole reliance on the median, or where there are too few cases to allow quartiles to be computed.

In final elevator tabulations, the following area groupings were used:

1. Bean-growing areas:
   - *a.* California,
   - *b.* Mountain States: Colorado, Nebraska, and southern Idaho,
   - *c.* Eastern States: Michigan and New York;
2. Pea-growing area: Northern Idaho and Washington State.

2. In order to approximate a measure that would eliminate the effect of firms of large volume, the following method was used. Each respondent was asked, for example, what percentage of his total volume of beans handled was subjected to each of several practices. Assume that respondent A, who handled 50,000 bags of beans, reported:

Practice:	*Percentage of total volume*
I	60. 0
II	30. 0
III	10. 0

while respondent B, who handled 500,000 bags of beans, reported:

Practice:	*Percentage of total volume*
I	90. 0
II	0
III	10. 0

If we weighted by volume, the following would result:

Practice:	*Respondent* A	B	*Total*	*Percentage of total volume*
I	30, 000	450, 000	480, 000	87. 3
II	15, 000	0	15, 000	2. 7
III	5, 000	50, 000	55, 000	10. 0
Total	50, 000	500, 000	550, 000	100. 0

Comparison with respondent B's original report shows the extent of his influences.

On the other hand, by our method, each respondent's one answer would be distributed in proportion to the percentages he reported:

Practice:	*Respondent* A	B	*Total*	*Percentage of total volume*
I	0. 6	0. 9	1. 5	75. 0
II	. 3	0	. 3	15. 0
III	. 1	. 1	. 2	10. 0
Total	1. 0	1. 0	2. 0	100. 0

Thus, respondent B, who handled a larger volume of beans, has received no greater weight than has respondent A. As we are looking for a figure that represents the practice of many firms rather than the practice of some large firm, we believe that this measure more closely approximates what might be called the modal practice.

Tables 10 and 55 show the group percentages obtained by weighting for the importance of each class of bean after percentages of each class of bean and pea had been obtained by the tabulation method here outlined. The combined 1948 and 1949 production as listed in *1949 Annual Summary—Acreage, Yield, and Production* [11] was used as a basis for weighting.

3. The technique used in the construction of the flow chart (fig. 5)—the diagram of the flow of beans through the marketing channels—was a combination of statistical method and subjective analysis.

The reports from the surveyed agencies were classified according to the volume of beans handled by them during the period studied. These firms reported the percentage of total beans handled which were sold to different types of buyers. For example, elevators reported what percentage of their beans went to dealers, what percentage to the Government, etc. These percentages were weighted by the volume of bean business for a particular firm and were averaged to obtain typical distributive patterns.

Often a check from both directions was available, for some buyers—dealers, wholesalers, and canners—reported the percentage of their volume of beans bought from various sources.

The weighted percentages were adjusted slightly for discrepancies between reported selling patterns and reported buying patterns.

The results were compared with available data on canned beans and exported beans, and were found to approximate closely the percentage obtained from secondary sources.[12]

Sample Design for Bean and Pea Study

The study consisted of four separately designed independent samples:

(1) Bean and pea elevators,
(2) Wholesale grocers,
(3) Canners,
(4) Brokers and dealers.

Sample of Elevators.—The sample of bean elevators had two parts: a sample of bean elevators and a sample of pea elevators. The part representing beans was designed in three stages.

Stage 1.—The total quota of interviews with bean elevator operators was distributed among the major bean-growing States in proportion to their 1949 production of beans. The major bean-growing States in 1949 were California, Colorado, Idaho, Michigan, Nebraska, and New York. These States accounted for 87 percent of the total 1949 production.

[11] U. S. Bureau of Agricultural Economics. 1949 ANNUAL SUMMARY—ACREAGE, YIELD, AND PRODUCTION. Washington, D. C. December 1949. (Processed.)

[12] See Bibliography.

Stage 2.—State elevator quotas were distributed among counties. This assignment was made on the basis of county production in 1945 as reported in the Census of Agriculture.

Stage 3.—Elevators to be sampled within counties were selected. A list of elevators in each county was compiled from lists furnished by the United States Department of Agriculture and from *Thomas' Wholesale Grocer and Kindred Trades Register*. To provide the list of bean elevator operators to be interviewed, every *n*th elevator was taken from the county lists.

The sample of pea elevators was designed in the same way. Interviews were confined to Idaho and Washington, as these States accounted for 77 percent of the dried field-pea production in 1949.

Appendix table 30 gives the distribution of the elevator sample by States.

SAMPLE OF BROKERS AND DEALERS.—Brokers and dealers were distinguished on the basis of whether or not they physically handled beans. The available lists of brokers and dealers were not accurate in this differentiation. On the basis of the lists given in *Thomas' Register*, separate samples were drawn for brokers and dealers. The regional break-down of the sample of wholesale grocers was used. Each of these two samples was made representative with respect to regional distribution and distribution according to number of brokers or dealers per city.

It was discovered in the process of interviewing that, because of the inaccuracy of the available lists, many establishments assigned to the broker sample actually handled beans and therefore should have been classified as dealers. The opposite situation frequently became evident in the case of establishments assigned to the dealer sample. In both of these cases interviews were obtained, and the establishments were later classified properly for tabulation. Appendix table 31 lists the cities in which broker and dealer interviews were obtained.

SAMPLE OF WHOLESALE GROCERS.—The universe of wholesale grocers from which the sample was drawn consisted of all wholesale grocers listed in *Thomas' Register* in cities of 25,000 population and over, in 1940, with certain exceptions. Excluded from the universe were the following groups of wholesale grocers.

1. Wholesalers who claimed to handle neither dried fruit nor cereals and breakfast foods. This group was excluded on the theory that wholesale grocers who handled neither of these commodities would not be likely to handle dried beans.
2. Those who specialized in some line that does not include dried beans or peas.
3. Those who had less than 25 percent of their business in groceries.
4. Those who operate no stores; for example, wagon dealers, and those who operate on a drop-shipment or consignment basis.
5. Manufacturers who handle wholesale groceries as sidelines.

The entire universe of wholesalers was divided into 5 regions and each of these regions was further divided into 2 subregions, making 10 geographical divisions altogether. Within each subregion, clusters of cities were defined as primary sampling units. The purpose of the clustering was to effect economies in training the interviewers.

In all subregions the primary sampling units were arrayed according to the retail sales in 1949 of the largest city in each primary sampling

unit. From each of the 10 subregions a primary sampling unit was selected, with probability proportionate to size. The process known as *deep stratification* was employed in this selection which involved the following steps.

(1) In each region one of the two subregions was assigned at random to be an area in which a primary sampling unit with high retail sales would be selected. The remaining subregion was then taken to be an area in which a primary sampling unit with low retail sales would be selected and 10 subregions were represented nationally.

(2) From each subregion a primary sampling unit was selected by the use of random numbers, with probability proportional to size.

Within each selected primary sampling unit, interviews were distributed among the cities that constituted the unit according to the distribution of eligible wholesalers among the cities. At this stage, then, a total of 10 primary sampling units had been selected which included 14 cities, and city interview quotas had been calculated. The remaining task was the selection of wholesalers to be interviewed within cities.

Within each sample city wholesalers were arrayed according to the size code reported in *Thomas' Register*, and every *n*th wholesaler was selected after a random start. This process of selecting wholesalers assured that all size classes would be represented in proper proportion.

Appendix table 32 gives the distribution among cities of the sample of wholesale grocers.

SAMPLE OF CANNERS.—The universe of canners consisted of all canners of dried beans listed in the *Food Products Directory, Blue Book of Food Packers*. This universe was first classified into the same geographical strata as employed in the sample of wholesale grocers.

The number of eligible canners in all cities, by region, was ascertained and a sample of 41 canners was drawn in 20 cities, which was representative with respect to geographical distribution and number of canners per city. Appendix table 32 gives the distribution of the sample by city.

