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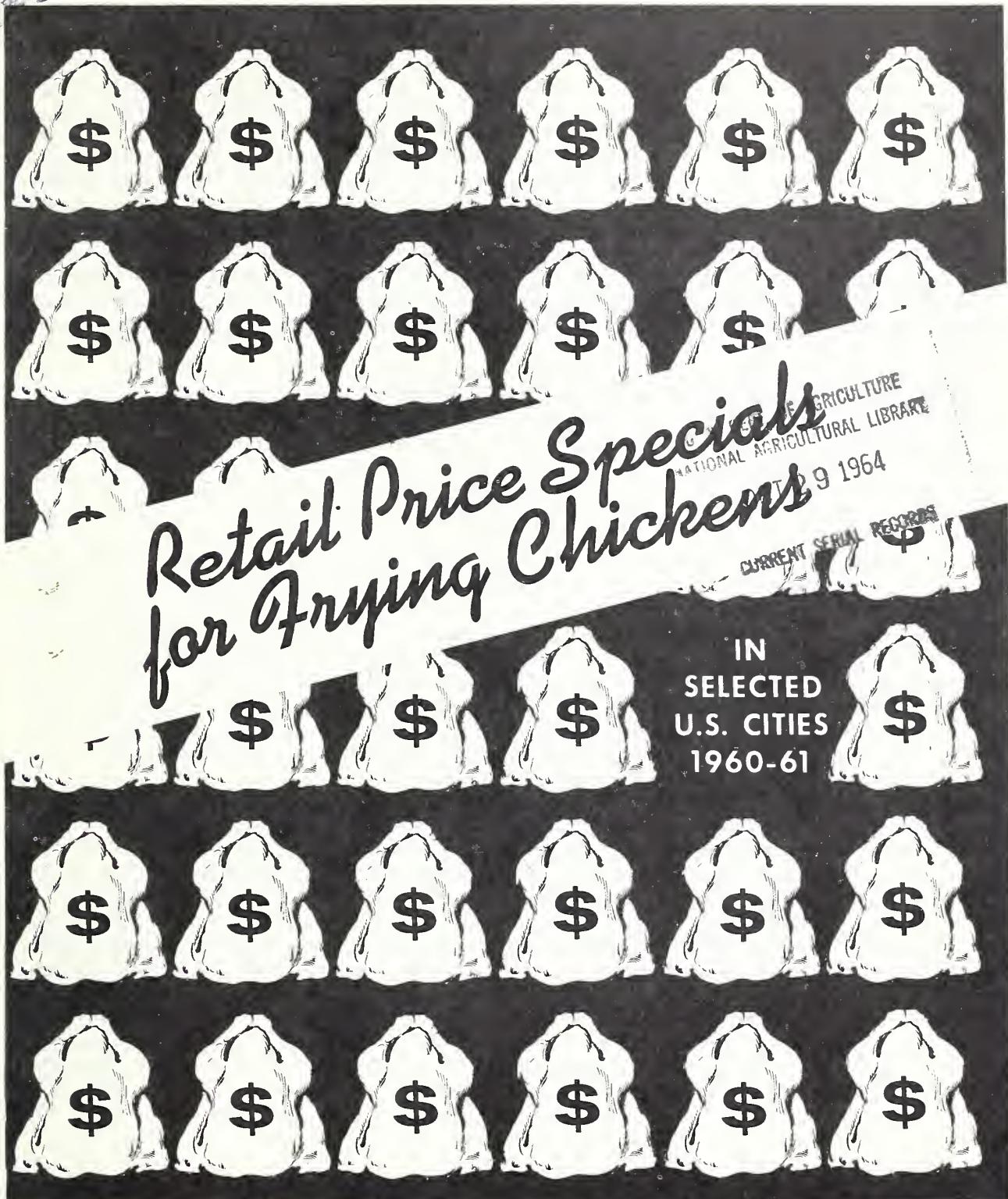
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UNITED STATES DEPARTMENT OF AGRICULTURE

Economic Research Service Marketing Economics Division

ERS-101

PREFACE

This preliminary report on price specials for frying chickens is based on data compiled from interviews with and records of private firms, newspapers, and government agencies. It covers the extent and frequency of specials in 10 cities in 1960-61, analyzes some effects of price specials in Washington, D. C., and points out some effects of price specials as related to selected elements of the marketing system. This is part of a broad program of research designed to provide information on factors related to price spreads on food.

The author appreciates the cooperation of private firms that supplied marketing information for this study.

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Washington, D. C.

January 1963

SUMMARY

Frying chickens have been one of the best food buys for consumers in recent years because of plentiful supplies and favorable low prices. Civilian per capita consumption of frying chickens in the United States was 25.5 pounds in 1961, an increase of 6.4 pounds since 1957. Retailers have frequently used fryers as feature sales items at special low prices. Retail prices for frying chickens declined from 1960 to 1961 during both regular sales weeks and periods of special sales promotions. There was also a general decline in prices paid by retailers and in farm values during this period.

Retail prices reported by the Bureau of Labor Statistics (BLS) for frying chickens in 10 cities in 1960-61 were about 11 cents a pound higher than typical special sales prices featured in newspapers. The BLS prices averaged 42.3 cents a pound in 1960 and 38.3 cents in 1961.

Frying chickens are one of the more popular meat commodities featured as special sales items by retailers in their newspaper advertisements. Many retailers featured fryers about once a month. Retailers in some of the 10 cities featured fryers in their newspaper advertisements more than 2 weeks a month in 1960-61. Newspaper advertisements featuring frying chickens were placed by an average of about 23 firms a week during the period of this study in the 10 cities.

More retailers in Washington, D. C., featured fryers in their newspaper advertisements than in most of the other nine cities. Retail prices for fryers in Washington were among the lowest of the 10 cities; BLS prices averaged 39.1 cents a pound in 1960 and 35.0 cents in 1961. Independent retailers often featured these birds at prices competitive with those advertised by chainstores during 1960-61. Independent retailers in Washington were aggressive merchandisers of fryers. They were often the first firms to advertise price specials on fryers at new low prices in 1960-61. Per capita consumption of fryers in Metropolitan Washington was estimated to be more than 5 pounds higher than the national average in 1961.

Special sales of fryers by a single retail firm usually did not have much effect on the total volume handled in the market area of Metropolitan Washington. However, when several firms featured fryers during the same time period, the estimate of total sales by all retailers in the area increased noticeably.

Retail selling prices of frying chickens changed more than prices paid by retailers when moving to and from periods of price specials in 1960-61. In contrast, retailers' selling prices during nonsale weeks, were comparatively more stable than their buying prices. As a result, retailers' price spreads usually changed drastically when moving to and from periods of featuring price specials on fryers. Retailers probably had higher gross returns from fryers during weeks of specials than during nonsale weeks, but gross expenditures for fryers were also higher. Their resulting net returns from fryers were therefore probably lower during the special weeks.

