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DAIRY INDUSTRY

Information on Prices for Fluid Milk and the Factors That Influence Them



**Resources, Community, and
Economic Development Division**

B-280638

October 8, 1998

The Honorable James M. Jeffords
The Honorable Patrick J. Leahy
United States Senate

Retail sales of fluid drinking milk (fluid milk) in the United States total about \$19 billion annually. A number of entities are involved in the process of moving milk from the dairy farm to the consumer, and these entities perform distinct functions in the production, processing, and marketing of fluid milk. Dairy farmers produce unprocessed milk that they (1) market through dairy cooperatives, (2) sell to bottlers who process it into fluid milk for sale to retail outlets, or (3) process into fluid milk for direct sale to consumers. Most milk produced by dairy farmers in the United States is marketed through dairy cooperatives. Dairy cooperatives can either sell, or arrange the sale of, unprocessed milk purchased from farmers to wholesalers, or they can process it into fluid milk and distribute this fluid milk to retail outlets themselves. Wholesalers (bottlers or retail food chains with bottling plants) purchase unprocessed milk from dairy farmers or cooperatives and process and package it into fluid milk, which they then distribute to retail outlets. Retail outlets purchase fluid milk for direct sale to consumers. A portion of the retail price of a gallon of fluid milk is received by farmers, cooperatives, wholesalers, and retailers for the functions they perform during the production, processing, and marketing of fluid milk.

You requested that we examine certain issues concerning the pricing and marketing of fluid milk. This report provides information on (1) the factors that influence the price of fluid milk as it moves from the farm to the consumer; (2) the portion of the average retail price of a gallon of fluid milk that is received by farmers, cooperatives, wholesalers, and retailers in selected markets across the country; (3) changes in farm and retail prices and their effect on the farm-to-retail price spread—which is the difference between the retail and the farm price; (4) the way changes in prices at any given level in the milk marketing chain are reflected in changes in prices at the other levels; and (5) different retail pricing relationships that exist in selected markets among the four kinds of milk—whole, reduced-fat (2-percent), low-fat (1-percent), and fat-free (skim). For this report, we analyzed fluid milk prices for 31 selected markets nationwide and generally limited our analysis to 2-percent milk sold in gallon containers, which currently represents the largest volume of reduced-fat milk sold nationwide. We issued a report on March 16, 1998, entitled Dairy Industry:

Information on the Marketing Channels and Prices for Fluid Milk (GAO/RCED-98-70) that addresses other issues—concerning marketing channels and pricing for fluid milk—about which you had concerns.¹

In summary, we found the following:

- At all levels in the fluid milk marketing chain, prices are determined by the interaction of numerous supply and demand factors. The supply available at any given level is influenced by the costs incurred by the entities involved in the production, processing, and marketing of fluid milk; the government policies that establish minimum prices for unprocessed milk used to produce fluid milk; competitive conditions in the marketplace; the market power acquired by the entities involved; and the price of milk. Similarly, the amount demanded at any given level is influenced by the size, age, and income levels of the population in the marketing area; and the prices of fluid milk and substitute goods. Furthermore, the prices that retailers receive for fluid milk are influenced not only by their operating costs and their needed return on investment but also by other factors, such as the pricing strategies that they and their competitors use.
- From January 1996 through February 1998, for the 31 fluid milk markets that we reviewed, on average, farmers received 42 percent of the retail price for a gallon of 2-percent milk, cooperatives received 10 percent,² wholesalers received 31 percent, and retailers received 17 percent. However, the portion received at any one level in the marketing chain varied substantially among markets. For example, the portion of the average retail price that farmers received ranged from about 31 to 54 percent, and the portion that retailers received varied between about 4 and 31 percent in the markets we reviewed, with one exception.
- From January 1996 through February 1998, retail prices for a gallon of 2-percent milk remained constant or increased in 27 markets and decreased in 4 markets. In contrast, farm prices decreased in 27 markets and remained constant in 4 markets. As a result of these price changes, the farm-to-retail price spread increased in 27 of the 31 markets over the 26-month period we reviewed.
- Changes in prices at any given level in the milk marketing chain were most often reflected in changes in prices at the next level, as might be expected. For example, in most of the markets we analyzed, there was a strong

¹Our Mar. 1998 report provided information on (1) the entities that handle fluid milk from the time it leaves the farm to the time it is sold to the consumer, including regional variations, and (2) prices for dairy and other food products at various market levels nationally and in certain urban markets across the country for the period Dec. 1990 through Sept. 1997.

²According to USDA officials, a portion of the amount received by cooperatives may be used to pay costs, such as hauling, in some markets.

correlation between changes in farm prices and changes in cooperative prices. Similarly, changes in wholesale prices generally correlated with changes in retail prices. In contrast, changes in prices received by farmers less frequently correlated with changes in retail prices than they did with changes in cooperative or wholesale prices.

- Retail pricing relationships among the four kinds of milk varied significantly in the markets we analyzed. For example, from January 1996 through February 1998, in some markets, 1-percent milk was most often the lowest-priced milk sold at the retail level; in other markets, fat-free milk was the lowest-priced milk; and in still other markets, the lowest-priced milk sold in retail stores shifted among whole, 2-percent, and fat-free milk.

This report is divided into six appendixes. Appendix I describes in detail our objectives, scope, and methodology. Appendix II describes the various factors that influence the price of fluid milk as it moves from the farm to the consumer. Appendix III provides information on the average price of milk at the farm, cooperative, wholesale, and retail levels; changes in farm and retail prices and their effect on the farm-to-retail price spread; and the relationship between changes in the price of milk at a given level to changes in prices at another level of the milk marketing chain for a gallon of 2-percent milk in selected markets for January 1996 through February 1998. Appendix IV provides information on retail pricing relationships for whole, 2-percent, 1-percent, and fat-free milk in selected markets for the period January 1996 through February 1998. Appendix V provides detailed information on the average monthly farm-, cooperative-, wholesale-, and retail-level prices for the four kinds of milk (whole, 2-percent, 1-percent, and fat-free) in selected markets for January 1996 through February 1998. Appendix VI provides the results of our analysis using an alternate method suggested by the Economic Research Service to calculate farm-level prices.

Agency Comments

We provided copies of a draft of this report to USDA and the Department of Defense for their review and comment. We met with officials from USDA's Agricultural Marketing Service, Economic Research Service, and Rural Business Service, including the Associate Deputy Administrator, branch chiefs, and others, to discuss their comments on the draft report. These officials had several concerns about our use of USDA's published data for the mailbox and announced cooperative price series as surrogates for farm- and cooperative-level prices, and our use of commissary prices as a

surrogate for wholesale prices. Specifically, the officials made the following comments:

- Using the mailbox price³ as the farm-level price understates the amount that farmers receive for a gallon of fluid milk by different amounts for various markets. This is because the mailbox price is the average price received by all farmers in the market for all uses of milk, and the actual prices received by farmers for milk used in fluid products would vary by market, depending upon the proportion of milk used in that market for products other than fluid milk, the costs and profits from manufacturing milk, and other factors that are unrelated to the fluid milk market. During our meeting, Economic Research Service officials suggested what they believe is a better measure of farm-level prices for fluid milk.⁴ However, these officials stated that while their suggested method might provide a better estimate of the farm-level price for fluid milk, it would still not provide a perfect estimate because it is impossible to isolate the price for fluid milk in a market where there is concurrent demand for milk used for other products. We were aware of the limitations of using mailbox prices as a surrogate for farm-level prices for fluid milk and therefore included a discussion of these limitations in appendix I of the draft report. However, we chose to use the mailbox price in our analysis because it is routinely published and is, in the dairy industry, a relatively well-recognized estimate of the average price received by farmers. We continue to believe that it provides an adequate proxy for determining the relative portions of the retail price received by the various entities in the farm-to-retail milk marketing chain and the associated trends in changes to these portions. Our views were generally shared by the dairy industry experts who we spoke with. However, to provide additional perspectives on fluid milk prices, we calculated the farm-level prices for 24 of the 31 markets for which the necessary data were available using the method suggested by the Economic Research Service officials. We found that by using this methodology, farmers, on average, received 47 percent of the retail price for a gallon of 2-percent milk instead of the 43 percent that we calculated using the mailbox price, and cooperatives received 6 percent of the retail price instead of 10 percent in the 24 markets from January 1996 through

³The mailbox price is the weighted average of the prices received by all dairy farmers in the market and therefore is computed as the total net dollars received for milk divided by the total pounds of milk marketed.

⁴The Economic Research Service-suggested formula for estimating farm-level prices for fluid milk is computed by subtracting the difference between the federal order blend price—which is the price paid to producers, specifically, and is the weighted average of the values of all classes of milk used by all processors—and the mailbox price from the federal order minimum class I price—which is the minimum price for Grade A milk used to produce fluid milk products.

February 1998. Appendix VI contains additional data and analysis of fluid milk prices using the Economic Research Service's methodology.

- USDA officials also told us that the manner in which we used the announced cooperative price series overstates the cooperatives' share of the retail price. In part, this is because the announced cooperative price includes certain revenues that are not retained by the cooperative but are used to cover costs such as hauling. The officials acknowledged, however, that it is difficult to calculate the actual share of the retail milk price that is received by cooperatives. We have revised the report to indicate that a portion of the announced cooperative price may be used to pay for some costs, such as hauling, in some markets.
- Finally, according to the officials, commissary prices may not be a good surrogate for wholesale prices because (1) some of the commissaries are not in close proximity to the markets we analyzed, (2) the wholesale price data were derived from a single store in each market we analyzed, and (3) the commissary price is based on contracts awarded to the lowest-cost bidder and is the result of a rigid bidding process that may not reflect the wholesale prices paid by retailers in a given market. Commissary prices were the best surrogate we could obtain for wholesale prices because of the proprietary nature of wholesale price data. We generally agree with USDA's concerns that commissary prices may not be fully representative of wholesale prices because they are derived from a single store in each of the markets and are often based on contracts awarded to the lowest-cost bidder. However, we disagree with USDA's comment that the commissaries we selected were not in close proximity to the markets we analyzed. As displayed in Figure I.1 in appendix I, for almost all of the 31 markets included in our analysis, the commissary that we selected was within the marketing area being analyzed. Moreover, according to industry representatives with whom we shared our analysis, the commissary prices appear to be a valid surrogate for actual wholesale prices.

USDA officials also provided us with technical comments that we have incorporated into the report as appropriate.

Department of Defense officials advised us that they agreed with the information included in this report on milk prices obtained from defense commissaries and had no other comments.

To identify the major factors that influence the price of milk as it moves from the farm to the consumer, we obtained and analyzed studies performed by USDA, universities, and private entities, and spoke to state

government and industry representatives and officials at USDA. To report on the various relationships among prices at the farm through retail levels, we obtained information on milk prices in 31 selected markets throughout the United States. These markets were selected because (1) data were available for these locations, (2) they provided geographical coverage for the nation, and (3) they represented a cross section of state- and federally regulated markets. For these markets, we obtained data from USDA, state milk control agencies, the Department of Defense, and a private data collection company on the prices received by farmers, cooperatives, wholesalers, and retailers for January 1996 through February 1998. We limited our data collection efforts to the sale of whole, 2-percent, 1-percent, and fat-free fluid milk sold in gallon containers, which represents about 64 percent of the fluid milk sold in the United States, and we limited our data analysis to 2-percent milk sold in gallon containers. Our analysis of 2-percent milk may not reflect pricing patterns and trends for the other kinds of milk. A more detailed description of our scope and methodology is presented in appendix I. We have attributed all of the data used in our analysis to the source from which they were obtained and have not verified the accuracy of these data because the information from which they were compiled was not available to us.

We conducted our review from November 1997 through September 1998 in accordance with generally accepted government auditing standards.

As arranged with your offices, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to the Senate Committee on Agriculture, Nutrition, and Forestry; the House Committee on Agriculture; other appropriate congressional committees; interested Members of Congress; the Secretary of Agriculture; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others upon request.

Please contact me at (202) 512-5138 if you or your staff have any questions about this report. Major contributors to this report are listed in appendix VII.

A handwritten signature in black ink that reads "Robert Robertson". The signature is written in a cursive style with a large, prominent initial "R".

Robert E. Robertson
Associate Director, Food
and Agriculture Issues

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Abbreviations

AMS	Agricultural Marketing Service
DOD	Department of Defense
ERS	Economic Research Service
GAO	General Accounting Office
NASS	National Agricultural Statistics Service
USDA	U.S. Department of Agriculture

Objectives, Scope, and Methodology

In August 1997, Senators Jeffords and Leahy requested GAO to examine a number of issues concerning the pricing and marketing of fluid drinking milk (fluid milk) in the United States.¹ This report provides information on (1) the factors that influence the price of fluid milk as it moves from the farm to the consumer, (2) the portion of the average retail price of fluid milk that is received by farmers, cooperatives, wholesalers, and retailers in selected markets nationwide, (3) changes in farm and retail prices and their effect on the farm-to-retail price spread—which is the difference between the retail and farm prices, (4) the way changes in prices at any given level in the milk marketing chain are reflected in changes in prices at the other levels, and (5) different retail pricing relationships that exist in selected markets among the four kinds of milk—whole, reduced-fat (2-percent), low-fat (1-percent), and fat-free (skim).

To identify the major factors that influence the price of milk as it moves from the farm to the consumer, we obtained and analyzed studies performed by researchers at the U.S. Department of Agriculture (USDA), universities, and private entities. These included milk marketing cost studies performed by USDA's Economic Research Service and researchers at Cornell University, and studies on retail pricing strategies performed by Texas A&M University researchers and various state and private entities. We interviewed officials at USDA, academic researchers, and industry representatives. We were also referred by the International Dairy Foods Association, Food Marketing Institute, and National Milk Producers Federation to some of their members, who spoke to us about the factors that they believe influence the price of milk as it moves from the farm to the consumer.