TABLE 30.—*Number of elevators in sample, by State and commodity*

State	Elevators handling—	
	Beans	Peas
	Number	*Number*
California	29	
Idaho	17	7
Colorado	15	
Nebraska	5	
Michigan	44	
New York	12	
Washington		5
Total	122	12

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TABLE 31.—*Number of brokers and dealers interviewed, by specified cities*

City	Brokers interviewed	City	Dealers interviewed
	Number		*Number*
San Francisco, Calif.	1	Los Angeles, Calif.	3
King City, Calif.	1	San Joaquin, Calif.	1
Salida, Calif.	1	Oxnard, Calif.	2
Kansas City, Mo.	1	Spokane, Wash.	1
Des Moines, Iowa	5	Denver, Colo.	1
Springfield, Ill.	1	Albuquerque, N. Mex.	1
Charlotte, N. C.	1	Chicago, Ill.	2
Wilson, N. C.	1	Savannah, Ga.	1
Jackson, Tenn.	2	Charleston, S. C.	1
Lexington, Ky.	3	Greensboro, N. C.	1
Clarksburg, W. Va.	3	Lexington, Ky.	2
New York, N. Y.	2	Chattanooga, Tenn.	1
Roanoke, Va.	1	Nashville, Tenn.	1
		Montgomery, Ala.	2
		Birmingham, Ala.	1
		New Orleans, La.	5
		Rochester, N. Y.	1
		New York, N. Y.	4
		Danville, Va.	2
		Roanoke, Va.	2
		Norfolk, Va.	2
Total	23	Total	37

TABLE 32.—*Number of wholesale grocers and canners interviewed, by specified cities*

City	Wholesale grocers interviewed	City	Canners interviewed
	Number		*Number*
San Francisco, Calif	5	San Francisco, Calif	3
Oakland, Calif	2	Oakland, Calif	1
Albuquerque, N. Mex	4	Los Angeles, Calif	4
Des Moines, Iowa	3	Brighton, Colo	1
Dubuque, Iowa	3	Plattsmouth, Nebr	1
Cleveland, Ohio	7	Austin, Tex	1
Montgomery, Ala	3	Dallas, Tex	1
Columbus, Ga	4	San Antonio, Tex	1
New Orleans, La	7	Chicago, Ill	8
Portland, Maine	4	Collinsville, Ill	1
Bangor, Maine	2	Indianapolis, Ind	3
New York, N. Y	6	Bedford, Ohio	1
Rochester, N. Y	6	Circleville, Ohio	1
Richmond, Va	6	Nashville, Tenn	1
		Portland, Maine	2
		New York, N. Y	3
		Oakfield, N. Y	1
		Merchantville, N. J	1
		Williamstown, N. J	1
		Baltimore, Md	4
		Berlin, Md	1
Total	62	Total	41

TABLE 33.—*Bean and pea elevators: Percentage distribution of all reporting, by percentage of total volume of business attributable to handling various commodities and retail business*

Item	Commodities handled			Retail business
	Beans	Peas	Other	
Reporting	*Number* 98	*Number* 20	*Number* 89	*Number* 12
	Percentage of all reporting			
Percentage of total physical volume:	*Percent*	*Percent*	*Percent*	*Percent*
20 percent and under	26.5	65.0	21.3	50.0
21 to 40 percent	24.5	15.0	12.4	16.7
41 to 60 percent	10.2	5.0	15.7	25.0
61 to 80 percent	13.3	0	27.0	8.3
81 percent or over	25.5	15.0	23.6	0
Total	100.0	100.0	100.0	100.0
Reporting	*Number* 94	*Number* 19	*Number* 87	*Number* 14
	Percentage of all reporting			
Percentage of total dollar volume:	*Percent*	*Percent*	*Percent*	*Percent*
20 percent and under	17.0	73.6	21.8	57.2
21 to 40 percent	18.1	5.3	14.9	21.4
41 to 60 percent	24.4	0	23.1	14.3
61 to 80 percent	11.7	5.3	24.1	0
81 percent or over	28.8	15.8	16.1	7.1
Total	100.0	100.0	100.0	100.0

TABLE 34.—*Bean and pea elevators: Percentage distribution, by function of establishment and classes of beans and peas handled, California*

Item	Function [1]	
	Storing	Processing
Reporting [2]	*Number* 29	*Number* 29
	Percentage of all reporting	
Beans:	*Percent*	*Percent*
Pea and medium white	6. 9	6. 9
Small white	48. 3	48. 3
Pinto	24. 1	24. 1
Red kidney	13. 8	13. 8
Pink	34. 5	31. 0
Small red	13. 8	13. 8
Cranberry	27. 6	27. 6
Standard lima	58. 6	58. 6
Baby lima	37. 9	37. 9
Blackeye, California	37. 9	37. 9
Garbanzo	13. 8	13. 8
Other	6. 9	3. 4
Peas:		
Alaska, other smooth green	3. 4	3. 4
White Canada, first and best, other white, and yellow seeded	3. 4	3. 4
Other	17. 2	10. 3

[1] Only one respondent in this area reported doing packaging.
[2] Many respondents reported more than one class.

TABLE 35.—*Bean and pea elevators: Percentage distribution by function of establishment and classes of beans and peas handled, Colorado, Nebraska, Idaho, and Washington*

Item	Colorado, Nebraska, and southern Idaho			Washington and northern Idaho, storing and processing [1]
	Storing	Processing	Packaging	
Reporting [2]	*Number* 35	*Number* 37	*Number* 5	*Number* 12
	Percentage of all reporting			
Beans:	*Percent*	*Percent*	*Percent*	*Percent*
Great northern	71.4	43.2	100.0	----------
Pinto	94.3	94.6	100.0	8.3
Red kidney	0	0	20.0	----------
Pink	0	0	20.0	----------
Small red	45.7	40.5	40.0	16.7
Cranberry	0	0	20.0	----------
Standard lima	0	0	40.0	----------
Baby lima	0	0	60.0	----------
Blackeye, California	0	0	40.0	----------
Pea and medium white	----------	----------	----------	8.3
Small white	----------	----------	----------	8.3
Peas:				
Alaska, other smooth green	0	0	20.0	100.0
White Canada, first and best, other white, and yellow seeded	0	0	20.0	66.7
Other	0	0	20.0	16.7

[1] All respondents did both storing and processing, but no respondents did any packaging.

[2] Many respondents reported more than one class.

TABLE 36.—*Bean and pea elevators: Percentage distribution, by function of establishments and classes of beans and peas handled, Michigan and New York*

Item	Function		
	Storing	Processing	Packaging
Reporting [1]	*Number* 46	*Number* 53	*Number* 4
	Percentage of all reporting		
Beans:	*Percent*	*Percent*	*Percent*
Pea and medium white	91. 3	94. 3	100. 0
Great northern	2. 2	1. 9	0
White marrow	8. 7	7. 5	0
White kidney	6. 5	5. 7	0
Pinto	0	1. 9	0
Red kidney	23. 9	20. 8	0
Small red	0	5. 7	0
Cranberry	10. 9	7. 5	25. 0
Yelloweye	10. 9	5. 7	0
Peas: White Canada, first and best, other white, and yellow seeded	2. 2	0	0

[1] Many respondents reported more than one class.

TABLE 37.—*Brokers, jobbers and distributors: Percentage distribution of beans and peas purchased by volume by months, 1948*

Class	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Great northern	14. 7	12. 3	8. 0	5. 6	8. 6	5. 3	14. 1	9. 1	11. 1	5. 2	1. 3	4. 7
Small white	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Pinto	13. 7	20. 6	16. 8	7. 5	5. 8	6. 8	6. 2	10. 0	7. 9	3. 3	1. 0	. 4
Red kidney	14. 8	4. 9	22. 2	24. 6	29. 5	2. 5	1. 5	0	0	0	0	0
Pink	7. 3	14. 5	8. 7	57. 9	11. 6	0	0	0	0	0	0	0
Small red	12. 4	23. 0	18. 2	13. 2	11. 0	5. 1	1. 1	12. 2	2. 2	1. 1	. 5	0
Standard lima	25. 6	20. 3	25. 7	12. 9	1. 8	1. 9	1. 4	. 5	. 9	0	0	0
Baby lima	4. 4	35. 0	15. 0	12. 0	7. 6	10. 1	7. 1	5. 4	3. 4	0	0	0
Blackeye	6. 6	12. 9	16. 7	6. 6	8. 8	6. 7	9. 5	2. 4	4. 7	6. 1	11. 4	7. 6
All classes	14. 2	18. 6	16. 0	9. 4	7. 6	5. 3	7. 7	6. 2	6. 1	3. 4	2. 7	2. 8
Peas:												
Alaska; and smooth green	0	. 5	0	0	0	39. 8	29. 6	0	29. 6	0	0	. 5
Other (yellow and green split)	0	0	5. 9	37. 6	31. 8	14. 3	0	10. 4	0	0	0	0
All classes	0	. 2	3. 3	20. 9	17. 6	25. 6	13. 2	5. 8	13. 2	0	0	. 2

[1] Monthly data not shown because of insufficient reports.