Advertising apparently had a significant effect on the increased volume of fryers sold by retailers. Volumes of fryers handled by a sample of five retail firms during their special sales weeks generally increased more than threefold over their volumes during nonsale weeks. When retailers changed prices of fryers during regular weeks (with no special sales promotion) they did not have significant changes in volumes of fryers handled. As a result of special sales, these retailers sold more fryers on an annual basis than apparently would have been sold without these sales promotions, but average retail prices were lower.

The volume of fryers handled by retail firms was generally about 25 percent smaller the week after a special than the week preceding a special. When fryers were featured as specials in successive weeks, there was a tendency for volume movement to drop off. This probably reflects consumer stockpiling of fryers during previous special weeks and increased consumer purchases of competing products, such as red meats.

Increased quantities of fryers purchased for anticipated requirements of a price special by a single firm generally had no appreciable influence on average prices to retailers in the market area during the weeks immediately bracketing the special week, especially if not too many firms featured fryers during the same week. However, some retailers included in this study tended to pay a little less for their special sales purchases than the prevailing general market price. Usually, few of the major retailers featured fryers during the same weeks.

In general, the decline in prices for frying chickens is often associated with the general increase in production of these birds in recent years. From 1960 to 1961, the percentage decline in fryer prices at all market levels in the 10 cities was greater than the percentage increase for either the total U. S. commercial slaughter of young chickens or the average U. S. civilian per capita consumption of frying chickens. Although the poultry industry may be in somewhat of a price dilemma, it can be given at least partial credit for helping to keep food prices from rising more than they have.

RETAIL PRICE SPECIALS FOR FRYING CHICKENS
IN SELECTED U. S. CITIES, 1960-61

By Leo R. Gray, agricultural economist
Marketing Economics Division
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INTRODUCTION

Many questions have been raised in recent years about the impacts of price specials for frying chickens on prices received by processors and producers and on the volume marketed both annually and seasonally. 1/ Most discussants have offered little empirical evidence to support their point of view. Retail price specials for frying chickens are analyzed in this report with respect to: (1) Extent and frequency of specialing in 10 selected U. S. cities, (2) extent, frequency, and aggregate volume of fryer sales as a result of specials in Washington, D. C., and (3) general effects of price specials on selected segments of the marketing system.

Frying chickens were frequently featured as low-price specials and at gradually declining price levels in the last few years. Special prices for fryers featured by retailers in their newspaper advertisements declined in many cities from a typical 39 cents a pound in 1957 to 23 cents and even lower in the autumn of 1961. Retailers usually sold substantially increased quantities of frying chickens when they were featured as specials.

Procedure

Basic data for this study were obtained for the years 1960 and 1961 from the following sources:

- (1) Retail prices collected in 10 cities by the Bureau of Labor Statistics, U. S. Department of Labor (BLS). The 10 cities are Boston, New York, Baltimore, Washington, Atlanta, Cleveland, Chicago, St. Louis, San Francisco, and Los Angeles.
- (2) Newspaper advertisements for frying chickens (whole, ready-to-cook) by 126 retail firms in the 10 selected cities. 2/
- (3) Volume-price information supplied by mail or personal interview with a selected, stratified sample of retail firms in Washington.

1/ In this report the terms special, feature, and sales are used interchangeably. Sales weeks cover those periods when a retail firm promoted fryers in newspaper advertisements. Regular and nonsale weeks refer to periods when the firm did not feature fryers in newspaper advertisements.

2/ In this report, retail grocers are divided into two categories - chainstores and independents. Chainstores are corporate firms operating 11 or more retail grocery stores. Independents include: Firms operating 10 or fewer retail stores, retailers who are members of cooperative wholesale buying groups, and retailers who belong to voluntary merchandising groups sponsored by wholesalers and who operate under a common name.

(4) Interviews with a sample of wholesalers in Washington, D. C., to obtain some information on effects of price specials.

(5) Recent statistical data on prices and commercial slaughter published by the Market News Service, Federal-State Departments of Agriculture.

Tabulations of the number of times frying chickens were put on special sale, and the typical price at which they were advertised, were obtained by checking at least one leading newspaper daily in each of the 10 cities for the 2-year period. These tabulations provided reliable measurements of the extent and frequency of fryer specials among major markets and information on price changes. However, information was not available on volumes sold at these prices, so total weekly commercial slaughter of young chickens in the United States was used as an indirect but simple means of comparing estimated relationships of these specials to volume on a broad national plane. A study in depth was then undertaken to measure the effects of advertised price specials on the aggregate market volume for all retailers in the Washington, D. C., metropolitan area.

Weekly aggregate estimates of the volume of fryers sold by retailers in Metropolitan Washington were developed by expanding volume information obtained from the stratified sample of retail firms. Data were reduced first to typical sale and nonsale weekly volume standards per store for each stratum. They were then expanded to aggregate weekly market estimates by multiplying weekly volume per store in each stratum by the number of stores in the stratum, and adding product totals for all strata during each week. Some adjustments in volume per store were made to account for differences in store sizes between the sample and the universe of firms, especially in strata where there was substantial variation in store size. Indexes of weekly volumes and prices for fryers sold by retailers in Metropolitan Washington were computed, based on these aggregate estimates.

EXTENT AND FREQUENCY OF SPECIALS - 10 CITIES, 1960-61

Retail Prices Collected by BLS

The BLS series of retail prices for frying chickens in 10 major cities averaged 38.3 cents a pound in 1961, a decline of 4 cents from 1960 (table 1). Although BLS prices for fryers in the 10 cities averaged nearly 40 cents a pound in 1960-61, there was considerable variation in prices among cities. Annual average retail prices in 1961 varied 12 cents a pound among the cities, ranging from a low of 34.5 cents in St. Louis to a high of 46.6 cents in San Francisco.

For each of the cities, BLS collects and determines average prices for frying chickens in samples of chainstore and independent retailers. They then combine these sample averages according to predetermined weightings based on aggregate gross sales by each of these types of retailers. Chainstores have increased their share of aggregate gross sales by all retail grocery stores. These weightings vary among cities and have gradually changed, with more weight now being given chainstores in most cities.

