

630.7

I26b

no. 691

cop. 8



UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
AGRICULTURE

5-21

#132

The Relationship Between CENTRAL MARKET EGG REPORTS and PRODUCER PRICES in Selected North Central States

CIRCULATING COPY
AGRICULTURE LIBRARY

NORTH CENTRAL REGIONAL PUBLICATION 132



Agricultural Experiment Stations of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin, and the U.S. Department of Agriculture cooperating.

This publication is a summary report of the research work in egg pricing. Some individual states involved in the research as well as the Agricultural Marketing Service of the United States Department of Agriculture have published additional reports on egg pricing which should be of interest to the reader:

1. Ruttan, V. W. and Laird, W. F., *The Pricing of Indiana Eggs at Country and Terminal Markets*, Indiana Station Bulletin 648, Purdue University, Agricultural Experiment Station, Lafayette, Indiana, 1957.
2. Luckham, W. R., Cray, R. E. and Clayton, P. C., *The Adequacy of Price Quotations at Ohio Terminal Markets in Reflecting True Market Conditions*, Ohio Research Circular 63, Ohio Agricultural Experiment Station, Wooster, Ohio, 1959.
3. Pritchard, N. T. and Hester, O. C., *Pricing Eggs at Wholesale in Chicago and St. Louis*, USDA, Agricultural Marketing Service, Marketing Research Report No. 173.
4. Gerald, J. O. and Pritchard, N. T., *Pricing Eggs at Wholesale in New York City*, USDA, Agricultural Marketing Service, Marketing Research Report No. 210.

630.7
J 166
M 291
29.8
AGX

The research on which this report is based was undertaken as part of the North Central Regional Poultry Marketing Project NCM-14. Funds for this project were made available through the Research and Marketing Act of 1946.

Representatives from the following states and federal agencies participated in this study.

State Agricultural Experiment Station Representatives

- J. R. Roush.....Illinois
- R. L. Kohls.....Indiana
- G. D. Ladd.....Iowa
- J. W. Koudele.....Kansas
- H. E. Larzelere.....Michigan
- Darrell F. Fienup.....Minnesota
- J. D. Miller, L. D. Bender, L. A. Voss.....Missouri
- Ernest Feder.....Nebraska
- F. R. Taylor.....North Dakota
- R. E. Cray, P. C. Clayton.....Ohio
- William Kohlmeyer.....South Dakota
- W. P. Mortenson.....Wisconsin

U. S. Department of Agriculture Representative

- John J. Scanlan.....Farmer Cooperative Service

Administrative Adviser

- H. J. Sloan.....Minnesota

CONTENTS

SCOPE AND METHOD OF STUDY.....	7
RECEIPT AND USE OF CENTRAL MARKET PRICE REPORTS.....	10
RELATIONSHIP BETWEEN PRODUCER PRICES AND CHICAGO QUOTATIONS	13
RELATIONSHIP BETWEEN PRODUCER EGG PRICES AND PRICES REPORTED FROM SEVEN CENTRAL MARKETS.....	23
SHORT-TIME PRICE MOVEMENTS AT COUNTRY POINTS AND CENTRAL MARKETS.....	40
SUMMARY AND CONCLUSIONS.....	46
APPENDIX TABLES	50

THE RELATIONSHIP BETWEEN CENTRAL MARKET EGG REPORTS AND PRODUCER PRICES IN SELECTED NORTH CENTRAL STATES¹

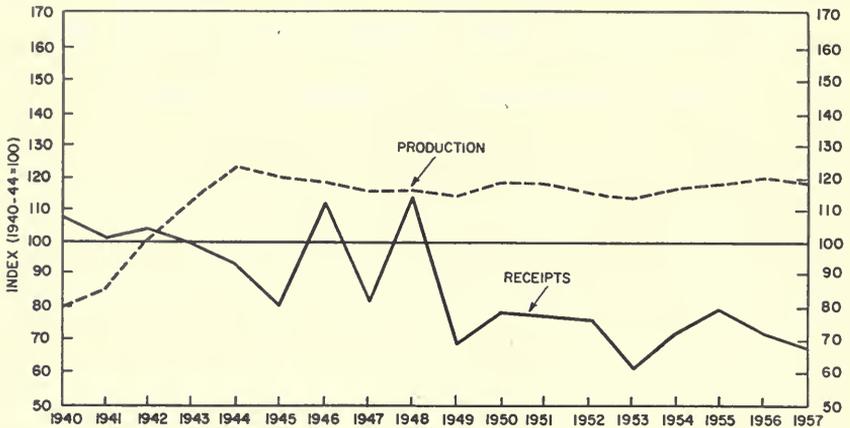
THE NORTH CENTRAL REGION IS THE MAJOR SURPLUS EGG-PRODUCING area in the United States. It produces an annual surplus of about 10.5 billion eggs. Except for those areas incorporating or adjacent to large population centers such as Chicago, Detroit, Cleveland, and St. Louis, most parts of the region are dependent upon outside consuming markets for a large portion of their egg production.

Prior to 1940, the typical movement of surplus eggs was through the larger central markets. Eggs not consumed by the local population were assembled at country points and shipped to wholesale dealers in these markets. Jobbers, dealers, chain stores, and dairies, bargaining with the wholesalers, procured a sufficient quantity of these eggs to supply the needs of the population center associated with the market. The remainder of the eggs were moved into market channels in the east, south, and west.

Prices established through the supply-and-demand forces at work within the central market provided a basis for establishing paying prices at country points servicing the market. Since most country dealers were selling to wholesalers in the central markets, the prices which they paid for eggs could not vary widely from the wholesale buying price at the market. If the country buyers' paying prices were too high relative to the central market price, they chanced a loss when they sold the eggs. If their paying prices were too low, local competitors would buy the producers' eggs and ship them to the central market. Dealers at country points reportedly paid producers the wholesale buying price at the central market less a charge to cover transportation to the market and a margin to cover their costs and services.

Since 1940 major changes have occurred in the marketing system for eggs produced in the North Central Region. Because of an increased demand for higher quality eggs, coupled with increased processing costs at the central markets, many large chain stores and dairies have bypassed the central wholesale markets and established their own country buying stations. They purchase eggs directly from pro-

¹J. R. Roush, of the University of Illinois, was primarily responsible for analyzing the data and preparing this report. R. L. Kohls and V. W. Ruttan of Purdue University; R. E. Cray and P. C. Clayton of Ohio State University; and J. D. Miller and L. A. Voss of the University of Missouri were responsible for collecting the data in their respective states and provided many helpful suggestions which greatly improved the manuscript.



Shell egg receipts in Chicago that originated in the North Central Region, compared with egg production in the region, during the years 1940-1957. The data on the Chicago egg receipts were compiled by the Dairy and Poultry Market News Service of the U.S. Department of Agriculture, the data on egg production in the North Central Region by the Bureau of Agricultural Economics and Agricultural Marketing Service, U.S. Department of Agriculture. (Fig. 1)

ducers in the surrounding area and obtain supplementary supplies from country assemblers. After processing, these eggs bypass the central wholesale markets and move directly into retail channels. Many smaller retail organizations have also bypassed the central wholesale markets and buy eggs that have been processed by dealers at country points.

Market integration has occurred at more than the state or regional level. Improved transportation facilities, especially improved highways and modern refrigerated trucks, have allowed distant firms to buy eggs directly from surplus production areas. Many eastern egg buyers who previously supplemented their local supply of eggs with purchases from midwestern central markets now bypass these markets to obtain supplementary supplies directly from country points in the major surplus areas. This has decreased the volume of eggs that move from the surplus production areas, through the central markets, to destinations in the deficit areas of the country.

Some indication of the effect of market integration on the volume of central market egg receipts is presented in Fig. 1. Chicago is the major central market for eggs produced in the North Central Region. From the period 1940-44 to the period 1953-57, egg production in the region increased 19 percent, while reported Chicago receipts from the region decreased 29 percent. These data do not give the complete

picture of the decline of the Chicago wholesale egg market. Many of the eggs reported as receipts in Chicago have moved through integrated marketing systems. They have bypassed the Chicago wholesale market and have not entered directly into the wholesale price-making forces operating in Chicago.

The recognition of the decline of the central wholesale egg markets has created concern regarding the existing pricing system for eggs. Egg prices established in the central markets are widely disseminated throughout the egg industry. The industry is disturbed because the use of these price reports in pricing eggs at various levels in the marketing channels may be altering prices from those which should prevail under existing supply-and-demand conditions. Particular concern has been raised regarding prices paid producers. The anxiety stems from the idea that a limited number of traders dealing in a small volume of eggs in our major central markets "set" the prices which producers receive for eggs.

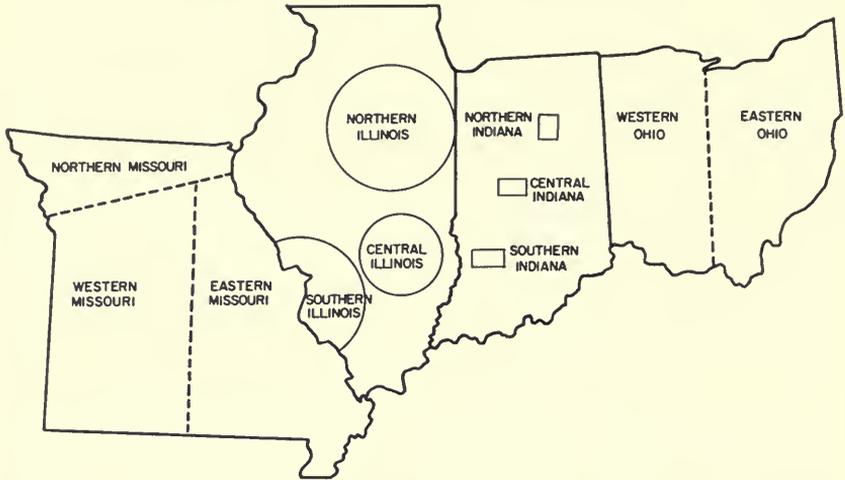
The concern of the industry regarding the pricing of eggs is based on two assumptions:

1. Egg prices reported from central markets do not accurately reflect existing supply and demand conditions for eggs at country points.
2. Prices at which eggs are bought and sold at country points are closely tied to prices reported from the central markets.

If prices paid for eggs at country points are not closely tied to prices reported from the central markets, the concern about the effect of reduced egg volume on prices established and reported from central markets can be alleviated. This report deals with the relationship between prices reported in central markets and prices paid producers for eggs in selected North Central states.

SCOPE AND METHOD OF STUDY

Sixty-nine country dealers cooperated in providing information on pricing eggs at country points in Illinois, Indiana, Missouri, and Ohio. Data were obtained from 22 dealers in three sections of Illinois. One group of eight dealers was located in the southwest quarter of the state, within 55 miles of the St. Louis market. For purposes of discussion, this area will be referred to as southern Illinois (Fig. 2). A second group of five dealers was located in the southeast quarter of the state, within 40 miles of Effingham. This area will be referred to as central Illinois. The third group of nine dealers was located in the



The location of dealers who supplied information for this study. (Fig. 2)

northeast quarter of the state, within 60 miles of Pontiac. This area will be referred to as northern Illinois.

Enumerators in Indiana selected a total of 20 dealers located in three scattered counties in the state. Eight of these dealers were located in a county in northern Indiana, six in a county in central Indiana, and six in a county in southern Indiana (Fig. 2).

Enumerators in Missouri chose a total of 23 dealers widely scattered throughout the state. After the data were collected, the dealers were divided into three groups primarily on the basis of the markets which they said they looked to for pricing information. Seven of them were located in northern Missouri, north of a line extending from Platte City on the west, to Monticello on the east. The dealers south of this line were divided into two groups; seven were located east of Columbia, while nine were located west of Columbia (Fig. 2).

Enumerators in Ohio obtained data from four market agencies scattered throughout the state. These were large cooperative organizations whose pricing practices were believed to have a strong influence on prices paid in their area. Each market was located in a different quarter of the state. Use of Columbus as a dividing point made it possible to compare the two firms in the east with the two firms in the west. It was also possible to compare the two firms south of Columbus with the two firms north of this city.

The volume of eggs handled by the cooperating dealers varied

Table 1.—Distribution of Cooperating Dealers According to Average Weekly Egg Purchases During the Period of Study, by States, 1955

Weekly cases of eggs	Number of dealers ^a				
	Illinois	Indiana	Missouri	Ohio	Total
0- 99.....	4	6	14	0	24
100- 199.....	3	6	5	0	14
200- 299.....	2	0	1	0	3
300- 399.....	5	1	1	0	7
400- 499.....	2	1	1	0	4
500- 999.....	3	1	1	0	5
1000-1999.....	2	1	0	3	6
2000 and over.....	0	1	0	1	2
Total.....	21	17	23	4	65
Median volume.....	347	115	73	1,431	147

^a Volume data were not obtained from 4 dealers.

within the states as well as between states (Table 1). The largest dealers were located in Ohio where the median dealer purchased an average weekly volume of 1,431 cases during the period of study. The smallest dealers were located in Missouri where the median dealer purchased 73 cases per week.

General information was obtained from the dealers about their business and the services they offered. They were asked about their sources of pricing information and how they used this information in establishing prices paid to producers. In addition, data were collected on the daily prices that the cooperating dealers paid to producers for various grades of eggs for three two-week periods during 1955. These periods were April 18 through 30, a period when egg production and quality are normally high and prices are seasonally low; July 25 through August 6, a period of normally declining production, rising prices, and relatively low quality; and October 24 through November 5, a period of normally increasing production, falling prices, and relatively high quality.

To make the pricing data more comparable between dealers, the daily prices paid for various grades of eggs were adjusted so that the price represented mixed-colored eggs delivered to the buyer's place of business in cases furnished by the buyer. For those dealers who purchased Extra Large and Jumbo eggs in addition to Large, the weighted average price for the three grades was used as the Large price. This made these data more comparable with the data for those firms that did not differentiate between Jumbo, Extra Large, and Large eggs but bought them all as Large.

Daily egg prices reported in central markets were obtained from various secondary sources. Prices reported by private agencies were used for the Chicago, New York, and St. Louis markets. Prices reported by the Market News Service of the U. S. Department of Agriculture were used for the Detroit, Cleveland, Cincinnati, and Pittsburgh markets. A detailed description of the reports that were used is presented in Appendix Tables 1 and 2.

RECEIPT AND USE OF CENTRAL MARKET PRICE REPORTS

The prices at which various grades of eggs are bought and sold in the important central markets are reported by various information media. The federal Market News Service releases a daily report of egg prices and related data for each of the markets where its service is available. These mimeographed reports are mailed free of charge to individuals or firms requesting them. Private reporting agencies located in some of the central markets mail daily market reports to firms and individuals on a subscription basis. Many newspapers and radio and television stations located in the central markets and at country points serving the central markets present egg market information obtained from federal or private reporting agencies.

Many of the daily reports issued by the federal Market News offices contain egg supply and pricing information not only for the market in which the office is located, but for other important egg markets as well. For example, individuals or firms obtaining the Daily Egg Report from the Chicago office of the federal Market News Service receive a summary of egg prices and market conditions in St. Louis, New York, Detroit, Cleveland, Pittsburgh, and Columbus as well as the Chicago market. Prices are also reported for several country points. The Chicago office receives this information daily by leased wire from its offices in other markets.

Information on egg price conditions in the major central markets is readily available, and the majority of country egg buyers obtain pricing information from one or more of the central markets. The fact that these dealers take time to listen to radio market reports, pay for private reports, or place their names on the mailing list to receive the federal reports indicates that they find the reports of value in establishing buying and selling prices for eggs.

