



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

73 indexes, only 24 are continuous and comparable with the earlier series. The remainder start in December 1977. Indexes for larger aggregates such as all items and all-food are available for 28 cities. Item detail is shown only in U.S. averages.

The loss of retail food price data directly affects the calculation of ESCS' market basket statistics and price spreads for individual foods, which are derived from retail prices and farm values for individual products. Price spreads for individual foods cannot be

computed without retail price information.

From now on, market basket statistics for the total basket, as well as for the major groups, will be computed from BLS indexes and related to changes in farm values using procedures similar to those used to construct the current basket.

The new market basket will be composed of all domestically produced farm foods selected from those included in the food-at-home index for CPI-U. The market basket will be reweighted and tailored

to the new weighting scheme for CPI-U.

ESCS will resume computing and publishing price spreads for individual products when BLS begins publishing food prices again. However, it is doubtful whether future series will be comparable with former series. Only price spreads for Choice beef and pork will be available during the period when BLS retail prices will not be available. Retail prices for these series will be from an ESCS survey of beef and pork prices in chain food stores.

FARM PRICE AND FOOD PRICE MOVEMENTS

By Allen Johnson

During the past decade both farm and retail food prices have trended higher at about the same overall rate. However, the two price series have not shown similar increases each year.

Farm price movements can be separated into three distinct patterns during the past 10 years. Farm prices rose at a steady, moderate rate of 4 to 5 percent per year from 1967 to 1972. Then came the strong upward movement from 1972 to 74 with an annual average rate of gain of 24 percent. This was followed by a period of declining prices which showed an annual decline of 1.6 percent for 1974-77.

While retail food prices rose at about the same rate as farm prices during 1967-72, food prices did not rise as rapidly as farm prices during the 1972-74 period, which included price controls. However, during 1974-77, retail food prices continued to rise, at a 6 percent annual rate, while farm prices fell. (table 1 and chart 1).

These comparisons are between the two most common measures of farm prices and retail food prices: prices received by farmers, and the Consumer Price Index. A direct comparison of these indexes is somewhat misleading since they

do not include the same items. Various nonfood items such as cotton and tobacco are included in the prices received by farmers series. Feed grains are mainly a raw material for meat production even though small quantities are used directly in cereals, starches, and syrups. Also, farm prices are combined by using weights which reflect quantities sold at the farm level. To the extent that commodities are held in commercial storage, the farm prices may be comparable only to retail prices during a future time period.

Retail food prices as reported by the Bureau of Labor Statistics also have certain aspects that make the comparison difficult. Generally, one equates food prices with prices paid in a grocery store, but prices paid for restaurant meals and snacks are also included in the index. Imported foods such as coffee

are included, and obviously these are not foods produced on U.S. farms. Also, fishery products are reported.

Data have been developed by USDA to measure changes in prices paid by consumers and returns received by farmers for domestic, farm-originated foods. The procedure was developed in 1935 and the data have been published periodically since 1941.

The retail cost is an estimate of what foods in the 1960-61 market basket would now cost. The cost of food purchased in restaurants and other eating establishments is not included in this measure. Food expenditures of workers living alone are also excluded. The market basket contains only food originating on U.S. farms. Fishery products, coffee, bananas, and other imported foods are excluded.

Farm value is the return or pay-

TABLE 1.—FARM PRICE AND RETAIL PRICE CHANGES FOR SELECTED PERIODS, 1967-77

Period	Annual Percentage Change	
	Prices Received by Farmers	Consumer Price Index
1967-72	+4.6	+4.3
1972-74	+24.0	+14.4
1974-77	-1.6	+5.9

ment received by farmers from the retail price of food. Part of the farm price may arise from the value of byproducts derived in processing. The value of these byproducts is estimated and subtracted from the gross farm value. Changes in byproduct allowances have usually been small and do not significantly affect the variation in the market basket farm value.

After all the adjustments needed for making retail prices and farm values as comparable as possible, the two series have shown a 6-percent annual rate of gain during the past decade. However, farm prices tended to rise more rapidly during the 1972-75 period than retail prices, and this was followed by a period of declining farm prices but slowly rising retail costs (chart 2).

While indexes are useful for showing relative changes in food and farm prices, they tend to distort unit changes. A \$1.00 increase at the farm level will be a larger percentage change than at the retail level since farm values are considerably less than retail values.

The total retail cost of a market basket of farm foods and the total farm values are good measures of actual changes in prices. Since quantities of food have been held constant, changes in the retail cost