Beginning in February 1960, the regular BLS pricing period occurred during either the first or second full week of each month. Prices are obtained for Tuesday, Wednesday, and Thursday of the pricing week. Prior to February 1960, the BLS

Table 1.--Retail prices per pound for frying chickens (grade A, whole, ready-to-cook), in 10 cities, annual averages, 1960-61

City			Typical prices advertised in newspapers 2/					
	BLS prices 1/		All stores		Chainstores		Independents	
	1960	1961	1960	1961	1960	1961	1960	1961
	: Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Boston.....	43.9	41.8	32	30	32	31	33	28
New York.....	42.9	38.6	30	27	30	28	30	26
Baltimore.....	41.4	37.9	29	24	29	25	31	22
Washington, D. C.	39.1	35.0	29	25	29	25	30	25
Atlanta.....	39.8	34.9	28	24	28	24	28	25
Cleveland.....	40.2	35.7	32	27	32	28	29	26
Chicago.....	39.1	35.2	29	26	29	26	34	22
St. Louis.....	38.6	34.5	28	24	27	24	28	24
Los Angeles.....	48.3	43.1	31	28	31	27	39	29
San Francisco 3/..	49.6	46.6	43	39	---	---	---	---
10-city average...	42.3	38.3	31	27	---	---	---	---

1/ Bureau of Labor Statistics, U. S. Department of Labor.

2/ Average of price specials most frequently advertised in leading local newspapers during BLS pricing periods.

3/ Newspaper prices were often the same for both whole and cut up fryers.

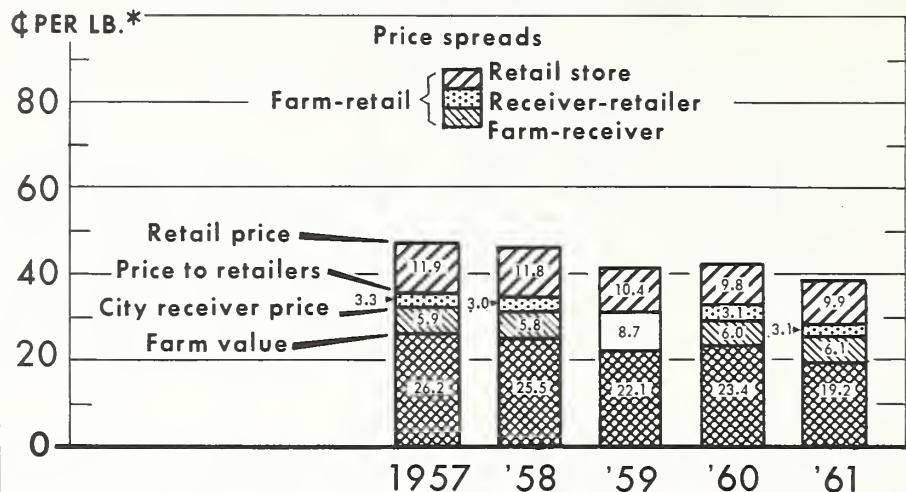
pricing period was regularly the Monday, Tuesday, and Wednesday of the week containing the 15th of the month. One reason for shifting the regular pricing period was to include the influence of weekend specials, which frequently began on Thursdays. In addition to their regular pricing period, BLS also collected prices for Thursday, Friday, and Saturday for frying chickens from 1955 to 1961. These weekend prices were used to adjust prices in the regular BLS pricing periods in the following week for each city.

There was an almost steady decline in annual averages of retail prices for frying chickens in these cities from 1957 to 1961 (fig. 1). These prices averaged 19 percent lower in 1961 than in 1957. During this 5-year period the average civilian per capita consumption of frying chickens in the United States rose to 25.5 pounds in 1961 - an increase of 33.5 percent over 1957 (fig. 2).

Information obtained in this study from some leading chainstores in several large cities indicates their prices for fryers were about the same as prices reported by BLS during similar pricing periods. Since BLS prices are weighted averages of prices in independent as well as chain retail stores, it appears that the sample of chainstores used in this comparison were pricing frying chickens within the range of prices of all retailers. A few of the chainstores indicated low-price specials during these pricing periods. Prices reported by BLS reflect advertised prices to the extent that stores in their sample feature special sales prices during the BLS pricing period.

FRYING CHICKENS

Prices and Price Spreads



* AVERAGE FOR TEN MAJOR U. S. CITIES, (EXCEPT FOR WASHINGTON, D. C. IN 1957 AND 1958)

U. S. DEPARTMENT OF AGRICULTURE

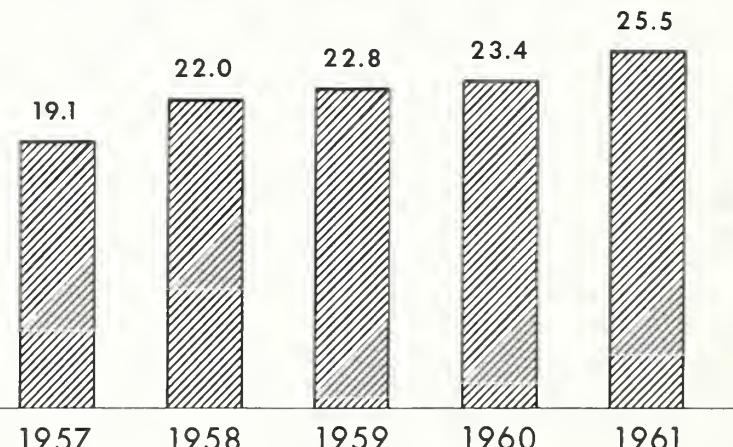
NEG. ERS 840-62(1) ECONOMIC RESEARCH SERVICE

Figure 1

Frying Chickens

CIVILIAN PER CAPITA CONSUMPTION

Pounds



ANNUAL AVERAGES FOR THE UNITED STATES

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 1581-62(1) ECONOMIC RESEARCH SERVICE

Figure 2

Retail Prices Advertised in Newspapers

Typical special sales prices for fryers, as advertised by 126 retail firms in newspapers in the 10 cities, averaged 29 cents a pound in 1960-61, or about 11 cents below BLS prices (table 1). One reason for much of the difference between BLS and newspaper prices is the sample of stores. BLS prices were based on a representative random sample of chain and independent retail stores for one week out of each month. Newspaper prices, however, were based on 64 chainstores and 62 independent retail firms advertising specials during each week of the month. Only a small part of the BLS sample of stores in each city was likely to have been included among the firms advertising fryers at reduced prices in newspapers. Therefore, an average of prices for all firms in a given market would be expected to fall within the range of the BLS and newspaper advertised prices.

Prices for whole, ready-to-cook frying chickens advertised in newspapers by selected chainstore and independent retailers in 10 major cities declined during the period 1960-61. In the first 9 months of 1960, these chickens, typically, were advertised at about 33 cents a pound, and toward the latter part of the year at 29 cents. After April 1961, prices advertised in newspapers in all the cities gradually declined below the 29-cent level to lows of 23 cents a pound and less. In Atlanta, several stores featured whole, ready-to-cook grade A frying chickens for 19 cents a pound in the summer and early autumn of 1961. The lowest price noted in Atlanta was 18.5 cents a pound in June 1961; at this time, prices paid for the equivalent value of ready-to-cook fryers at farms in Georgia was about 15 cents a pound (or about 11 cents a pound on a live weight basis).