Central markets from which dealers obtained pricing information

Almost 60 percent of the cooperating dealers in the four states reported obtaining egg pricing information from the Chicago market. Except for Ohio, more firms in each state obtained pricing information from Chicago than from any other single market (Table 2). The Ohio firms were primarily interested in New York pricing information. Only firms in Illinois and Missouri regularly obtained egg market information from St. Louis. The lack of interest in St. Louis prices in Indiana and Ohio undoubtedly is due to the small proportion of the total receipts—less than one-tenth of one percent—that these two states jointly supply to this market. Missouri and Illinois provide more than three-fourths of the St. Louis egg supply.

Illinois firms that reported receiving St. Louis market information were all located in the southern part of the state, while most of the Missouri firms receiving St. Louis pricing information were located in eastern Missouri. Many firms in western Missouri obtained price reports from Kansas City and Springfield, Missouri.

In Table 2, the number of dealers reporting that they obtained information from various markets is shown to be greater than the number of cooperating firms. This difference indicates that some of the firms were obtaining market information from more than one central market. Some dealers said they studied conditions in several markets in evaluating egg price trends.

Price information media

Approximately 57 percent of the cooperating dealers in the four states obtained market information by radio. Except in Missouri,

Table 2.—Number of Dealers Obtaining Egg-Pricing Information From Various Central Markets, by States, 1955

Central market	Number of dealers				Total
	Illinois	Indiana	Missouri	Ohio	
Chicago.....	17	14	9	1	41
New York.....	5	7	2	3	17
St. Louis.....	10	0	7	0	17
Detroit.....	0	1	0	0	1
Cleveland.....	0	0	0	1	1
Cincinnati.....	0	1	0	1	2
Pittsburgh.....	0	0	0	0	0
Other.....	0	1	10	0	11
Dealers reporting ^a	22	20	23	4	69

^a Some dealers received information from more than one central market.

Table 3. — Media by Which Dealers Obtained Egg-Pricing Information, by States, 1955

State	Number of dealers using each medium						
	Radio	Tele- phone	News- paper	Mailed reports	Tele- graph	Other dealers	Dealers reporting ^a
Illinois.....	15	7	3	5	0	2	22
Indiana.....	15	13	6	5	1	11	20
Missouri.....	6	6	16	7	1	1	23
Ohio.....	3	3	1	3	0	0	4
Total.....	39	29	26	20	2	14	69

^a Some dealers received information from more than one medium.

no medium was used more than radio (Table 3). In Missouri newspapers were by far the most important source of market information. More than half of the Missouri firms that looked to newspapers as a source of pricing information were located in the Kansas City area and obtained Kansas City market prices from the Kansas City paper.

More than half of the Indiana dealers interviewed reported obtaining pricing information from other dealers. In some cases they obtained information from their market outlets on prices existing in the market. In others they determined what other buyers in their own local area were paying producers for eggs.

Again in Table 3 the total of firms obtaining information through various media exceeds the number of firms contacted. Many of the firms were relying on more than one medium for pricing information. For example, a dealer might rely on radio to obtain timely information on existing prices in the central markets, but he might also obtain a published report from the market. Although not as timely, the published report provides more detailed information and can also be filed for future reference. A dealer may also get market information over the telephone while filling orders with a wholesaler at a central market. Yet he may still rely on the radio or mail reports to obtain more exact information on prices paid for various grades of eggs at the central market.

Dealers' reported use of price reports

When egg pricing was discussed with the cooperating dealers, an attempt was made to determine the importance of central market price reports in establishing prices paid to producers. Only 16 percent of the cooperating dealers in the four states reported that their prices paid to producers were associated in a fixed manner with definite reports originating in a central market (Table 4). However, some of these

Table 4.—Dealers' Reported Use of Central Market Price Reports in Establishing Prices Paid to Producers, by States, 1955

Nature of use	Number of dealers				Total
	Illinois	Indiana	Missouri	Ohio	
Applied fixed differential to market report.....	6	1	4	0	11
Applied varying differential to market report.....	16	0	6	0	22
Followed market report in only a general way.....	0	11	6	1	18
Made little use of market report....	0	8	7	3	18
Total.....	22	20	23	4	69

same dealers obtained price reports not only from the designated central market but from other markets as well.

About one-fourth of the cooperating dealers in the four states indicated that they followed central market prices in only a general way in establishing prices paid to producers. Most of these firms mentioned competition or prices paid by their outlets as factors altering the relationship between the prices they paid producers and central market price reports.

An additional 26 percent of the dealers contacted in the study reported making very little use of central market price reports in establishing producer prices. Most of these dealers said that the price which they paid producers was a derived price, being based on the price paid by another firm. The other firm was usually the outlet to which they sold eggs. The country dealers deducted costs from selling price in arriving at prices paid producers. Two Indiana dealers reported that their prices paid to producers depended wholly on local competition for eggs. Even though these firms reported little use of central market price reports, the majority did receive price reports from at least one central market.

RELATIONSHIP BETWEEN PRODUCER PRICES AND CHICAGO QUOTATIONS

In analyzing the relationships between prices paid to producers and prices reported in any central market, the author determined the average daily price paid by each dealer, during each two-week period, for each of several grades of eggs. This price could be compared with the average daily price reported in any central market for the comparable grade of eggs during the same period. Or, the average rela-

tionship of the producer price to any central market price report could be determined for a group of dealers.

Since more dealers in the study reported receiving Chicago price reports than those from any other market, the relationship between producer prices and Chicago prices was analyzed. The quotations of a private reporter, which are based largely on spot trading on the Chicago Mercantile Exchange, were used as the Chicago prices. These prices are widely disseminated by radio and newspaper and are accepted and used by most egg dealers as the Chicago market prices.

This analysis was made for A Large, A Medium, and current receipt eggs. Producer to Chicago price relationships were compared between states, between periods, and between grades of eggs. On more limited data, it was also possible to make some comparisons between areas within a state.

Producer prices for eggs relative to the Chicago quotations varied widely among dealers (Table 5). Except in Ohio, the majority of dealers in each state paid producers less than the appropriate Chicago quotations for all grades of eggs. Two-thirds of the observations in Ohio for both A Large and A Medium eggs found the dealer price to producers above the appropriate Chicago quotations. The next highest proportion occurred for current receipt eggs in Indiana, where, on about one-fourth of the observations, dealers were paying producers more than the Chicago quotation for current receipt eggs.

Table 5 shows that the relationship between prices paid producers and Chicago quotations varied between states as well as between grades of eggs. A more complete analysis shows that the relationship also varied between periods and between areas within a state.

A Large eggs

Several dealers contacted in the study were not buying eggs from producers on a graded basis during each enumeration period. Some were buying on a current receipt basis during the spring and shifting to a graded basis during the summer or fall. In the analysis of relationships between the producer price of A Large eggs and the Chicago quotation for the comparable grade, only those dealers were used who bought A Large eggs from producers during each enumeration period.

Variation between states. Ohio was the only state in which dealers' prices to producers for A Large eggs averaged above the appropriate Chicago quotation during the six weeks studied (Table 6). The Ohio firms paid producers the highest price for A Large eggs during each enumeration period and averaged almost three cents a dozen above Chicago during the six-week period. At the other

Table 5. — Prices Paid Producers for Three Grades of Eggs, Expressed as a Differential From the Chicago Quotation for the Comparable Grade of Eggs,^a by States, for Three Two-Week Periods, 1955

Producer premium or discount (cents per dozen)	Illinois			Indiana			Missouri			Ohio		
	Mixed Large	Mixed A Medium	Current receipts	Mixed Large	Mixed A Medium	Current receipts	Mixed Large	Mixed A Medium	Current receipts	Mixed Large	Mixed A Medium	
+10.0 or more.....	0	0	0	0	0	1	0	0	0	1	0	
+9.0 to +9.9.....	0	0	0	0	0	2	0	0	0	0	0	
+8.0 to +8.9.....	0	0	0	0	0	1	0	0	0	0	0	
+7.0 to +7.9.....	0	0	0	0	0	1	0	0	0	0	0	
+6.0 to +6.9.....	0	0	0	0	0	0	0	0	0	1	0	
+5.0 to +5.9.....	0	0	0	0	0	0	0	0	0	2	0	
+4.0 to +4.9.....	0	2	0	1	1	0	0	0	1	1	0	
+3.0 to +3.9.....	0	0	0	0	0	1	0	0	1	0	2	
+2.0 to +2.9.....	2	1	0	1	0	0	0	0	1	0	1	
+1.0 to +1.9.....	2	2	2	1	1	1	0	1	1	2	1	
0.0 to +0.9.....	1	0	0	1	1	0	0	0	0	0	4	
-0.1 to -0.9.....	3	1	4	0	2	2	0	0	0	1	0	
-1.0 to -1.9.....	7	0	2	5	3	2	1	0	3	3	2	
-2.0 to -2.9.....	7	1	3	6	4	3	0	4	8	0	1	
-3.0 to -3.9.....	9	4	5	10	2	5	1	3	8	0	0	
-4.0 to -4.9.....	3	4	6	1	5	3	3	2	19	0	1	
-5.0 to -5.9.....	5	11	4	1	1	1	0	0	10	0	0	
-6.0 to -6.9.....	4	8	0	0	3	2	1	0	8	0	0	
-7.0 to -7.9.....	0	6	0	1	0	2	3	0	4	0	0	
-8.0 to -8.9.....	1	2	0	1	1	0	1	0	0	0	0	
-9.0 to -9.9.....	2	2	0	0	1	0	4	0	1	0	0	
-10.0 or more.....	1	1	0	0	0	0	4	1	0	0	0	
Total.....	47	45	26	28	25	27	18	12	63	12	12	

Number of observations of given range^b

^a The Chicago grades used were Mixed Large (60 to 69.9% A), Mixed Medium (60 to 69.9% A), and current receipts.
^b Each observation represents one dealer for a two-week period.

Table 6.—Average Prices Paid Producers for Mixed A Large Eggs as a Differential From the Chicago Quotation for Mixed Large (60 to 69.9% A) Eggs, by States and Periods, 1955

Period	Illinois	Indiana	Missouri	Ohio
	(cents per dozen above or below Chicago)			
April 18-30.....	-3.2	-4.4	-4.1	-.3
July 25-August 6.....	-3.5	-.5	-8.8	+6.6
October 24-November 5.....	-1.5	-2.6	-10.2	+1.9
Average.....	-2.7	-2.5	-7.7	+2.7

extreme, the Missouri firms averaged almost eight cents below the Chicago quotation.

Seasonal variation. Throughout the area studied, three patterns existed in the seasonal relationship between prices paid to producers for A Large eggs and the appropriate Chicago quotation (Table 6):

1. In Illinois there was little difference in the relationship during the spring and summer enumerations. But during the fall dealers paid producers a considerably higher price relative to the Chicago quotation.

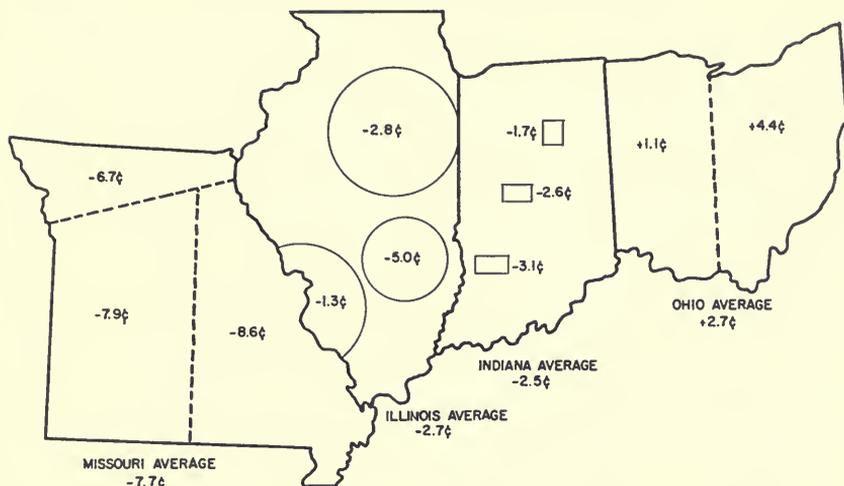
2. In Missouri the A Large price to producers relative to the Chicago quotation was highest during the spring and lowest during the fall.

3. In Indiana and Ohio dealers paid producers the highest prices relative to Chicago during the summer and the lowest during the spring.¹

The seasonal pattern in Indiana and Ohio provides some indication that producer prices in these states are more strongly influenced by the eastern markets, especially New York nearby prices, than are prices in Illinois and Missouri. During the spring and fall enumeration periods, the New York Urner-Barry quotation for nearby Extra Fancy Heavyweights was 6 to 7 cents above the Chicago quotation for mixed Large (60 to 69.9% A) eggs. But during the summer period, the same New York quotation was almost 15 cents above Chicago.

The high summer price in New York relative to Chicago exerted an upward pressure on Ohio and Indiana producer prices. The prices in these two states rose relative to Chicago. The same effect was not apparent in Illinois and Missouri. This upward pressure in summer prices relative to Chicago prices was more pronounced in Ohio than in Indiana (Table 6). Appendix Table 3 indicates that the influence was also greater in eastern than in western Ohio.

¹ The seasonal relationship of producer prices to the Chicago quotation for individual areas in each state can be found in Appendix Table 3.



Average prices that were paid to producers for mixed A Large eggs as a differential from the Chicago quotation for mixed Large (60 to 69.9% A) eggs. The prices (cents per dozen above or below Chicago) are for combined periods of 1955. (Fig. 3)

Variations within states. In each area of Illinois, dealers' prices to producers for A Large eggs averaged below the Chicago quotation during the six weeks studied (Fig. 3). During each of the three two-week periods the spread between the dealer price to producers and the Chicago price was narrowest in the southern section of the state and widest in the central section (Appendix Table 3). This difference indicates that prices averaged highest in southern and lowest in central Illinois.

With one exception, the average price in each area was below the Chicago price during each enumeration period. The A Large price to producers in the southern section averaged almost one cent above Chicago during the two-week fall period (Appendix Table 3).

The price paid producers for A Large eggs in each Indiana area averaged below the Chicago price during the six weeks studied (Fig. 3). The price averaged highest in the northern section and lowest in the south, but this pattern did not exist during each of the two-week periods (Appendix Table 3). Indiana producer prices were more uniform from area to area than those in Illinois.

In northern Indiana during the summer period, dealers paid producers an average of 1.6 cents above the Chicago price. With this exception, the producer price in each area during each period averaged below Chicago (Appendix Table 3).

The procurement of eggs from producers on a graded basis was not a well-established practice in Missouri during the period of study. Of the dealers contacted in Missouri, only three purchased A Large eggs from producers during each of the periods of enumeration. One of these dealers was located in each of the three sections of the state. These limited data indicated that the A Large price to producers was well below Chicago in each area of the state (Fig. 3). The producer price did not exceed the Chicago price in any area during any of the two-week periods (Appendix Table 3).

Prices paid producers for A Large eggs by dealers in both eastern and western Ohio exceeded the Chicago price during the six-week period (Fig. 3). The eastern firms paid more than the western firms during each of the two-week periods (Appendix Table 3).

The average price paid by the firms in western Ohio was 1.6 cents below the Chicago price during the spring period. With this one exception, the average price paid in both areas exceeded the Chicago price during each period of enumeration (Appendix Table 3).

A Medium eggs

The prices paid producers for mixed A Medium eggs were compared with the Chicago quotation for mixed Medium (60 to 69.9% A) eggs. Too few Missouri dealers reported purchase of A Medium eggs for these data to be included in the analysis.

