Prices and Marketing Margins

fluctuations in retail store margins found to be interlocked with changes in wholesale prices and with retail sales volume

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The following is the second of two articles based on a study of prices and retail margins for oranges, lemons, and grapefruit reported in detail in Reports No. 168 and No. 170, published by the Giannini Foundation of Agricultural Economics, University of California, Berkeley

Marketing margins for farm products—one subject in agricultural marketing that has received much attention in recent years—continue to cause confusion as to why they behave as they do. Studies on market prices of fresh citrus were made to provide a firm basis for separating the facts from the folklore about marketing margins.

If the retailer—often considered a bottleneck in the market-price system—actually raised retail prices quickly when wholesale prices advanced and held back in lowering retail prices when wholesale prices decline, movement to consumers would be retarded. For quickly advanced prices at one time, coupled with sluggishly lowered prices at another time, would both discourage consumers from purchasing increased quantities of citrus.

Examination of what does happen shows that most citrus retailers closely follow the wholesale market. But when the current wholesale price goes up or down, that in itself does not make the retailer change his selling price for the citrus he has on hand. The price of the citrus he is selling remains tied to the wholesale price he paid for it and when he purchases new fruit at the changed wholesale price, he bases his retail price for the new fruit on the wholesale price he paid.

The retailers are just as sensitive and responsive to downward as to upward adjustments in wholesale prices.

Price Changes

The record of daily prices of citrus shows that they vary from day to day and, at times, the changes are considerable in amount. Price fluctuations both cause and reflect uncertainties in the marketing system. Some marketers have sought to reduce the uncertainties by reducing the degree of price fluctuations over a period of time. It has been argued that, if the degree of fluctuations in the retail and wholesale prices were not so different in amount, that—in itself—would lead to less uncertainty. How different, in fact, are the degrees of change in the daily prices, is shown by the following measures of percentage fluctuation in relation to the average prices in Denver during the year studied.

	Oranges %	Lemons %	Grapefruit %
Retail price	13	12	19
Wholesale price	15	15	23

These figures show that some differences do exist in the degree of fluctuation in the daily retail and wholesale prices. The wholesale prices do vary relatively more than the retail prices, but the difference is not sufficient to account in a substantial way for the uncertainties in marketing.

When changes in weekly prices are considered, it is found that the retail and wholesale prices fluctuate in about the same degree. It is further learned that in the large stores the weekly prices fluctuate considerably more than in the small or medium stores. These greater fluctuations in the large stores do not occur always, but at irregular periods the large stores have sharp breaks soon followed by strong advances in their prices. Such occurrences are tied in with the purchase and margin-setting practices of the large stores.

Prices and Retail Margins

To summarize the differing price and margin experience of the large-, medium-, and small-sized stores, the following average weekly measures are noted for oranges. A comparable situation between stores prevails in lemons and grapefruit.

Store group	Retail price (cents per pound)	Wholesale price (cents per pound)	Absolute margin (cents per pound)	Relative margin (percent retail price)
Small stores	12.2	8.8	3.4	28
Medium stores	12.4	8.4	4.0	32
Large stores	10.5	7.6	2.9	28
Weighted average for all stores	11.8	8.2	3.5	30

The retail prices in large stores average lower than in the small and medium stores which average about the same. The wholesale prices paid by the large stores average less than those paid by the medium stores, which, in turn, average somewhat lower wholesale prices than the small stores. The large stores on the average have lower retail prices because they tend to buy more cheaply and to have smaller absolute margins.

Although the small stores tend to have higher wholesale costs for citrus, they have lower absolute margins than do the medium-sized stores. The lower margins used by the small stores just about offset their higher wholesale costs so that the retail prices in the small- and medium-sized stores average at about the same level over a period of several months.

Large stores average lower absolute margins but not the lowest relative margins. During the first half of the year studied, the small stores averaged slightly lower relative margins than the large stores. For the year as a whole, the small and large stores averaged the same relative margin, each being greater than for the medium-sized stores. Of interest is that the average relative margins do not differ widely among the three groups of stores—small, medium, and large.

A major advantage of the large stores is their ability to buy fresh citrus at lower prices than the other stores. Such

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and expenditure on sales efforts limit the validity of any average or generalized estimates based on these data alone. The operators are pursuing different goals, the one seeking a wide market for direct sales, the other furnishing supplies through intermediary channels. This phase of the study indicates the character and range of the special pedigree expenses.

Similarly no attempt was made to evaluate the efficiency of these particular enterprises and thus to consider whether services of equal quality may be obtained at lower cost.