TABLE 38.—*Brokers, jobbers, and distributors: Percentage distribution of beans and peas sold by volume by months, 1948*

Class	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	17.3	13.4	13.4	10.5	8.3	7.7	6.2	6.9	3.1	4.1	4.2	4.9
Great northern	14.7	11.9	7.9	5.6	8.8	5.3	14.0	9.4	11.5	5.0	1.4	4.5
Small white	0	25.0	0	0	18.8	0	56.2	0	0	0	0	0
Pinto	14.8	18.7	13.4	6.5	10.7	6.4	7.1	9.3	8.3	3.0	1.2	.6
Red kidney	15.1	6.4	22.2	23.2	27.6	2.6	1.7	.4	.1	.2	.2	.3
Pink	7.3	14.5	8.7	57.9	11.6	0	0	0	0	0	0	0
Small red	12.5	23.1	19.8	13.3	10.0	5.2	1.1	11.2	2.2	1.1	.5	0
Cranberry	12.8	11.1	38.5	6.8	1.5	4.3	7.8	3.8	7.7	1.7	1.9	2.1
Yelloweye	17.0	20.1	25.7	12.4	2.8	4.7	1.9	3.8	1.6	3.1	3.1	3.8
Standard lima	29.1	28.6	26.6	10.6	1.3	.9	1.1	1.0	.5	.1	.1	.1
Baby lima	4.5	34.9	16.0	12.3	6.9	8.9	6.6	5.4	4.3	.1	.1	0
Blackeye	8.5	14.0	11.0	7.2	5.8	8.4	9.0	9.4	4.3	7.0	8.5	6.9
All classes	15.3	17.7	14.4	9.1	8.2	5.4	7.7	7.5	6.3	3.5	2.2	2.7
Peas:												
Alaska; and smooth green	0	.5	0	0	0	39.8	29.6	0	29.6	0	0	.5
Other (green and yellow split)	0	0	5.9	17.8	41.6	5.9	4.0	24.8	0	0	0	0
All classes	0	.2	3.3	9.9	23.1	21.0	15.4	13.7	13.2	0	0	.2

TABLE 39.—*Canners: Percentage distribution of beans purchased by volume by months, 1948*

Class	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	0	20. 3	12. 4	11. 7	12. 8	9. 2	11. 6	6. 3	6. 9	5. 2	. 7	2. 9
Great northern	24. 4	0	2. 1	0	29. 7	0	0	18. 6	. 7	24. 5	0	0
White kidney	28. 9	2. 9	5. 2	0	15. 7	22. 7	0	5. 2	0	6. 3	0	13. 1
Pinto	0	0	42. 2	0	23. 0	34. 8	0	0	0	0	0	0
Red kidney	1. 5	9. 4	19. 5	5. 3	2. 9	12. 3	15. 1	19. 6	1. 0	11. 9	0	1. 5
Pink	4. 8	18. 6	17. 0	17. 8	10. 7	10. 7	4. 8	3. 0	0	2. 4	4. 3	5. 9
Yelloweye	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Small red	8. 0	8. 4	8. 7	7. 5	9. 8	9. 2	7. 5	8. 6	7. 6	8. 8	7. 6	8. 3
Standard lima	7. 5	7. 5	18. 8	. 2	0	0	1. 0	22. 6	22. 6	19. 8	0	0
Baby lima	4. 5	19. 7	9. 8	6. 8	4. 5	4. 6	19. 7	4. 5	4. 5	12. 2	4. 6	4. 6
Garbanzo	52. 9	0	0	12. 2	. 8	14. 9	2. 6	2. 6	1. 4	1. 4	2. 6	8. 6
All classes	4. 3	14. 0	13. 9	8. 4	10. 0	9. 0	9. 4	10. 6	7. 0	8. 8	1. 5	3. 1

[1] Data not made available.

TABLE 40.—*Wholesalers: Percentage distribution of beans and peas purchased by volume by months, 1948*

Class	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	21. 0	8. 3	7. 7	6. 2	13. 9	5. 8	8. 4	6. 3	6. 2	6. 0	5. 1	5. 1
Great northern	8. 8	8. 5	9. 0	8. 0	9. 5	8. 2	8. 4	8. 5	8. 2	7. 2	7. 7	8. 0
Small white	7. 5	7. 5	7. 5	7. 5	10. 2	13. 1	7. 5	7. 5	7. 5	7. 5	7. 5	9. 2
White marrow	4. 8	4. 8	37. 6	4. 8	19. 3	4. 8	4. 8	4. 8	14. 3	0	0	0
Pinto	2. 3	18. 8	2. 2	2. 2	2. 3	11. 5	1. 9	10. 6	3. 8	4. 1	11. 7	28. 6
Red kidney	8. 1	7. 7	8. 4	6. 1	11. 5	6. 3	15. 9	7. 1	4. 6	16. 1	4. 1	4. 1
Pink	8. 3	8. 3	8. 3	8. 3	8. 3	8. 3	8. 3	8. 3	8. 4	8. 4	8. 4	8. 4
Small red	9. 8	6. 9	9. 8	6. 9	9. 8	6. 9	9. 8	6. 8	9. 8	6. 9	9. 7	6. 9
Yelloweye	11. 1	11. 1	11. 1	11. 1	11. 1	11. 1	11. 1	11. 1	11. 2	0	0	0
Standard lima	5. 6	8. 3	10. 8	8. 9	14. 7	5. 5	21. 2	7. 3	6. 9	3. 8	3. 0	4. 0
Baby lima	5. 6	10. 3	7. 3	6. 3	7. 6	11. 8	11. 1	12. 9	5. 1	13. 2	4. 3	4. 5
Blackeye, California	. 7	22. 5	. 8	9. 1	13. 2	1. 7	4. 8	30. 4	11. 2	. 6	. 5	4. 5
Garbanzo	8. 2	8. 1	9. 1	8. 6	9. 6	7. 6	10. 1	9. 6	7. 1	7. 0	7. 5	7. 5
All classes	9. 2	9. 8	8. 4	7. 5	11. 4	7. 2	11. 8	9. 7	7. 0	6. 7	5. 1	6. 2
Peas: Alaska, other smooth green	9. 0	9. 0	9. 6	8. 3	9. 1	8. 6	9. 2	8. 2	9. 0	6. 1	7. 8	6. 1

TABLE 41.—*Wholesalers: Percentage distribution of beans and peas sold by volume, by months, 1948 and 1949*

Class	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	8.6	8.2	10.1	8.4	9.6	7.9	8.8	8.6	8.2	8.2	6.7	6.7
Great northern	7.2	8.9	8.9	8.8	8.5	8.4	8.6	8.9	8.2	8.1	8.1	7.4
Small white	7.5	7.5	7.5	7.5	10.2	13.1	7.5	7.5	7.5	7.5	7.5	9.2
White marrow	8.8	8.7	11.6	8.7	8.8	18.4	8.7	8.7	3.9	3.9	4.9	4.9
Pinto	2.2	5.4	7.2	6.4	2.7	12.4	1.9	11.9	3.4	3.6	12.4	30.5
Red kidney	9.1	9.1	9.5	9.0	11.0	11.6	8.5	8.4	6.4	5.8	5.8	5.8
Pink	8.3	8.4	8.3	8.4	8.3	8.3	8.3	8.3	8.4	8.4	8.3	8.3
Small red	9.8	6.9	9.8	6.8	9.8	6.9	9.7	6.9	9.8	6.9	9.8	6.9
Yelloweye	11.1	11.2	11.1	11.1	11.1	11.1	11.1	11.1	11.1	0	0	0
Standard lima	8.5	8.5	10.6	7.4	10.9	8.8	8.2	8.1	8.0	8.6	6.3	6.1
Baby lima	7.8	10.2	10.4	7.7	11.3	8.2	10.5	7.5	7.3	6.4	6.2	6.5
Blackeye, California	6.8	5.4	8.2	6.1	14.6	20.2	8.9	6.1	7.5	5.4	4.0	6.8
Garbanzo	8.2	8.6	9.2	9.2	8.9	7.3	8.9	8.3	7.9	8.1	7.9	7.5
All classes	7.8	8.6	9.6	8.3	9.4	8.9	8.6	8.6	7.8	7.4	7.2	7.8
Peas: Alaska, other smooth green	8.9	8.8	9.3	8.8	8.7	9.1	8.9	8.8	8.3	6.7	6.9	6.8