Variation between states. Illinois and Indiana dealers paid producers less than the Chicago quotation for A Medium eggs during the six-week period studied, while Ohio prices averaged slightly above (Table 7). Illinois dealers paid a lower average price than Indiana dealers.

If dealers were using the Chicago quotations as a price base, they were applying greater average discounts or smaller average premiums

Table 7. — Average Prices Paid to Producers for Mixed A Medium Eggs as a Differential From the Chicago Quotation for Mixed Medium (60 to 69.9% A) Eggs, by States and Periods, 1955

Period	Illinois	Indiana	Ohio
	(cents per dozen above or below Chicago)		
April 18-30.	-5.3	-5.6	-1.7
July 25-August 6.	-6.6	-5.1	+1.4
October 24-November 5.	-3.3	-2.1	+1.2
Average.	-5.1	-4.3	+ .3

in pricing the Medium than the Large eggs. In each state the producer price was lower for A Medium than for A Large eggs relative to the appropriate Chicago quotations (compare Tables 7 and 6). Illinois and Indiana discounts on appropriate Chicago quotations averaged, respectively, 2.4 and 1.8 cents a dozen greater for A Medium than for A Large eggs during the six weeks studied. Ohio dealers paid 2.4 cents more (above appropriate Chicago quotations) for A Large than for A Medium eggs.

Applying larger discounts or smaller premiums to central market quotations in pricing Medium than in pricing Large eggs is difficult to justify from the standpoint of marketing costs. It does not cost more to process, pack, and transport Medium eggs. The smaller volume of Medium eggs combined with the seasonal variation in volume may make it more difficult to find markets for these eggs. The breaking industry also discriminates against smaller eggs. These problems may tend to increase marketing costs. However, it appears that these increased costs should be reflected in the prices of A Medium eggs at central markets as well as at country points.

On an annual basis, Large eggs make up a much higher proportion of producer deliveries than Medium eggs. And producers normally look at the top price offered when comparing prices paid for eggs by various dealers. For these reasons, dealers may feel that they can maintain producer patronage by pricing Large eggs high relative to central market reports while applying greater discounts (or smaller premiums) on the Medium eggs.

Seasonal variation. Illinois and Indiana producer prices of A Medium eggs were 2 to 3 cents closer to Chicago quotations during the fall than during the other two periods of analysis (Table 7). Ohio producers received about the same amount above Chicago quotations during the fall and summer, but their spring price averaged below Chicago.¹

Comparison of Tables 7 and 6 indicates that the spread between Chicago prices and producer prices for Large and Medium eggs was more nearly equal during the fall than during the other two periods. This was true in each of the three states. In Indiana during the fall, the A Large price was farther below the Chicago quotation than the A Medium price.

Medium eggs are in seasonally heavy supply during the fall, while Large eggs are in light supply. This difference is reflected in the rela-

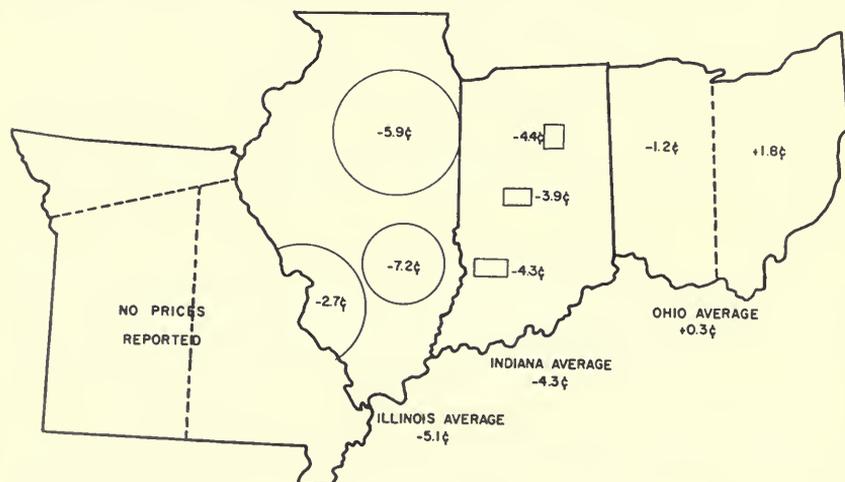
¹ The seasonal relationship of producer prices to the Chicago quotation for individual areas in each state is shown in Appendix Table 3.

tive prices of the two grades of eggs in the central markets. During both the spring and summer periods of study, for example, the Chicago quotation for Large eggs averaged less than 4 cents a dozen above the Medium quotation. During the fall period, however, the Chicago Large quotation averaged more than 14 cents above the Medium quotation. Because of heavier marketings and much lower prices for Medium than for Large eggs during the fall, producers may look more critically at prices offered for Medium eggs. Dealers may respond by more nearly equalizing discounts (or premiums) for A Large and A Medium eggs during this period.

Variation within states. In each area of Illinois, dealers' prices to producers for A Medium eggs averaged below the Chicago quotation during the six weeks studied (Fig. 4). With one exception, the producer price was below Chicago in all the areas during each period of study. The A Medium price to producers in the southern area averaged about 2 cents above Chicago during the fall period (Appendix Table 3).

The spread between the producer price of A Medium eggs and the Chicago quotation was narrowest in the southern section of Illinois and widest in the central part. This difference indicates that A Medium prices were highest in southern and lowest in central Illinois.

The price paid producers for A Medium eggs in each area of Indiana averaged below the Chicago price during the six weeks



Average prices that were paid to producers for mixed A Medium eggs as a differential from the Chicago quotation for mixed Medium (60 to 69.9% A) eggs. The prices (cents per dozen above or below Chicago) are for combined periods of 1955. (Fig. 4)

studied (Fig. 4). In fact, the price in each area during each period was below Chicago (Appendix Table 3). The relationship between the producer price and the Chicago quotation was quite uniform from area to area within the state.

Prices paid to producers for A Medium eggs by dealers in eastern Ohio exceeded the Chicago price during the six-week period, while the prices in western Ohio averaged below Chicago (Fig. 4). Eastern Ohio firms paid producers more than the Chicago quotation during each period of study. The price in western Ohio averaged above Chicago during the summer but fell below during the spring and fall periods (Appendix Table 3).

The analysis indicates that, in relation to Chicago prices, dealers in all states paid producers smaller discounts or larger premiums for A Large than for A Medium eggs. Appendix Table 3 shows that the only exceptions occurred in the southern areas of Illinois and Indiana during the fall period. When Ohio dealers were divided into northern and southern firms, the same pattern occurred there. The southern Ohio dealers paid 1.3 cents above Chicago for A Large eggs and 2.4 cents above Chicago for A Medium eggs during the fall period.

A 1955 study showed that a greater proportion of southern than northern United States households used the smaller sized eggs during the April to June period.¹ It is reasonable to believe that the demand for smaller eggs would be even greater during the fall when the price spread between large and smaller sized eggs is greatest. Some eggs from the southern sections of the North Central Region move into southern United States markets, and prices are influenced by southern demands. The greater demand for Medium eggs in the southern part of the region during the fall could bolster Medium prices more than Large prices relative to Chicago quotations. The result may be the noted smaller discounts or greater premiums for A Medium than A Large eggs relative to Chicago prices.

Current receipt eggs

Some dealers were still using the current receipt or nest-run method of procuring eggs from producers during the period of study. This procedure was especially evident in Missouri, where 17 of the 23 firms in the study were buying current receipt eggs from producers

¹ United States Department of Agriculture; *Food Consumption of Households in the North-Central Region* and *Food Consumption of Households in the South*, Reports Number 3 and 4 of the Household Food Consumption Survey of 1955, Table 12, page 91. It was found that 48.4 percent of all southern households reported using Medium, Small, or Pee wee eggs compared with 30.8 percent of the households in the North Central Region.

Table 8.—Average Prices Paid Producers for Current Receipt Eggs as a Differential From the Chicago Quotation for Current Receipt Eggs, by States and Periods, 1955

Period	Illinois	Indiana	Missouri
	(cents per dozen above or below Chicago)		
April 18–30.	–4.3	–5.6	–4.2
July 25–August 6.	–3.1	–5.7	–5.3
October 24–November 5.	–1.8	+2.3	–4.1
Average.	–3.1	–3.0	–4.5

during each of the three periods. The cooperating Ohio firms did not buy current receipt eggs. The prices paid producers for current receipt eggs by cooperating dealers were compared with the Chicago quotation for current receipt eggs.

Variation between states. In each state the dealers' prices to producers for current receipt eggs averaged below the Chicago quotation for the six-week period studied (Table 8). There was little variation from state to state. The price extremes occurred in Indiana and Missouri.

For the complete period of study, Illinois and Indiana producer prices for current receipt eggs averaged about 3 cents below the Chicago quotation. This discount was slightly larger than that taken for A Large eggs but smaller than that for A Medium eggs (compare Tables 6, 7, and 8). Missouri dealers averaged a considerably smaller discount on current receipt than on A Large eggs.

Seasonal variation. For current receipt eggs, dealers in each state paid producers a higher price relative to the Chicago quotation during the fall than during the spring and summer (Table 8). The seasonal variation in the relationship between producer prices and the Chicago quotation was greater in Indiana and Illinois than in Missouri.¹

The greatest positive or smallest negative spread between country prices and Chicago quotations during the fall period was not confined to current receipt eggs only. The same situation occurred for A Large eggs in Illinois² and for A Medium eggs in Illinois and Indiana (Tables 6 and 7). The relative scarcity of eggs during the fall months

¹ The seasonal relationship of producer prices to the Chicago quotation for individual areas in each state is shown in Appendix Table 3.

² Grade A Large prices in Ohio and Indiana were at their highest point relative to Chicago during the summer period. It was previously indicated that this might be due to the influence of the greater increase in the New York nearby than in the Chicago price from the spring to summer period. Prices of A Large eggs in both Indiana and Ohio were higher relative to Chicago quotations during the fall than during the spring.

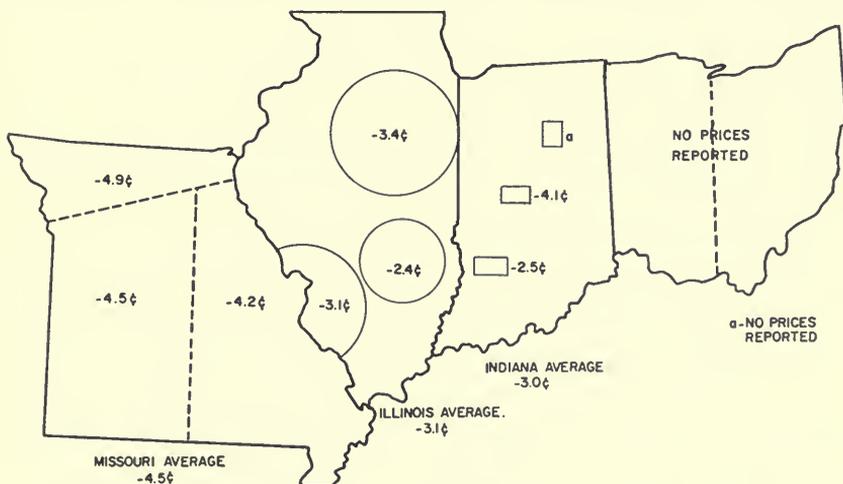
increases the competition for producers' eggs. Apparently this competition at country points was not accurately reflected in the Chicago wholesale market. The result was that country prices were at their highest point relative to Chicago quotations during the fall period.

Variation within states. The producer price of current receipt eggs in each area of each state averaged below the Chicago quotation during the six-week period of study (Fig. 5). Except in southern Indiana during the fall, the price in each area of each state during all periods averaged below Chicago (Appendix Table 3). The price paid to producers in southern Indiana averaged almost 4 cents above Chicago during the fall period.

The average price of current receipt eggs was quite uniform from area to area within the states during the six weeks of the study. The greatest variation occurred in Indiana (1.6 cents), while the least occurred in Missouri (0.7 cent).

RELATIONSHIP BETWEEN PRODUCER EGG PRICES AND PRICES REPORTED FROM SEVEN CENTRAL MARKETS

The relationships between producer prices and reported prices in seven important North Central Region markets are presented in Appendix Table 4. The data are presented by states and by enumeration periods for A Large, A Medium, and current receipt eggs. In a study



Average prices that were paid to producers for current receipt eggs as a differential from the Chicago quotation for current receipt eggs. The prices (cents per dozen above or below Chicago) are for combined periods of 1955. (Fig. 5)

of these relationships, it is important to understand the quality of the eggs on which prices are reported in the central markets and the services involved in the transactions. This material is presented in Appendix Tables 1 and 2.

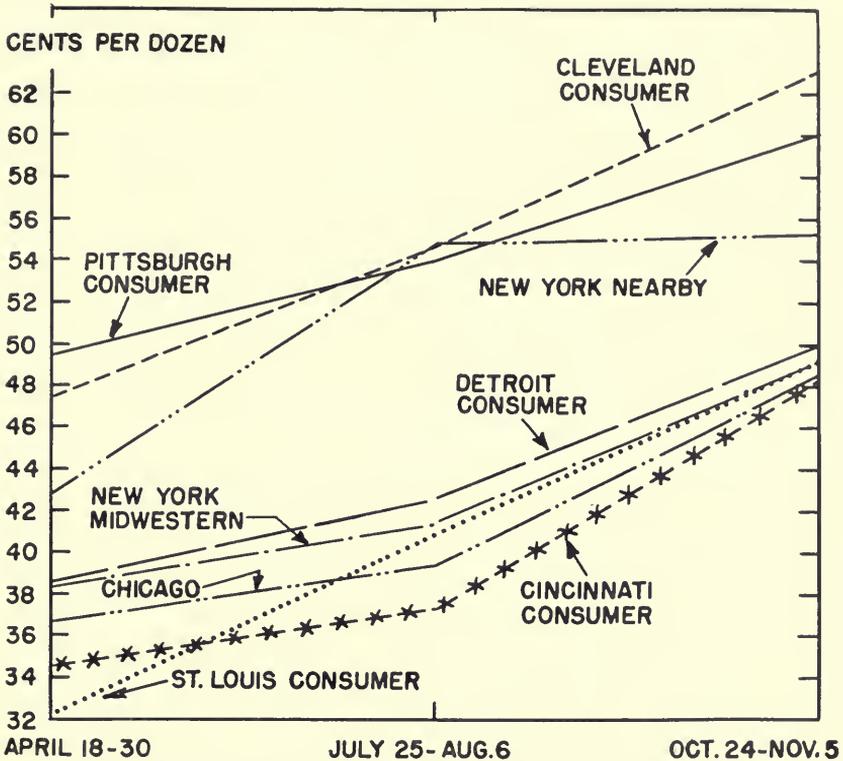
The discounts and premiums paid to producers relative to various central market prices do not indicate the market reports with which producer prices are most closely related. For example, if a dealer's price to producers averages 8 cents a dozen under the New York quotation and only 3 cents under the Chicago quotation, it does not necessarily follow that the producer price is more closely related to the Chicago than the New York quotation. The dealer may be pricing his eggs more in line with the New York than the Chicago market, although applying a greater discount to the New York price. The additional discount may merely represent the additional costs involved if the eggs were marketed in New York rather than Chicago.

A better indication of the market reports with which the dealer price to producers is more closely related would seem to be the uniformity of premiums or discounts from period to period throughout the year. The following analysis is based on the assumption that the more uniform the spread between the price paid by a dealer and a central market report from period to period, the more closely the central market price report reflects producer prices.