To obtain information on the portion of the retail price received by farmers, cooperatives, wholesalers, and retailers; changes in farm and retail prices and their effect on farm-to-retail price spreads; and the relationship among price changes at different marketing levels, we obtained information on milk prices in 31 selected markets throughout the United States. These markets were selected because (1) data were available for these locations, (2) they provided geographical coverage for the nation, and (3) they represented a cross section of state- and federally regulated markets. For these markets, we collected data on the prices received by farmers, cooperatives, wholesalers, and retailers for

¹In response to this request, we issued a report on Mar. 16, 1998, entitled *Dairy Industry: Information on the Marketing Channels and Prices for Fluid Milk* (GAO/RCED-98-70) that provided information on (1) the entities that handle fluid milk from the time it leaves the farm to the time it is sold to the consumer, including regional variations, and (2) prices for dairy and other food products at various market levels nationally and in certain urban markets across the country.

January 1996 through February 1998. We limited our data collection efforts to the sale of whole, 2-percent, 1-percent, and fat-free fluid milk sold in gallon containers, which represent about 64 percent of the fluid milk sold in the United States.

It is important to recognize that there does not exist a precise method by which to calculate or determine the price received by farmers and cooperatives for fluid milk. It is almost impossible to isolate the value of milk used for one type of product when there are competing demands for milk for use in other products. Any method that is selected will only provide an approximation of the value of milk received by farmers and cooperatives and should not be viewed as a precise measure.

For farm-level prices, we used data from USDA's Agricultural Marketing Service's (AMS) mailbox price series. The mailbox price is representative of the average price received by dairy farmers who sell milk to cooperatives, bottlers, and processors that are regulated under federal milk marketing orders.² The mailbox price is the weighted average of the prices received by all dairy farmers in the market and therefore is computed as the total net dollars received for milk divided by the total pounds of milk marketed. This price includes returns from all milk uses, such as milk used to manufacture cheese and butter, and not just milk used for fluid purposes; therefore, it does not exactly reflect the amount of money received by farmers for milk used only for fluid purposes. AMS developed the mailbox price series in 1995, at the request of the industry, to more accurately reflect the amount of money farmers receive for their unprocessed milk, and it is currently the best data available on the price of milk at the farm level. However, according to AMS officials, this price tends to understate the prices received by farmers for the portion of their milk that is used in fluid milk products. AMS collects data on mailbox prices for 25 of the 31 locations that we analyzed. Four locations that we included in our analysis—Bismarck, North Dakota; Richmond, Virginia; and San Diego and Sacramento, California—are not under a federal milk marketing order, and AMS does not collect mailbox price data for them. As a result, for Bismarck and Richmond, we relied on data collected by the National Agricultural Statistics Service (NASS). NASS collects data for these locations on the price paid to dairy farmers who marketed Grade A milk.³ This price was

²Federal milk marketing orders establish minimum prices for unprocessed milk. Handlers regulated under the federal milk marketing orders process about 75 percent of the total fluid milk produced in the United States.

³Grade A milk is the only milk that can be used for fluid purposes. Grade A milk producers must adhere to higher standards than those who produce grade B milk. Grade B milk can only be used for manufacturing purposes, such as to make butter and cheese.

adjusted by an amount that represents the national average for typical deductions from dairy farmers', checks such as hauling costs, cooperative dues, and national dairy board assessments.⁴ For San Diego and Sacramento, we used data collected by the California state government. For two other markets—Kansas City, Missouri, and Phoenix, Arizona—although AMS collects mailbox prices, it could not share this information with us because of concerns about data confidentiality. Consequently, for these markets, we used the federal milk marketing order blend price for the Greater Kansas City and the Central Arizona federal milk marketing orders, respectively, adjusted by an amount that represents the national average for typical deductions from dairy farmers' checks—such as hauling costs, cooperative dues, and national dairy board assessments—to represent mailbox prices.

For cooperative-level prices, we used AMS' announced cooperative prices to represent prices paid by bottlers to cooperatives. Bottlers in federally regulated markets generally purchase milk from cooperatives and pay the federal minimum price for fluid milk plus premiums established by the cooperatives. The announced cooperative price is the Class I milk price announced by the major cooperative in each of the markets.⁵ The announced cooperative price does not apply to all Class I sales in these markets and is not necessarily the price actually received for all of the fluid milk sold by the major cooperative. The announced cooperative prices have not been verified as actually having been paid by handlers. For Bismarck, North Dakota; Richmond, Virginia; and San Diego and Sacramento, California; which are state-regulated markets, we used the minimum fluid prices established by the states. Data on premiums paid in excess of these minimums were not available for these markets. For Augusta, Maine, we used the Maine Dealer Cost; for Vermont, New Hampshire, Las Vegas, Nevada, Orlando, Florida, and New York City, New York, we used AMS' estimated cooperative prices.

For wholesale-level prices, we used the prices paid by the Department of Defense's Commissary Agency under competitive contracts to wholesalers. We used commissary prices as a surrogate for privately established wholesale prices because (1) defense commissaries sell groceries at cost to active and retired military personnel and (2) wholesale

⁴National dairy board assessments are amounts paid by producers to promote and conduct research on dairy products.

⁵Under the federal milk marketing orders, a classified pricing plan provides different classes and minimum prices for milk depending on how the milk is used. Milk used in fluid products is placed in Class I, which is the highest-priced class. Milk used for various manufactured products is placed in lower-priced classes.

price data are considered proprietary by industry officials and were not available to us. According to Defense Commissary officials, the commissary network of stores ranks seventh in the United States in terms of sales volume for supermarket chains. For each of our 31 markets, we selected a nearby commissary, and the Defense Commissary Agency provided us with the monthly wholesale prices paid by the selected commissaries for gallons of whole, 2-percent, 1-percent, and fat-free milk. We recognize that these locations may not provide an ideal match with the other price data analyzed for a given location; however, these were the best wholesale data that we could obtain. In those locations where commissaries sold more than one brand of milk, we obtained the prevailing price for the brand that had the highest sales volume for the period we reviewed. Figure I.1 shows the locations of the 31 selected markets and corresponding commissaries.

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Figure I.1: Selected Fluid Milk Markets and the Corresponding Defense Commissaries Used for Our Analysis of Milk Prices



For retail-level prices, we contracted with A.C. Nielsen, a private data collection and analysis company, to obtain average monthly retail prices for gallons of whole, 2-percent, 1-percent, and fat-free milk for supermarkets with yearly sales exceeding \$2 million in 25 of the 31

markets included in our analysis. We were able to use these data for 27 of the 31 markets we analyzed because data for A.C. Nielsen's Boston market also includes data for the Rhode Island and New Hampshire markets. For the other four markets—Augusta, Maine; Bismarck, North Dakota; Las Vegas, Nevada; and Vermont—where privately collected data were not available, we used the retail price data obtained by the milk control agencies for these states.

To determine the (1) portion of the retail price that is received by farmers, cooperatives, wholesalers, and retailers; (2) changes in retail and farm prices and their effect on the farm-to-retail price spread; and (3) the way in which changes in prices at any given level in the milk marketing chain are reflected in changes in prices at the other levels, we limited our analysis to 2-percent milk, which currently represents the largest volume of reduced-fat milk sold nationally. Our analysis of 2-percent prices may not necessarily reflect pricing patterns and trends for the other three kinds of milk. Appendix III includes graphs that show the relationships among the farm, cooperative, wholesale, and retail prices for a gallon of 2-percent milk for each of the 31 markets. Because the farm-level and cooperative-level prices reflect a higher butterfat content than is present in 2-percent milk, we adjusted these prices to reflect the value of removing butterfat and replacing it with skim milk.⁶ This adjustment allowed us to use farm- and cooperative-level prices that were comparable to the wholesale- and retail-level prices for our analysis.

To determine how much farm and retail prices had changed and the effect of these changes on the farm-to-retail price spread from January 1996 through February 1998 for each of the 31 markets, we used a statistical procedure to estimate mailbox and retail prices at the beginning and end of the period.⁷

We used estimated rather than actual prices to reduce the influence of the starting and ending dates selected for our analysis in markets in which

⁶For Sacramento and San Diego, California, we used prices that were adjusted for 2-percent butterfat and 10-percent nonfat milk solids so that they were comparable with retail milk sold in that state.

⁷A regression procedure was used for each market to determine whether the price could be reliably predicted as a function of time for both mailbox and retail prices. This procedure allowed us to estimate initial and final prices for mailbox and retail prices that take into account the variability in these price series during the 26-month period. A statistically significant relationship indicates that a stable trend, either up or down, was found between price and time. For statistically significant relationships, a final price estimate (computed for the last month of our data series) was calculated and compared to an estimated price calculated for the first month. In the absence of a statistically significant relationship—when no trend differing from zero was found—initial and final estimates of price are the same, even if actual beginning and final prices differ.

there is considerable month-to-month variability in milk prices. The differences between the estimated initial and final prices represent the trend changes during the period. In some cases, this difference may be zero because there is no apparent trend. We calculated the change in the farm-to-retail price spread as the estimated retail price difference minus the estimated mailbox price difference.

To describe how changes in prices at any given level in the milk marketing chain were reflected in changes in prices at the other levels in each of the 31 markets included in our analysis, we tested for correlations between price changes at the various levels. Specifically, we calculated coefficients describing the degree of correlation between changes in mailbox prices and changes in prices at the cooperative, wholesale, and retail levels; changes in cooperative-level prices and changes in prices at the wholesale and retail levels; and changes in prices at the wholesale and retail levels. In appendix III, we report those correlation coefficients that are statistically different from zero at the 95-percent confidence level. Although we only report correlations between price changes that occur in the same month, we also calculated correlations under the assumption of lagged effects (such as the correlation between changes in wholesale prices in the current month and changes in cooperative-level prices in the previous month). In general, we found fewer markets with statistically significant correlations when we took lagged effects into account, although when effects were assumed to be lagged, the correlations were greater in some markets.

To provide information on the relationships among retail prices for all four kinds of milk, we analyzed the retail price data that we obtained from A.C. Nielsen and the state milk control agencies. These data are arrayed in appendix IV for each of the selected 31 markets for January 1996 through February 1998.

When we met with USDA officials to obtain their comments on a draft of this report, officials from the Economic Research Service (ERS) suggested an alternative method by which we could better estimate the farm-level price of a gallon of unprocessed milk used for fluid purposes compared to the mailbox price. They believe that the farm value of fluid milk is better defined as the minimum order Class I price minus the difference between the minimum order blend price and the mailbox price. However, this methodology to calculate an alternative farm price assumes that all classes of milk are equally profitable to the cooperative at the prevailing prices. We used the ERS method to calculate farm-level prices for the 24 markets

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in our sample of 31 markets that are under the federal milk marketing order program. Appendix VI provides our analysis using this alternative farm-level price for fluid milk for these 24 markets.

Factors That Influence the Price of Fluid Milk as It Moves From the Farm to the Consumer

About 6 billion gallons of the approximately 18 billion gallons of milk produced by U.S. dairy farmers each year is processed into fluid milk that has a retail value of about \$19 billion.¹ Dairy farmers receive a price for unprocessed milk, and each entity that is involved in the processing and marketing of fluid milk adds value to the product and receives a portion of the difference between the farm and retail price. (This difference is known as the price spread.) This appendix describes how unprocessed milk prices are determined at the farm level and the factors that influence the price of milk as it moves from the farm to the retail level. This appendix also provides information on the costs associated with marketing milk, as estimated by researchers at Cornell University, and industry officials' views regarding these estimates. We could not obtain specific cost data for our analysis because wholesale and retail cost data in the private sector are proprietary.

Federal and State Policies Influence Milk Prices at the Farm

Prices at the farm level for unprocessed milk sold for use in fluid milk products are determined by supply and demand forces that are influenced by federal and state dairy programs. These programs ensure that dairy farmers receive at least a specified minimum price for their unprocessed milk. The primary federal programs include the milk marketing order and dairy price support programs. The federal and state programs were established to provide a safety net for individual farmers who lack market power compared with other entities, such as wholesalers and retailers.

About 75 percent of the milk produced in the United States is regulated under the federal milk marketing order program, which was established in 1937. Some areas, such as California, are not under the federal program and are covered by state programs. In these areas, dairy farmers are paid minimum milk prices that are established by the state government. The milk marketing order program sets minimum prices for unprocessed milk; these minimum prices are based on the way the milk is to be used. Minimum prices paid to farmers for unprocessed fluid grade milk are based on the prices paid to the farmers who produce manufacturing-grade milk in Minnesota and Wisconsin. Manufacturing-grade milk can only be used for making products such as butter and cheese. This milk is not regulated and therefore its market price is based on supply and demand conditions. For milk used for fluid products, a differential is added to the minimum price for milk used for manufacturing purposes. This differential varies throughout the United States and generally increases as the distance increases from Eau Claire, Wisconsin. The extent to which these

¹Fluid milk products include flavored milks, buttermilk, whole, 2-percent, 1-percent, and fat-free milk.

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differentials will affect the average price of milk the farmer receives depends on the extent to which the total supply of milk in a specific market area is used for fluid or manufacturing purposes. Buyers of milk regulated by federal and state orders are permitted to pay farmers prices in excess of the established minimums. Any such excess payments are determined by market forces.