TABLE 42.—*Percentage distribution of marketings of 100-pound bags of great northern beans, by agencies, by months, 1948 and 1949*

Agency	Percentage of crop year total, 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Elevator:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Receipts	65. 9	32. 0	1. 3	0. 4	0. 0	0. 0	0. 1	0. 1	0. 0	0. 0	0. 0	0. 2
Purchases	33. 0	26. 0	10. 5	6. 7	7. 9	3. 7	4. 5	3. 3	2. 2	1. 3	. 5	. 4
Sales	11. 7	25. 2	13. 1	8. 0	6. 2	7. 7	8. 5	4. 4	5. 4	4. 4	3. 5	1. 9
Dealer:												
Purchases	14. 7	12. 3	8. 0	5. 6	8. 6	5. 3	14. 1	9. 1	11. 1	5. 2	1. 3	4. 7
Sales	14. 7	11. 9	7. 9	5. 6	8. 8	5. 3	14. 0	9. 4	11. 5	5. 0	1. 4	4. 5
Wholesaler:												
Purchases	8. 7	8. 5	9. 0	8. 3	9. 4	8. 2	8. 4	8. 4	8. 2	7. 2	7. 7	8. 0
Sales	7. 2	8. 9	8. 9	8. 8	8. 5	8. 4	8. 6	8. 9	8. 2	8. 1	8. 1	7. 4
Purchases [1]	14. 2	11. 0	13. 0	8. 6	9. 2	10. 1	8. 8	10. 2	6. 4	3. 2	2. 1	3. 2
Sales [1]	13. 7	11. 0	13. 0	8. 6	9. 5	10. 1	8. 8	9. 7	7. 1	3. 2	2. 5	2. 8
	1949 [2]											
Elevator:												
Receipts	34. 4	29. 7	8. 4	7. 4	9. 4	4. 4	6. 3	-------	-------	-------	-------	-------
Purchases	34. 4	29. 7	8. 4	7. 4	9. 4	4. 4	6. 3	-------	-------	-------	-------	-------
Sales	24. 3	29. 5	11. 5	9. 0	9. 6	8. 6	7. 5	-------	-------	-------	-------	-------

[1] Expressed in terms of percentage of purchase sales of consumer-size packages rather than 100-pound bags.
[2] Seven months only.

TABLE 43.—*Percentage distribution of marketings of 100-pound bags of pinto beans, by agencies and by months, 1948 and 1949*

Agency	Percentage of crop year total, 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Elevator:												
Receipts	61. 7	7. 3	2. 0	1. 5	1. 3	0. 6	0. 2	0. 3	0. 1	0. 1	0. 1	24. 8
Purchases	32. 7	21. 5	7. 4	2. 5	3. 4	3. 9	2. 3	4. 2	1. 9	3. 6	. 2	16. 4
Sales	30. 7	17. 0	8. 7	3. 6	6. 1	2. 2	2. 1	2. 0	4. 5	. 5	. 7	21. 9
Dealer:												
Purchases	13. 7	20. 6	16. 8	7. 5	5. 8	6. 8	6. 2	10. 0	7. 9	3. 3	1. 0	. 4
Sales	14. 8	18. 7	13. 4	6. 5	10. 7	6. 4	7. 1	9. 3	8. 3	3. 0	1. 2	. 6
Wholesaler:												
Purchases	2. 3	18. 8	2. 2	2. 2	2. 3	11. 5	1. 9	10. 6	3. 8	4. 1	11. 7	28. 6
Sales	2. 2	5. 4	7. 2	6. 4	2. 7	12. 4	1. 9	11. 9	3. 4	3. 6	12. 4	30. 5
Purchases [1]	4. 2	8. 6	2. 9	6. 0	14. 1	7. 9	7. 3	7. 9	6. 0	12. 3	13. 6	9. 2
Sales [1]	4. 2	8. 6	2. 9	6. 0	14. 1	7. 9	7. 3	7. 9	6. 0	12. 3	13. 6	9. 2
	Percentage of crop year total, 1949 [2]											
Elevator:												
Receipts	88. 5	9. 0	0. 7	0. 3	0. 3	0. 8	0. 4					
Purchases	46. 0	19. 8	6. 6	3. 3	9. 1	8. 4	6. 8					
Sales	45. 3	7. 5	5. 2	7. 3	14. 8	14. 3	5. 6					

[1] Expressed in terms of consumer-size packages rather than 100-pound bags.
[2] Seven months only.

TABLE 44.—*Percentage distribution of marketings of 100-pound bags of standard lima beans, by agencies, by months 1948 and 1949*

Agency	Percentage of crop year total, 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Elevator:												
Receipts	27. 5	65. 2	5. 9	0	0	0	0	0	0	0	0	1. 4
Purchases	8. 1	41. 6	50. 3	0	0	0	0	0	0	0	0	0
Sales	8. 1	41. 6	50. 3	0	0	0	0	0	0	0	0	0
Dealer:												
Purchases	25. 6	29. 3	25. 7	12. 9	1. 8	1. 9	1. 4	. 5	. 9	0	0	0
Sales	29. 1	28. 6	26. 6	10. 6	1. 3	. 9	1. 1	1. 0	. 5	. 1	. 1	. 1
Wholesaler:												
Purchases	5. 6	8. 4	10. 9	8. 9	14. 8	5. 5	21. 3	7. 4	6. 9	3. 3	3. 0	4. 0
Sales	8. 5	8. 5	10. 6	7. 4	10. 9	8. 8	8. 2	8. 1	8. 0	8. 6	6. 3	6. 1
Purchases [1]	11. 3	7. 7	7. 8	11. 2	9. 3	9. 7	6. 2	8. 9	7. 8	7. 4	5. 0	7. 7
Sales [1]	11. 3	7. 6	7. 8	11. 2	9. 3	9. 7	6. 2	8. 9	7. 8	7. 4	5. 1	7. 7
	1949 [2]											
Elevator:												
Receipts	48. 0	46. 8	5. 2	0	0	0	0					
Purchases	19. 5	45. 3	35. 2	0	0	0	0					
Sales	19. 5	45. 3	35. 2	0	0	0	0					

[1] Expressed in terms of consumer-size packages rather than 100-pound bags.
[2] Seven months only.

TABLE 45.—*Percentage distribution of marketings of 100-pound bags of red kidney beans, by agencies, by months, 1948 and 1949*

Agency	Percentage of crop year total, 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Elevator:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Receipts	6.9	17.8	14.2	13.1	15.0	7.5	4.2	11.7	6.2	2.2	0.4	0.8
Purchases	8.7	22.8	19.4	5.4	15.1	9.2	5.5	4.2	5.5	2.9	.4	.9
Sales	8.3	16.0	16.8	1.6	13.8	7.9	14.4	8.3	7.3	5.0	0	.6
Dealer:												
Purchases	14.8	4.9	22.2	24.6	29.5	2.5	1.5	0	0	0	0	0
Sales	15.1	6.4	22.2	23.2	27.6	2.6	1.7	.4	.1	.2	.2	.3
Wholesaler:												
Purchases	8.1	7.7	8.4	6.1	11.5	6.3	15.9	7.1	4.6	16.1	4.1	4.1
Sales	9.1	9.1	9.5	9.0	11.0	11.6	8.5	8.4	6.4	5.8	5.8	5.8
Purchases [1]	12.0	9.3	8.9	9.5	9.9	8.5	8.0	8.9	5.6	6.8	6.7	5.9
Sales [1]	12.0	9.3	8.9	9.5	9.9	8.5	8.0	8.9	5.6	6.8	6.7	5.9
	1949 [2]											
Elevator:												
Receipts	2.6	34.0	22.2	11.9	18.0	3.8	7.5					
Purchases	3.2	43.6	22.9	14.4	1.8	4.4	9.7					
Sales	3.8	22.7	12.9	24.1	8.6	11.6	16.3					

[1] Expressed in terms of consumer-size packages rather than 100-pound bags.
[2] Seven months only.