It is possible that prices paid by a dealer may be closely tied to central market price reports and yet not show a uniform seasonal price spread with respect to any given central market report. This situation might occur if the dealer changed his pricing base from one market to another during the year. Such a change might result from a seasonal change in the importance of various market destinations for the dealer's eggs. However, such a pricing change would still indicate that prices reported from any given central market did not "set" the prices which producers received for their eggs.

Between periods of analysis, the range of fluctuation of each dealer's price around each central market price was determined. For example, if a dealer's price to producers for A Large eggs averaged 2 cents below Chicago during the two-week spring period, 3 cents below during the summer period, and 1 cent above during the fall, the seasonal range of price fluctuation around the Chicago price would be 4 cents (3 cents below to 1 cent above). The market report with which the dealer's price had the smallest range of fluctuation was assumed to be the best reflector of the dealer's paying price.

To determine the seasonal fluctuation of prices around a central market price report for a group of dealers in a state or an area of a



Price movements for Large eggs in selected central markets during 1955. Lines indicate the changes between periods of enumeration. (Fig. 6)

state, the average range was used. For example, if the fluctuation ranges of two dealers were 5 cents and 3 cents, the average for the two would be 4 cents.

Egg price movements from period to period throughout the year in one central market were often similar to those in one or more other markets (Fig. 6). As a result, dealers' seasonal price fluctuations with respect to several price reports were often quite similar. This similarity, combined with the small sample of dealers in some cases, often made it impossible to point to one market report as being significantly better than all other reports as a reflector of dealers' paying prices in a state or an area of a state. It was often possible, however, to isolate a group of market reports that was significantly better than another group in reflecting dealers' paying prices.

In the analysis of relationships between prices paid to producers and the central market price reports, it was possible to obtain some

idea of the limitations of the various central market price reports in accurately reflecting producer prices in each state. The period of year was determined in which each dealer paid his highest and his lowest price relative to each central market price report. If a majority of the dealers in a state paid their highest price relative to a certain central market price report during the same period, it would seem to indicate that the price on that market report was not high enough during that period to accurately reflect prices paid to producers. Conversely, if the majority of dealers paid their lowest price relative to a certain central market price during the same period, it would appear that the price in that market was too high to accurately reflect prices paid to producers.

Central market prices most closely related to producer prices of A Large eggs

Illinois. Most Illinois dealers reported receiving Chicago or St. Louis price reports. These two markets provided the major outlets for eggs sold by Illinois dealers. They were also among the better reflectors of the Illinois dealers' prices to producers for A Large eggs. The prices paid to producers by 12 of the 14 dealers showed the least seasonal fluctuation with respect to a St. Louis or Chicago price report (Table 9). The St. Louis report for the consumer grade of A Large eggs was better than all other reports in reflecting Illinois producer prices. The New York nearby quotation was by far the poorest.¹

Prices reported in the St. Louis market not only were good reflectors of producer prices of A Large eggs for the state as a whole, but were also among the better reflectors of northern Illinois prices. Prices paid by three dealers in the northern area fluctuated least with respect to a St. Louis report, two dealers with respect to Chicago, and one dealer with respect to a Cleveland report (Appendix Table 5). Although the smallest average seasonal fluctuation occurred with respect to the St. Louis consumer grade price report, this report was not significantly better than the Cleveland wholesale, Pittsburgh wholesale, and Chicago reports in reflecting northern Illinois producer prices of A Large eggs. The New York nearby quotation was the poorest.

Prices paid by two of the three central Illinois dealers showed the smallest seasonal fluctuation with respect to the Chicago report. The

¹ The difference between the average fluctuation with respect to a given report and each other report was tested for significance. All statements will use the 10 percent level as the criterion for significance.

Table 9. — Seasonal Fluctuation of Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, A Large Eggs, by States, 1955^a

Market report ^b	Average fluctuation range	Dealers having smallest fluctuation	Market report ^b	Average fluctuation range	Dealers having smallest fluctuation
	(cents per dozen)	(number)		(cents per dozen)	(number)
Illinois			Indiana		
St. Louis consumer.....	1.85	4	Pittsburgh wholesale.....	3.99	1
Cleveland wholesale.....	2.37	1	Cleveland wholesale.....	4.07	...
Chicago.....	2.65	4	Chicago.....	4.16	2
Pittsburgh wholesale.....	2.94	...	Detroit consumer.....	4.16	1
St. Louis wholesale.....	3.33	4	New York midwestern.....	4.60	...
Detroit consumer.....	3.78	...	Cleveland consumer.....	4.62	...
New York midwestern.....	3.88	1	Cincinnati wholesale.....	4.62	...
Pittsburgh consumer.....	5.09	...	Pittsburgh consumer.....	4.88	...
Cleveland consumer.....	5.29	...	St. Louis consumer.....	4.92	...
Cincinnati wholesale.....	5.64	...	Detroit wholesale.....	5.04	...
Cincinnati consumer.....	5.65	...	Cincinnati consumer.....	5.32	1
Detroit wholesale.....	5.76	...	St. Louis wholesale.....	6.69	...
New York nearby.....	10.41	...	New York nearby.....	6.71	1
Missouri			Ohio		
New York midwestern.....	5.44	2	Cincinnati wholesale.....	2.62	...
Chicago.....	6.43	1	Cleveland consumer.....	2.72	2
Detroit consumer.....	6.66	...	New York nearby.....	3.22	2
Pittsburgh consumer.....	6.75	...	Cincinnati consumer.....	4.11	...
Detroit wholesale.....	7.40	...	Detroit wholesale.....	4.36	...
St. Louis consumer.....	8.09	...	Pittsburgh consumer.....	5.01	...
Cleveland wholesale.....	8.25	...	Pittsburgh wholesale.....	5.12	...
Pittsburgh wholesale.....	8.44	...	Detroit consumer.....	5.62	...
Cincinnati wholesale.....	9.29	...	Cleveland wholesale.....	5.79	...
Cleveland consumer.....	9.47	...	New York midwestern.....	6.17	...
St. Louis wholesale.....	11.04	...	Chicago.....	6.86	...
Cincinnati consumer.....	11.42	...	St. Louis consumer.....	7.19	...
New York nearby.....	13.58	...	St. Louis wholesale.....	8.91	...

^a For method of computation, see pages 24 and 25.

^b For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 1.

smallest average fluctuation occurred with respect to this report (Appendix Table 5). However, the Chicago report was not significantly better than the New York midwestern, St. Louis consumer, and Cleveland wholesale price reports in reflecting the central Illinois producer prices of A Large eggs. The New York nearby quotation was the poorest.

The influence of the St. Louis market on producer prices of A Large eggs was evident in the southern area of Illinois. Prices paid by all dealers in this area showed the smallest seasonal fluctuation with respect to a St. Louis report (Appendix Table 5). The St. Louis consumer grade price report was not significantly better than the St. Louis wholesale grade report in reflecting producer prices in this area. However, it was significantly better than the remainder of the reports studied. The New York nearby quotation again was the poorest.

Indiana. No single report or group of reports was better than any others in reflecting the Indiana producer prices of A Large eggs.

Prices paid by the six firms that purchased A Large eggs from producers during each period of analysis showed the least seasonal fluctuation with respect to five different central market price reports (Table 9). The average fluctuation was quite uniform with respect to the various reports analyzed. Fluctuation with respect to the Pittsburgh wholesale price report was not even significantly smaller than that with respect to the New York nearby report.

The Indiana dealers were shipping eggs to several different markets in several different states. They reported receiving price reports from Chicago, New York, and other markets located between these two. Their prices to producers appeared to be influenced by prices reported in several of the central markets. Prices reported in no individual market were significantly better than those reported in most other markets in reflecting prices paid to producers for A Large eggs.

The situation was similar in individual areas of the state (Appendix Table 6). Wide differences in producer to central market price relationships between dealers in an area, combined with the small sample of dealers, made it impossible to point to any report as being significantly better than most others in reflecting producer prices. Only in central Indiana was the indicated best reflector (Chicago) significantly better than the indicated poorest reflector (New York nearby).

Missouri. Only three of the cooperating Missouri dealers purchased A Large eggs from producers during each period of analysis. Prices paid to producers by these dealers showed little uniformity in seasonal relationship with any of the price reports studied. The prices paid by two of the dealers fluctuated least with respect to the New York midwestern report, while prices paid by the other dealer fluctuated least with respect to Chicago (Table 9). Average seasonal fluctuation was not significantly less with respect to the New York midwestern report than to the Chicago, Detroit consumer, St. Louis consumer, and Cleveland wholesale price reports. The New York nearby price report was not significantly poorer than the Cincinnati consumer and St. Louis wholesale reports in reflecting producer prices of A Large eggs in Missouri.

Data were not sufficient to analyze area-to-area differences in the reports most closely reflecting producer prices. Firms showing least fluctuation with respect to the New York midwestern report were located in northern and eastern Missouri, while the one showing the least with respect to the Chicago report was located in the western area. All firms showed the greatest fluctuation with respect to the New York nearby quotation.

Ohio. Cincinnati, Cleveland, Detroit, and Pittsburgh supplied the major outlets for eggs purchased by the Ohio dealers cooperating in this study. Most dealers also indicated that they observed price movements in the New York market in making pricing decisions. Only one dealer reported interest in Chicago prices, while none reported interest in those from St. Louis. With this background, it was not surprising to find that prices reported in the eastern markets were better than Chicago and St. Louis reports in reflecting producer prices of A Large eggs in Ohio (Table 9).

The average seasonal fluctuation of Ohio dealers' prices with respect to the Cincinnati wholesale and Cleveland consumer price reports was not significantly less than that with respect to the New York nearby report. However, these two reports were significantly better than the remainder of the reports studied in reflecting Ohio producer prices of A Large eggs. The St. Louis and Chicago reports were the poorest.

There were only small differences between northern and southern Ohio with respect to the reports most closely reflecting producer prices (Appendix Table 8). In both areas the Cincinnati wholesale, Cleveland consumer, and New York nearby price reports were among the four best indicators. However, the small sample of dealers in each area limited the reliability that can be placed on the analysis. Even with the small sample, the Cincinnati wholesale, New York nearby, and Cleveland consumer price reports were significantly better than the St. Louis and Chicago price reports in reflecting producer prices in northern Ohio. In the southern area, the St. Louis, Chicago, and New York midwestern reports were significantly poorer than the others.

Limitations of various reports in reflecting producer prices of A Large eggs

Illinois. The Chicago quotation was not high enough during the fall to accurately reflect Illinois producer prices of A Large eggs. In fact, 12 of the 14 Illinois dealers paid their highest prices relative to Chicago during the fall period (Table 10). The fall season is the period of shortest egg supplies. Country dealers bid strongly against each other in attempting to obtain a sufficient quantity of eggs to fill their orders. Apparently the Chicago quotation did not rise enough during the fall to reflect existing supply-and-demand conditions at country points in Illinois.

Table 10. — Enumeration Period During Which More Than Half the Cooperating Dealers Paid Their Highest and Lowest Prices to Producers, Relative to Selected Central Market Price Reports, A Large Eggs, by States, 1955

Market report ^a	Smallest discount or highest premium			Greatest discount or smallest premium		
	Period ^b	Number of dealers	Number of dealers	Period ^b	Number of dealers	Number of dealers
Illinois						
Total dealers.....		14			14	
Chicago.....	Fall	12	None	None	14	6
New York midwestern.....	Fall	13	Summer	Summer	..	4
New York nearby.....	Fall	9	Summer	Summer	14	4
St. Louis wholesale.....	Spring	12	Fall	Fall	13	4
St. Louis consumer.....	None	..	None	None	..	5
Cleveland wholesale.....	None	..	Summer	Summer	10	4
Cleveland consumer.....	None	..	Summer	Summer	14	..
Detroit wholesale.....	Fall	13	Summer	Summer	14	4
Detroit consumer.....	Fall	12	Summer	Summer	13	4
Cincinnati wholesale.....	Fall	9	Summer	Summer	14	4
Cincinnati consumer.....	Spring	14	Summer	Summer	13	4
Pittsburgh wholesale.....	None	..	Summer	Summer	13	..
Pittsburgh consumer.....	Fall	13	Summer	Summer	14	..
Missouri						
Total dealers.....		3			3	
Chicago.....	Spring	3	Fall	Fall	2	4
New York midwestern.....	Spring	3	Fall	Fall	2	4
New York nearby.....	Spring	3	Summer	Summer	3	4
St. Louis wholesale.....	Spring	3	Fall	Fall	3	4
St. Louis consumer.....	Spring	3	Fall	Fall	3	4
Cleveland wholesale.....	Spring	3	Fall	Fall	2	3
Cleveland consumer.....	Spring	3	Summer	Summer	2	3
Detroit wholesale.....	Spring	3	Fall	Fall	2	4
Detroit consumer.....	Spring	3	Summer	Summer	3	4
Cincinnati wholesale.....	Spring	3	Fall	Fall	2	4
Cincinnati consumer.....	Spring	3	Fall	Fall	2	4
Pittsburgh wholesale.....	Spring	3	Fall	Fall	2	4
Pittsburgh consumer.....	Spring	3	Summer	Summer	2	4
Indiana						
Total dealers.....		6			6	
Chicago.....	Spring	4	Spring	Spring	4	6
New York midwestern.....	Spring	4	Spring	Spring	4	4
New York nearby.....	Summer	4	Summer	Summer	4	4
St. Louis wholesale.....	None	..	None	None	..	4
St. Louis consumer.....	Summer	4	Summer	Summer	4	5
Cleveland wholesale.....	Summer	4	Summer	Summer	4	4
Cleveland consumer.....	None	..	None	None	..	4
Detroit wholesale.....	Spring	4	Spring	Spring	4	..
Detroit consumer.....	Fall	4	Fall	Fall	4	..
Cincinnati wholesale.....	Fall	4	Spring	Spring	4	4
Cincinnati consumer.....	Spring	4	Spring	Spring	4	4
Pittsburgh wholesale.....	Spring	4	Spring	Spring	4	..
Pittsburgh consumer.....	Fall	4	Fall	Fall	4	..
Ohio						
Total dealers.....		4			4	
Chicago.....	Summer	4	Summer	Spring	4	4
New York midwestern.....	Summer	4	Summer	Spring	4	4
New York nearby.....	Fall	3	Fall	Summer	4	4
St. Louis wholesale.....	Summer	4	Summer	Fall	4	4
St. Louis consumer.....	Summer	4	Summer	Spring	3	3
Cleveland wholesale.....	Summer	4	Summer	Spring	3	3
Cleveland consumer.....	Summer	4	Summer	Spring	4	4
Detroit wholesale.....	Summer	3	Summer	Spring	4	4
Detroit consumer.....	Summer	4	Summer	Spring	4	4
Cincinnati wholesale.....	Summer	3	Summer	Spring	3	3
Cincinnati consumer.....	Summer	4	Summer	Spring	4	4
Pittsburgh wholesale.....	Summer	4	Summer	Spring	4	4
Pittsburgh consumer.....	Summer	3	Summer	Spring	4	4

^a For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 1.
^b For the exact periods of enumeration, see page 9.

The St. Louis report on consumer Grade A Large eggs did not have any obvious limitations in reflecting Illinois producer prices. Dealers were fairly evenly divided with regard to the period of the year in which they paid their highest and lowest price relative to this report. The St. Louis wholesale grade price report appeared to be too high in the fall and too low in the spring to accurately reflect Illinois producer prices.