Cut-up frying chickens were generally advertised along with whole chickens, but prices were usually 2 to 4 cents a pound higher for the cut-up birds. Independent retailers generally advertised specials for frying chickens in newspapers at prices competitive with those in chainstores in most of the 10 cities in 1960-61. Typical prices featured by the national chains generally averaged about the same as those of the regional and local chains.

Pricing Policies of Major Retailers

Retail prices are determined by competition as well as by direct cost elements. In any given time period, prices for frying chickens in a particular store or group of stores of a major retailer may be set largely by administered pricing policies of the retailer. These policies, however, are influenced by prices and practices of competing independent and chainstore retailers in various cities and local areas. This type of pricing policy would be in contrast to retail prices determined on the basis of costs of production plus transportation and other costs of marketing to get the fryers to retail stores and ready for sale to consumers. Presumably, however, retail selling prices over an extended period of time would be sufficient to equal buying prices plus marketing charges. Comparisons of newspaper prices featured in different cities by national or regional firms indicate that factors other than direct costs were important determinants of retail price.

National and regional chainstores often featured frying chickens in newspaper advertisements in more than one city during the same week, and sometimes at different prices. Chains with stores in Washington, D. C., and Baltimore often featured fryers in both cities, and at the same prices, largely because pricing policies for stores in these cities were generally administered from the same central division offices, and central warehouses supplied both cities.

Frequency of Weekly Newspaper Advertisements

Retailers used frying chickens as one of the most frequently featured special sales items during 1960-61. Many retailers, both chain and independent, featured fryers about 12 times a year or roughly once a month. Certain stores in some cities featured special sales prices for frying chickens two or more times a month. In most of the 10 cities, fryers were advertised in newspapers by at least one firm nearly every week (See Appendix, table 8). During this 2-year period an average of about 23 firms a week featured fryers in the 10 cities. In addition to or in place of newspaper advertisements, many retailers used in-store signs and flyers to feature specials on fryers. This study, however, did not observe the extent of the latter types of advertisements.

ANALYSIS OF PRICE SPECIALS IN WASHINGTON, D. C.

Retail Prices

More retailers featured frying chickens in newspaper advertisements each week during 1960-61 in Washington, D. C., than in any of the other nine cities except Atlanta (Appendix). As many as 10 different retail grocery firms advertised whole fryers in Washington newspapers in a single week during 1960-61 (table 2). Most major retail firms in Washington advertised whole fryers in 25 or more weeks during 1960-61; one firm advertised them during 62 of the 104 weeks (table 3).

Table 2.--Number of weeks that specified numbers of firms advertised whole frying chickens in newspapers during the same week,
Washington, D. C., 1960-61 1/

Number of firms advertising in same week	1960	1961
	Weeks	Weeks
10 firms.....	0	1
9 firms.....	0	0
8 firms.....	1	2
7 firms.....	3	6
6 firms.....	5	7
5 firms.....	5	9
4 firms.....	8	3
3 firms.....	10	8
2 firms.....	9	7
1 firm.....	7	7
No firms.....	4	2
	:	

1/ Based on advertisements of 13 firms in the Washington Post and Times Herald, and the Washington Daily News.

Retail prices for fryers in Washington were among the lowest of the 10 cities (table 1). Newspaper advertisements by 13 leading Washington retailers featured whole frying chickens for about 29 cents a pound in 1960 and 25 cents in 1961 (table 4). Some of the independent retailers often featured fryers at lower prices than the major chainstores during 1960-61. Price specials advertised in Washington newspapers were about 10 cents below BLS prices in 1960-61.

Table 3.--Number of weeks that 13 individual firms advertised whole frying chickens, Washington, D. C., 1960-61 1/

Firm	1960	1961
1.....	25	37
2.....	19	21
3.....	15	15
4.....	14	15
5.....	6	1
6.....	1	3
7.....	4	13
8.....	6	8
9.....	14	18
10.....	9	16
11.....	11	7
12.....	10	7
13.....	14	13
.....

1/ Advertisements in: (1) The Washington Post and Times Herald, and (2) The Washington Daily News.

Table 4.--Retail prices per pound for frying chickens (grade A, whole, ready-to-cook), Washington, D. C., monthly averages, 1960-61

Month	BLS prices 1/		Prices advertised in newspapers 2/			
			Chainstores		Independents	
	1960	1961	1960	1961	1960	1961
January.....	40.0	33.0	30.4	28.5	30.3	28.5
February.....	38.8	36.6	29.7	29.0	32.3	29.0
March.....	43.6	41.3	32.2	29.0	32.0	29.0
April.....	38.2	35.6	29.6	27.7	29.3	27.8
May.....	38.5	35.2	30.0	25.7	31.0	25.5
June.....	41.4	31.0	29.0	23.9	29.7	24.4
July.....	42.4	32.4	30.1	23.6	31.5	23.5
August.....	39.9	37.5	29.2	24.3	29.0	23.7
September.....	36.4	35.3	29.0	23.1	28.2	22.8
October.....	35.3	34.4	28.0	22.9	28.2	23.2
November.....	35.3	35.0	27.6	23.0	28.0	23.0
December.....	39.3	32.3	27.8	24.0	27.7	23.0
.....
12-month average.:	39.1	35.0	29.4	25.4	29.8	25.3
.....

1/ BLS prices collected by the Bureau of Labor Statistics, U. S. Department of Labor.

2/ Monthly averages of prices advertised in newspapers: (1) The Washington Post and Times Herald, and (2) The Washington Daily News.

Price Leaders Among Stores in Washington

Chainstores dominated the retail grocery business in Washington in terms of aggregate gross sales of all commodities.^{3/} However, independents often priced their fryers as specials to meet the competition of the major chains in their shopping area. A few independent retailers were leaders in changing the level of featured prices for frying chickens as advertised in newspapers. For example, between the weeks ending March 26, 1960, and October 14, 1961, newspaper advertised prices indicated 10 separate declines in price levels--from 31 to 19 cents a pound. In 6 of these 10 declines, independent retailers were the first firms observed to advertise a new and lower price level; major chains shared leadership with independents twice; and major chains were leaders twice. Not all retailers lowered their prices to 19 cents in their newspaper advertisements, but they did go down to at least 25 cents a pound.

Estimate of Aggregate Weekly Volumes and Prices of Fryers Sold By Retailers in Metropolitan Washington

People in Metropolitan Washington probably consumed annually about 30 pounds of frying chickens per capita in 1960-61. This is based on an estimate that all retailers sold about 56.4 million pounds of frying chickens in 1960 and 63.7 million pounds in 1961. The population of Metropolitan Washington was about 1,990,000 in 1960 and 2,050,000 in 1961.