TABLE 46.—*Percentage distribution of marketings of 100-pound bags of pea beans, by agencies, by months 1948 and 1949*

Agency	Percentage of crop year total, 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Elevator:												
Receipts	28.2	15.4	8.6	4.9	5.6	6.3	2.6	7.2	11.9	6.6	2.0	0.7
Purchases	29.3	16.7	9.6	5.8	6.1	5.8	2.9	7.4	6.4	7.0	2.2	.8
Dealer: Sales	17.3	13.4	13.4	10.5	8.3	7.7	6.2	6.9	3.1	4.1	4.2	4.9
Wholesaler:												
Purchases	21.0	8.3	7.7	6.2	13.9	5.8	8.4	6.3	6.2	6.0	5.1	5.1
Sales	8.6	8.2	10.1	8.4	9.6	7.9	8.8	8.6	8.2	8.2	6.7	6.7
Purchases [1]	14.8	13.8	8.6	6.4	8.4	9.5	8.8	6.9	6.4	5.4	5.5	5.5
Sales [1]	14.7	13.7	9.1	6.4	7.7	9.1	9.3	7.2	6.4	5.4	5.5	5.5
	1949 [2]											
Elevator:												
Receipts	26.1	25.7	12.6	9.9	10.7	7.4	7.6	-------	-------	-------	-------	-------
Purchases	27.3	17.3	10.7	11.9	9.3	10.6	12.9	-------	-------	-------	-------	-------

[1] Expressed in terms of consumer-size packages rather than 100-pound bags.
[2] Seven months only.

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TABLE 47.—*Percentage distribution of marketings of 100-pound bags of Alaska and other smooth green peas, by agencies, by months, 1948 and 1949*

Agency	Percentage of crop year total, 1948											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Elevator:												
Receipts	24. 0	1. 4	9. 3	5. 7	4. 1	1. 7	7. 0	3. 6	0	43. 2	0	0
Purchases	1. 6	4. 2	23. 0	14. 1	9. 7	3. 2	15. 3	28. 9	0	0	0	0
Sales	0	0	0	0	10. 7	10. 7	6. 3	31. 7	1. 7	14. 2	22. 9	1. 8
Dealer:												
Purchases	0	. 5	0	0	0	39. 8	29. 6	0	29. 6	0	0	. 5
Sales	0	. 5	0	0	0	39. 8	29. 6	0	29. 6	0	0	. 5
Wholesalers:												
Purchases	9. 0	9. 0	9. 6	8. 3	9. 1	8. 6	9. 2	8. 2	9. 0	6. 1	7. 8	6. 1
Sales	8. 9	8. 8	9. 3	8. 8	8. 7	9. 1	8. 9	8. 8	8. 3	6. 7	6. 9	6. 8
Purchases [1]	8. 4	9. 6	10. 2	8. 9	10. 0	9. 2	8. 2	8. 6	8. 4	6. 5	6. 0	6. 0
Sales [1]	8. 4	9. 7	9. 6	9. 4	9. 5	9. 0	8. 4	8. 4	8. 4	6. 9	6. 3	6. 0
	1949 [2]											
Elevator:												
Receipts	94. 6	2. 6	0. 5	1. 1	0. 3	0. 3	0. 6	-------	-------	-------	-------	-------
Purchases	30. 3	29. 8	11. 2	16. 2	2. 5	2. 0	8. 0	-------	-------	-------	-------	-------
Sales	10. 9	37. 9	15. 4	5. 9	11. 1	12. 8	6. 0	-------	-------	-------	-------	-------

[1] Expressed in terms of consumer-size packages rather than 100-pound bags.
[2] Seven months only.

TABLE 48.—*Bean and pea elevators: Percentage distribution of establishments transporting beans and peas to elevators, by bag or bulk*

Item	Establishments transporting	
	Beans	Peas
Reporting	*Number* 116	*Number* 18
	Percentage of all reporting [1]	
Delivered to elevator in bags furnished by:		
Elevators	*Percent* 22.6	*Percent* 16.3
Growers	29.7	31.5
Total	52.3	47.8
Bulk	47.7	52.2

[1] Distributed in proportion to the percentage of all beans delivered to the elevator in each form. See Appendix for discussion of methods used.

TABLE 49.—*Bean and pea elevators: Percentage distribution of average and maximum distance groupings of transportation to elevators*

Item	Establishments transporting—	
	Beans	Peas
Average distance reporting [1]	*Number* 113	*Number* 18
	Percentage of all reporting	
Under 10 miles	*Percent* 66. 3	*Percent* 61. 1
10 to 19 miles	29. 2	33. 3
20 to 29 miles	2. 7	0
30 miles and over	1. 8	5. 6
Total	100. 0	100. 0
Maximum distance reporting [2]	*Number* 113	*Number* 18
	Percentage of all reporting	
Under 10 miles	*Percent* 16. 8	*Percent* 22. 2
10 to 19 miles	48. 7	55. 5
20 to 29 miles	14. 2	16. 7
30 to 49 miles	11. 5	0
50 miles and over	8. 8	5. 6
Total	100. 0	100. 0

[1] The median average distance beans are transported is 6 miles; peas, 7.5 miles.
[2] The median maximum distance beans are transported is 15 miles; peas, 10 miles.

TABLE 50.—*Bean and pea elevators: Percentage distribution of methods of sale*

Item	Establishments selling—	
	Beans	Peas
Reporting	*Number* 66	*Number* 15
	Percentage of all reporting [1]	
F. o. b. car, elevator shipping point	*Percent* 86. 3	*Percent* 60. 0
Delivered to warehouses of dealers, canners, and others	9. 7	26. 1
Delivered shipside	2. 8	7. 3
Others	1. 2	6. 6
Total	100. 0	100. 0

[1] Distributed in proportion to the total percentage of beans and peas sold under each method followed. See Appendix for discussion of methods used.

TABLE 51.—*Bean and pea elevators: Number reporting and charges per 100-pound bag of beans for custom processing by type of charge and by specified areas*

Type of charge	California		Colorado, Nebraska, and southern Idaho		Michigan and New York		All areas	
	Reporting	Charge (median)	Reporting	Charge (median)	Reporting	Charge (median)	Reporting	Charge (median)
Processing charge:	*Number*	*Dollars*	*Number*	*Dollars*	*Number*	*Dollars*	*Number*	*Dollars*
Drying				[1]	5	0.28	6	0.27
Fumigating	13	0.08					13	.08
Cleaning	4	.16	22	0.20	30	.05	56	.11
Destoning		[1]		[1]		[1]	3	.20
Picking	10	.41		[1]	7	.08	18	.28
Polishing				[1]	2	.14	3	.25
Bagging	4	.03	8	.10	3	.05	15	.09
Bags	18	.27	21	.31	6	.25	45	.28

[1] Insufficient data secured.

TABLE 52.—*Bean and pea elevators: Percentage spread between cost and selling price per 100-pound bag of beans and peas, by classes and by principal producing areas, 1948 and 1949*

Item	Percentage spread based on crop year average—			
	Cost		Selling price	
	1948	1949	1948	1949
California:				
Beans:	*Percent*	*Percent*	*Percent*	*Percent*
Small white	3.9	3.6	3.8	3.5
Standard lima	.6	1.0	.6	1.0
Baby lima	2.8	7.5	2.7	7.0
Blackeye, California	.6	1.7	.5	1.6
Colorado, Nebraska, southern Idaho:				
Beans:				
Great northern	11.4	14.8	10.3	12.9
Pinto	6.6	11.1	6.2	10.0
Small red	13.2	16.9	11.7	14.5
Michigan, New York:				
Beans:				
Pea and medium white	16.2	16.0	13.9	13.8
White marrow	12.4	15.1	11.0	13.1
Red kidney	14.9	14.3	12.9	12.5
Yelloweye	8.3	11.6	7.7	10.4
All areas:				
Beans:				
Pea and medium white	16.2	16.0	13.9	13.8
Great northern	11.4	14.8	10.3	12.9
Small white	3.9	3.6	3.8	3.5
White marrow	12.4	15.1	11.0	13.1
Pinto	6.6	11.1	6.2	10.0
Red kidney	14.9	14.3	12.9	12.5
Small red	13.2	16.9	11.7	14.5
Yelloweye	8.3	11.6	7.7	10.4
Standard lima	.6	1.0	.6	1.0
Baby lima	2.8	7.5	2.7	7.0
Blackeye, California	.6	1.7	.5	1.6
Washington, northern Idaho: Peas: Alaska other smooth green	15.2	10.6	13.2	9.6
All areas: Peas: Alaska other smooth green	15.2	10.6	13.2	9.6

TABLE 53.—*Bean and pea elevators: Average and actual gross returns from handling and sale of beans, by source of returns*

Source of returns	Reporting	Gross returns		
		Average [1]		Actual [2]
		Value	Percentage of total	
	Number	*Dollars*	*Percent*	*Dollars*
Sales for food [1]	81	252, 291	85. 4	323, 028
Sales to growers for seed	157	14, 113	4. 8	25, 750
Sales of culls for food, etc., including own use	47	1, 821	. 6	4, 030
Custom processing	51	10, 446	3. 5	21, 302
Custom storing	51	4, 377	1. 5	8, 926
Sale of original bags	18	2, 183	. 7	12, 610
Others	16	10, 358	3. 5	67, 330
Total		295, 589	100. 0	463, 876

[1] Average gross returns are the averages for the industry as a whole.
[2] Actual gross returns are averages for firms reporting income from each source.