The New York nearby price rose well above Chicago and St. Louis prices during the summer period (see Fig. 6). Prices in the smaller eastern markets also rose relative to Chicago and St. Louis during this period. Prices paid for A Large eggs by Illinois dealers did not respond to the large summer price increases in the eastern markets. As a result, egg prices in New York and other markets east of Chicago were too high during the summer to accurately reflect Illinois producer prices.

Indiana. Prices paid to Indiana producers for A Large eggs tended to increase in response to increases in the eastern markets during the summer period. As a result, prices reported in Chicago and St. Louis were too low during the summer to accurately reflect producer prices of A Large eggs in Indiana. Most of the dealers paid their highest prices relative to these reports during the summer (Table 10).

Even though Indiana prices rose relative to Chicago and St. Louis prices during the summer months, the increase was not proportionate to that in the New York nearby report as well as in the reports from many of the other eastern markets. The majority of dealers paid their lowest prices relative to those reported in many of the eastern markets during the summer. The fact that the summer increase in Indiana producer prices was greater than in Chicago but less than in most eastern markets is additional evidence that Indiana producer prices were a composite of prices reported in Chicago and the eastern markets.

Missouri. Prices reported in each central market appeared to be too low during the spring to accurately reflect producer prices of A Large eggs in Missouri. All dealers paid their highest prices relative to each report during the spring period (Table 10). The egg-breaking industry may have helped to create this situation. Breakers provide an important outlet for Missouri eggs, and the spring enumeration occurred during the peak of the breaking season.

During the spring, egg breakers bid the price of current receipt eggs in Missouri up near the Grade A Large price. Many producers

tended to shift from graded to current receipt markets as the spread between A Large and current receipt prices narrowed. This shift tended to force graded buyers to increase prices of A Large eggs in the attempt to maintain a sufficient quantity of eggs to supply their established outlets. This competition for breaking and shell eggs during the spring period could have raised prices to a seasonal peak relative to prices reported in the central markets.

In addition to being too low in the spring, both St. Louis price reports were too high in the fall to accurately reflect Missouri producer prices of A Large eggs.

Ohio. Prices reported in most central markets were too low during the summer to accurately reflect producer prices of A Large eggs in Ohio. Most dealers paid their highest prices relative to most central market price reports during the summer period (Table 10). The only exception was the New York nearby quotation. New York nearby prices rose to their peak above prices reported in other central markets during the summer period. The relatively high nearby prices apparently exerted an upward pressure on Ohio producer prices, forcing them above their normal relationship to prices in other central markets. Yet prices reported in these other central markets tempered the effect of the nearby price increase on Ohio producer prices, since all dealers paid their lowest prices relative to the nearby quotation during the summer. It appears that Ohio producer prices were a composite of New York nearby prices and those reported in other eastern markets.

In addition to being too low during the summer, prices in the majority of reports were too high during the spring to accurately reflect Ohio producer prices of A Large eggs (Table 10).

Central market prices most closely related to producer prices of A Medium eggs

Illinois. In pricing A Medium eggs, the 14 Illinois dealers showed the smallest seasonal fluctuation with respect to five different central market price reports. As was true for A Large eggs, Chicago and St. Louis price reports were among the better reflectors. Prices paid by 10 dealers showed the smallest seasonal fluctuation with respect to Chicago or St. Louis reports (Table 11).

Because of the differences in producer to central market price relationships between dealers, it was not possible to select one report as being significantly better than all others in reflecting Illinois producer prices of A Medium eggs. The Chicago report was not significantly

Table 11.— Seasonal Fluctuation of Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, A Medium Eggs, by States, 1955^a

Market report ^b	Average fluctuation range	Dealers having smallest fluctuation
	(cents per dozen)	(number)
Illinois		
Chicago.....	4.03	6
Detroit consumer.....	4.17	2
Pittsburgh wholesale.....	4.58	...
New York midwestern.....	4.63	1
Pittsburgh consumer.....	4.85	1
Cleveland consumer.....	5.13	...
St. Louis wholesale.....	5.17	4
St. Louis consumer.....	5.27	...
Cincinnati consumer.....	6.09	...
Detroit wholesale.....	6.26	...
New York nearby.....	6.49	...
Indiana		
Pittsburgh consumer.....	4.95	...
Cleveland consumer.....	5.14	...
St. Louis wholesale.....	5.19	2
St. Louis consumer.....	5.19	...
Detroit consumer.....	5.36	1
Cincinnati consumer.....	5.45	1
Chicago.....	5.76	...
Pittsburgh wholesale.....	5.97	...
New York midwestern.....	6.51	...
New York nearby.....	7.35	1
Detroit wholesale.....	7.40	...
Ohio		
Cleveland consumer.....	2.97	...
Cincinnati consumer.....	3.26	1
Pittsburgh wholesale.....	3.39	...
Detroit consumer.....	3.47	...
Pittsburgh consumer.....	3.59	...
Chicago.....	3.90	...
New York nearby.....	3.92	1
Detroit wholesale.....	4.17	1
St. Louis consumer.....	4.46	1
New York midwestern.....	4.51	...
St. Louis wholesale.....	4.96	...

^a For method of computation, see pages 24 and 25.

^b For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 1.

better than the Detroit consumer, Pittsburgh consumer, and both St. Louis reports. The New York nearby report was not significantly poorer than the Cincinnati consumer and St. Louis price reports. This lack of conclusiveness can be traced to major differences in producer to central market price relationships between areas of the state.

Unlike the situation for A Large eggs, the Chicago price report was a good reflector of producer prices of A Medium eggs in the northern area of Illinois, while the St. Louis reports were among the poorest. Five of the six northern dealers showed the smallest fluctuation with respect to the Chicago report (Appendix Table 5). This report was not significantly better than the Detroit consumer report in reflecting producer prices but was significantly better than the remainder of the reports studied. The two St. Louis reports and the Cincinnati consumer report were the poorest.

Prices paid for A Medium eggs by the three central Illinois dealers showed the smallest fluctuation with respect to three different price reports (Appendix Table 5). Although the smallest average seasonal fluctuation occurred with respect to the Chicago report, this report was not significantly better than the New York midwestern, Detroit consumer, and Pittsburgh consumer reports in reflecting producer prices in this area of the state. It was also impossible to pick out any individual report as being significantly poorer than all others.

As was true for A Large eggs, the St. Louis reports were among the better reflectors of producer prices of A Medium eggs in the southern area of Illinois. Prices paid by four of the five dealers showed the smallest seasonal fluctuation with respect to the St. Louis wholesale price report (Appendix Table 5). This report was not significantly better than the St. Louis consumer and Pittsburgh consumer reports in reflecting producer prices. However, these three reports were significantly better than all others analyzed. The New York nearby and Detroit wholesale price reports were the poorest.

Indiana. As was true for A Large eggs, none of the market reports studied was better than others in reflecting the Indiana producer prices of A Medium eggs. Prices paid by the five cooperating firms showed the least seasonal fluctuation with respect to four different central market price reports (Table 11). Most reports were poorer reflectors of the Indiana price of A Medium than A Large eggs. The average fluctuation was quite uniform with respect to the various reports studied. Fluctuation with respect to the Pittsburgh consumer report, the indicated best reflector, was not significantly smaller than the fluctuation with respect to any other report.

A similar situation occurred in individual areas of the state (Appendix Table 6). Wide differences in producer to central market price relationships between dealers in an area, combined with the small sample of dealers, make it impossible to pick out any report as being significantly better than others in reflecting producer prices.

Ohio. In pricing A Medium eggs, each of the Ohio dealers showed the smallest seasonal fluctuation with respect to a different central market price report (Table 11). Average fluctuation was quite uniform with respect to the various reports studied. This factor, combined with large differences in producer to central market price relationships between dealers, made it impossible to select any report that was significantly better than others in reflecting Ohio producer prices. In fact, the Cleveland consumer report was not even significantly better than the St. Louis wholesale report.

The inconclusiveness of the analysis for the state as a whole can be traced partly to differences in producer and central market price relationships between the northern and southern areas of the state. Even with a smaller sample of dealers, it was possible to make more definite statements about price relationships in the individual areas than in the state as a whole.

In northern Ohio, the New York nearby and most of the other reports were significantly better than the St. Louis reports in reflecting producer prices (Appendix Table 8). In southern Ohio, the average seasonal fluctuation with respect to the Cincinnati consumer grade price report was not significantly less than that with respect to the Cleveland consumer, Pittsburgh consumer, and St. Louis reports. However, the Cincinnati consumer report was significantly better than the remainder of the reports studied in reflecting the producer price of A Medium eggs in this area of the state.

Limitations of various reports in reflecting producer prices of A Medium eggs

Illinois. The Chicago quotation appeared to have the fewest limitations in accurately reflecting Illinois producer prices of A Medium eggs. It would have been a more accurate reflector if it had been higher in the fall. A majority of the dealers paid their highest prices relative to the Chicago quotation during the fall (Table 12).

The St. Louis reports were too low in the spring and too high in the fall to accurately reflect producer prices. Both New York reports were too low in the fall and too high in the summer.

Table 12.—Enumeration Period During Which More Than Half the Cooperating Dealers Paid Their Highest and Lowest Prices to Producers, Relative to Selected Central Market Price Reports, A Medium Eggs, by States, 1955

Market report ^a	Smallest discount or highest premium		Greatest discount or smallest premium	
	Period ^b	Number of dealers	Period ^b	Number of dealers
Illinois				
Total dealers.....		14		14
Chicago.....	Fall	8	None	...
New York midwestern.....	Fall	13	Summer	9
New York nearby.....	Fall	13	Summer	14
St. Louis wholesale.....	Spring	9	Fall	10
St. Louis consumer.....	Spring	10	Fall	11
Cleveland consumer.....	Spring	9	Summer	8
Detroit wholesale.....	Fall	13	Summer	13
Detroit consumer.....	None	...	Summer	8
Cincinnati consumer.....	Spring	10	Summer	8
Pittsburgh wholesale.....	Fall	8	Summer	13
Pittsburgh consumer.....	Spring	9	Fall	10
Indiana				
Total dealers.....		5		5
Chicago.....	Fall	4	Summer	3
New York midwestern.....	Fall	4	Summer	3
New York nearby.....	Fall	4	Summer	3
St. Louis wholesale.....	None	...	None	...
St. Louis consumer.....	None	...	None	...
Cleveland consumer.....	None	...	Summer	3
Detroit wholesale.....	Fall	4	Summer	3
Detroit consumer.....	Fall	4	Summer	3
Cincinnati consumer.....	Spring	3	Summer	3
Pittsburgh wholesale.....	Fall	4	Summer	3
Pittsburgh consumer.....	None	...	None	...
Ohio				
Total dealers.....		4		4
Chicago.....	None	...	Spring	3
New York midwestern.....	None	...	Spring	4
New York nearby.....	Fall	4	Spring	3
St. Louis wholesale.....	Summer	4	None	...
St. Louis consumer.....	Summer	4	None	...
Cleveland consumer.....	None	...	None	...
Detroit wholesale.....	Fall	4	Spring	4
Detroit consumer.....	Summer	3	None	...
Cincinnati consumer.....	None	...	None	...
Pittsburgh wholesale.....	None	...	Spring	3
Pittsburgh consumer.....	None	...	None	...

^a For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 1.

^b For the exact periods of enumeration, see page 9.

Indiana. The St. Louis price reports and the Pittsburgh consumer report had the fewest limitations in reflecting Indiana producer prices of A Medium eggs (Table 12). The dealers were quite evenly divided with respect to the season of the year in which they paid their highest and lowest prices relative to these reports. For most other reports, prices appeared to be too low in the fall or too high in the summer to accurately reflect producer prices.

Ohio. Unlike the situation for A Large eggs, various central market price reports differed in their limitations in reflecting Ohio producer prices of A Medium eggs (Table 12). The St. Louis reports were too low in the summer, while the New York nearby and Detroit wholesale reports were too low in the fall. Several, including those from Chicago and New York, appeared to be too high during the spring.

Central market prices most closely related to producer prices of current receipt eggs

Illinois. Only three of the seven central markets studied reported a price for current receipt eggs (or a comparable grade) during each period in which pricing data were collected. These three markets were Chicago, St. Louis, and Cincinnati.

Five of the cooperating Illinois dealers purchased current receipt eggs from producers during each period of analysis. Prices paid to producers by three of these dealers fluctuated least with respect to the Cincinnati price report (Table 13). However, the average seasonal fluctuation with respect to the Cincinnati report was not significantly less than the fluctuation with respect to each of the other two markets.

The analysis of current receipt eggs for individual areas of the state is presented in Appendix Table 5. No report was significantly better than the others in reflecting producer prices in any area.

Indiana. Only three of the cooperating Indiana dealers purchased current receipt eggs from producers during each period of analysis. Seasonally the prices paid producers by each of these dealers fluctuated least with respect to the St. Louis price report (Table 13). Although quite large, the average fluctuation with respect to the St. Louis report was significantly smaller than with the other reports. The Chicago report was the poorest reflector of Indiana producer prices.

Only in southern Indiana did more than one cooperating firm purchase current receipt eggs from producers during each period of anal-

Table 13. — Seasonal Fluctuation of Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, Current Receipt Eggs, by States, 1955^a

Market report ^b	Average fluctuation range	Dealers having smallest fluctuation
	(cents per dozen)	(number)
Illinois		
Cincinnati.....	2.86	3
Chicago.....	3.33	1
St. Louis.....	3.72	1
Indiana		
St. Louis.....	4.43	3
Cincinnati.....	7.38	...
Chicago.....	8.26	...
Missouri		
Chicago.....	3.22	10
Cincinnati.....	3.58	1
St. Louis.....	4.39	6

^a For method of computation, see pages 24 and 25.

^b For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 2.

ysis. In this area the St. Louis price was significantly better than either of the others in reflecting producer prices (Appendix Table 6). The Chicago report was not significantly poorer than the Cincinnati report.

Missouri. Seventeen of the cooperating Missouri dealers purchased current receipt eggs from producers during each period of analysis. Prices paid by 16 of the dealers showed the smallest seasonal fluctuation with respect to the Chicago or St. Louis price reports (Table 13). The average fluctuation with respect to the Chicago report was not significantly smaller than that with respect to the other two markets. However, significant differences were found within individual areas of the state.

In northern Missouri, prices paid for current receipt eggs by five of the six cooperating dealers showed the least seasonal fluctuation with respect to the Chicago report (Appendix Table 7). The Chicago report was significantly better than each of the other reports in reflecting producer prices in this area of the state. The St. Louis report was the poorest.

Prices of five of the six cooperating dealers in western Missouri fluctuated least with respect to the Chicago report (Appendix Table 7). The average seasonal fluctuation with respect to Chicago was not significantly different from that with respect to Cincinnati. However,

both reports were significantly better than the St. Louis report in reflecting producer prices in this area of the state.

In eastern Missouri, the area nearest the St. Louis market, prices paid by all cooperating dealers showed the smallest seasonal fluctuation with respect to the St. Louis report (Appendix Table 7). This report was significantly better than the others in reflecting the producer prices of current receipt eggs in this area. The Chicago report was the poorest.

Limitations of various reports in reflecting producer prices of current receipt eggs

Illinois. The St. Louis price for current receipt eggs appeared to be too low during the summer and too high during the fall to accurately reflect Illinois producer prices. A majority of the dealers paid their highest prices during the summer and lowest prices during the fall relative to the St. Louis report (Table 14). There was some indication that Chicago prices were too low in the fall and too high in the summer to accurately reflect producer prices.