This exploratory study points the way toward the development of systems by which the cost of various alternative genetic programs might be estimated in advance. The effect of variations in the proportion of birds of different ages maintained, in the duration of the testing periods, and in the price of labor and feed could be analyzed. Geneticists are able to forecast provisionally the degree of gain which may be expected from the maintenance of standard selection programs for a given number of generations. Economic values may also be attached to these expected gains. The synthesis of these two approaches would permit both individual breeders and industry groups to balance the cost of a proposed breeding program against the probable gain.

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MARGINS

lower purchase prices put the large stores in a position to quote lower retail prices and have lower absolute margins but still have relative spreads averaging not less than some other stores. In terms of returns in relation to investment in fresh citrus, the large stores are in a favorable position, particularly in view of their volume handled and rate of inventory turnover.

Lower wholesale price is not a consistent advantage held by large stores at all times. When the detailed daily and weekly record is studied, it is found that only periodically, with an irregular timing, do their wholesale prices go sharply and markedly below the wholesale prices paid by other stores. The same applies to the absolute spreads in the large stores. At other times, and not for brief periods, the wholesale prices paid by the

large stores hover close to or not much under the wholesale prices paid by medium-sized or small stores. The lower average retail and wholesale prices, and also absolute margins, in the large stores are due in the main to the occasional intervals when the large stores enjoy marked differentials in their wholesale prices and at the same time operate with reduced absolute margins.

The small stores maintain their competitive position with the medium-sized stores by accepting smaller margins, absolute and relative, than do the medium-sized stores. The latter, however, succeed in maintaining their absolute and relative spreads above those of the small stores as well as the large ones.

Wholesale Prices

Citrus margins, in cents per pound, do not remain fixed; they change in response to changes in the wholesale prices. As the wholesale price increases, the cents-per-pound margin also increases, but the relative or percentage margin decreases. The changes in the margins, as the wholesale price changes, are summarized for oranges as follows:

Average Change in Weekly Margin for a Change of 1 Cent per Pound in Wholesale Price

Store group	Change in absolute margin (cents per pound)	Change in relative margin (per cent retail price)
Small stores	+0.32	−0.55
Medium stores ..	+0.41	−0.37
Large stores	+0.34	−0.09
Weighted average for all stores ..	+0.37	−0.36

The above figures show that in response to changes in the wholesale price, the effect on the absolute margin is about the same in the small and large stores; but there is a greater effect on the absolute margin in the medium stores. In terms of the relative margin, however, changes in the wholesale price result in substantially greater effects on the relative margin in small stores than in large stores; the effect for the medium stores being about halfway between.

It is clear that changes in the wholesale price cause different effects on the margins of various sized stores. As the wholesale price varies from day to day or week to week, instabilities result in margins and also in retail prices.

Sales Volume

In addition to wholesale price changes, retail margins are affected by the volume of citrus sales in the stores. As the sales volume increases, the margin tends to decrease; with decreased volume, the margin tends to increase. Such average effects of volume on margins, in each of

the three sizes of stores, are shown for oranges in the table below:

Average Change in Weekly Margin for a Change of 100 Pounds in Weekly Retail Sales Volume

Store group	Change in absolute margin (cents per pound)
Small stores	−1.08
Medium stores	−0.32
Large stores	−0.10
Weighted average for all stores	−0.33

These results not only show how much the margin is affected with changes in retail sales volume in each of the three store groups but the effects differ in each of the groups. Thus, as business volume fluctuates from week to week and shifts from store to store, it carries along with it fluctuations in the store margins.

Margins, and their changes over time, do not occur by chance or haphazardly. Changes in retail margins are intertwined with changes in many business factors, particularly, changes in wholesale prices and changes in retail sales volume.

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HONEYBEES

TEPP, Compound A-42, Compound 340, endrin, and chlordane.

Moderately toxic materials were: potasan, Compound 21/116, Compound Q-137, DDT, calcium arsenate, isodrin, Compound 1189, tartar emetic, Chlorobenzilate, Compound 21/199, cryolite, Compound 876, *ryania*, NPD, TDE, R-242, OMPA, methoxychlor, Compound 2066, DNOCHP, Aramite, and toxaphene.

Relatively safe materials were: sulfur, Compound 2131, rotenone, Ovotran, chlorinated terpine, Compound Q-128, pyrethrins, Compound 923, Neotran, CMU, demeton, allethrin, DMC, cunilate, dilan, and nicotine.

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