TABLE 54.—*Bean and pea elevators: Average and actual gross returns from handling and sale of peas, by source of returns*

Source of returns	Reporting	Gross returns		
		Average [1]		Actual [2]
		Value	Percentage of total	
	Number	*Dollars*	*Percent*	*Dollars*
Sales for food [1]	9	138, 765	89. 8	200, 438
Sales to growers for seed	4	2, 817	1. 8	9, 155
Sales of culls for food, etc., including own use	7	5, 611	3. 6	10, 421
Custom processing	5	557	. 4	1, 449
Custom storing	5	1, 566	1. 0	4, 072
Sale of original bags	2	31	[3]	200
Other	1	5, 284	3. 4	68, 691
Total		154, 631	100. 0	294, 426

[1] Average gross returns are the averages for the industry as a whole.
[2] Actual gross returns are averages for those firms reporting income from each source.
[3] Less than 0.05 percent.

TABLE 55.—*Bean and pea elevators: Percentage disposition of beans and peas marketed for human consumption, by class and by type of buyer, 1948*

Class	Percentage of production of all classes	Percentage of total sales by type of buyer [1]								
		Dealer	Canner	Wholesaler	Packager	Exporter	Government	Institution	Growers (seed)	Others
Beans:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	25.0	10.9	10.3	56.4	5.8	0.4	11.9	1.4	2.3	0.6
Great northern	18.4	44.6	3.1	20.4	2.8	4.6	8.4	2.7	8.0	5.4
Small white	3.4	35.2	18.2	13.3	4.7	0	14.2	0	7.9	6.5
White marrow	.5	1.7	8.3	48.3	36.7	0	0	0	5.0	0
White kidney	.1	0	8.3	45.0	1.7	10.0	0	0	1.7	33.3
Pinto	17.7	51.1	1.4	17.5	5.2	0	3.0	1.9	3.1	16.8
Red kidney	8.1	.3	29.7	28.6	4.4	12.0	11.9	2.9	3.8	6.4
Pink	3.0	26.0	0	31.3	13.8	0	7.5	0	.8	20.6
Small red	2.6	43.0	4.4	26.4	2.9	7.1	6.2	0	4.1	5.9
Cranberry	1.5	21.1	9.1	41.4	9.1	0	13.4	0	0	5.9
Yelloweye	.7	0	0	100.0	0	0	0	0	0	0
Standard lima	6.4	52.7	2.9	15.4	19.9	.5	0	0	2.7	5.9
Baby lima	5.7	47.0	1.5	16.6	13.8	0	0	0	13.0	8.1
Blackeye, California	3.6	66.0	0	24.4	0	0	0	0	1.8	7.2
Garbanzo	.1	0	0	35.0	0	0	0	0	0	65.0
Other	3.2	100.0	0	0	0	0	0	0	0	0
All classes [2]	100.0	35.1	7.0	29.8	6.3	2.1	7.1	1.4	4.3	6.9
Peas:										
Alaska other smooth green	63.6	10.5	0	10.8	9.7	2.8	56.5	0	3.2	6.5
White Canada, first and best, other white and yellow seeded	14.5	29.9	0	15.6	3.9	1.7	36.2	0	5.5	7.2
Other	21.9	50.0	0	0	0	0	0	0	50.0	0
All classes [2]	100.0	22.0	0	9.2	6.7	1.8	41.2	0	13.8	5.3

[1] Each answer for each class of bean or pea was distributed in proportion to the percentage of total sales of this class of bean or pea which was sold to each type of buyer.

[2] Each class of bean or pea was weighted for importance (according to 1948–49 United States production) to get total lines.

See Appendix for discussion of methods.

TABLE 56.—*Bean and pea elevators: Weighted average price per 100 pounds for beans and peas handled, 1948* [1]

Class	Season beginning Sept. 1948	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Pea and medium white	6. 74	6. 44	6. 65	6. 86	6. 68	6. 94	6. 81	6. 77	6. 65	7. 00	7. 34	7. 37	7. 01
Great northern	7. 02	7. 03	7. 02	7. 21	6. 89	6. 84	6. 81	7. 31	7. 01	6. 77	6. 70	6. 61	7. 62
Small white	7. 40	8. 45	8. 84	8. 00	6. 91	7. 05	7. 25	7. 22	7. 52	6. 99	6. 84	6. 84	6. 80
White marrow	8. 30	8. 87	8. 81	8. 37	8. 39	7. 47	7. 60	7. 86	8. 17	8. 20	8. 49	9. 40	7. 98
Pinto	7. 08	7. 13	7. 12	6. 99	7. 03	7. 18	7. 19	7. 66	7. 61	7. 38	7. 49	7. 79	6. 60
Red kidney	7. 80	8. 84	7. 58	7. 30	6. 83	7. 54	7. 96	7. 91	8. 19	8. 77	9. 21	9. 73	9. 00
Small red	7. 29	7. 32	7. 43	7. 29	7. 08	7. 24	7. 34	7. 00	7. 10	7. 05	7. 16	7. 57	7. 77
Yelloweye	12. 01	12. 17	12. 29	12. 25	11. 58	12. 50	11. 14	-------	10. 72	11. 23	11. 15	11. 86	-------
Standard lima	17. 01	17. 50	17. 00	17. 00	-------	-------	-------	-------	-------	-------	-------	-------	-------
Baby lima	7. 88	-------	-------	-------	-------	8. 00	8. 00	7. 40	8. 00	8. 00	-------	8. 00	6. 00
Blackeye, California	5. 23	-------	-------	-------	-------	2. 65	5. 57	5. 32	4. 59	4. 55	4. 28	5. 01	6. 59
Peas:													
Alaska	5. 16	5. 27	5. 02	4. 99	5. 06	5. 01	5. 34	4. 97	5. 50	-------	-------	-------	-------
White Canada	1. 95	4. 64	2. 87	1. 42	-------	-------	-------	-------	-------	-------	-------	-------	-------

[1] F. o. b. delivered.

TABLE 57.—*Bean and pea elevators: Weighted average price per 100 pounds for beans and peas sold, 1948* [1]

Class	Season beginning Sept. 1948	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Beans:													
Pea and medium white	7. 83	7. 60	7. 70	7. 82	7. 63	7. 75	7. 75	7. 75	7. 79	7. 91	8. 42	7. 83	8. 78
Great northern	7. 79	7. 99	7. 77	7. 76	7. 72	7. 68	7. 79	7. 68	7. 86	7. 83	7. 72	7. 82	7. 80
Small white	7. 69	9. 03	9. 03	8. 22	7. 26	7. 33	7. 53	7. 51	6. 81	7. 29	7. 14	7. 15	7. 10
White marrow	9. 33	9. 61	9. 75	9. 75	-------	8. 75	8. 75	8. 94	11. 75	-------	12. 50	-------	8. 75
Pinto	7. 55	7. 53	7. 00	7. 98	7. 88	8. 15	8. 44	8. 33	8. 42	8. 59	8. 25	8. 36	7. 13
Red kidney	8. 96	10. 24	8. 31	8. 48	7. 71	8. 62	8. 95	8. 88	9. 19	9. 71	10. 25	-------	10. 18
Small red	8. 13	8. 00	8. 50	7. 91	8. 58	7. 83	8. 11	8. 05	7. 57	8. 19	8. 08	8. 22	8. 41
Yelloweye	13. 01	13. 25	13. 29	13. 25	-------	-------	-------	-------	11. 75	12. 30	14. 12	-------	-------
Standard lima	17. 14	17. 60	17. 10	17. 10	-------	-------	-------	-------	-------	-------	-------	-------	-------
Baby lima	8. 10	-------	-------	-------	-------	8. 10	8. 10	8. 10	8. 10	8. 10	8. 10	8. 15	-------
Blackeye, California	5. 26	-------	-------	-------	-------	6. 79	5. 94	4. 70	4. 82	4. 43	4. 32	5. 02	6. 42
Peas: Alaska	5. 40	-------	-------	-------	-------	5. 88	5. 65	5. 06	5. 36	4. 83	2. 87	2. 95	3. 50

[1] F. o. b. shipping point.