Table 14.—Enumeration Period During Which More Than Half the Cooperating Dealers Paid Their Highest and Lowest Prices to Producers Relative to Selected Central Market Price Reports, Current Receipt Eggs, by States, 1955

Market report ^a	Smallest discount or highest premium		Greatest discount or smallest premium	
	Period ^b	Number of dealers	Period ^b	Number of dealers
Illinois				
Total dealers.		5		5
Chicago.	Fall	3	Summer	3
St. Louis.	Summer	4	Fall	4
Cincinnati.	None	...	Summer	3
Indiana				
Total dealers.		3		3
Chicago.	Fall	3	Spring	2
St. Louis.	Fall	3	Spring	3
Cincinnati.	Fall	3	Summer	3
Missouri				
Total dealers.		17		17
Chicago.	Spring	9	Summer	9
St. Louis.	Spring	9	Fall	15
Cincinnati.	Spring	10	None	...

^a For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 2.

^b For the exact periods of enumeration, see page 9.

Indiana. Each of the three central market reports for current receipt eggs was too low in the fall to accurately reflect Indiana producer prices. All dealers paid their highest prices relative to each report during the fall period (Table 14). Again this situation may logically be traced to the seasonally short supply of eggs during the fall period. Because of the cooler weather, a relatively high proportion of current receipt eggs are of Grade A quality. These factors may cause country dealers in Indiana to bid up the price of current receipt eggs in the fall. Prices reported in the central markets did not rise enough during this period to reflect existing supply-and-demand conditions at country points in Indiana.

In addition to being too low during the fall, the St. Louis price appeared to be too high in the spring and the Cincinnati price too high in the summer to accurately reflect producer prices.

Missouri. All reports would have been better reflectors of producer prices of current receipt eggs in Missouri if they had been higher during the spring. More than half of the dealers paid their highest prices relative to each report during this period (Table 14). Again, this was probably at least partly due to the seasonally heavy demand for eggs for breaking purposes, which bolstered producer prices relative to central market reports.

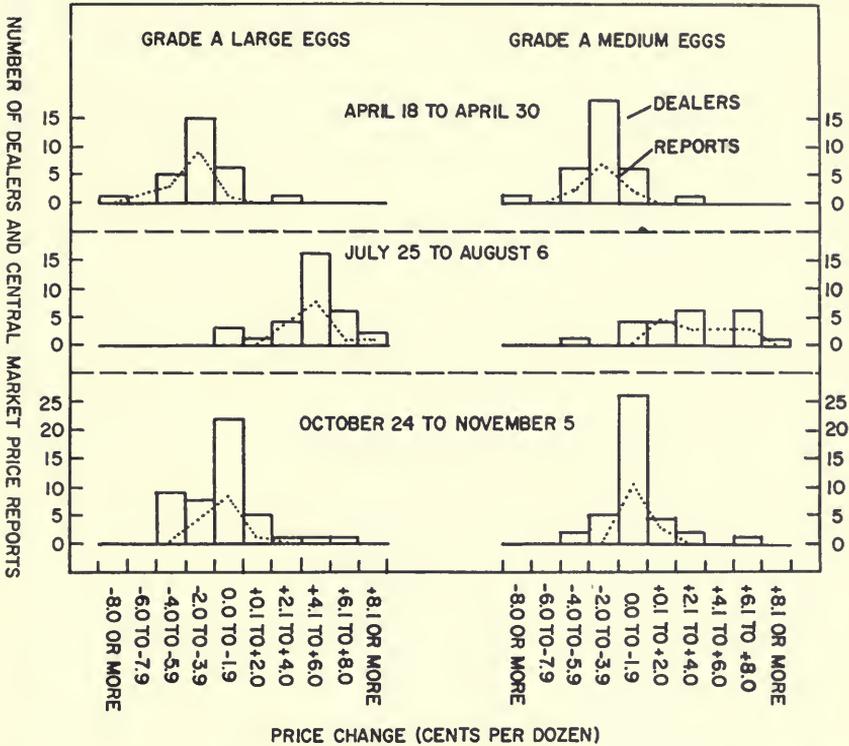
In addition, the St. Louis price report was too high during the fall to accurately reflect Missouri producer prices. Fifteen of the 17 dealers paid their lowest prices relative to this report during the fall period of study. The Chicago report appeared to be too high during the summer.

SHORT-TIME PRICE MOVEMENTS AT COUNTRY POINTS AND CENTRAL MARKETS

Price movements over two-week periods

During each of the two-week periods studied, prices reported in most central markets moved in the same direction. A different movement occurred during each period. During the spring, prices moved downward. In the summer, they moved upward rather rapidly. During the fall they tended to increase slightly during the first week and then drop during the second week. Prices at country points were compared with those in central markets during each of these three periods to determine whether they moved in the same direction and in equal amounts.

For both A Large and A Medium eggs, price changes made by country dealers during each two-week period were arranged into classes with two-cent intervals. Changes reported in the central markets were



Price changes made by country dealers and central market price reports over three two-week periods during 1955. Bars indicate the number of dealers in combined states and lines the number of central market price reports. (Fig. 7)

treated in the same manner. In most instances, a distinct modal (most typical) price movement resulted for both country dealers and central market price reports (Fig. 7). Furthermore, the modal price change was the same at country points as in central markets. Over each of the two-week periods, prices paid to producers tended to move in the same direction and by approximately equal amounts as prices reported in the central markets.

Also, the more uniform the price changes occurring among the central market price reports over the two-week period, the more uniform the price changes occurring at country points. For example, for A Medium eggs during the fall, 10 of the 13 central market price reports (77 percent) showed a price movement of zero to minus 1.9 cents a dozen over the two-week period. During the same period, 26 of the 42 country dealers (62 percent) showed the same price move-

ment. In contrast, price movements of A Large eggs were less uniform among central markets during the summer. Seven of the 13 reports (54 percent) showed the most typical price movement, an increase of 4.1 to 6.0 cents a dozen. During the same period, 16 of the 32 country dealers (50 percent) showed the same price increase. Less uniformity in price movements among central markets resulted in less uniformity among country dealers.

What happens to egg price movements at country points when price movements vary widely among central markets was evidenced in A Medium eggs during the two-week summer period. There was no one predominant movement in the central markets (Fig. 7). On individual reports, changes ranged from an increase of one-half cent to 8 cents. These diverse movements in the central markets caused a similarly diverse movement at country points (Fig. 7). Changes made by individual country dealers ranged from a decrease of 4 cents to an increase of 10 cents.

It was possible that the price change made by a country dealer over a two-week period may have been influenced not only by price changes in the central markets, but also by the price he paid at the beginning of the period relative to prices paid by surrounding dealers. To determine this effect, if any, the dealers were divided into two groups according to whether they paid above or below the average of all cooperating dealers in the state on the first day of the two-week period. Average price changes made by the two groups over the two-week periods were compared. The analysis was made for A Large eggs for each two-week period (Table 15). On a declining market, the average decrease was greater for dealers paying above-average prices on the first day than for dealers paying below-average prices. On a rising market, the average increase was less for dealers paying above-average prices on the first day than for those paying below-average prices. Some of the variation in price changes among dealers over the two-week period can be traced to their relative price position at the beginning of the period.

As indicated in Fig. 7, egg prices did not change by equal amounts in all central markets during each two-week period. The changes were so nearly equal on many reports that it was impossible to associate those in any state with those in any individual central market report. However, comparisons of average price changes for A Large eggs in each state and on each central market price report indicate that certain reports may have influenced country dealers in one state more than in another.

During the two-week spring period, the decline in the Ohio price

Table 15. — Comparison of Price Changes Made Over Two-Week Periods by Dealers Paying Above and Below State Average Prices on the First Day of the Period, A Large Eggs for Combined States, 1955

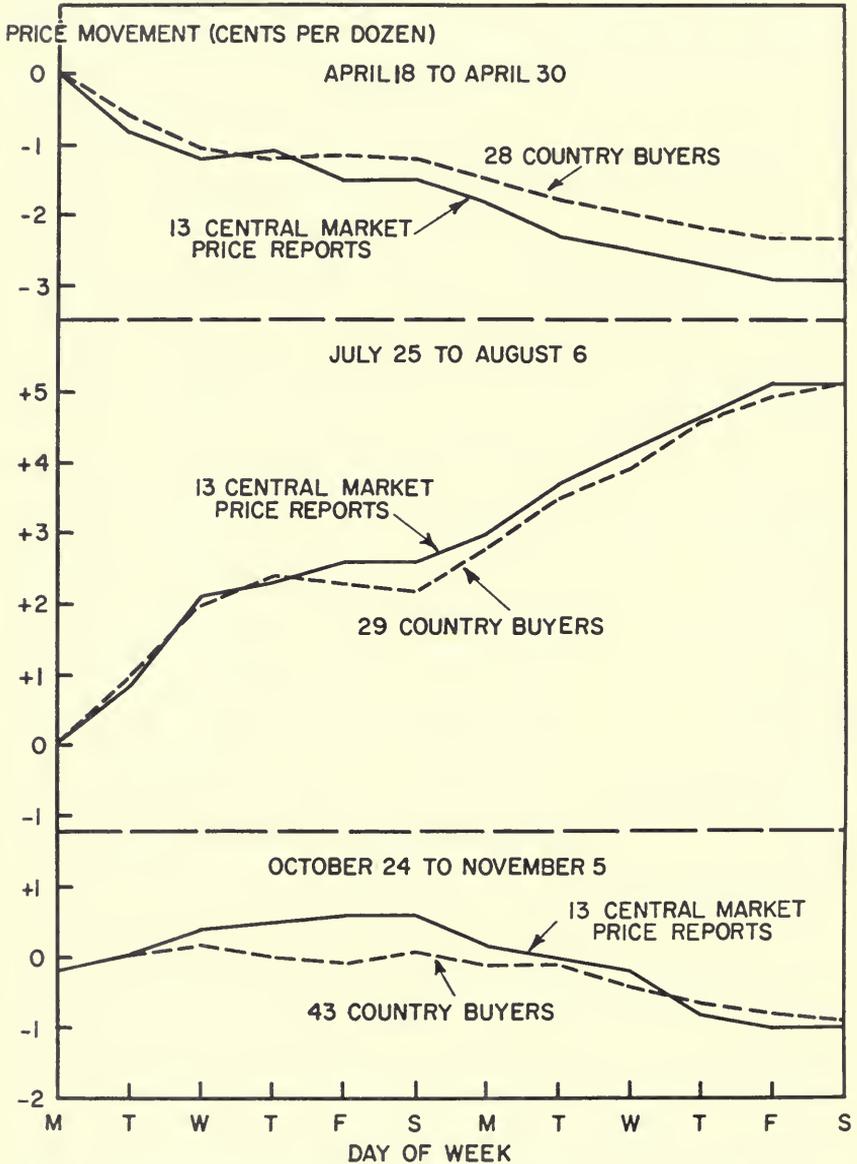
Period	Dealers paying above state average		Dealers paying below state average	
	Number	Av. price change (cents per dozen)	Number	Av. price change (cents per dozen)
April 18–April 30.....	14	-3.1	12	-1.6
July 25–August 6.....	16	+4.4	16	+5.9
October 24–November 5.....	27	-1.4	18	0

Table 16. — Price Changes Made for A Large Eggs by Country Dealers and Central Market Price Reports Over Three Two-Week Periods, by States, 1955

April 18 to April 30		July 25 to August 6		October 24 to November 5	
Central market price report* and country dealers	Price change, cents per dozen	Central market price report* and country dealers	Price change, cents per dozen	Central market price report* and country dealers	Price change, cents per dozen
Cleveland consumer...	0.0	New York nearby....	+8.5	St. Louis wholesale....	+1.5
Cincinnati consumer...	-2.0	Detroit consumer.....	+8.0	St. Louis consumer....	0.0
Indiana dealers.....	-2.1	Ohio dealers.....	+7.3	Cleveland consumer....	0.0
Illinois dealers.....	-2.2	Cleveland consumer....	+6.0	Cincinnati consumer....	0.0
New York midwestern	-2.5	Detroit wholesale....	+5.3	Pittsburgh consumer....	0.0
St. Louis consumer....	-2.5	St. Louis wholesale....	+5.0	Missouri dealers.....	-0.1
St. Louis wholesale....	-2.8	Pittsburgh wholesale....	+5.0	Ohio dealers.....	-0.3
Cincinnati wholesale....	-2.8	Pittsburgh consumer....	+5.0	Indiana dealers.....	-0.4
Missouri dealers.....	-3.0	Illinois dealers.....	+4.9	Cincinnati wholesale....	-0.5
Chicago.....	-3.0	Indiana dealers.....	+4.8	Cleveland wholesale....	-1.0
Pittsburgh wholesale....	-3.0	Cleveland wholesale....	+4.8	Pittsburgh wholesale....	-1.0
Pittsburgh consumer....	-3.0	Missouri dealers.....	+4.5	Detroit wholesale....	-1.5
Detroit consumer.....	-3.8	Chicago.....	+4.5	Illinois dealers.....	-1.8
Ohio dealers.....	-3.9	Cincinnati wholesale....	+4.0	Chicago.....	-2.0
Detroit wholesale....	-4.0	New York midwestern	+3.5	New York nearby.....	-2.5
Cleveland wholesale....	-4.3	Cincinnati consumer....	+3.0	New York midwestern....	-3.0
New York nearby.....	-6.0	St. Louis consumer....	+2.5	Detroit consumer.....	-3.8

* For a more detailed description of central market prices with which producer prices were compared, see Appendix Table 1.

of A Large eggs averaged almost 4 cents a dozen, while declines in the other states averaged 3 cents or less (Table 16). Ohio dealers may have been more strongly influenced than others by the relatively large declines on the New York nearby, Detroit, and one of the Cleveland price reports. During the summer period, Ohio producer prices increased more than 7 cents a dozen, while average increases in other states were less than 5 cents (Table 16). Again, the Ohio price increase was more comparable with increases in the New York nearby, Detroit, and one of the Cleveland price reports than increases occurring in other markets. However, during the fall period, Ohio, Indiana and Missouri prices changed very little, while the New York nearby and Detroit prices showed sizable declines.



A comparison of average daily price changes made by country dealers and central market price reports over three two-week periods, for A Large eggs, in combined states, during 1955. (Fig. 8)

The greatest diversity in egg price movements between Chicago and St. Louis occurred during the fall. Over this two-week period, the St. Louis price of consumer grade A Large eggs did not change, while the price of the wholesale grade increased 1.5 cents a dozen (Table 16). During the same period, the Chicago price declined 2.0 cents. This difference in the two markets was reflected in differences within Illinois. Dealers in the southern area increased prices of A Large eggs an average of 1 cent a dozen in apparent response to the increase in St. Louis. Northern and central Illinois dealers reduced prices an average of 3.2 cents in apparent response to the decline in Chicago.

Day-to-day price movements

The previous analysis indicated that short-time price changes were not equal in all central market price reports. Also, price changes in certain central markets may have a greater influence on country dealers in one state than in another. However, to reduce space, average daily price changes on the 13 central market price reports used in the study were compared with average daily changes made by cooperating dealers in the four states. The price on the first day of each two-week period in the central markets and at country points was set equal to zero. Average price changes from this day were determined on a daily basis over the two-week period. The analysis for A Large eggs for each of the three periods is presented in Fig. 8.

During each of the periods of analysis, average daily price movements at country points were similar to average daily movements made on the 13 central market price reports (Fig. 8). On only four days during the six weeks did the spread exceed one-half cent. The greater spread during the second week of the spring period can be traced to rapid declines in the New York nearby, Detroit, and Cleveland consumer price reports. As indicated in Table 16, the declines in these reports had little effect on dealers in Illinois, Indiana, and Missouri.