In addition to the federal and state milk marketing order programs, the federal dairy price support program, created in 1949, supports farm-level prices by providing a standing offer to purchase butter, cheese, and nonfat dry milk at specified prices. The prices offered for these dairy products are intended to provide sufficient revenue so that dairy product manufacturers can pay farmers the legislatively mandated support price. This program has the effect of providing a floor for the price of milk used for manufacturing purposes. As a result, it influences the price that farmers receive for milk used for fluid purposes under the milk marketing order program because the support price sets a floor below which manufacturing grade milk prices are unlikely to fall for very long. The price support program offers a safety net to all dairy farmers, including those not participating in federal or state milk marketing orders.

Services Provided by Dairy Cooperatives Affect the Price of Milk

The price that cooperatives charge wholesalers for fluid milk is influenced by the minimum price established by federal and state milk marketing order programs, the services that the cooperatives provide, and the relative market power of cooperatives and processors.

About 86 percent of all milk produced by farmers is marketed through dairy cooperatives that are owned and financed by farmer-members.² Cooperatives can either (1) process, package, and distribute the resulting fluid milk to retail outlets for sales to consumers or (2) sell the unprocessed milk to wholesalers who process, package, and distribute fluid milk for sale to retail outlets.³ Cooperatives operate like corporate businesses to perform services for their members. Some distinctive features of cooperatives include member-user ownership and control, services at cost to their members, and distribution of income to their members on the basis of their patronage.

²Milk not marketed through cooperatives is sold directly to processors or, in some instances, is processed into dairy products by farmers themselves. Cooperatives process and market about 16 percent of all fluid milk produced.

³See our Mar. 1998 report entitled *Dairy Industry: Information on Marketing Channels and Prices for Fluid Milk* (GAO/RCED-98-70, Mar. 16, 1998) for more information on the role of cooperatives and other entities in the marketing of fluid milk.

Cooperatives generally sell unprocessed milk to wholesalers at prices that are higher than the federal or state minimums for fluid milk. In federally or state-regulated markets, any differences between the prices charged to the wholesalers and the milk marketing order minimums are known as over-order premiums. These premiums are primarily determined by the marketplace rather than the federal milk marketing order program. Over-order premiums compensate cooperatives for the services they provide, such as transporting milk from different milk-producing areas, and also reflect the market power acquired by cooperatives relative to processors.

Wholesalers’ Processing, Packaging, and Distributing Costs Affect the Price of Fluid Milk

The price that wholesalers charge retailers for fluid milk is influenced by the costs they incur for processing, packaging, and distributing fluid milk to retail outlets and by the wholesalers’ interest in earning a return on investment. Wholesalers include bottlers and major retail food chains with bottling plants.⁴ Processing services provided by wholesalers include pasteurization, homogenization, and the standardization of butterfat and nonfat solids in flavored milks, buttermilk, whole, 2-percent, 1-percent, and fat-free milk. Wholesalers package these products into a variety of types and sizes of containers and arrange for their distribution to retail outlets for sale to consumers. In addition to shipping the products to retailers, some wholesalers provide different levels of in-store service, according to industry officials. For example, some wholesalers provide a full range of services to retailers—unloading the milk at the store dock, restocking the dairy case, and removing outdated and/or leaking containers. In contrast, other wholesalers may not provide any services to retailers beyond their shipping docks. Differences in wholesale-level prices reflect differences in any or all of these factors.

Furthermore, according to dairy industry officials we spoke to, in some highly regulated markets, state regulations may increase both wholesale and retail prices. For example, an official from one of the nation’s largest grocery wholesalers told us that in North Dakota the distribution of milk is restricted to wholesalers approved by the state. Consequently, milk can only be delivered to retail stores on trucks owned by an approved wholesaler. This requirement prohibits retailers and nonapproved wholesalers from using their own trucks to deliver milk to retail stores, which in some cases may be a less costly and more economical delivery method.

⁴Wholesalers also include cooperatives that process, package, and distribute fluid milk for sale to retailers.

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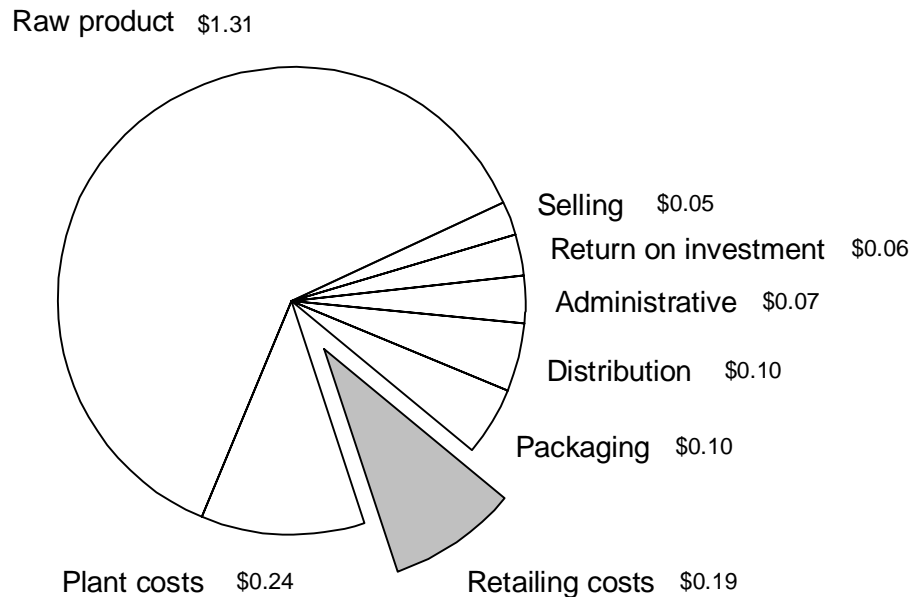
Typically, wholesale cost and pricing data in the private sector are not available to the public because such data are considered proprietary. In addition, any sharing of cost or pricing data with competitors or others could be considered a violation of state and/or federal antitrust laws. In the absence of specific cost data, we obtained cost estimates from researchers at Cornell University that are based on information obtained from a survey of wholesalers. The researchers surveyed 35 well-managed plants, operated by 23 companies.⁵ The 35 sampled plants included 22 proprietary plants, 5 cooperative plants, and 8 supermarket-owned plants. The plants processed an average of 28 million pounds of milk per month, ranging from slightly more than 13 million pounds to more than 51 million pounds. Distribution cost estimates were based on large accounts served by the plants, including supermarkets, large convenience stores, and club stores.

On the basis of the survey data they received from the wholesalers, the Cornell researchers estimated the cost of marketing fluid milk products. For example, the researchers estimated that in 1995, it cost about \$2.12 to market a gallon of 2-percent milk, through a large supermarket in the New York metropolitan area. (This amount also included an estimated 19 cents per gallon for handling costs incurred by the retailer and the retailer's return on investment.) Figure II.1 shows the various costs associated with marketing a gallon of 2-percent milk through supermarkets in the New York metropolitan area in 1995.

⁵Erba, E.M., R.D. Aplin, and M.W. Stephenson, *An Analysis of Processing and Distribution Productivity and Costs in 35 Fluid Milk Plants*. R.B. 97-03, Department of Agricultural, Resource, and Management Economics. (Ithaca, NY: Cornell University, 1997).

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Figure II.1: Estimated Costs of Marketing a Gallon of 2-Percent Milk in the New York Metropolitan Area, 1995



According to officials of dairy cooperatives, wholesalers, and retailers of fluid milk, the estimates developed by the researchers at Cornell University were generally representative of the cost of performing fluid milk processing and marketing functions. However, they told us that the costs for distributing milk in other markets could be significantly higher than the 10 cents per gallon estimated in the study for the New York metropolitan area. In particular, distribution costs in rural markets could range as high as 25 to 40 cents a gallon. According to one industry official, delivery costs to rural markets are higher than some urban markets because wholesalers have to deliver smaller quantities of fluid milk products to more isolated, rural stores. These additional costs are often reflected in higher wholesale and retail prices for fluid milk in these areas.

Retail Milk Prices Depend on the Pricing Strategies Used by Retailers

Prices that consumers pay retailers for fluid milk are influenced not only by supply and demand considerations that determine the overall retail-level market price for fluid milk but also by specific considerations that affect prices at individual retail outlets. With respect to determining the overall price charged at the retail level, the quantity of fluid milk supplied by retailers is influenced by the prices that retailers have to pay

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wholesalers to acquire the product, retailers' operating costs, such as labor, rent, and utilities, and their required return on investment. On the other hand, the amount of fluid milk that consumers want to purchase at the retail level is influenced not only by the price of fluid milk, but also by such factors as the size, age, and income levels of the population in the marketing area, and the prices of substitutes. Studies performed by economists and others over the years have shown that the demand for milk at the retail level is relatively insensitive to changes in the price for fluid milk because of the lack of close substitutes. Generally, these studies have concluded that a 10-percent increase or decrease in the price of fluid milk will result in less than a 10-percent decrease or increase in the quantity that consumers will purchase.⁶ However, several industry officials told us that they believe that the demand for milk in recent years has become more sensitive to price changes than previously thought.

For individual retail outlets, additional considerations may influence the manner in which retail prices for milk are set. To meet their stores' goals, such as profit maximization and increased market share, retailers may use a number of strategies for pricing fluid milk. In developing these pricing strategies, retailers consider their retailing costs, the prices charged by their competitors, the role that milk prices play in attracting customers to their stores, the convenience offered by their store compared with other stores, and their desire to build an image of quality or low prices for their stores. Those retail pricing strategies that are primarily based on a retailer's operating costs are generally referred to as vertical pricing strategies, whereas those strategies that are based on responding to prices charged by competitors are referred to as horizontal pricing strategies. Retailers may use a combination of horizontal and vertical pricing strategies when setting prices for fluid milk.

A vertical pricing strategy is a method by which retailers price fluid milk products to cover the costs associated with operating their stores. The retail price is set in a manner that allows them to recoup (1) the price paid to fluid milk wholesalers; (2) operating costs such as rent, labor, interest expense, and general overhead; and (3) a return on investment. Some retailers use a variable markup strategy that allows them to charge different markups on various products sold in their stores while seeking an overall profit margin target for the store. For example, a retailer who wishes to promote a low-cost image for the store may sell gallons of 2-percent milk at or near cost while raising the price of other items in the

⁶Some of these studies have estimated price elasticities of demand for fluid milk as small as -0.15, which would imply only a 1.5-percent increase in the quantity that consumers purchase as a result of a 10-percent decrease in price.

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store. On the other hand, retailers wishing to increase the profitability of the dairy section might maintain relatively high prices for fluid milk but set lower prices for other items in the store. According to state and dairy industry officials, the latter situation has existed during the last couple of years in the Minneapolis market. Retailers' pricing strategy choices will depend on their views about the importance of milk prices versus the prices of other products sold in their stores in influencing consumers' overall perceptions about their stores.

A horizontal pricing strategy is a method by which retailers set fluid milk prices in response to the prices being charged by competitors in their area. Retailers pursuing such strategies are very sensitive to price levels at neighboring retail outlets and will adjust their prices accordingly to create an image of lower or more competitive prices. Also, retailers pursuing horizontal pricing strategies may be less sensitive to market signals on the wholesale price of milk. Instead, retailers may continue to price milk at a certain price even though wholesalers have either increased or decreased prices.

Furthermore, retail prices may be influenced by state regulations and customers' desire for convenience or high quality. For example, dairy industry officials contend that state regulations that prohibit wholesalers and retailers from selling milk below cost result in higher retail milk prices. Such regulations prevent retailers from using lower-priced milk as a means of attracting more customers to their stores. In addition, according to industry officials, retail prices for fluid milk may be influenced by the fact that some consumers are willing to pay a higher price for convenience and quality. For example, convenience stores sell only a limited number of items, which allows consumers to quickly purchase fluid milk and spend the least amount of time necessary in the store. As a result, these stores can charge a higher price for fluid milk than supermarkets charge primarily because of the convenience that they provide. Similarly, retail stores that emphasize high-quality products may stock widely recognized brand-label fluid milk products for which their customers are willing to pay a higher price because they associate the brand label with better quality. Industry officials told us that some retailers believe that a stable retail price for milk may also help create an impression of high quality.

Analysis of Farm-To-Retail Prices for 2-Percent Milk in Selected Markets

This appendix summarizes our analysis of farm-to-retail prices for a gallon of 2-percent milk in 31 selected markets nationwide for January 1996 through February 1998. Our analysis includes information on (1) the portion of the retail price that is received by farmers, cooperatives, wholesalers, and retailers; (2) changes to retail and farm-level prices and their effect on the farm-to-retail price spread; and (3) the way in which changes in prices at any given level in the milk marketing chain are reflected in changes in prices at the other levels. We limited our analysis to gallons of 2-percent milk because in recent years sales of reduced-fat milk products have increased and account for about 63 percent of all retail sales of fluid milk. Of this amount, sales of 2-percent milk account for about 55 percent of the total sales of reduced-fat milk. The farm and cooperative prices included in our analysis and presented in this appendix are adjusted for 2-percent butterfat. Our analysis of 2-percent milk prices may not reflect pricing patterns and trends for the other three kinds of milk. Complete data on prices for all four kinds of milk—whole, 1-percent, fat-free as well as 2-percent—are presented in appendix V.

Portion Received by Farmers, Cooperatives, Wholesalers, and Retailers

From January 1996 through February 1998, for the 31 fluid milk markets that we reviewed, farmers, on average, received 42 percent of the retail price for a gallon of 2-percent milk, cooperatives received 10 percent, wholesalers received 31 percent, and retailers received 17 percent. However, the portion received at any one level in the marketing chain varied substantially among markets. For example, the portion of the average retail price that farmers received ranged from about 31 to 54 percent and the portion that retailers received ranged from about 4 to 31 percent in the markets we reviewed, with one exception.