TABLE 58.—*Bean and pea elevators: Length of time machinery is in operation for cleaning beans and peas*

Item	Cleaning machinery	
	Beans	Peas
Reporting	*Number* 115	*Number* 17
	Medians	
Machinery in operation:[1]		
Hours per day	10	8
Days per week	6	5½
Days per year	90	60

[1] Medians.

TABLE 59.—*Bean and pea elevators: Percentage using bean and pea polishers*

Item	Polishers	
	Beans	Peas
Reporting	*Number* 85	*Number* 12
	Percentage of all reporting	
Users	*Percent* 43.5	*Percent* 16.7
Nonusers	56.5	83.3
Total	100.0	100.0

TABLE 60.—*Bean and pea elevators: Percentage doing consumer-size packaging of beans and peas, by grades*

Item	Establishments handling—	
	Beans	Peas
	Number	*Number*
Reporting	83	8
	Percentage of all reporting	
	Percent	*Percent*
Elevators doing consumer-size packaging	8. 4	25. 0
Grades packaged:[1]		
U. S. Extra No. 1 or choice hand picked	2. 4	12. 5
U. S. No. 1	4. 8	25. 0
U. S. No. 2	1. 2	12. 5
Elevators not doing consumer-sized packaging	91. 6	75. 0
Total	100. 0	100. 0

[1] Some respondents specified more than one grade.

TABLE 61.—*Brokers, jobbers, and distributors: Establishments handling each class of beans and peas, by area*

Item	Establishments handling—							Total
	I	II	III	V	VI	IX	X	
	Number	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*
Reporting	11	(1)	9	5	20	7	7	59
Beans:								
Pea and medium white	1		6	5	12	6	4	34
Great northern	2		6	5	18	5	6	42
Small white	5		1	3	3	3	3	18
White marrow						5		5
White kidney				1	1	4		6
Pinto	6		6	5	17	4	7	45
Red kidney	5		4	5	10	5	5	34
Pink	6		3	1	3		3	16
Small red	4		6	1	5	2		18
Cranberry	4		4	4	4	5	4	25
Yelloweye				1	9		5	15
Standard lima	2		2	5	2	1	1	13
Baby lima	6		8	5	13	5	7	44
Blackeye, California	6		7	5	12	5	7	42
Garbanzo	3			1	1	5		10
Other	2		2	1		2		7
Peas:								
Alaska other smooth green	2		4	3	4	5	2	20
White Canada, first and best, other white and yellow seeded	1		1		2	2	1	7
Other	1		1	1	1		1	5

[1] Data omitted to avoid disclosure of one firm's operations.

TABLE 62.—*Brokers, jobbers, and distributors: Percentage of distribution of all reporting, by percentage of total volume of business attributable to handling of beans and peas*

Item	Functions	
	Beans	Peas
Reporting	*Number* 41	*Number* 17
	Percentage of all reporting	
	Percent	*Percent*
20 percent and under	48. 7	76. 5
21 to 40 percent	7. 3	23. 5
41 to 60 percent	4. 9	0
61 to 80 percent	9. 8	0
81 percent or over	29. 3	0
Total	100. 0	100. 0

TABLE 63.—*Brokers, jobbers, and distributors: Percentage distribution, by classes of beans shipped in mixed cars*

Number of different classes shipped	Establishments shipping mixed cars			
	Average		Maximum	
	Reporting	Percentage of all reporting	Reporting	Percentage of all reporting
	Number	*Percent*	*Number*	*Percent*
1	----------	4. 0	----------	4. 5
2 to 4	----------	48. 0	----------	22. 7
5 to 7	----------	48. 0	----------	59. 2
8 and over	----------	0	----------	13. 6
Total	25	100. 0	22	100. 0

TABLE 64.—*Brokers, jobbers, and distributors: Percentage distribution by stop-offs in shipment of beans*

Number of stop-offs	Establishments shipping beans			
	Average		Maximum	
	Reporting	Percentage of all reporting	Reporting	Percentage of all reporting
	Number	*Percent*	*Number*	*Percent*
0		41. 6		33. 3
1		37. 5		33. 3
2		12. 5		
3 or over [1]		8. 4		6. 8
3		0		13. 3
4 or over [2]		0		13. 3
Total	24	100. 0	15	100. 0

[1] Includes one respondent who reported 20 stop-offs as average.
[2] Includes one respondent who reported maximum of 30 stop-offs.

TABLE 65.—*Brokers, jobbers and distributors: Weighted average price per 100 pounds for beans and peas purchased, 1948* [1]

Class	Season beginning Sept. 1948	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:													
Pea and medium white	*Dollars* 8.50	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)	*Dollars* (2)
Great northern	7.96	8.41	7.83	7.74	7.87	7.86	7.93	8.27	8.00	7.84	7.67	8.16	7.21
Small white	----------	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Pinto	8.30	7.80	7.88	8.17	7.96	8.42	8.78	8.80	9.04	8.84	8.74	8.34	8.67
Red kidney	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	-------	-------	-------	-------	-------
Pink	8.00	8.00	8.00	8.00	8.00	8.00	-------	-------	-------	-------	-------	-------	-------
Small red	8.32	8.73	8.49	8.14	8.09	8.39	8.07	8.10	8.15	8.25	8.35	8.50	10.10
Standard lima	17.54	18.02	17.67	17.28	16.91	17.06	17.25	17.25	17.25	17.25	-------	-------	-------
Baby lima	8.30	8.80	8.32	8.24	8.29	8.15	8.16	8.25	8.51	8.27	-------	-------	-------
Blackeye	6.22	9.95	8.29	6.84	6.50	6.50	5.29	4.75	5.64	4.47	4.25	4.75	5.25
Peas:													
Alaska, and smooth green	5.78	-------	8.60	-------	-------	-------	6.11	5.55	-------	5.50	-------	-------	6.68
Other (green and yellow split)	6.43	-------	-------	6.80	6.65	6.31	6.23	-------	6.05	-------	-------	-------	-------

[1] F. o. b. shipping point.
[2] Monthly data not shown because of insufficient reports.

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TABLE 66.—*Brokers, jobbers and distributors: Weighted average price per 100 pounds for beans and peas sold, 1948* [1]

Class	Season beginning Sept. 1948	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:													
Pea and medium white	*Dollars* 8.63	*Dollars* 8.54	*Dollars* 8.65	*Dollars* 8.58	*Dollars* 8.54	*Dollars* 8.55	*Dollars* 8.64	*Dollars* 8.58	*Dollars* 8 67	*Dollars* 8.69	*Dollars* 8.82	*Dollars* 8.75	*Dollars* 9.12
Great northern	8.18	8.57	8.07	7.91	8.02	8.32	8.24	8.40	8.22	8.04	7.81	8.41	7.36
Small white	8.60	-------	8.45	-------	-------	9.35	-------	8.42	-------	-------	-------	-------	-------
Pinto	8.71	8.35	8.17	8.59	8.49	8.73	9.17	9.08	9.39	9.10	9.30	9.26	9.14
Red kidney [2]	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Pink	8.10	8.10	8.10	8.10	8.10	8.10	-------	-------	-------	-------	-------	-------	-------
Small red	8.50	8.88	8.61	8.28	8.20	8.55	8.18	8.19	8.72	8.30	8.45	8.50	10.40
Cranberry	15.33	15.20	15.25	15.73	15.91	15.66	15.67	15.39	14.51	14.73	12.66	13.37	13.69
Yelloweye	15.19	15.00	15.25	15.91	15.91	15.66	15.61	14.34	14.11	12.56	2.66	13.37	13.69
Standard lima	18.00	18.44	18.28	17.63	17.14	17.67	17.73	17.76	17.72	17.70	19.70	19.60	19.60
Baby lima	8.46	9.13	8.45	8.38	8.49	8.37	8.29	8.36	8.68	8.46	9.85	9.85	-------
Blackeye	6.63	10.20	8.80	7.54	7.65	6.77	5.76	5.19	5.06	4.72	4.60	5.01	5.54
Peas:													
Alaska, and smooth green	5.94	-------	8.85	-------	-------	-------	6.38	5.59	-------	5.64	-------	-------	6.97
Other (green and yellow split)	6.69	-------	-------	7.03	6.89	6.89	6.58	6.25	6.24	-------	-------	-------	-------

[1] F. o. b. shipping point.
[2] Data not shown because of insufficient reports.