During the fall period, average prices in the central markets rose during the first week, while average prices paid by country dealers showed little change (Fig. 8). However, only six of the central market price reports showed price increases during this week. Six price reports remained stable, while the Chicago price showed a slight decline. Country dealers were apparently hesitant about increasing prices when there appeared to be some confusion among central market price reports regarding the direction and extent of movements. However, during the second week of this period, 10 of the 13 central market reports showed net price declines, and average prices paid by country dealers also declined.

SUMMARY AND CONCLUSIONS

The decline of the central wholesale egg markets has created concern over the existing pricing system for eggs. The egg industry is at present disturbed because the use of price reports from wholesale markets appears to be altering egg prices from those which should prevail under existing supply-and-demand conditions. This concern is not warranted unless prices paid for eggs at country points are tied to prices reported from the central markets. This report therefore deals with the relationship between prices reported in important central markets and prices paid producers for eggs in selected North Central states.

Pricing information was obtained from 69 country dealers in Illinois, Indiana, Missouri, and Ohio. Prices paid producers were obtained on a daily basis for three two-week periods during 1955. Central market prices were obtained from governmental or private reports issued from Chicago, New York, St. Louis, Cleveland, Detroit, Cincinnati, and Pittsburgh markets.

Central market price reports are readily available, and most country buyers reported receipt of daily prices from at least one central market. More firms in Illinois, Indiana, and Missouri received price reports from Chicago than from any other single market, while New York reports were of greater importance than any others in Ohio. Generally speaking radio was the most important medium for obtaining pricing information, although in Missouri dealers relied most heavily on newspaper reports. The majority of dealers indicated that egg price reports were influential in establishing prices to producers. However, many indicated that the reports were used only as a guide, and there was not a rigid relationship between their prices to producers and prices reported in central markets.

Since more dealers indicated receiving reports from Chicago than from any other market, an analysis was made of the relationship between dealers' prices to producers and Chicago quotations. Prices paid to producers by Ohio dealers averaged above the Chicago quotations during the six weeks studied, while prices in each of the other states averaged below Chicago. If dealers were using the Chicago quotations as a price base, they were applying greater average discounts or smaller average premiums in pricing the Medium than in pricing the Large eggs. In each state, the producer price was lower for A Medium than for A Large eggs relative to appropriate Chicago quotations.

The uniformity of the spread between producer prices and central market prices from season to season was used as one measure of how closely the various central market price reports reflected producer

prices. The New York midwestern and Chicago reports were among the better reflectors of the producer prices of A Large eggs in Missouri. The New York nearby report was among the poorest reflectors. All reports were too low during the spring period of analysis to accurately reflect producer prices. For current receipt eggs in Missouri, reports from Chicago and St. Louis most accurately reflected producer prices. Chicago was better than St. Louis in the northern and western areas, while St. Louis was the best reflector in the area of Missouri adjacent to the St. Louis market.

In pricing A Large and A Medium eggs, most Illinois dealers followed the St. Louis or Chicago price reports more closely than those issued from any other market. For A Large eggs, the St. Louis reports were better than the Chicago report in reflecting producer prices in the area near the St. Louis market. The St. Louis report for the consumer grade of eggs was equally as good as the Chicago report in northern Illinois. The Chicago price was not high enough during the fall period to accurately reflect producer prices. The New York nearby quotation was the poorest reflector of producer prices of A Large eggs in all areas of Illinois. For A Medium eggs in southern Illinois, the St. Louis reports were better than Chicago. The New York nearby report was again one of the poorest reflectors. In northern Illinois, the Chicago report was one of the best, while the St. Louis reports were among the poorest.

In Indiana, no single price report was better than others in reflecting producer prices of either A Large or A Medium eggs. Indiana is located between Chicago and the eastern markets. Indiana dealers were shipping eggs to several markets in several states. These factors created wide differences in the producer to central market price relationships between dealers in the state and even in individual areas of the state. As a result, prices reported in no central market did a good job of reflecting producer prices. For A Large eggs, prices reported in Chicago and St. Louis were too low during the summer period to accurately reflect producer prices. Prices reported in most eastern markets were too high during the summer. This indicated that prices paid Indiana producers were a composite of prices reported in Chicago, St. Louis, and the eastern markets.

In Ohio, prices reported in the eastern markets played a more dominant role in pricing eggs at country points, especially A Large eggs. Cincinnati, Cleveland, and the New York nearby reports were among the better reflectors of Ohio producer prices of A Large eggs, and the St. Louis and Chicago reports were the poorest. Only minor differences existed between areas of the state. The New York nearby price was too high during the summer to accurately reflect producer

prices of A Large eggs; yet all other reports were too low during the summer. This indicated that prices paid Ohio producers were a composite of New York nearby prices and prices reported in other eastern markets. For A Medium eggs in Ohio, there were wide differences in the producer to central market price relationships between dealers. This could partially be traced to pricing differences between the northern and southern areas of the state. In southern Ohio, the Cincinnati, Cleveland, and St. Louis price reports were among the better reflectors of producer prices, while the New York nearby and Detroit wholesale reports were among the poorest. This situation was practically reversed in the northern area.

Comparisons were also made of short-time price movements at country points and central markets. Over each two-week period, prices paid to producers moved in the same direction and by approximately equal amounts as prices reported in the central markets. The more uniform the price changes occurring among the central market price reports, the more uniform the price changes occurring at country points. There was some evidence that short-time changes in New York nearby prices and those from some of the other eastern markets exerted a greater influence in Ohio than in the other three states.

Day-to-day price movements at country points also reflected the average daily movements made in the central markets. This was true when central market prices were moving up as well as when they were moving down. Country dealers could not afford to ignore a price change in the central markets, especially if the change was fairly consistent among markets.

This study provides evidence that the prices dealers pay to producers in the North Central Region are not as closely related to central market price reports as many people have been led to believe. However, it appears that these reports do exert sufficient influence on the pricing decisions of country dealers to encourage continued efforts to evaluate and improve the price-reporting system for eggs in the North Central Region.

In this study many country dealers indicated that they used central market price reports in only a general way to establish the prices they paid to producers. A seasonal analysis of the spread between dealers' prices and those reported in central markets showed that dealers did alter this spread from period to period during the year. For example, although the Chicago market was an important source of pricing information for Illinois dealers, 12 of 14 dealers paid their highest prices for A Large eggs relative to the Chicago quotation during the fall period of analysis. All Missouri dealers paid their highest prices for A Large eggs relative to all central market price reports during the

spring. In Ohio, the New York nearby price rose too much from spring to summer to accurately reflect producer prices of A Large eggs. Yet no other price reports rose enough.

These examples clearly indicate that central market price reports do not "set" prices to which North Central egg buyers rigidly adhere. Country dealers are not always guided by reported prices but alter their paying prices from season to season during the year when local supply-and-demand conditions dictate.

Although the spread between country prices and central market price reports did vary from season to season, the analysis indicates that day-to-day price changes made by country dealers were closely related to changes occurring in the central markets. Country dealers apparently have no better basis than the central market price reports for determining short-run changes in supply-and-demand conditions. A country dealer can hardly afford to ignore a change in central market prices which is accepted by his competitors. Since dealers look to market reports for day-to-day price changes, it is essential that these reports accurately reflect day-to-day variations in supply and demand. The small number of transactions on which some of the central market price reports are based may hamper the ability of these reports to detect short-run changes.

One of the major objections of producers and tradespeople to central market price reports is that they fluctuate more than supply-and-demand conditions warrant. This may be because prices established one day are too high in relation to actual supply-and-demand conditions. The next day they may be lowered to compensate for the error of the previous day. This procedure may cause an excessive number of changes around the equilibrium price. Since country dealers in the North Central Region do follow these numerous price changes, they will be faced with greater risks in buying and selling. They will need a higher margin to cover these risks. This higher margin will mean lower prices to producers.

The poultry industry has been alert to devise improvements in the price-reporting system for eggs. A popular suggestion, and one that has been adopted in several areas, has been to report prices paid by country dealers at country points. But this practice will not solve the major pricing problem facing the egg industry—the problem of determining short-run changes in supply-and-demand. This study indicates that country dealers depend on market price reports for day-to-day price changes. So long as price reports originate in the central markets, country dealers will probably continue to use them in this way. If so, reporting prices paid by country dealers will only reflect the daily price changes originally reported from the central market.

Appendix Table 1. — Description of Central Market Price Reports Used in Analyzing Price Relationships for Mixed A Large and A Medium Eggs

Market report	Description of reported price ^a
Chicago.....	First receivers' buying prices for mixed Large and mixed Medium (60% to 69.9% A) eggs as reported by the Chicago Market News Survey
New York midwestern....	Prices of midwestern mixed Large and mixed Medium eggs delivered f.o.b. New York as quoted by the Urner-Barry Company
New York nearby.....	Prices of nearby brown Extra Fancy Heavyweight eggs and brown Medium eggs delivered f.o.b. New York as quoted by the Urner-Barry Company
St. Louis wholesale.....	Prices of mixed Large Extras and mixed Medium Extras (minimum 70% A) eggs as reported by the O'Connor Market Reporter Company
St. Louis consumer.....	Prices of mixed Grade A Large and mixed Grade A Medium eggs as reported by the O'Connor Market Reporter Company
Cleveland wholesale.....	Prices paid for brown Large (minimum 60% A) eggs delivered to Cleveland as reported by the Market News Service of the USDA
Cleveland consumer.....	Prices paid for brown Grade A Large and brown Grade A Medium eggs delivered to Cleveland retailers as reported by the Market News Service of the USDA
Detroit wholesale.....	Prices paid for brown Large and brown Medium (minimum 60% A) eggs delivered to Detroit as reported by the Market News Service of the USDA
Detroit consumer.....	Prices paid for brown Grade A Large and brown Grade A Medium eggs delivered to Detroit as reported by the Market News Service of the USDA
Cincinnati wholesale.....	Prices paid for brown Large (minimum 60% A) eggs delivered to Cincinnati as reported by the Market News Service of the USDA
Cincinnati consumer.....	Prices paid for brown Grade A Large and brown Grade A Medium eggs delivered to Cincinnati as reported by the Market News Service of the USDA
Pittsburgh wholesale....	Prices paid f.o.b. Pittsburgh for brown and mixed Large Extras and brown and mixed Medium Extras (minimum 60% A) eggs as reported by the Market News Service of the USDA
Pittsburgh consumer....	Prices paid by Pittsburgh retailers for mixed and brown Grade A Large and mixed and brown Grade A Medium eggs as reported by the Market News Service of the USDA

Appendix Table 2. — Description of Central Market Price Reports Used in Analyzing Price Relationships for Current Receipt Eggs

Market report	Description of reported price ^a
Chicago.....	First receivers' buying prices for current receipt eggs as reported by the Chicago Market News Survey
St. Louis.....	Prices of unclassified eggs as reported by the O'Connor Market Reporter Company
Cincinnati.....	Prices of farm run eggs delivered to Cincinnati as reported by the Market News Service of the USDA

^a Where price ranges were reported, midpoints were used. Mostly prices were used if reported.

Appendix Table 3.—Average Prices Paid Producers for Mixed A Large, Mixed A Medium, and Current Receipts Eggs as a Differential From the Chicago Quotation for the Comparable Grades of Eggs, in Periods of 1955, by States and Areas

State and area	April 18– April 30	July 25– August 6	October 24– November 5	Average
Mixed A Large Eggs				
(cents per dozen above or below Chicago)				
Illinois				
Northern.....	-3.6	-3.3	-1.6	-2.8
Central.....	-4.4	-5.4	-5.1	-5.0
Southern.....	-2.1	-2.6	+ .9	-1.3
State.....	-3.2	-3.5	-1.5	-2.7
Indiana				
Northern.....	-4.4	+1.6	-2.5	-1.7
Central.....	-3.0	-2.5	-2.4	-2.6
Southern.....	-5.7	- .7	-2.8	-3.1
State.....	-4.4	- .5	-2.6	-2.5
Missouri				
Northern.....	-4.3	-7.0	-8.8	-6.7
Eastern.....	-4.1	-9.1	-12.5	-8.6
Western.....	-4.0	-10.4	-9.3	-7.9
State.....	-4.1	-8.8	-10.2	-7.7
Ohio				
Eastern.....	+1.1	+8.7	+3.4	+4.4
Western.....	-1.6	+4.6	+ .4	+1.1
State.....	- .3	+6.6	+1.9	+2.7
Mixed A Medium Eggs				
Illinois				
Northern.....	-5.9	-6.2	-5.7	-5.9
Central.....	-6.5	-7.9	-7.3	-7.2
Southern.....	-3.9	-6.4	+2.1	-2.7
State.....	-5.3	-6.6	-3.3	-5.1
Indiana				
Northern.....	-5.2	-4.3	-3.6	-4.4
Central.....	-4.4	-4.8	-2.6	-3.9
Southern.....	-6.6	-6.1	- .3	-4.3
State.....	-5.6	-5.1	-2.1	-4.3
Ohio				
Eastern.....	+ .3	+2.3	+2.9	+1.8
Western.....	-3.6	+ .5	- .6	-1.2
State.....	-1.7	+1.4	+1.2	+ .3
Current Receipt Eggs				
Illinois				
Northern.....	-4.4	-3.1	-2.8	-3.4
Central.....	-3.0	-3.9	- .2	-2.4
Southern.....	-4.9	-2.8	-1.6	-3.1
State.....	-4.3	-3.1	-1.8	-3.1
Indiana				
Central.....	-5.3	-6.4	- .5	-4.1
Southern.....	-5.7	-5.4	+3.7	-2.5
State.....	-5.6	-5.7	+2.3	-3.0
Missouri				
Northern.....	-4.2	-5.2	-5.4	-4.9
Eastern.....	-5.4	-5.9	-1.4	-4.2
Western.....	-3.3	-5.0	-5.1	-4.5
State.....	-4.2	-5.3	-4.1	-4.5

Appendix Table 4. — Average Prices Paid Producers for Mixed A Large Eggs, A Medium Eggs and Current Receipt Eggs as a Differential From Reported Prices in Selected Central Markets, by States and Periods, 1955