Nearly 1,200 of the 1,504 retail grocery stores in Metropolitan Washington carried fresh meats in 1961.^{4/} About 23 percent of these 1,200 stores were members of corporate chainstore organizations and they probably handled about 75 percent of the frying chickens sold in the area. About 70 percent of the stores owned by corporate chains were in nearby Maryland and Virginia.

Indexes of estimated aggregate weekly volumes and prices of frying chickens sold by all retail stores in Metropolitan Washington in 1960-61 are shown in figure 3. These indexes are based on the following estimated annual averages: weekly volumes of about 1.1 million pounds in 1960 and 1.2 million pounds in 1961, and weekly prices per pound of 38.7 cents in 1960 and 34.2 cents in 1961. The indexes include aggregates of both special and regular prices each week and of volumes sold in corresponding weeks by all retailers in the market. Using aggregates for all retailers tends to iron out the highs and lows of individual firms. But by matching the data on number of firms advertising weekly in Washington newspapers (see Appendix) with the indexes of volume and prices shown in figure 3, it can still readily be seen that largest volumes and lowest prices occurred when several firms featured fryers during the same week.

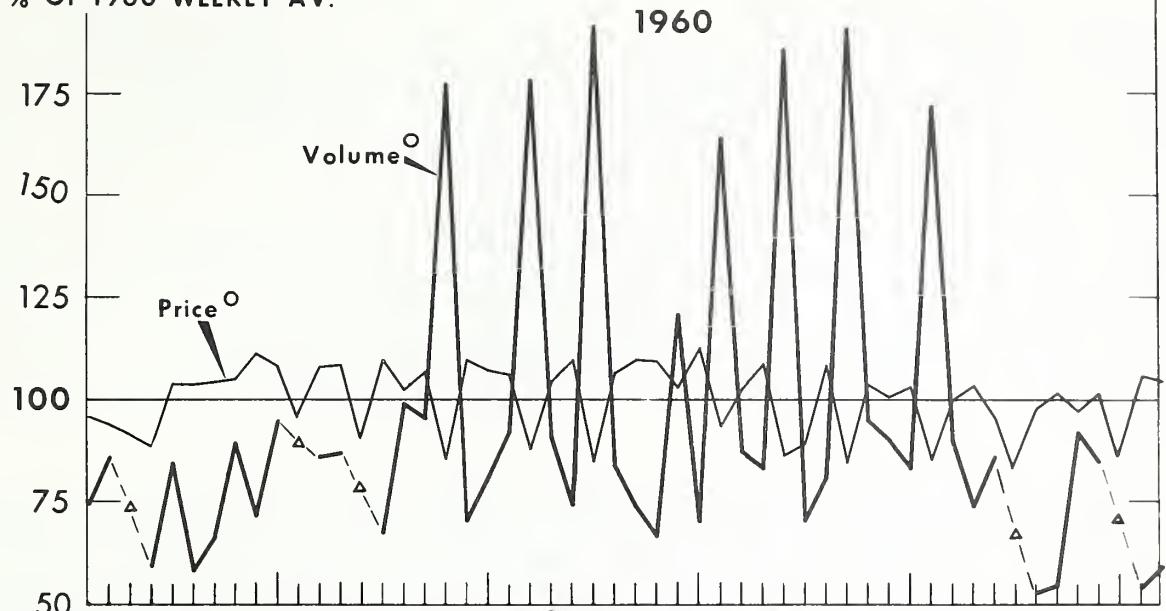
^{3/} The 1958 Census of Business indicates chainstores handled 71 percent of the aggregate gross sales of retail grocery firms in Washington, D. C., and independent retailers handled 29 percent.

^{4/} Based on material in "Washington, D. C., Retail Grocery Guide" published by the Washington Post, 1961.

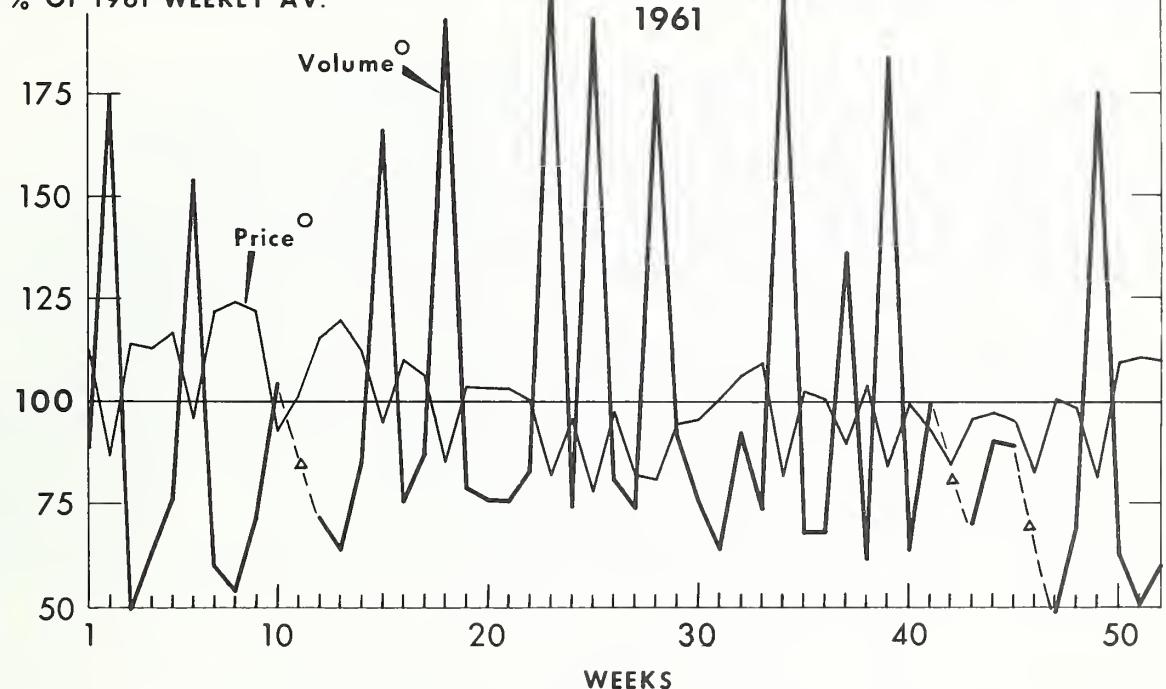
Frying Chickens, Washington, D. C.

RETAIL PRICES AND VOLUMES

% OF 1960 WEEKLY AV.



% OF 1961 WEEKLY AV.



○ INDEX OF AGGREGATE ESTIMATES OF WEEKLY AVERAGE PRICES AND VOLUMES OF FRYING CHICKENS SOLD BY ALL RETAILERS.
△ OMITTED TO AVOID REVEALING IDENTITY OF RETAILERS.