In commenting on a draft of this report, USDA officials stated that because the farm-level and cooperative-level prices used in our analysis are not a measure of the prices that farmers and cooperatives actually receive for milk used for fluid products, our results understate the amount received by farmers and overstate the cooperatives' share of the retail price, especially in some markets. Moreover, a portion of the amount received by the cooperatives may be used by the cooperative to pay for some costs, such as hauling, in some markets.

Table III.1 provides these data for each of the selected markets.

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Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets

Table III.1: Portion of the Retail Price of a Gallon of 2-Percent Milk Received by Farmers, Cooperatives, Wholesalers, and Retailers for 31 Markets, January 1996 Through February 1998

Selected market area	Percent received by farmers	Percent received by cooperatives	Percent received by wholesalers	Percent received by retailers
North Atlantic Region				
Augusta, Me.	45	12	22	20
Boston, Mass.	44	14	22	19
New Hampshire	44	13	31	11
New Haven, Conn.	42	13	19	26
New York, N.Y.	39	11	30	20
Philadelphia, Pa.	42	11	27	20
Rhode Island	44	14	22	19
Vermont	40	11	22	27
Washington, D.C.	42	11	16	30
Southeastern Region				
Atlanta, Ga.	43	9	35	13
Louisville, Ky.	48	7	33	11
Miami, Fla.	43	8	33	16
New Orleans, La.	42	9	40	9
Orlando, Fla.	44	6	32	18
Raleigh, N.C.	45	7	43	4
Richmond, Va.	40	13	24	22
East-North Central Region				
Chicago, Ill.	46	9	27	18
Cincinnati, Oh.	53	11	32	4
Milwaukee, Wis.	48	9	28	15
West-North Central Region				
Bismarck, N.D.	31	7	39	22
Kansas City, Mo.	40	7	29	24
Minneapolis, Minn.	35	6	31	28
West-South Central Region				
Dallas, Tex.	44	11	40	5
Houston, Tex.	47	13	41	-1 ^a
Mountain Pacific Region				
Denver, Colo.	38	9	22	31
Las Vegas, Nev.	33	6	33	27
Phoenix, Ariz.	54	10	32	5
Seattle, Wash.	48	9	22	21
Sacramento, Calif.	42	9	29	20

(continued)

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

Selected market area	Percent received by farmers	Percent received by cooperatives	Percent received by wholesalers	Percent received by retailers
Salt Lake City, Utah	44	10	43	4
San Diego, Calif.	36	8	36	19
Average for the 31 markets	42	10	31	17

^aOur analysis shows that retailers in the Houston market received -1 percent of the retail price of a gallon of 2-percent milk for the 26-month period. According to industry officials, this condition is not unusual in markets like Houston, which are dominated by vertically integrated processors and retailers and in which these companies can use milk as a loss leader.

Changes in Farm and Retail Prices and the Price Spread

From January 1996 through February 1998, retail fluid milk prices remained constant or increased in 27 markets and decreased in 4 markets. In contrast, farm prices decreased in 27 markets and remained constant in 4 markets. As a result of these price changes, the farm-to-retail price spread increased in 27 of the 31 markets over the 26-month period. Table III.2 provides these data for each of the selected markets.¹

Table III.2: Increases or Decreases in the Farm-To-Retail Price Spread for a Gallon of 2-Percent Milk for 31 Markets, January 1996 Through February 1998

Selected market area	Increases or decreases in farm-level prices	Increases or decreases in retail prices	Increases or decreases in the farm-to-retail price spread
North Atlantic Region			
Augusta, Me.	\$(.09)	\$.35	\$.44
Boston, Mass.	(.09)	.30	.39
New Hampshire	(.09)	.30	.39
New Haven, Conn.	(.09)	.28	.37
New York, N.Y.	(.14)	.09	.23
Philadelphia, Pa.	(.13)	^a	.13
Rhode Island	(.09)	.30	.39
Vermont	(.09)	.19	.28
Washington, D.C.	(.13)	(.08)	.05
Southeastern Region			

(continued)

¹The values used to calculate increases or decreases in retail and farm-level prices in table III.2 are based on statistical estimates of initial and final prices for these two levels, not the actual observed prices recorded in the first and last month of the period for which we have data. The method for calculating these estimates is described in app. I. The changes in the farm-to-retail price spreads are the differences between the changes in retail- and farm-level prices from January 1996 to February 1998 and consequently are determined from the statistically estimated initial and final prices for the retail and farm levels.

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Selected market area	Increases or decreases in farm-level prices	Increases or decreases in retail prices	Increases or decreases in the farm-to-retail price spread
Atlanta, Ga.	(.16)	.25	.41
Louisville, Ky.	(.15)	^a	.15
Miami, Fla.	^a	^a	^a
New Orleans, La.	(.16)	.31	.47
Orlando, Fla.	^a	.14	.14
Raleigh, N.C.	(.16)	^a	.16
Richmond, Va.	(.14)	.20	.34
East-North Central Region			
Chicago, Ill.	(.15)	.22	.37
Cincinnati, Ohio	(.15)	(1.23)	(1.08)
Milwaukee, Wis.	(.15)	^a	.15
West-North Central Region			
Bismarck, N.D.	(.14)	^a	.14
Kansas City, Mo.	(.16)	^a	.16
Minneapolis, Minn.	(.15)	(.09)	.06
West-South Central Region			
Dallas, Tex.	(.12)	.20	.32
Houston, Tex.	(.12)	^a	.12
Mountain Pacific Region			
Denver, Colo.	(.18)	.29	.47
Las Vegas, Nev.	(.19)	^a	.19
Phoenix, Ariz.	(.17)	^a	.17
Seattle, Wash.	(.12)	^a	.12
Sacramento, Calif.	^a	^a	^a
Salt Lake City, Utah	(.19)	^a	.19
San Diego, Calif.	^a	(.33)	(.33)

^aIndicates that no statistically significant change was observed in the price over the 26-month period and therefore represents a constant price for that market.

Correlation Between Price Changes at the Four Marketing Levels

The strongest correlation between changes in prices occurs between any level and its adjacent level in the marketing chain. For example, in most of the markets we analyzed, there was a strong correlation between changes in farm prices and changes in cooperative prices. Similarly, changes in wholesale prices were generally reflected in changes in retail prices. In contrast, changes in the prices received by farmers less frequently

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correlated with changes in retail prices than they were with changes in cooperative or wholesale prices. This is because, as discussed in appendix II, many factors other than farm or wholesale prices influence the price of fluid milk at the retail level. Tables III.3 through III.5 present data on our correlation analysis for price changes at the four marketing levels. The values of the correlation coefficients presented represent estimates of the degree to which price changes at one level in the milk marketing chain are associated with price changes at other levels.

Table III.3: Correlation Between Farm-Level-Price Changes and Changes in Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Milk for 31 Markets, January 1996 Through February 1998

Selected market area	Correlation coefficients for cooperative prices	Correlation coefficients for wholesale prices	Correlation coefficients for retail prices
North Atlantic Region			
Augusta, Me.	.91*	.75*	.11
Boston, Mass.	.86*	.55*	.08
New Hampshire	.85*	.53	.08
New Haven, Conn.	.86*	.74*	-0.06
New York, N.Y.	.82*	.16	.38
Philadelphia, Pa.	.87*	.44*	.63*
Rhode Island	.86*	.61*	.08
Vermont	.86*	.55*	.23
Washington, D.C.	.87*	.85*	.50*
Southeastern Region			
Atlanta, Ga.	.95*	.26	.16
Louisville, Ky.	.87*	.35	.19
Miami, Fla.	.94*	.42*	.45*
New Orleans, La.	.88*	.09	.26
Orlando, Fla.	.94*	.62*	.35
Raleigh, N.C.	.94*	.25	.21
Richmond, Va.	.87*	.52*	.11
East-North Central Region			
Chicago, Ill.	.05	-0.19	.01
Cincinnati, Ohio	.98*	.38	-0.08
Milwaukee, Wis.	.05	-0.19	.08
West-North Central Region			
Bismarck, N.D.	.49*	-0.10	-0.06
Kansas City, Mo.	.91*	-0.10	.56*
Minneapolis, Minn.	.17	-0.09	.05
West-South Central Region			
Dallas, Tex.	.76*	.16	.17

(continued)

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Analysis of Farm-To-Retail Prices for
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Selected market area	Correlation coefficients for cooperative prices	Correlation coefficients for wholesale prices	Correlation coefficients for retail prices
Houston, Tex.	.74*	.16	.03
Mountain Pacific Region			
Denver, Colo.	.69*	.35	-0.01
Las Vegas, Nev.	.47*	-0.37	.21
Phoenix, Ariz.	.78*	.37	-0.05
Seattle, Wash.	.66*	.68*	.14
Sacramento, Calif.	.48*	0.0	.45*
Salt Lake City, Utah	.50*	-0.37	-0.12
San Diego, Calif.	.48*	.51*	.40*

Note: In calculating the correlation coefficients for each market, we omitted the months for which data were missing.

*Indicates that the correlation coefficient is statistically significant (i.e. $p < .05$). However, we have not included the p-values in the table.

Table III.4: Correlation Between Cooperative-Level-Price Changes and Changes in Wholesale and Retail Prices for a Gallon of 2-Percent Milk for 31 Markets, January 1996 Through February 1998

Selected market area	Correlation coefficients for wholesale prices	Correlation coefficients for retail prices
North Atlantic Region		
Augusta, Me.	.85*	.23
Boston, Mass.	.70*	.33
New Hampshire	.83*	.31
New Haven, Conn.	.83*	.19
New York, N.Y.	.37	.67*
Philadelphia, Pa.	.46*	.75*
Rhode Island	.81*	.33
Vermont	.71*	.32
Washington, D.C.	.89*	.54*
Southeastern Region		
Atlanta, Ga.	.31	.11
Louisville, Ky.	.35	.23
Miami, Fla.	.37	.49*
New Orleans, La.	.26	.44*
Orlando, Fla.	.67*	.40*
Raleigh, N.C.	.37	.31
Richmond, Va.	.64*	.10
East-North Central Region		
Chicago, Ill.	.28	.11

(continued)

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Selected market area	Correlation coefficients for wholesale prices	Correlation coefficients for retail prices
Cincinnati, Ohio	.40	−0.16
Milwaukee, Wis.	.31	.27
West-North Central Region		
Bismarck, N.D.	.44	.63*
Kansas City, Mo.	−0.01	.51*
Minneapolis, Minn.	.61*	.59*
West-South Central Region		
Dallas, Tex.	.31	.38
Houston, Tex.	.34	.42*
Mountain Pacific Region		
Denver, Colo.	.75*	.09
Las Vegas, Nev.	−0.01	.17
Phoenix, Ariz.	.52*	.12
Seattle, Wash.	.85*	.28
Sacramento, Calif.	.41	.80*
Salt Lake City, Utah	−0.15	.38
San Diego, Calif.	.81*	.62*

Note: In calculating the correlation coefficients for each market, we omitted the months for which data were missing.

*Indicates that the correlation coefficient is statistically significant (i.e. $p < .05$). However, we have not included the p-values in the table.

Table III.5: Correlation Between Wholesale-Level-Price Changes and Changes in Retail Prices for a Gallon of 2-Percent Milk for 31 Markets, January 1996 Through February 1998

Selected market area	Correlation coefficients for retail prices
North Atlantic Region	
Augusta, Me.	.28
Boston, Mass.	.28
New Hampshire	.90*
New Haven, Conn.	.21
New York, N.Y.	.26
Philadelphia, Pa.	.47*
Rhode Island	.46*
Vermont	.51*
Washington, D.C.	.53*
Southeastern Region	
Atlanta, Ga.	−0.23
Louisville, Ky.	.43

(continued)

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Selected market area	Correlation coefficients for retail prices
Miami, Fla.	-0.15
New Orleans, La.	.51*
Orlando, Fla.	.39
Raleigh, N.C.	.44*
Richmond, Va.	.46*
East-North Central Region	
Chicago, Ill.	-0.08
Cincinnati, Ohio	.16
Milwaukee, Wis.	.62*
West-North Central Region	
Bismarck, N.D.	.68*
Kansas City, Mo.	.39
Minneapolis, Minn.	.46*
West-South Central Region	
Dallas, Tex.	.43*
Houston, Tex.	.58*
Mountain Pacific Region	
Denver, Colo.	-0.02
Las Vegas, Nev.	-0.69
Phoenix, Ariz.	.44
Seattle, Wash.	.08
Sacramento, Calif.	.47
Salt Lake City, Utah	-0.41
San Diego, Calif.	.61*

Note: In calculating the correlation coefficients for each market, we omitted the months for which data were missing.