TABLE 67.—*Brokers, jobbers, and distributors: Percentage spread between cost and selling price per 100-pound bag of beans and peas, by classes*

Class	Cost	Selling Price
	Percent	*Percent*
Beans:		
Pea and medium white	1. 5	1. 5
Great northern	2. 8	2. 7
Pinto	4. 9	4. 7
Red kidney	6. 2	5. 9
Pink	1. 3	1. 2
Small red	2. 2	2. 1
Standard lima	2. 6	2. 6
Baby lima	2. 0	1. 9
Blackeye	6. 6	6. 2
Peas:		
Alaska	2. 8	2. 7
White Canada	4. 0	3. 9

TABLE 68.—*Brokers, jobbers, and distributors: Percentage distribution of establishments using specified sales methods*

Item	Establishments selling—	
	Beans	Peas
	Number	*Number*
Reporting	48	21
	Percentage of all reporting [1]	
	Percent	*Percent*
F. o. b. car, dealer's shipping point	46. 2	48. 1
Delivered to purchaser's warehouse	16. 3	22. 4
Delivered shipside	. 3	0
Consigned to broker or other handler	6. 4	8. 1
Other	30. 8	21. 4
Total	100. 0	100. 0

[1] Distributed in proportion to the percentage of all beans or peas which were sold by each method. See Appendix for discussion of methods used.

TABLE 69.—*Canners: Weighted average price per 100 pounds for beans purchased, 1948.*

Class	Season beginning Sept. 1948	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Beans:	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Pea and medium white	8.16	-------	8.28	7.98	7.55	7.87	7.96	8.32	9.25	9.42	7.81	12.61	8.87
Great northern	8.77	8.49	-------	9.85	-------	8.80	-------	-------	9.20	9.58	9.01	-------	-------
White kidney	12.80	10.18	14.59	14.50	-------	15.13	14.76	-------	14.50	-------	12.84	-------	10.65
Pinto	7.40	-------	-------	7.54	-------	7.30	7.30	-------	-------	-------	-------	-------	-------
Red kidney	9.50	9.38	9.14	12.63	9.25	9.76	8.79	8.30	8.48	9.50	8.45	-------	11.41
Pink	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	-------	9.10	9.10	9.13
Small red	7.34	7.39	7.46	7.51	7.11	7.52	7.64	7.11	7.31	7.15	7.38	7.10	7.35
Yelloweye	11.50	(1)	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Standard lima	15.95	18.50	18.25	17.95	19.18	-------	-------	19.00	15.08	14.45	14.70	-------	-------
Baby lima	9.46	10.00	8.77	10.48	10.22	10.00	10.00	8.73	10.00	10.00	9.60	10.00	10.00
Garbanzo	14.10	13.25	-------	-------	15.31	15.00	14.84	15.00	15.00	15.00	15.00	15.00	15.18

[1] Monthly data not available.

TABLE 70.—*Bean canners: Percentage of damage and foreign matter in beans purchased and length of time beans are held before canning*

Item	Average loss	Item	Establishments handling beans
	Percent	Reporting	*Number* 38
Type of loss:			Percentage of all reporting
Damage [1]	1.14		
Foreign matter [2]	.63		
		Length of time held:	*Percent*
		7 days or less	21.0
		8 to 14 days	13.2
		15 to 21 days	23.7
		22 to 31 days	23.7
		Over 31 days	18.4
Total [3]	1.77	Total	100.0

[1] Includes loss from splits.
[2] Includes stones.
[3] Twenty-four firms reported percentage loss or waste.

TABLE 71.—*Bean canners: Average price per case received, by size of cans, 1948*

Size of can	Reporting	Weight of can	Cans in a case	Average price received for 1948 pack	
				Mean	Median
	Number	*Ounces*	*Number*	*Dollars*	*Dollars*
Number 300	12	15½	48	5. 47	3. 90
Number 2½	8	21	24	3. 29	3. 12
Number 2	12	21	24	2. 78	2. 38
Number 1 picnic	8	10½	48	5. 25	4. 32
Number 10	9	110	6	5. 05	4. 88
Other [1]	5			4. 13	4. 10

[1] Includes a variety of heterogeneous packs.

TABLE 72.—*Wholesalers: Percentage distribution of ownership by type of organization*

Ownership	Type of organization			
	Individual proprietor	Partnership	Corporation	Total
	Number	*Number*	*Number*	*Number*
Reporting	12	13	37	62
	Percentage of all reporting			
	Percent	*Percent*	*Percent*	*Percent*
Owned by some other purchasing organization:				
Corporate chain	0	8. 7	13. 5	9. 7
Retailer-owned	0	0	10. 8	6. 4
Not owned by any other organization	100. 0	91. 3	75. 7	83. 9
Total	100. 0	100. 0	100. 0	100. 0

TABLE 73.—*Wholesalers: Percentage distribution of business attributable to handling of beans and peas by establishments by total volume*

Item	Establishments handling—	
	Beans	Peas
Reporting	*Number* 39	*Number* 21
	Percentage of all reporting	
Volume:		
Less than 2 percent	*Percent* 53. 9	*Percent* 85. 7
2 to 4 percent	33. 3	9. 5
5 percent or over	12. 8	4. 8
Total	100. 0	100. 0

TABLE 74.—*Wholesalers: Percentage spread between cost and selling price of beans and peas, by type of container by classes*

Class	Percentage spread based on—			
	Cost		Selling price	
	100-pound bag	Case [1]	100-pound bag	Case [1]
Beans:	*Percent*	*Percent*	*Percent*	*Percent*
Pea and medium white	8. 1	7. 2	7. 5	6. 8
Great northern	10. 0	[2] 17. 9	9. 2	[2] 15. 2
Small white	9. 0	10. 0	8. 3	9. 1
White marrow	[2] 21. 8	5. 4	[2] 17. 9	5. 2
Pinto	13. 3	9. 6	11. 8	8. 8
Red kidney	5. 3	9. 4	5. 0	8. 6
Pink	8. 8	7. 6	8. 1	7 0
Small red	11. 7	10. 7	10. 5	9. 7
Yelloweye	[2] 25. 0	----------	[2] 20. 0	----------
Standard lima	13. 1	8. 2	11. 6	7. 6
Baby lima	5. 6	8. 9	5. 3	8. 2
Blackeye, California	[2] 27. 1	6. 1	[2] 21. 3	5. 8
Garbanzo	7. 9	9. 9	7. 4	9. 0
Peas: Alaska, other smooth green	12. 2	8. 4	10. 9	7. 8

[1] Cases of 24 one-pound packages.
[2] Based on a small number of reports and therefore not necessarily typical.

TABLE 75.—*Wholesalers: Percentage distribution of sales by type of container, by establishments*

Item	Establishments handling—	
	Beans	Peas
Reporting [1]	*Number* 62	*Number* 36
	Percentage of all reporting	
Containers:		
In 100-pound bags	*Percent* 75. 8	*Percent* 52. 8
In consumer size packages	72. 5	66. 7
Cellophane bags	41. 9	25. 0
Cardboard packages	12. 9	16. 6
Window-front packages	14. 5	19. 4
Other [2]	3. 2	5. 5
Not classified	8. 1	8. 3

[1] Some respondents specified both 100-pound bags and consumer-size packages; some specified more than one kind of consumer-size package.
[2] Includes 10- and 25-pound packages.

TABLE 76.—*Wholesalers: Percentage distribution of establishments by length of time for holding beans and peas before sale*

Item	Establishments handling—	
	Beans	Peas
Reporting	*Number* 61	*Number* 35
	Percentage of all reporting	
Time held:		
Less than 1 month	*Percent* 36. 1	*Percent* 34. 3
1 month to less than 2 months	41. 0	45. 7
2 months to less than 3 months	13. 1	5. 7
3 months and over	9. 8	14. 3
Total	100. 0	100. 0

TABLE 77.—*Wholesalers: Percentage distribution of establishments by methods of pricing beans and peas to retailers*

Item	Establishments handling—	
	Beans	Peas
Reporting	*Number* 45	*Number* 32
	Percentage of all reporting	
Pricing methods:	*Percent*	*Percent*
Standardized percentage mark-up over cost	66. 7	62. 4
Market price and handling charges	6. 7	9. 4
Cost and competition	17. 8	18. 8
What traffic will bear	4. 4	6. 3
Quick turn-over	4. 4	3. 1
Total	100. 0	100. 0

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