PRICES RECEIVED BY FARMERS AND CONSUMERS PRICE INDEX, 1967-77

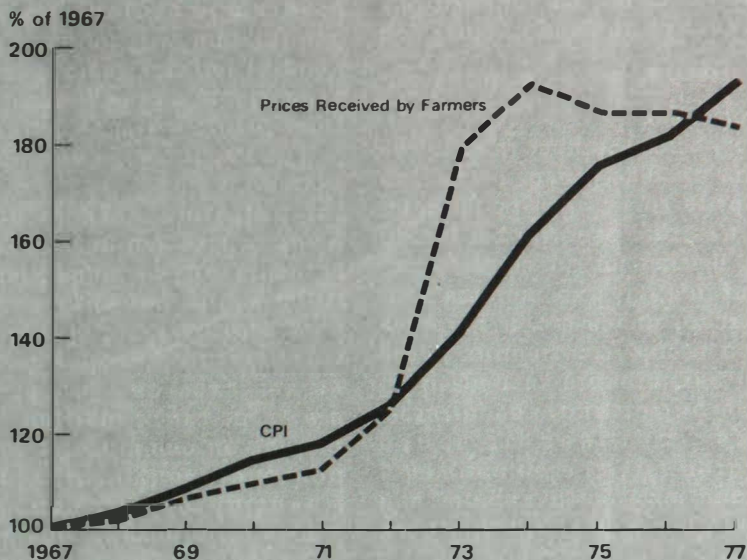


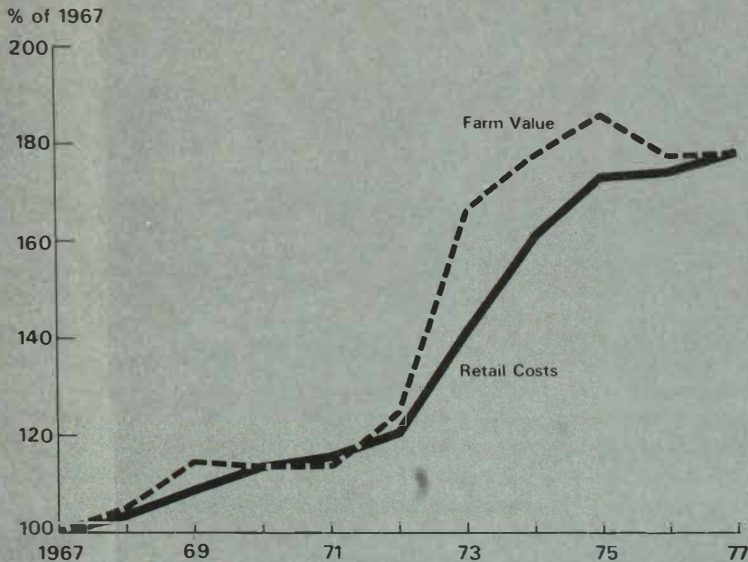
TABLE 2: FOOD MARKETING COSTS AND PROFIT RATES

Year	Goods and Services				Profits on Sales	
	Total	Containers Packaging	Fuel power and light	Hourly earning ²	Food Retailers ³	Food Manufacturers ³
				Dollars	Percent	
1970	113	108	108	3.03	—	2.5
1971	120	113	120	3.24	—	2.6
1972	126	117	126	3.45	—	2.6
1973	134	123	138	3.66	—	2.6
1974	159	151	202	3.99	—	2.9
1975	180	174	237	4.40	.5	3.2
1976	193	184	258	4.77	.8	3.4
1977	208	195	310	5.18	.8	3.1

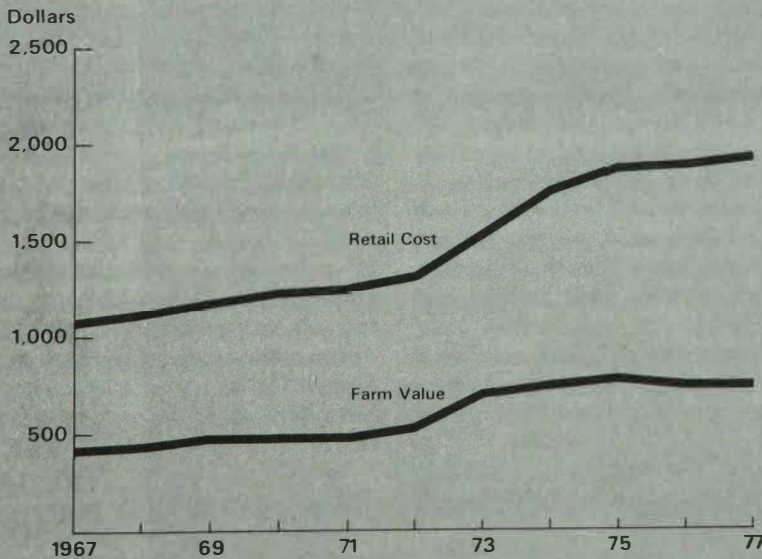
¹ Represents all goods purchased by food marketing firms except raw materials, plants and equipment and all services except those performed by employees. ² Weighted composite of production employees in food manufacturing and non-supervisory employees in wholesale and retail trade. ³ Federal Trade Commission data.

Source: USDA, Agricultural Outlook, June 1978.

FARM VALUE AND RETAIL COST INDEXES, 1967-77



RETAIL COST AND FARM VALUE OF MARKET BASKET OF FARM FOODS, 1967-77



are due to price changes. Also, factors to equate farm products to retail quantities have remained the same over the past decade.

The total retail cost of the market basket rose from \$1,081 in 1967 to \$1,937 in 1977. The farm value for a market basket of goods has risen from \$419 in 1967 to \$749 in 1977. Throughout the 1967-77 period, food retail costs increased \$856 while farm values rose \$330. The difference between these two values is the cost of processing and marketing (chart 3).

While the costs and profits involved in the farm to retail spread cannot be precisely measured, data are available for major components.

As the data in table 2 show, labor rates, energy costs, and packaging materials increased during the 1970-77 period while profits for retailing and processing continued to be modest.