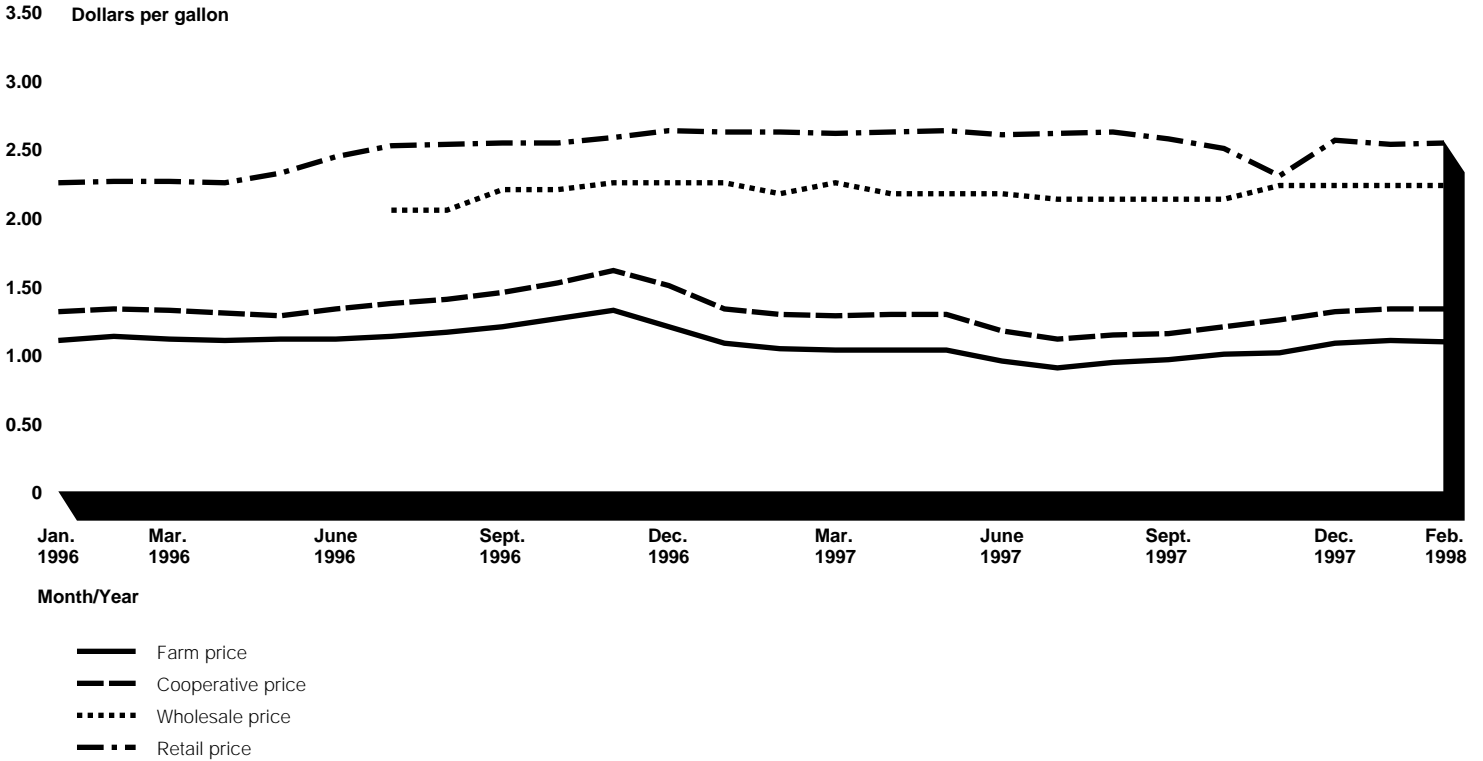
*Indicates that the correlation coefficient is statistically significant (i.e. $p < .05$). However, we have not included the p-values in the table.

Comparison of Prices at the Four Marketing Levels

Figures III.1 through III.31 present data for January 1996 through February 1998 on farm, cooperative, wholesale, and retail prices for gallons of 2-percent milk in each of the 31 markets for which we obtained data. Gaps in any of the lines shown in the following graphs are the result of unavailable data.

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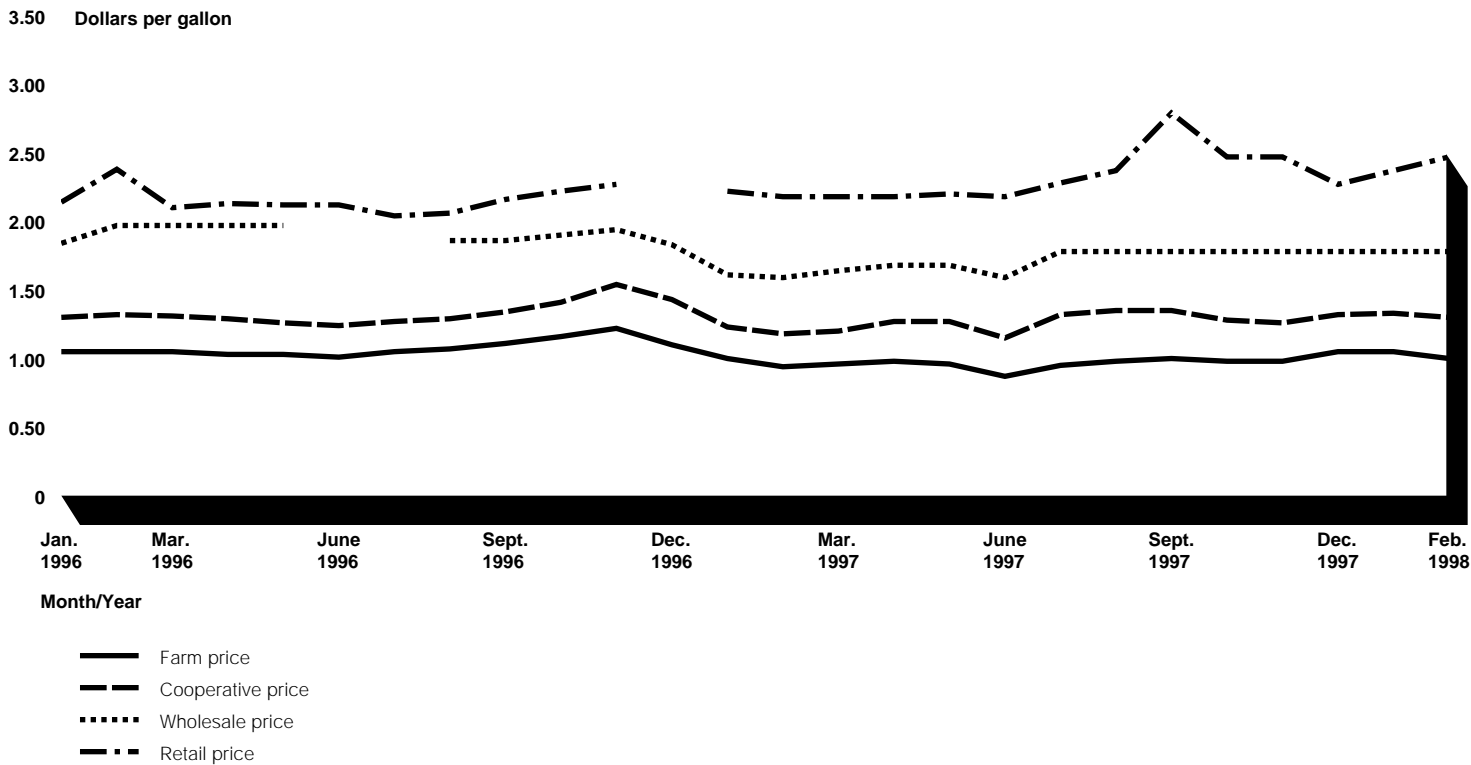
Figure III.1: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Atlanta, Ga., Market



Note: For the Atlanta, Ga., market, the farm price is the Southeast mailbox price; the cooperative price is the announced cooperative price for Atlanta; the wholesale price is the price charged by the commissary at the Athens Naval Supply Corps School; and the retail price is the A.C. Nielsen price for the Atlanta market.

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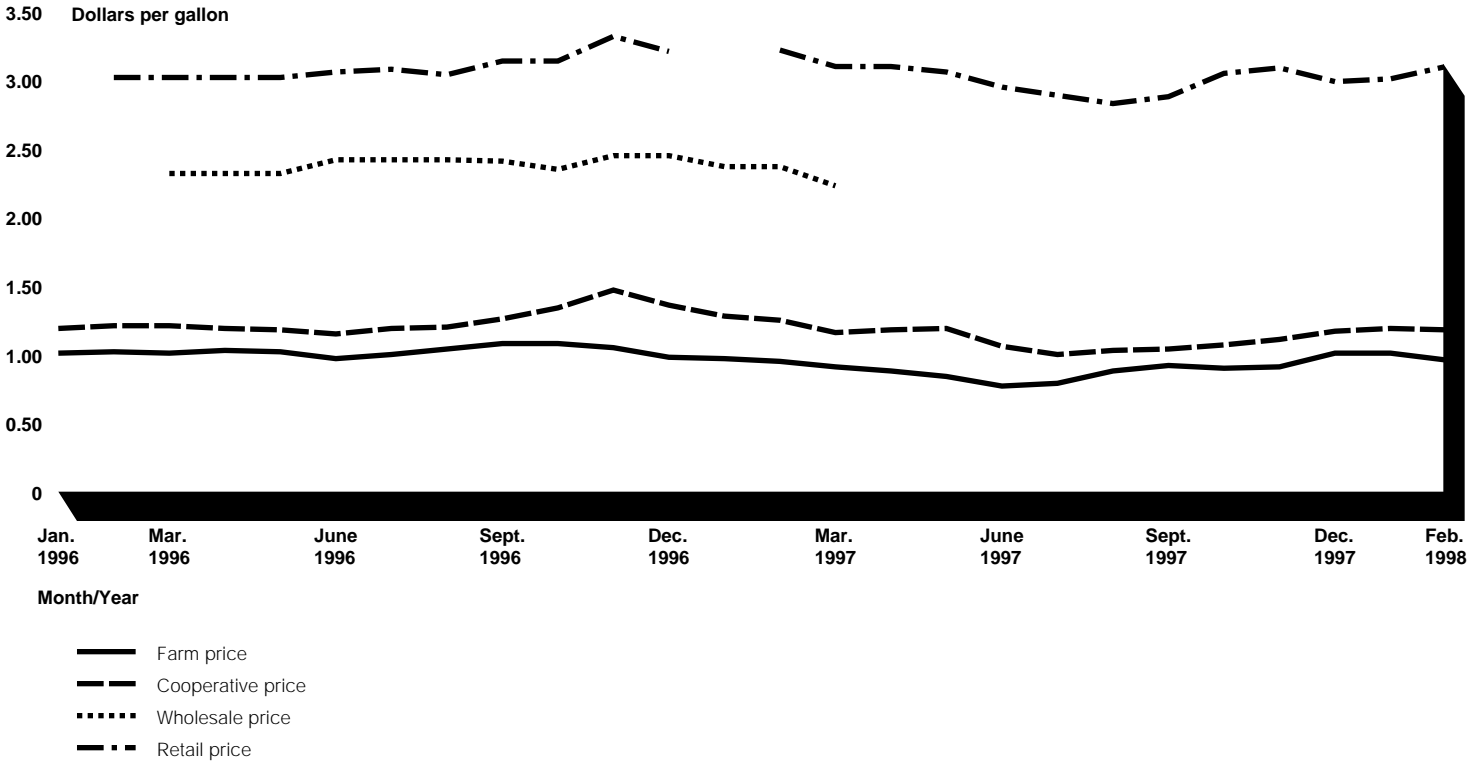
Figure III.2: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Augusta, Me., Market



Note: For the Augusta, Me., market, the farm price is the New England mailbox price; the cooperative price is the Maine dealer cost; the wholesale price is the price charged by the commissary at the Brunswick Naval Air Station; and the retail price is the price reported by the state milk control agency for the Augusta market.

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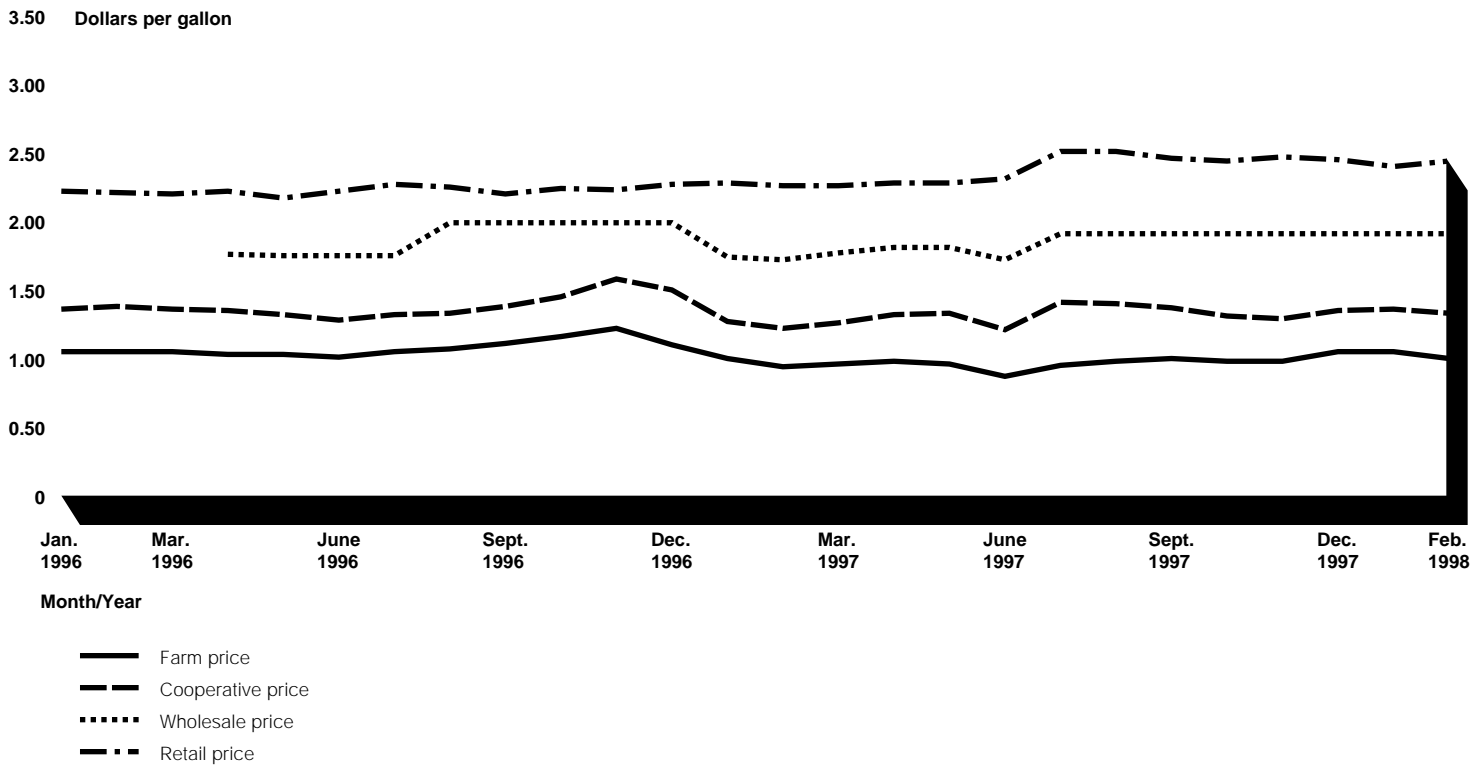
Figure III.3: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Bismarck, N.D., Market



Note: For the Bismarck, N.D., market, the farm price is based on data collected by the National Agricultural Statistics Service on the Grade A price paid to farmers in this area minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the North Dakota State Order Class I price; the wholesale price is the price charged by the commissary at the Minot Air Force Base; and the retail price is the price reported by the state milk control agency for the Bismarck market.