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Figure 3

EFFECTS OF PRICE SPECIALS

Effects on Weekly Volumes of Fryers Handled by Retailers

There was a distinct difference in volume-price response for fryers during sale weeks and nonsale weeks, according to information from a sample of five major chain-store and independent retailers. Some of these retail firms operated in Metropolitan Washington and are included in the indexes referred to in the preceding section. In addition to the low prices featured in newspapers, fryer specials usually were accompanied by favorable merchandising factors such as an increase in display space, and the selling of major competing meats at nonsale prices.

When the retailers featured fryers as specials, prices were generally about 30 percent lower than prices during nonsale periods, and weekly volumes averaged nearly fourtimes as large (table 5). In the week after a special, volume was generally about 25 percent smaller than in the week before a special. There was a tendency for volume to drop off when fryers were featured as specials in successive weeks at the same price. This was probably due to consumer stockpiling of fryers during the previous week of price specials, and to consumer purchases of competing substitute products such as red meats.

The data suggest that the volume of fryers sold by retailers may be influenced as much by advertising as by changes in price levels. Retailers sometimes lowered prices with no special sales promotion. During these weeks, lower prices were not accompanied by significant increases in volume; in fact, volume sometimes declined. Occasionally when fryers were featured with small changes in price, changes in weekly

Table 5.--Index of typical weekly prices and volumes of frying chickens sold by 5 large-volume retailers in 1960-61 1/

(Annual average of nonsale week prices and volumes = 100)

Firm	Nonsale week 2/		Special sale week 3/		Postsale week 4/		Average for all weeks	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume
1.....	100	100	70	456	100	97	79	192
2.....	100	100	70	432	100	78	82	175
3.....	100	100	69	400	100	90	80	190
4.....	100	100	70	367	100	90	83	162
5.....	100	100	70	270	96	95	83	148
Aver- age 5: firms	100	100	70	385	99	90	81	173

1/ Retail selling prices in this sample of stores averaged 12 cents a pound less during weeks of special sales than during nonsale weeks.

2/ Excludes sale weeks and postsale weeks.

3/ Week when whole fryers were featured in newspaper advertisements.

4/ Week immediately following special-sale week.

volume were sizable. In one instance fryers were featured with only a 5-percent decrease in price, but the weekly volume increased 87 percent over the week before the special. Then during the postsale week the price returned to the pre-special level, but the volume dropped off 76 percent from the special week and 54 percent from the week before the special.

Many smaller independent retailers featured specials on fryers during weeks when major chainstores in their neighborhood did not. These smaller stores were normally serviced through local wholesalers. Smaller buildups in supplies, or even normal stocks in wholesalers' hands, may be adequate for the requirement of specials run by smaller retailers. On the other hand, simultaneous orders of several large-volume retailers for frying chickens for use in specials, place heavy demands on processors and also for fill-ins by local wholesalers. Supplies held by local wholesalers may become short, thus contributing to a possible strengthening of their prices. When large-volume retailers in Washington were frequently featuring low-price specials in 1961, many small retailers had to pay more for their fryers than the featured selling price of some retailers. Thus, small retailers who attempted to run specials under these circumstances sometimes had to sell at or below cost to meet competition.

Annual average prices (52 weeks) for the 5 sample firms were nearly 20 percent lower than prices in nonsale weeks, but weekly average volumes (52 weeks) were about 75 percent larger than in nonsale weeks. Thus, although data available for this study may not be an adequate basis for proof, it appears that more fryers were sold on an annual basis as a result of special sales than might have been sold without sales promotion.

Effects on Returns to Retailers

A case study of retailer returns and expenditures for fryers based upon information obtained in this study is shown in table 6. These data suggest that gross returns to retailers for fryers were higher during weeks of specials than during nonsale weeks. Gross expenditures for fryers, however, were also higher during weeks of specials. As a result, net returns for fryers were lower during sale weeks than during nonsale weeks.

A limited amount of information from retailers suggests that retail selling prices during nonsale weeks were generally more stable than prices paid by retailers. When fryers were offered to consumers as feature sales attractions, however, the change in selling prices from nonsale weeks was generally much more drastic than the change in prices paid by retailers. This resulted in sharp changes in retail store price spreads. For example, information for one year from one large-volume retailer indicates the weighted average selling price of fryers during weeks of price specials was nearly 12.5 cents a pound lower than during nonsale weeks. But the firm's paying price was only about 0.8 cent a pound lower. The resulting price spreads realized by this firm averaged 2.7 cents a pound during weeks of specials, 14.5 cents during regular weeks, and 8.3 cents for the year.

Since all firms in the sample of retailers who supplied detailed weekly volume and price data for this study had different markups for special sale and nonsale periods, there is no basis for measuring markups of comparable firms not featuring fryers as specials. Some retail firms may have sold their fryers regularly at prices and markups which were significantly higher or lower than the average for nonsale weeks in the sample of stores in this study.

Table 6.--Index of weekly prices, volumes, and returns for a large-volume retailer selling frying chickens the week before, during, and after a special, 1960-61 1/

(Averages for week before special = 100)

Item	Week		
	Before special		
	Special	After special	
Selling price 2/.....:	100	72	100
Buying price 3/.....:	100	96	99
Price spread.....:	100	24	103
Volume of sales.....:	100	257	72
Gross return from fryer :			
sales.....:	100	184	72
Gross amount paid for :			
fryers.....:	100	246	71
Net return from fryer :			
sales.....:	100	62	74

1/ Based on weighted averages for 5 selected 3-week periods, each including a special, as obtained in a case study.

2/ Selling prices averaged 12.5 cents a pound lower during special week.

3/ Buying price was about 0.8 cent a pound lower for week of the special than for week before the special.

A review of weekly buying price information for some retailers included in this study and of prices to retailers as reported by the Market News Service indicates that purchases for price specials by individual retail firms generally had no appreciable influence on average prices to retailers in the market area during the week before or the week after the specials. This was especially applicable when only one or two firms featured specials the same week, and their requirements did not seriously deplete the inventories of local wholesalers. Generally however, most major retailers did not feature fryers during the same weeks. Buying prices did, however, tend to be a little lower during the week of the specials for some retail firms featuring fryers.

Effects on the Poultry Industry

Recent increases in total volume of fryers sold annually by retailers are of special importance to processors and producers. These increases over what apparently might have been sold without sales promotion were largely a result of special sales.

Sales of fryers to institutional outlets were not usually affected when only two or three retailers featured specials on frying chickens. When several retailers featured them simultaneously, however, institutional sales tended to decline.

In any one short-run situation (or within a year), retail specials probably contributed to an increase in gross returns to processors and producers since short-run demand at these market levels was relatively elastic (the percentage change in

the volume of retailer purchases was greater than the percentage change in purchase prices). In contrast, over the longer run (from one year to the next), data for 1960-61 as shown in figures 1 and 2, and in table 7, imply that the demand was probably more inelastic (the percentage change in the volume of retailer purchases was less than the percentage change in purchase prices). However, more work needs to be done to derive more exact measurements of elasticity of demand for fryers.

