Fresh Vegetable Price Relationships at Shipping Point, Wholesale Terminal Markets, and Retail Outlets:
A Case Study in Tennessee

by

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The health of the food distribution system depends, to a large extent, on the linkages between markets. This is particularly true for highly perishable fresh produce. To date, completed studies have been limited by the data sources used to test the hypotheses. A research initiative just begun under the Scan Data Project umbrella is designed to address this problem. The goal is to re-examine retail-farm linkages for selected fresh produce. Three unique features are associated with the research. First, the type retail level data have not been used elsewhere. Second, the time period for decision making is more consistent with the planning horizons associated with the markets. Third, the emphasis is on produce of interest to Tennessee agriculture, but the methodology could be replicated in other areas.

There are two broad components of the research. Initial interest centers on descriptive analyses of the data for the three markets. The objective is to obtain preliminary information about seasonal patterns, trends, and possible interactions among the markets. Developing and testing a theoretical model of retail-farm linkages are the objectives of the second component.

Data for the shipping point markets will be gathered through a Tennessee Experiment Station survey. These data should cover 1992, 1991, and possibly earlier years. Weekly wholesale level data are available for the Atlanta, Baltimore, Cincinnati, and Chicago wholesale markets through the USDA's Market News. Retail level data can be drawn from the Scan Data Project's historical record that begins with the week ending May 14, 1988.
Some coding of the wholesale data has been completed and compared with the supermarket scan data. Preliminary plots of the prices of tomatoes and green peppers display significant differences by type of produce. Correlations between retail item movement and retail and wholesale prices for the current and one- and two-week lags also indicate disparate results. An inference is that separate models may need to be developed for each fresh produce commodity.