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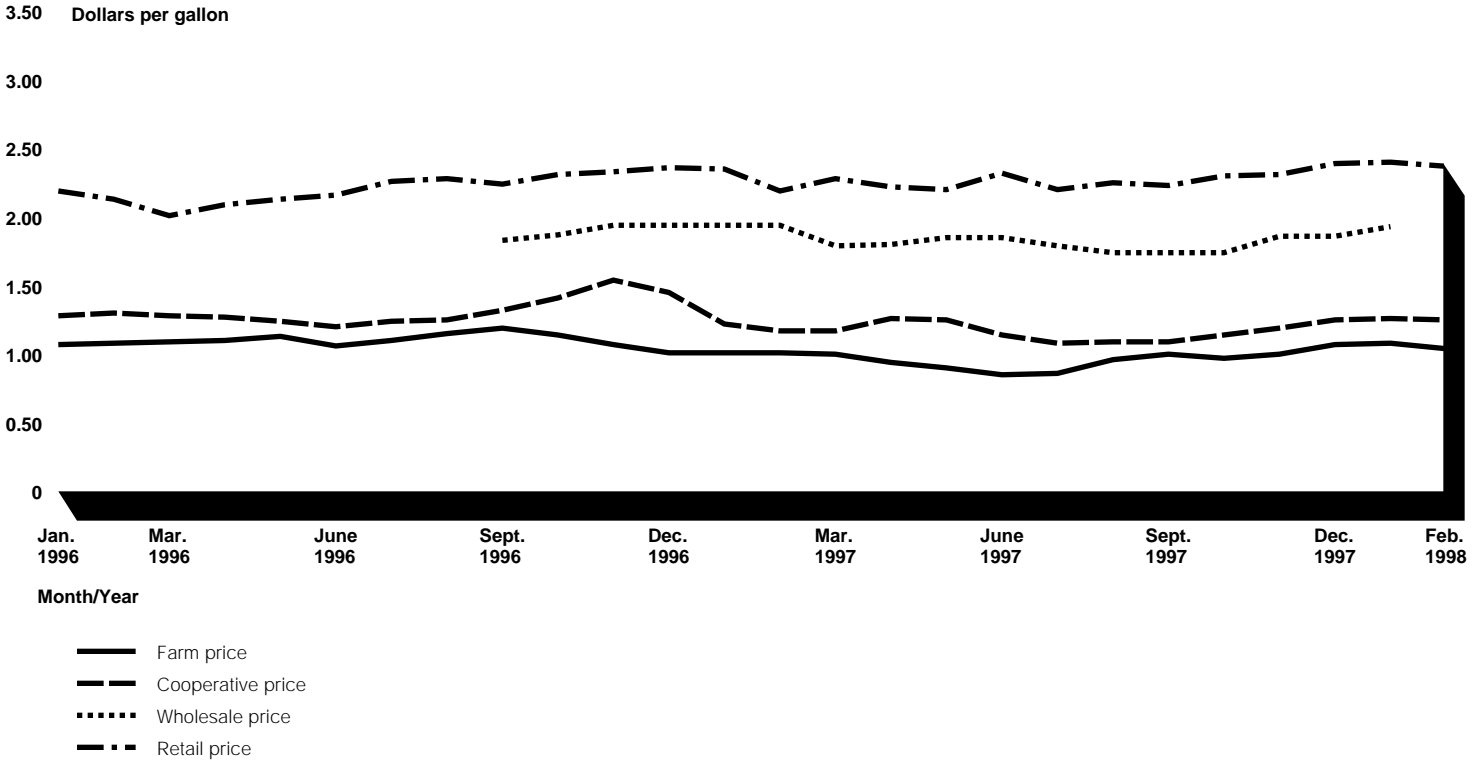
Figure III.4: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Boston, Mass., Market



Note: For the Boston, Mass., market, the farm price is the New England mailbox price; the cooperative price is the announced cooperative price for Boston; the wholesale price is the price charged by the commissary at the Hanscom Air Force Base; and the retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire.

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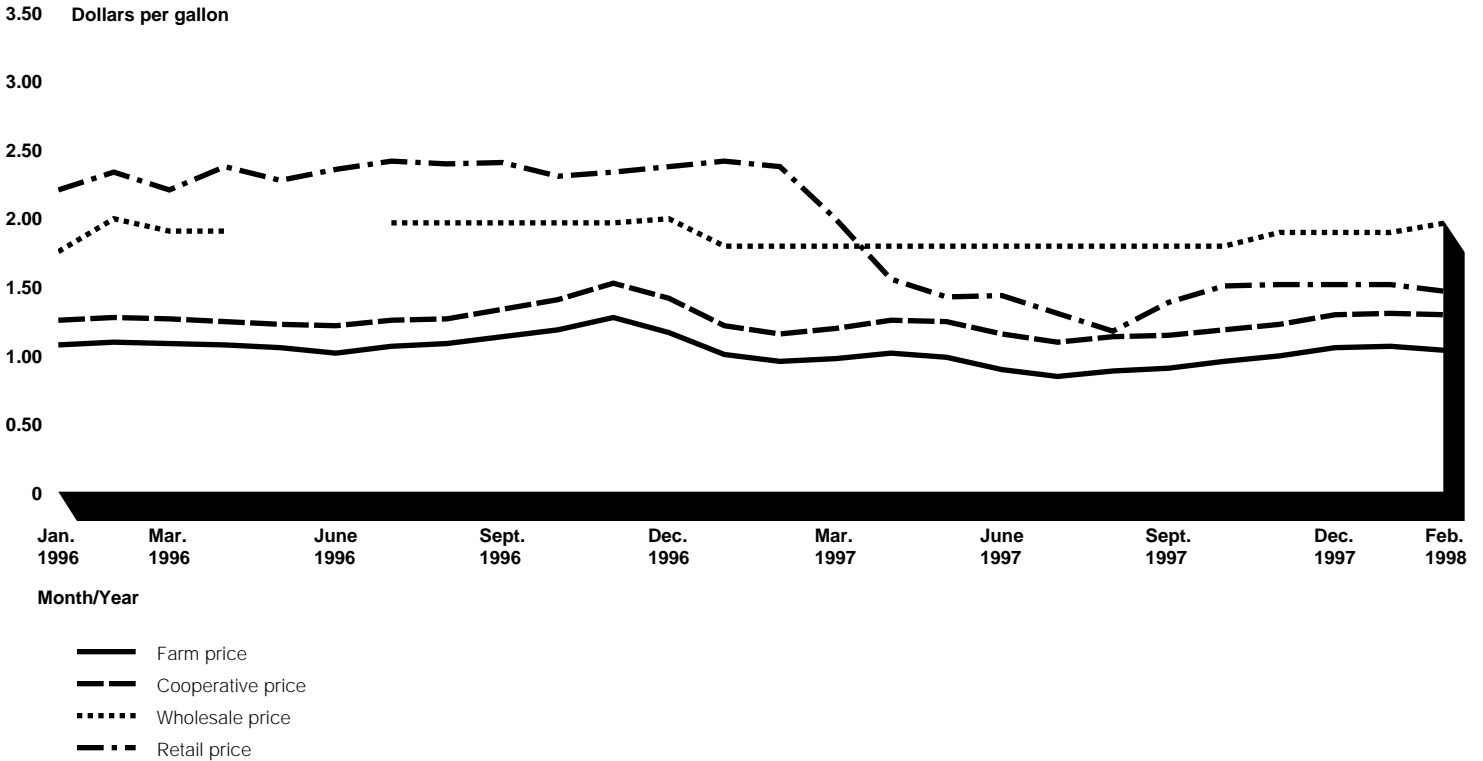
Figure III.5: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Chicago, Ill., Market



Note: For the Chicago, Ill., market, the farm price is the Chicago Regional mailbox price; the cooperative price is the announced cooperative price for Chicago; the wholesale price is the price charged by the commissary at the Great Lakes Naval Training Center; and the retail price is the A.C. Nielsen price for the Chicago market.

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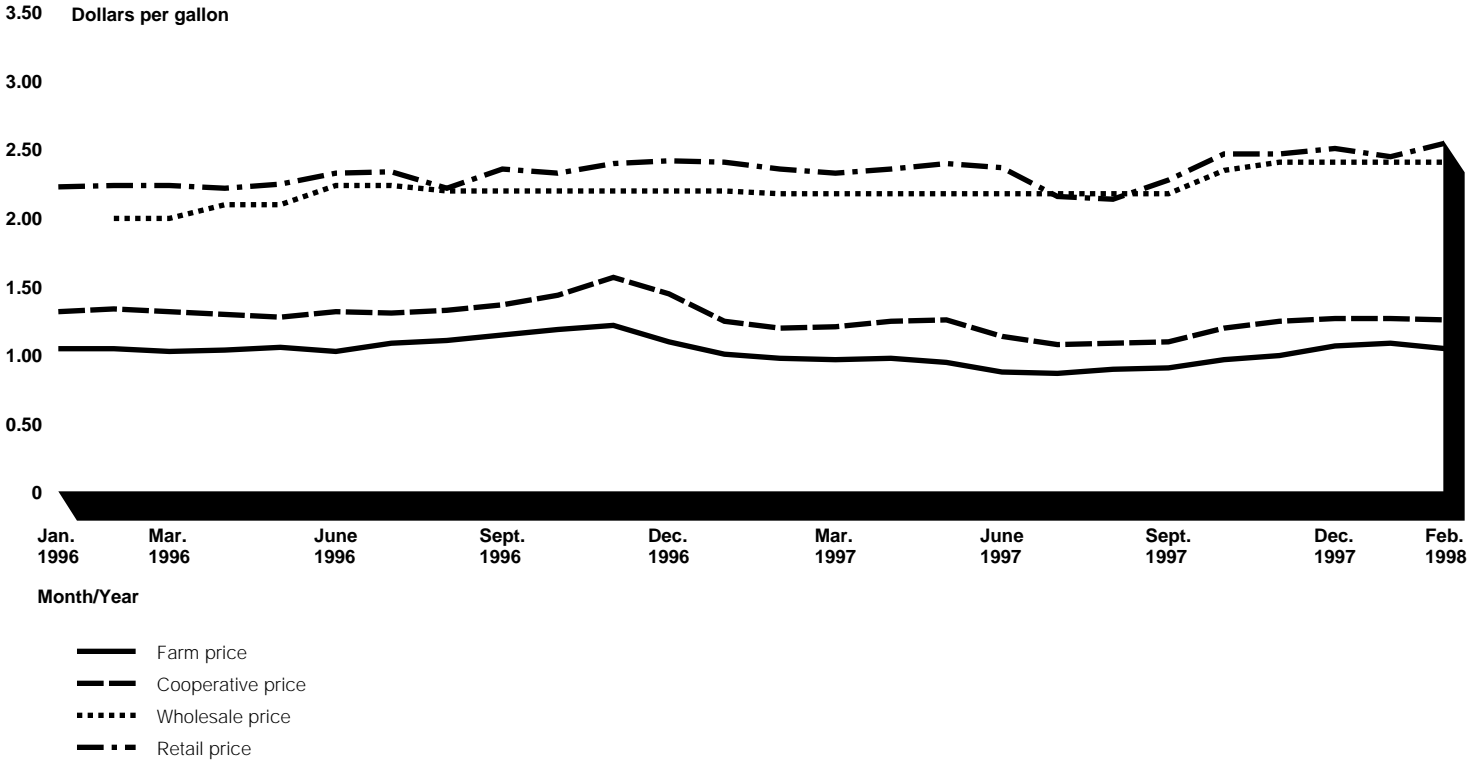
Figure III.6: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Cincinnati, Ohio, Market



Note: For the Cincinnati, Ohio, market, the farm price is the Ohio Valley mailbox price; the cooperative price is the announced cooperative price for Cincinnati; the wholesale price is the price charged by the commissary at the Wright Patterson Air Force Base; and the retail price is the A.C. Nielsen price for the Cincinnati market.