Table 7.--Farm value per pound of ready-to-cook frying chickens sold in 10 cities, and total U. S. commercial slaughter of young chickens, 1959-61

Year	: Farm value, 10 cities <u>1/</u>	: Total U. S. slaughter
:	:	:
:	: Cents	<u>1,000 pounds</u>
1959.....	22.1	5,356,333
1960.....	23.4	5,604,601
1961.....	19.2	5,911,709
:	:	:

1/ Average of farm values for fryers in major commercial broiler producing areas supplying the 10 cities.

If the demand for broilers is relatively inelastic, the industry could probably improve its income position if it were to produce fewer birds, sell them for a higher price, and thus try to realize a higher net return. In this environment the need for specialing might be reduced. On the other hand, if the industry were to continue to expand output at an annual rate comparable to 1959-61, it might create an environment where more frequent specialing may seem desirable.

Initiators of Price Specials

Retailers who studied data on prospective supplies and who followed policies of alternating various meat items as sales specials often took the initiative in suggesting price specials on fryers to their suppliers. On the other hand, interviews with a sample of Washington wholesale suppliers of frying chickens in 1961 indicated they often encouraged retailers to feature fryers. Similarly, processors of frying chickens sometimes suggested to retailers that they feature price specials on fryers. These suggestions of wholesalers and processors were often followed up with offers of price discounts for volume purchases over and above normal weekly requirements. Thus, it appears fryer specials were not always initiated by retailers.

Supplier inventories of fresh, ice-packed fryers sometimes followed a somewhat cyclical pattern. When inventories of local wholesalers built up over normal requirements, the surplus exerted pressure on available holding space. To move this excess inventory, local suppliers often negotiated with retailers, especially the smaller ones, to promote fryer specials at reduced prices. Retailers often have been accommodating to the poultry industry by featuring additional specials to move surplus supplies.

Farm Prices

Farm values for ready-to-cook frying chickens sold in the 10 cities averaged 23.4 cents a pound in 1960 and 19.2 cents in 1961. 5/ The spread per pound between the ready-to-cook value of prices received by farmers and the prices to retailers for fryers was 9.1 cents in 1960 and 9.2 cents in 1961 (fig. 1). This spread averaged 9 cents a pound for the 5 years 1957-61.

Interregional competition and large-scale coordinated marketing programs have resulted in almost nationwide markets for fryers. This appears evident in the similarity and narrow range of farm prices for frying chickens in widely scattered areas.

Farm values for fryers in 1960 increased nearly 6 percent over 1959 levels, but total commercial slaughter of young chickens also increased 4.6 percent (table 7). In 1961, farm values declined about 18 percent from 1960 levels, and total commercial slaughter increased 5.5 percent.

These annual increases in the total slaughter of fryers seem to be associated with expansion programs of firms in various segments of the industry. These programs were probably designed to help maintain existing shares or achieve a greater share of the market in intensely competitive marketing situations. Some integrated organizations expanded in 1961 by acquiring additional facilities through mergers, as well as by constructing new plant facilities. There was a decrease of 3.3 percent in the number of commercial slaughtering plants reporting in the 3 fiscal years ending June 30, 1962--from 548 plants in 1960 to 530 in 1962. The fewer plants had bigger average outputs, due either to larger average size of plant or to greater utilization of existing plant capacity.

Prices and Weekly Commercial Slaughter

For most weeks when five or more retailers in Washington featured fryers as specials, the total United States slaughter of young chickens was either considerably heavier than for the previous week or else the slaughter was at a level higher than the annual weekly average. In Atlanta, this same pattern tended to apply when nine or more retailers featured fryers as specials. This may not be merely coincidental. According to tendencies shown in figure 4, weeks of peak U. S. commercial slaughter of young chickens coincided reasonably well with weeks of peak numbers of firms advertising fryers in newspapers in 10 cities in 1960-61. If data for advertising fryers in all United States cities were plotted, perhaps an even higher correlation with total slaughter would be revealed. (Slaughter data are for the weeks ending on Wednesday, whereas price-special data are for the weeks ending on Saturday.)

Retailers could tentatively plan to feature price specials on fryers several weeks in advance, based upon potential supply, by following USDA reports on the number of layers, monthly hatchings, and weekly placements of broiler chicks, as well as the weekly commercial slaughter of young chickens. Plans for the initiation of price specials could thus be influenced strongly by the anticipated slaughter for the coming week or weeks. Some large-volume retailers may have held specials on fryers during periods of above-average slaughter in order to help drain off excess

5/ Farm value is the payment received by producers for a quantity of live poultry equivalent to one pound of ready-to-cook poultry. These farm values for fryers assumed a 72-percent yield from live to ready-to-cook weight.

Frying Chickens

FIRMS ADVERTISING AND SLAUGHTER

% OF 1960 WEEKLY AV.

1960

150

125

100

75

50

25

% OF 1961 WEEKLY AV.

1961

150

125

100

75

50

25

1

10

20

30

40

50

WEEKS

▲ INDEX FOR 10 CITIES OF TOTAL NUMBER OF RETAIL FIRMS ADVERTISING WHOLE FRYING CHICKENS IN NEWSPAPERS EACH WEEK.

○ INDEX FOR THE UNITED STATES, OF TOTAL POUNDS OF WEEKLY COMMERCIAL SLAUGHTER OF YOUNG CHICKENS.

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Figure 4

supplies. But if specials are initiated simultaneously by several major retailers in a given market, local supplies of fryers may run low. Most retailers seem willing to feature specials only if they can reduce retail prices substantially and still anticipate a satisfactory return for their overall operations. At these lower prices, consumers generally buy several times their normal quantity.