Market report	Illinois			Indiana			Missouri			Ohio		
	Apr. 18- Apr. 30	July 25- Aug. 6	Oct. 24- Nov. 5	Apr. 18- Apr. 30	July 25- Aug. 6	Oct. 24- Nov. 5	Apr. 18- Apr. 30	July 25- Aug. 6	Oct. 24- Nov. 5	Apr. 18- Apr. 30	July 25- Aug. 6	Oct. 24- Nov. 5
	(cents per dozen above or below market report)											
	Mixed A Large Eggs											
Chicago.....	-3.2	-3.5	-2.5	-4.4	-5	-2.5	-4.1	-8.8	-10.2	-3	+6.6	+1.9
New York midwestern.....	-4.8	-5.8	-2.1	-6.0	-2.8	-3.2	-5.7	-11.1	-10.8	-1.8	+4.3	+1.2
New York nearby.....	-9.3	-18.4	-8.5	-10.4	-15.4	-9.5	-10.2	-23.8	-17.2	-6.3	-8.3	-5.1
St. Louis wholesale.....	-1.4	-2.5	4.6	-2.5	+5	-5.7	-2.3	-7.8	-13.3	+1.6	+7.6	+1.3
St. Louis consumer.....	-1.1	-1.4	1.4	-2.3	+1.6	-2.5	-2.0	-6.7	-10.1	+1.8	+8.7	+1.9
Cleveland wholesale.....	-2.7	-4.3	-2.9	-3.8	-1.3	4.0	-3.5	-9.6	-11.6	+1.8	+5.8	+4
Cleveland consumer.....	-14.0	-18.7	-14.2	-15.1	-15.7	-15.3	-14.9	-24.0	-22.9	-11.0	-8.6	-10.9
Detroit wholesale.....	-2.0	-4.9	+7	-3.1	-1.9	-4	-2.8	-10.2	-8.0	+1.0	+5.2	+4.0
Detroit consumer.....	-5.1	-6.6	-3.1	-6.3	-3.6	4.2	-6.0	-12.0	-11.8	-2.2	+3.5	+2
Cincinnati wholesale.....	-3.4	-8.1	3.1	-4.6	-5.1	-4.2	-4.3	-13.4	-11.8	-4	+2.0	+2
Cincinnati consumer.....	+8	-4.9	-2.2	-3	-1.9	-3.3	-1	-10.2	-10.9	+3.8	+5.2	+1.1
Pittsburgh wholesale.....	-4.9	-7.2	-5.1	-6.0	-4.2	-6.2	-5.8	-12.5	-13.8	-1.9	+2.9	+1.8
Pittsburgh consumer.....	-16.0	-18.2	-13.2	-17.2	-15.2	-14.3	-16.9	-23.5	-21.9	-13.1	-8.1	-9.9
	Mixed A Medium Eggs											
Chicago.....	-5.3	-6.6	-3.3	-5.6	-5.1	-2.0	...	...	...	-1.6	+1.4	+1.1
New York midwestern.....	-8.3	-9.3	-5.2	-8.6	-7.8	-3.9	...	...	...	-4.6	-1.3	-7
New York nearby.....	-10.2	-13.4	-7.1	-10.4	-12.0	-5.9	...	...	...	-6.5	-5.4	-2.7
St. Louis wholesale.....	-3.2	-5.0	6.2	-3.5	-3.6	4.9	...	...	...	+5	+2.9	+1.7
St. Louis consumer.....	-2.5	-4.8	5.5	-2.8	-3.4	4.2	...	...	...	+1.2	+3.1	+1.0
Cleveland consumer.....	-14.1	-17.9	-15.4	-14.4	-16.5	-14.1	...	...	...	-10.5	-9.9	-10.9
Cleveland wholesale.....	-4.2	-7	-7	-4.4	-5.3	+5	...	...	...	...	+1.2	+3.7
Detroit consumer.....	-5.6	-7.7	4.6	-5.9	-6.2	3.4	...	...	...	-1.9	+3	-2
Detroit wholesale.....	-1.3	-6.4	4.0	-1.6	-5.0	-2.7	...	...	...	+2.4	+1.5	+4
Cincinnati consumer.....	-8.0	-10.2	-6.2	-8.3	-8.8	4.9	...	...	...	-4.3	-2.2	-1.7
Pittsburgh wholesale.....	-17.2	-20.0	-19.0	-17.5	-18.6	-17.7	...	...	...	-13.5	-12.0	-14.5
Pittsburgh consumer.....							...	...	...
	Current Receipt Eggs											
Chicago.....	-4.3	-3.2	-1.8	-5.6	-5.8	+2.3	-4.2	-5.3	-4.1	...	...	...
St. Louis.....	-4	+2.1	-1.3	-1.6	-5	+2.8	-3	-1	-3.6	...	...	...
Cincinnati.....	+2	+5	+1.2	-1.1	-2.1	+5.3	+3	-1.6	-1.1	...	...	...

Appendix Table 5.—Seasonal Fluctuation of Illinois Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, A Large, A Medium, and Current Receipt Eggs, by Areas of the State, 1955*

Market report	Average fluctuation range (cents per dozen)				Number of dealers having smallest fluctuation			
	North- ern	Central	South- ern	State	North- ern	Central	South- ern	State
A Large Eggs								
Chicago.....	2.28	1.68	3.73	2.65	2	2	...	4
New York midwestern.....	3.43	2.65	5.16	3.88	...	1	...	1
New York nearby.....	9.80	9.86	11.46	10.41	...	...	...	...
St. Louis wholesale.....	3.14	5.69	2.15	3.33	1	...	3	4
St. Louis consumer.....	1.51	2.74	1.73	1.85	2	...	2	4
Cleveland wholesale.....	1.70	2.86	2.88	2.37	1	...	...	1
Cleveland consumer.....	4.65	5.42	5.98	5.29	...	...	...	...
Detroit wholesale.....	5.19	4.62	7.11	5.76	...	...	...	...
Detroit consumer.....	3.22	2.76	5.05	3.78	...	...	...	...
Cincinnati wholesale.....	5.02	5.42	6.51	5.64	...	...	...	...
Cincinnati consumer.....	5.03	6.44	5.91	5.65	...	...	...	...
Pittsburgh wholesale.....	2.25	3.20	3.57	2.94	...	...	...	...
Pittsburgh consumer.....	4.54	3.91	6.46	5.09	...	...	...	...
A Medium Eggs								
Chicago.....	.98	1.99	8.91	4.03	5	1	...	6
New York midwestern.....	1.65	2.03	9.75	4.63	...	1	...	1
New York nearby.....	3.42	4.27	11.52	6.49	...	...	...	...
St. Louis wholesale.....	4.80	5.84	5.22	5.17	...	...	4	4
St. Louis consumer.....	4.77	5.84	5.52	5.27	...	...	...	...
Cleveland consumer.....	3.20	4.61	7.77	5.13	...	...	...	...
Detroit wholesale.....	3.18	3.90	11.37	6.26	...	...	...	...
Detroit consumer.....	1.40	2.58	8.45	4.17	1	1	...	2
Cincinnati consumer.....	4.61	6.02	7.91	6.09	...	...	...	...
Pittsburgh wholesale.....	1.49	2.64	9.45	4.58	...	...	...	...
Pittsburgh consumer.....	3.57	4.64	6.51	4.85	...	...	1	1
Current Receipt Eggs								
Chicago.....	2.80	3.74	3.65	3.33	1	...	...	1
St. Louis.....	4.48	1.00	4.31	3.72	...	1	...	1
Cincinnati.....	2.80	3.05	2.84	2.86	1	...	2	3

* For method of computation, see pages 24 and 25.

Appendix Table 6.—Seasonal Fluctuation of Indiana Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, A Large, A Medium, and Current Receipt Eggs, by Areas of the State, 1955^a

Market report	Average fluctuation range (cents per dozen)				Number of dealers having smallest fluctuation			
	North- ern	Cent- ral	South- ern	State	North- ern	Cent- ral	South- ern	State
A Large Eggs								
Chicago.....	6.04	1.19	5.26	4.16	...	1	1	2
New York midwestern.....	6.08	2.00	5.73	4.60	...	...	...	...
New York nearby.....	4.84	8.33	6.95	6.71	1	...	...	1
St. Louis wholesale.....	8.28	4.62	7.17	6.69	...	...	...	...
St. Louis consumer.....	6.54	2.09	6.12	4.92	...	...	...	...
Cleveland wholesale.....	5.19	1.62	5.42	4.07	...	...	...	...
Cleveland consumer.....	4.76	3.89	5.20	4.62	...	...	...	...
Detroit wholesale.....	5.76	3.65	5.70	5.04	...	...	...	...
Detroit consumer.....	5.47	1.62	5.40	4.16	...	1	...	1
Cincinnati wholesale.....	4.76	3.89	5.20	4.62	...	...	...	...
Cincinnati consumer.....	5.76	5.01	5.20	5.32	...	...	1	1
Pittsburgh wholesale.....	4.84	1.93	5.20	3.99	1	...	...	1
Pittsburgh consumer.....	5.84	3.00	5.79	4.88	...	...	...	...
A Medium Eggs								
Chicago.....	4.24	2.25	9.03	5.76	...	...	...	...
New York midwestern.....	4.79	3.02	9.96	6.51	...	...	...	...
New York nearby.....	4.74	5.22	11.02	7.35	1	...	...	1
St. Louis wholesale.....	5.12	3.23	6.24	5.19	1	...	1	2
St. Louis consumer.....	5.12	3.23	6.24	5.19	...	...	...	...
Cleveland consumer.....	4.26	2.98	7.10	5.14	...	...	...	...
Detroit wholesale.....	4.93	4.98	11.08	7.40	...	...	...	...
Detroit consumer.....	4.08	1.93	8.34	5.36	...	1	...	1
Cincinnati consumer.....	5.08	4.32	6.38	5.45	...	...	1	1
Pittsburgh wholesale.....	4.14	2.97	9.29	5.97	...	...	...	...
Pittsburgh consumer.....	4.52	2.03	6.84	4.95	...	...	...	...
Current Receipt Eggs								
Chicago.....	(b)	5.94	9.42	8.26	(b)	...	...	...
St. Louis.....	(b)	1.33	5.98	4.43	(b)	1	2	3
Cincinnati.....	(b)	5.25	8.44	7.38	(b)	...	...	...

^a For method of computation, see pages 24 and 25.

^b None of the cooperating firms in Northern Indiana purchased current receipt eggs during each period of study.

Appendix Table 7.—Seasonal Fluctuation of Missouri Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, Current Receipt Eggs, by Areas of the State, 1955^a

Market report	Average fluctuation range (cents per dozen)				Number of dealers having smallest fluctuation			
	North- ern	West- ern	East- ern	State	North- ern	West- ern	East- ern	State
Chicago.....	2.24	2.65	5.01	3.22	5	5	0	10
St. Louis.....	5.14	5.67	1.94	4.39	1	0	5	6
Cincinnati.....	3.24	3.43	4.16	3.58	0	1	0	1

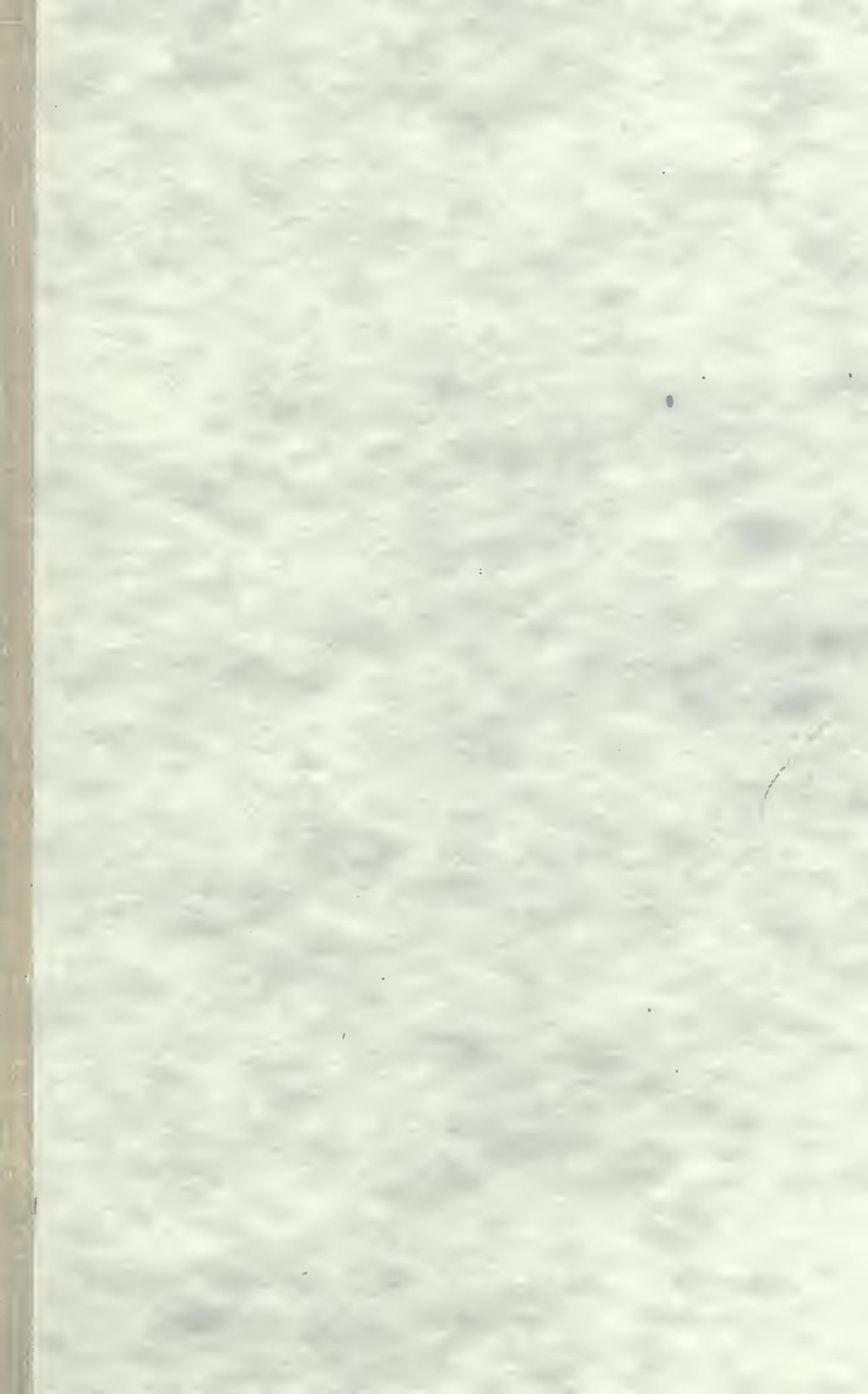
^a For method of computation, see pages 24 and 25.

Appendix Table 8.—Seasonal Fluctuation of Ohio Dealers' Prices to Producers Around Selected Central Market Price Reports, and Number of Dealers Having Smallest Fluctuation With Respect to Each Report, A Large Eggs, and A Medium Eggs, by Areas of the State, 1955^a

Market report	Average fluctuation range (cents per dozen)			Number of dealers having smallest fluctuation		
	Northern	Southern	State	Northern	Southern	State
A Large Eggs						
Chicago.....	6.78	6.93	6.86	...	...	...
New York midwestern.....	6.09	6.24	6.17	...	...	...
New York nearby.....	2.68	3.75	3.22	1	1	2
St. Louis wholesale.....	9.46	8.34	8.91	...	...	...
St. Louis consumer.....	7.41	6.96	7.19	...	...	...
Cleveland wholesale.....	6.01	5.57	5.79	...	...	...
Cleveland consumer.....	2.93	2.50	2.72	1	1	2
Detroit wholesale.....	4.09	4.61	4.36	...	...	...
Detroit consumer.....	5.54	5.69	5.62	...	...	...
Cincinnati wholesale.....	2.65	2.57	2.62	...	...	...
Cincinnati consumer.....	4.66	3.54	4.11	...	...	...
Pittsburgh wholesale.....	5.33	4.91	5.12	...	...	...
Pittsburgh consumer.....	4.91	5.11	5.01	...	...	...
A Medium Eggs						
Chicago.....	2.27	5.53	3.90	...	...	...
New York midwestern.....	2.40	6.63	4.51	...	...	...
New York nearby.....	1.33	6.53	3.92	1	...	1
St. Louis wholesale.....	6.50	3.43	4.96	...	...	...
St. Louis consumer.....	6.00	2.93	4.46	...	1	1
Cleveland consumer.....	3.35	2.60	2.97	...	...	...
Detroit wholesale.....	1.43	6.91	4.17	1	...	1
Detroit consumer.....	2.34	4.60	3.47	...	...	...
Cincinnati consumer.....	4.68	1.84	3.26	...	1	1
Pittsburgh wholesale.....	1.45	5.33	3.39	...	...	...
Pittsburgh consumer.....	4.36	2.83	3.59	...	...	...

^a For method of computation, see pages 24 and 25.





UNIVERSITY OF ILLINOIS-URBANA

Q.630.71L6B C008
BULLETIN. URBANA
691 1963



3 0112 019530523