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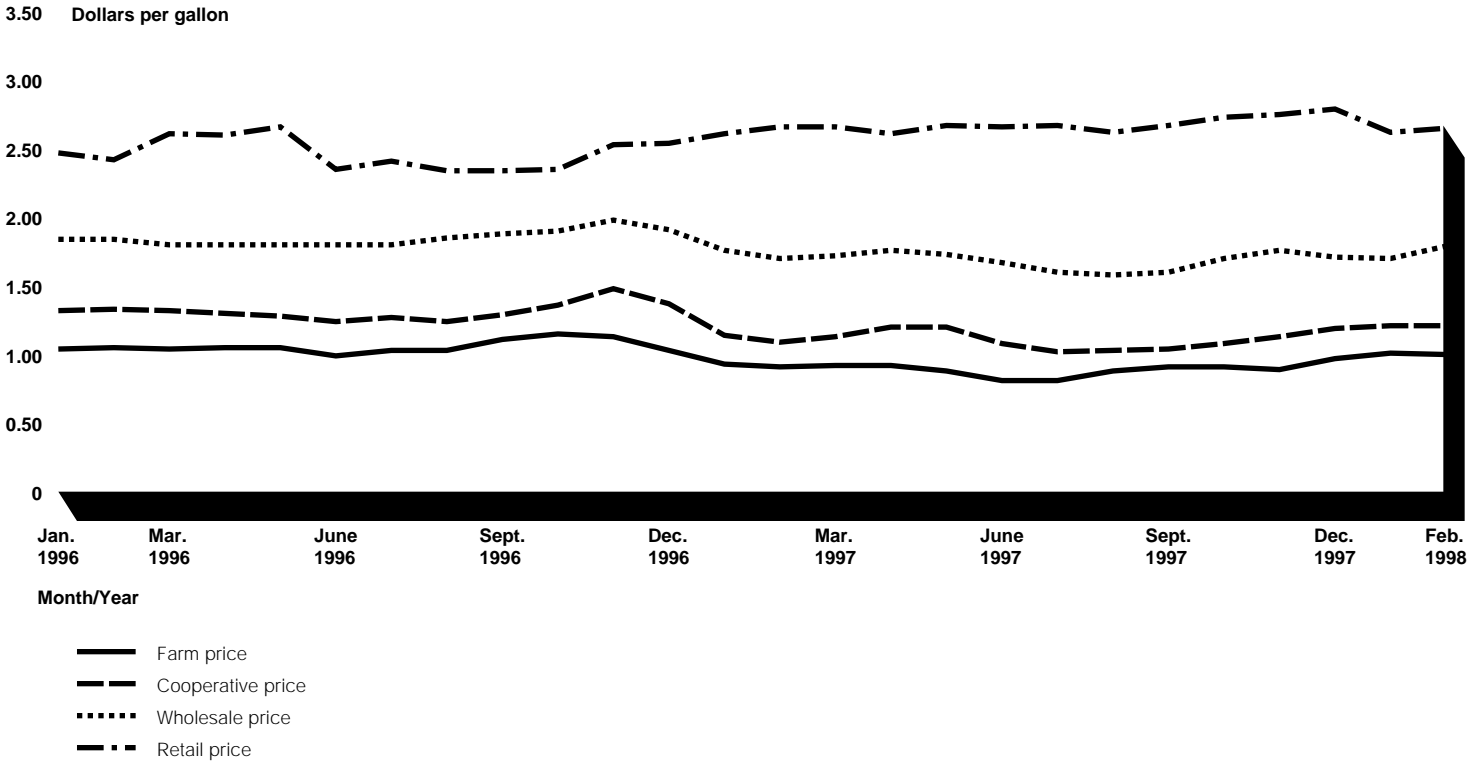
Figure III.7: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Dallas, Tex., Market



Note: For the Dallas, Tex., market, the farm price is the Texas mailbox price; the cooperative price is the announced cooperative price for Dallas; the wholesale price is the price charged by the commissary at the Kelly Air Force Base; and the retail price is the A.C. Nielsen price for the Dallas market.

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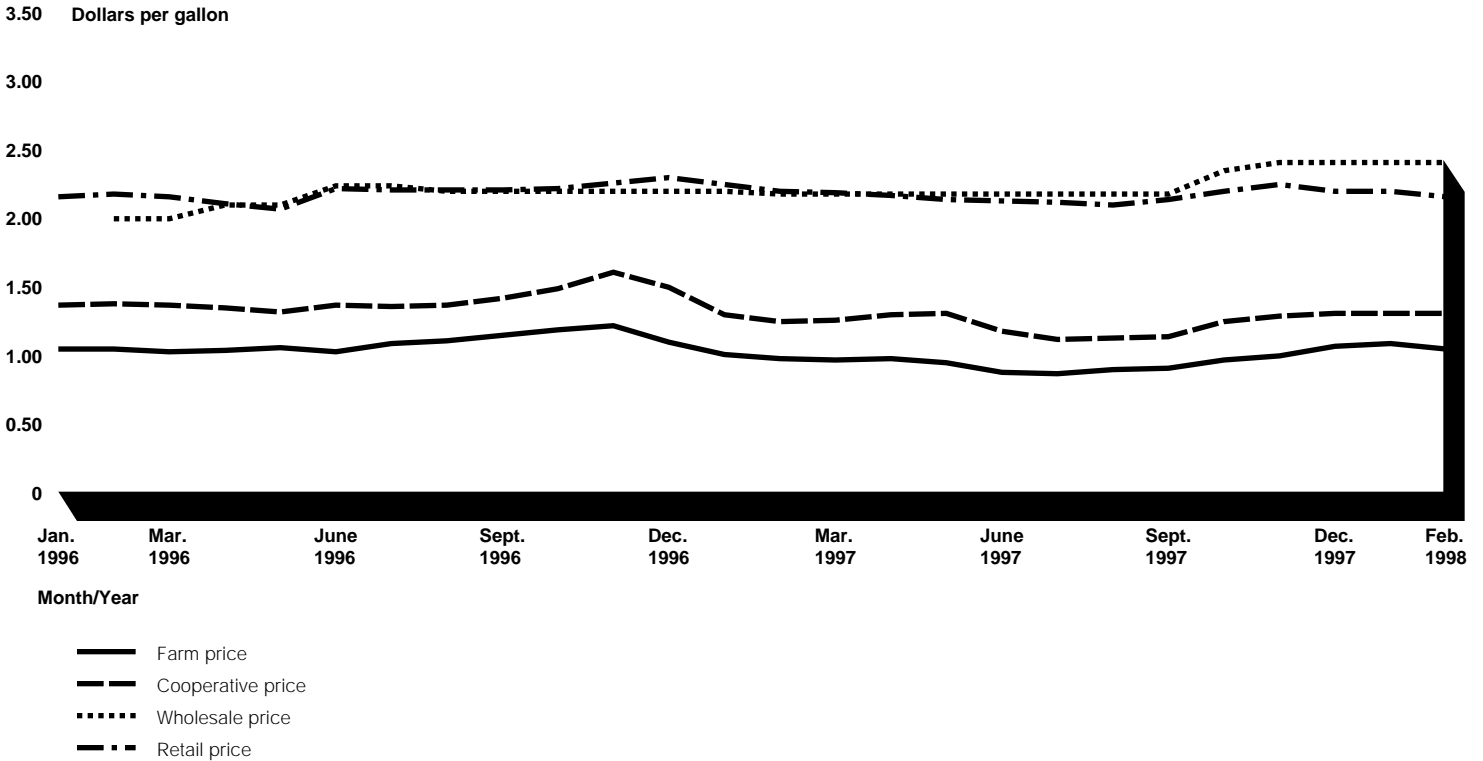
Figure III.8: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Denver, Colo., Market



Note: For the Denver, Colo., market, the farm price is the Eastern Colorado mailbox price; the cooperative price is the announced cooperative price for Denver; the wholesale price is the price charged by the commissary at the Fitzsimons U.S. Army Garrison; and the retail price is the A.C. Nielsen price for the Denver market.

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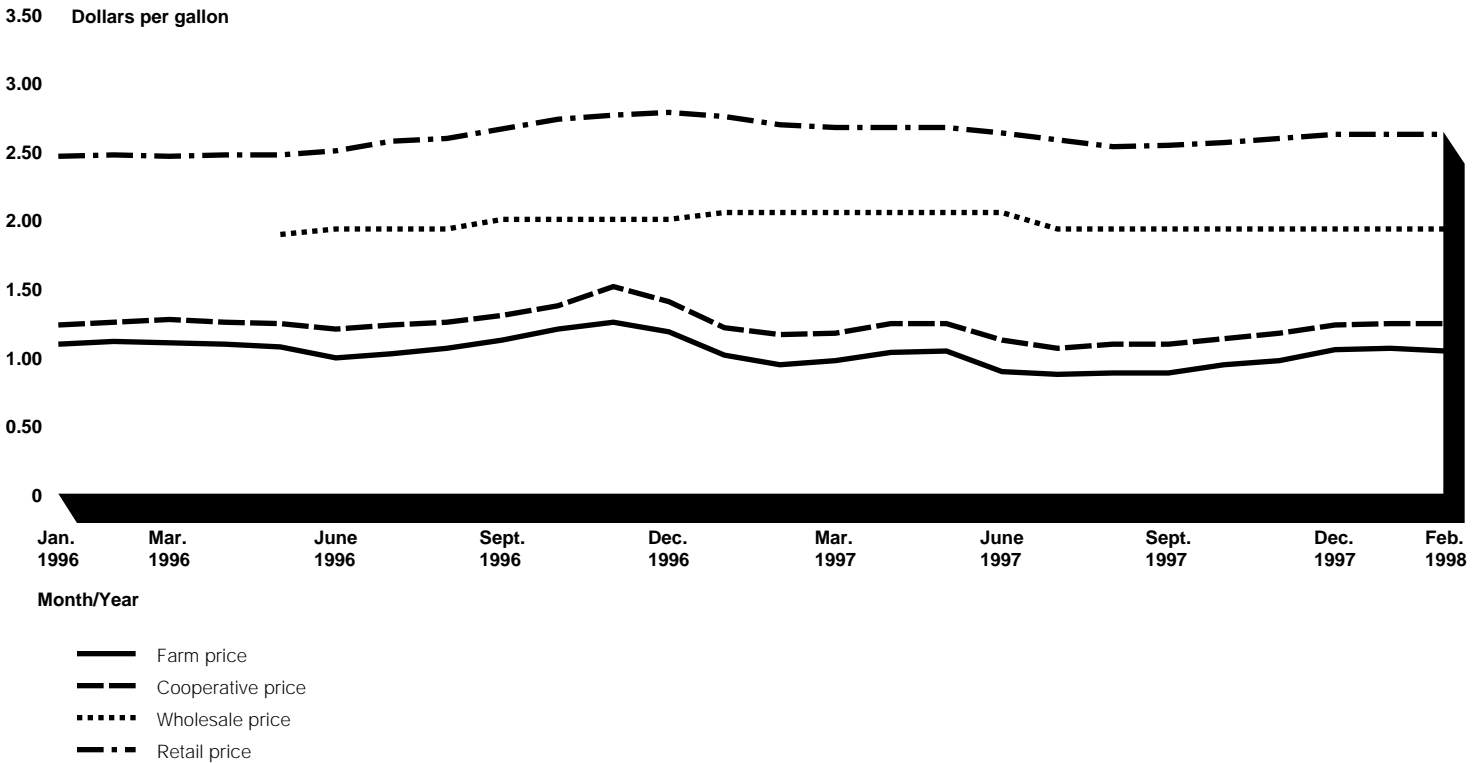
Figure III.9: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Houston, Tex., Market



Note: For the Houston, Tex., market, the farm price is the Texas mailbox price; the cooperative price is the announced cooperative price for Houston; the wholesale price is the price charged by the commissary at the Kelly Air Force Base; and the retail price is the A.C. Nielsen price for the Houston market.

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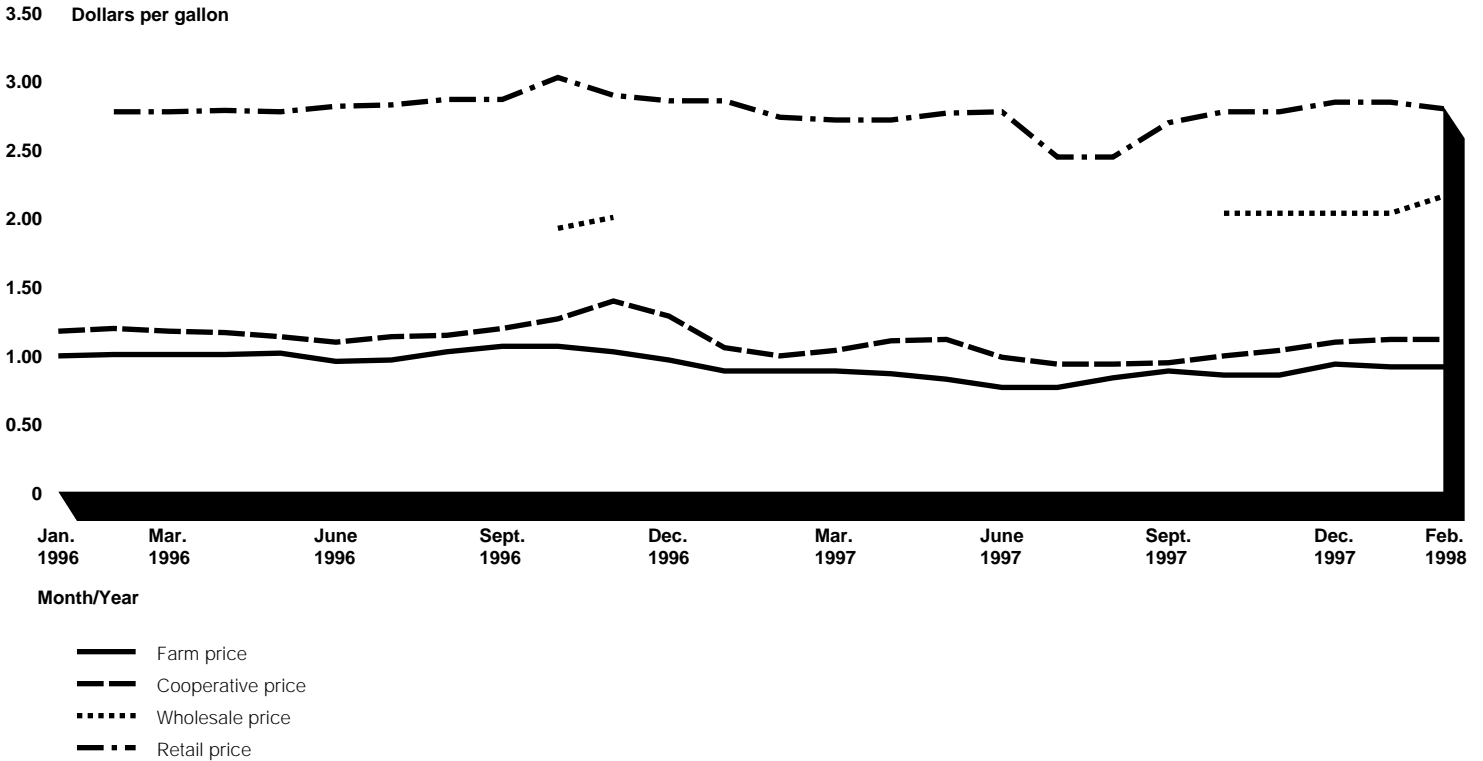
Figure III.10: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Kansas City, Mo., Market



Note: For the Kansas City, Mo., market, the farm price is the Greater Kansas City Blend price minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the announced cooperative price for Kansas City; the wholesale price is the price charged by the commissary at Fort Leavenworth; and the retail price is the A.C. Nielsen price for the Kansas City market.