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APPENDIX

Table 8.--Number of firms advertising whole frying chickens in major newspapers in 10 cities, by weeks, 1960 and 1961

Ending--	Week Number	Boston	New York	Baltimore	Washington	Atlanta	Cleveland	Chicago	St. Louis	Los Angeles	San Francisco	10-city total
1960	9	1	0	0	0	0	0	0	0	0	0	1
	16	2	2	0	0	0	0	0	0	0	0	28
	23	3	1	1	1	1	1	1	1	1	1	17
Feb.	6	5	1	1	1	1	1	1	1	2	2	22
	13	6	2	0	0	0	0	0	0	0	0	19
	20	7	0	0	0	0	0	0	0	0	0	16
Mar.	5	9	10	1	0	0	0	0	0	0	0	19
	12	10	11	1	1	1	1	1	1	1	1	21
	19	11	12	2	2	2	2	2	2	2	2	20
	26	12	13	2	2	2	2	2	2	2	2	15
Apr.	2	13	14	2	2	2	2	2	2	2	2	33
	9	14	15	4	5	5	5	5	5	5	5	35
	16	15	16	2	2	2	2	2	2	2	2	34
	23	16	17	5	1	2	2	2	2	2	2	31
	30	17	18	1	2	2	2	2	2	2	2	31
May	7	18	19	2	0	0	0	0	0	0	0	15
	14	20	21	1	1	1	1	1	1	1	1	18
	21	21	22	0	0	0	0	0	0	0	0	18
	28	21	23	1	1	1	1	1	1	1	1	25
	30	21	24	1	1	1	1	1	1	1	1	25
June	4	22	22	0	0	0	0	0	0	0	0	17
	11	23	24	1	1	1	1	1	1	1	1	21
	18	24	25	0	0	0	0	0	0	0	0	21
	25	25	25	1	2	2	2	2	2	2	2	24
July	2	26	27	2	0	0	0	0	0	0	0	31
	9	27	28	1	1	1	1	1	1	1	1	13
	16	28	29	1	1	1	1	1	1	1	1	15
	23	29	30	4	1	1	1	1	1	1	1	25
	30	30	30	4	1	1	1	1	1	1	1	25
Aug.	6	31	32	1	0	0	0	0	0	0	0	26
	13	32	33	1	0	0	0	0	0	0	0	28
	20	33	34	3	0	0	0	0	0	0	0	29
	27	34	35	1	1	1	1	1	1	1	1	33
Sept.	3	35	35	2	0	0	0	0	0	0	0	30
	10	36	36	2	0	0	0	0	0	0	0	19
	17	37	37	1	0	0	0	0	0	0	0	28
	24	38	38	0	0	0	0	0	0	0	0	28
Oct.	1	39	39	0	0	0	0	0	0	0	0	26
	8	40	40	5	0	0	0	0	0	0	0	27
	15	41	41	0	0	0	0	0	0	0	0	25
	22	42	42	0	0	0	0	0	0	0	0	19
	29	43	43	0	0	0	0	0	0	0	0	19

Table 8.--(Continued)

Week Ending--	Number	Boston	New York	Baltimore	Washington	Atlanta	Cleveland	Chicago	St. Louis	Los Angeles	San Francisco	10-city total
Nov.	5	44	1	2	3	5	1	2	3	1	3	22
	12	45	1	1	4	8	4	2	3	1	2	27
	19	46	1	0	1	7	2	0	0	2	14	14
	26	47	0	0	0	0	2	0	0	0	7	7
Dec.	3	48	0	0	2	1	1	1	1	2	16	16
	10	49	1	3	4	10	1	4	3	4	32	32
	17	50	1	1	4	8	2	1	1	0	22	22
	24	51	0	2	0	4	5	1	1	1	11	11
	31	52	0	0	1	1	0	0	2	2	14	14
Average for 52 weeks...			1.4	1.0	1.3	3.1	6.3	2.0	1.5	2.2	2.1	22.7
<u>1961</u>												
Jan.	7	1	1	1	1	1	1	1	1	1	4	4
	14	2	3	0	0	2	2	2	2	2	1	28
	21	0	4	3	0	0	0	0	0	0	16	16
	28	0	6	2	1	1	1	1	1	1	29	29
Feb.	4	5	7	1	1	1	1	1	1	1	2	22
	11	6	1	1	1	1	1	1	1	1	0	0
	18	7	1	1	1	1	1	1	1	1	0	0
	25	8	1	1	1	1	1	1	1	1	1	15
Mar.	4	9	1	1	1	1	1	1	1	1	1	20
	11	10	1	1	1	1	1	1	1	1	1	34
	18	11	0	0	1	1	1	1	1	1	1	20
	25	12	0	0	1	1	1	1	1	1	1	15
Apr.	1	13	0	0	1	1	1	1	1	1	1	15
	8	14	0	0	1	1	1	1	1	1	1	20
	15	15	2	2	2	2	2	2	2	2	2	20
	22	16	2	2	2	2	2	2	2	2	2	20
	29	17	2	3	2	3	2	3	2	3	2	20
May	6	18	2	2	1	1	1	1	1	1	1	37
	13	19	2	2	1	1	1	1	1	1	1	36
	20	20	2	2	1	1	1	1	1	1	1	31
	27	21	1	1	1	1	1	1	1	1	1	26
June	3	22	3	3	3	3	3	3	3	3	3	34
	10	23	1	1	1	1	1	1	1	1	1	23
	17	24	1	1	1	1	1	1	1	1	1	31
July	1	25	2	2	1	1	1	1	1	1	1	30
	8	27	2	2	1	1	1	1	1	1	1	38
	15	28	2	2	1	1	1	1	1	1	1	27
	22	29	2	2	1	1	1	1	1	1	1	42
	29	30	2	2	1	1	1	1	1	1	1	3

Table 8.--(Continued)

Week Ending--	Number	Boston	New York	Baltimore	Washington	Atlanta	Cleveland	Chicago	St. Louis	Los Angeles	San Francisco	10-city total
Aug.	31	1	2	1	2	7	3	3	3	0	0-	25
12	32	-0-	-0-	1	3	4	1	-0-	1	1	1	16
19	33	1	2	-0-	3	7	2	2	5	2	-0-	19
26	34	4	1	3	3	7	4	3	1	6	-0-	36
Sept.	2	35	1	2	2	7	7	2	2	3	1	22
	9	36	2	3	2	7	7	2	2	-0-	2	26
	16	37	2	3	1	7	7	3	3	2	2	30
	23	38	3	-0-	1	1	1	1	4	-0-	4	22
	30	39	-0-	1	2	6	2	2	2	-0-	2	21
Oct.	7	40	2	2	2	5	5	1	1	2	1	18
	14	41	1	2	1	6	6	1	4	3	-0-	29
	21	42	2	1	1	2	5	1	1	4	-0-	20
	28	43	-0-	1	1	5	6	2	2	-0-	2	20
Nov.	4	44	3	2	2	5	4	4	-0-	2	3	24
	11	45	1	2	2	3	5	3	1	2	3	23
	18	46	1	-0-	1	2	4	4	-0-	2	-0-	3
	25	47	-0-	-0-	-0-	-0-	6	2	1	2	-0-	12
Dec.	2	48	1	-0-	1	2	6	1	-0-	4	1	17
	9	49	-0-	1	2	5	4	4	-0-	2	3	21
	16	50	2	1	1	3	3	3	1	2	-0-	16
	23	51	-0-	-0-	-0-	1	-0-	1	1	-0-	1	8
	30	52	-0-	-0-	-0-	1	-0-	1	2	-0-	1	12

Average
for 52
weeks.....

1.3	1.1	1.6	4.1	6.9	2.1	1.6	2.0	2.3	1.4	24.4
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