

## VARIATION IN CUSTOMER PURCHASES AND EXPENDITURES AT SELECTED PRICES

Knowledge that enables predicting customer reaction to various price conditions is the core of an informed pricing policy. This section is devoted to an examination of the relationship between the rate at which frozen orange concentrate is purchased and the price at which this product is sold. It should be helpful in extending the insight of those concerned with the marketing of this product.

The measurement of customer reaction to induced prices in terms of purchase rates could not be established without also reckoning with the other forces which influence the sales of frozen orange concentrate in a retail store. Consequently, the mathematical relationship selected to explain concentrate sales took into account not only price, but also several factors to measure effects other than those related to price. However, only the relationship between rates of purchase and prices is dealt with in this report.

Since patronage and volume of business varied among the sample stores, the total sales of frozen orange concentrate did not directly reflect the response of individuals to the various test prices. To facilitate interpretation of the results, sales were expressed in terms of quantities purchased per 100 customers.<sup>7</sup> Through the use of this procedure, the effect of price upon sales per sales opportunity at the retail level is more readily apparent.

**Price-Quantity Relationships.**—Results of the pricing experiment indicate that concentrate purchases varied markedly over the range of prices tested. The average relationship between prices and customer purchase rates for frozen orange concentrate is shown in Figure 3.<sup>8</sup> When the product was sold at 20.5 cents per can, or 4 cents above the prevailing market level, the purchase rate per 100 customers was 111 ounces. As successively lower prices were introduced in the test stores, volume of sales increased. At a test price of 13.5 cents per can, or 3 cents below the prevailing market level, each 100 customers bought an average of 130 ounces of concentrate. At 8.5 cents per can, the lowest

<sup>7</sup> Measurement of sales in terms of purchases per 100 customers appeared to be an acceptable procedure, because a formal statistical test indicated that the imposed variation in concentrate prices did not significantly affect customer traffic in the sample stores.

<sup>8</sup> Interest was centered in the aggregate demand for frozen orange concentrate as a commodity. Since the prices of several brands were involved, the price of the company's private brand was utilized as an index of all concentrate prices.