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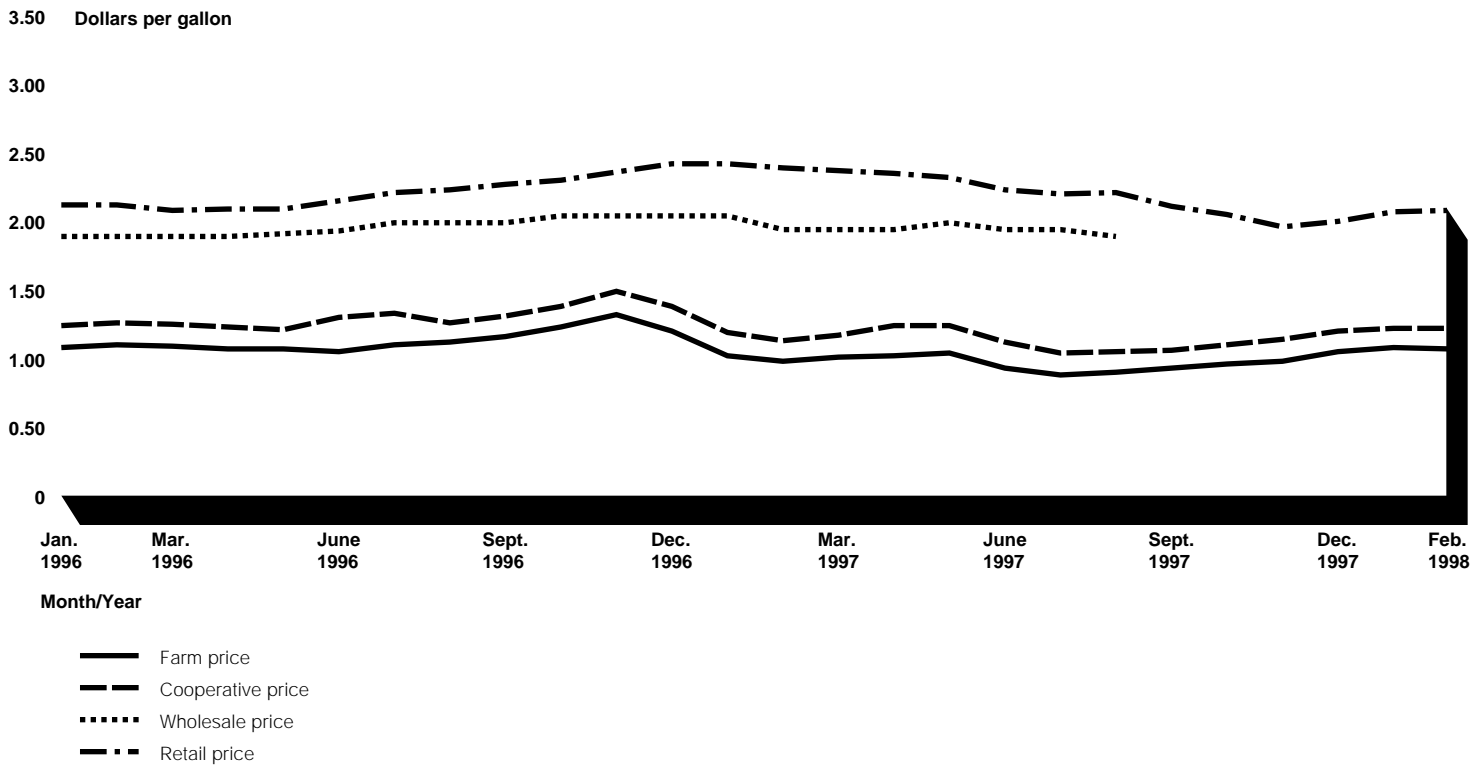
Figure III.11: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Las Vegas, Nev., Market



Note: For the Las Vegas, Nev., market, the farm price is the Great Basin mailbox price; the cooperative price is the estimated cooperative price (Salt Lake City cooperative price minus \$.0258 per gallon); the wholesale price is the price charged by the commissary at the Nellis Air Force Base; and the retail price is the price reported by the state milk control agency for the Las Vegas market.

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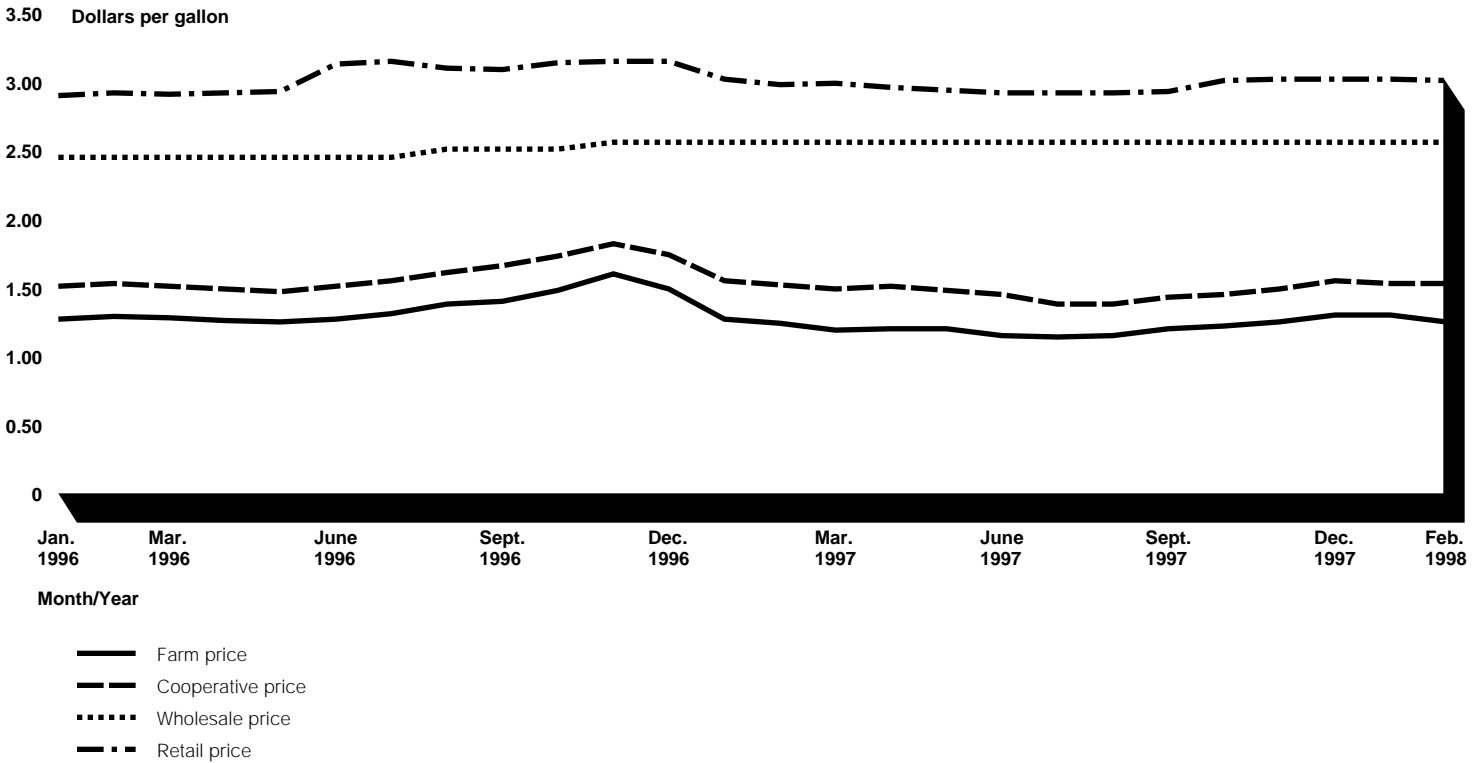
Figure III.12: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Louisville, Ky., Market



Note: For the Louisville, Ky., market, the farm price is the Louisville, Lexington, and Evansville mailbox price; the cooperative price is the announced cooperative price for Louisville; the wholesale price is the price charged by the commissary at Fort Knox; and the retail price is the A.C. Nielsen price for the Louisville market.

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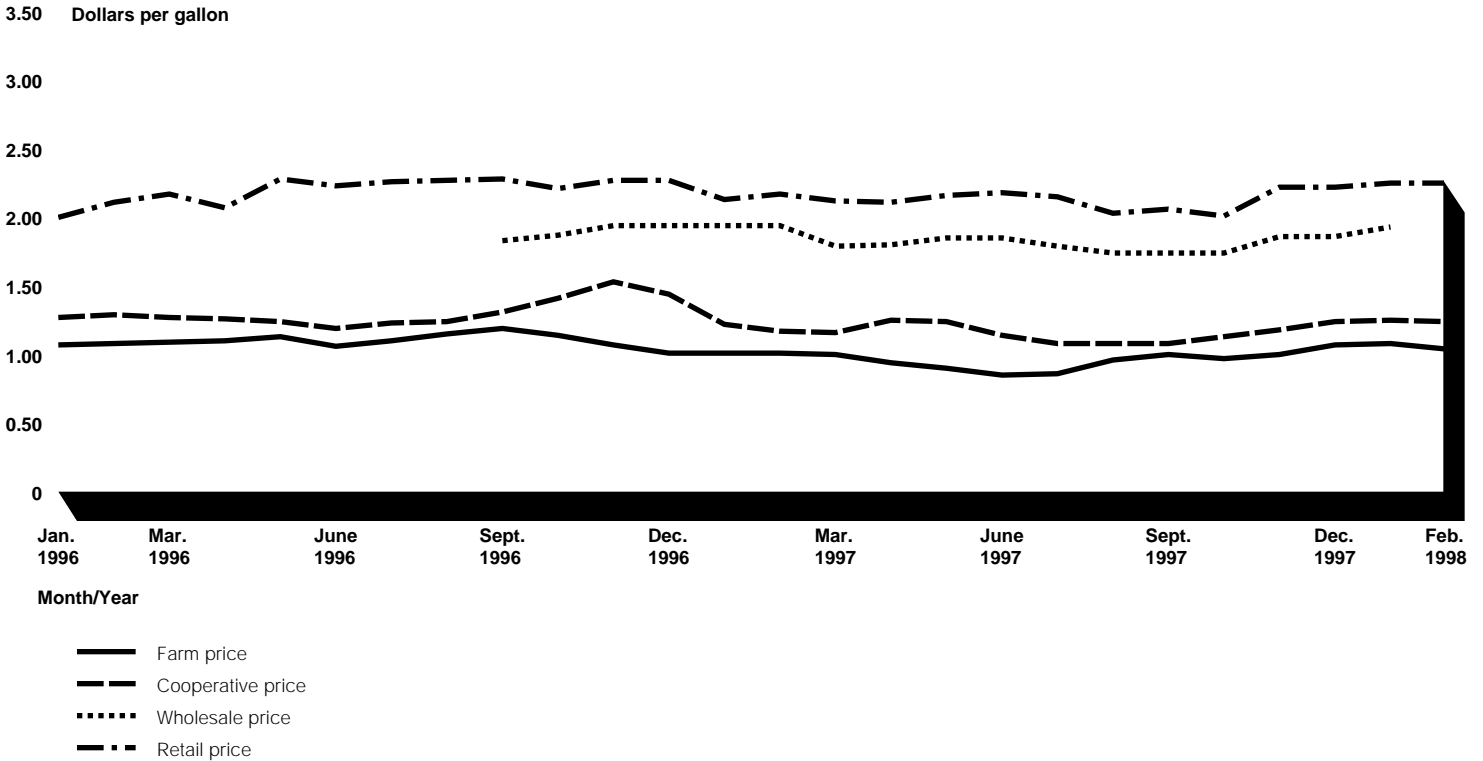
Figure III.13: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Miami, Fla., Market



Note: For the Miami, Fla., market, the farm price is the Florida mailbox price; the cooperative price is the announced cooperative price for Miami; the wholesale price is the price charged by the commissary at the Key West Naval Air Station; and the retail price is the A.C. Nielsen price for the Miami market.

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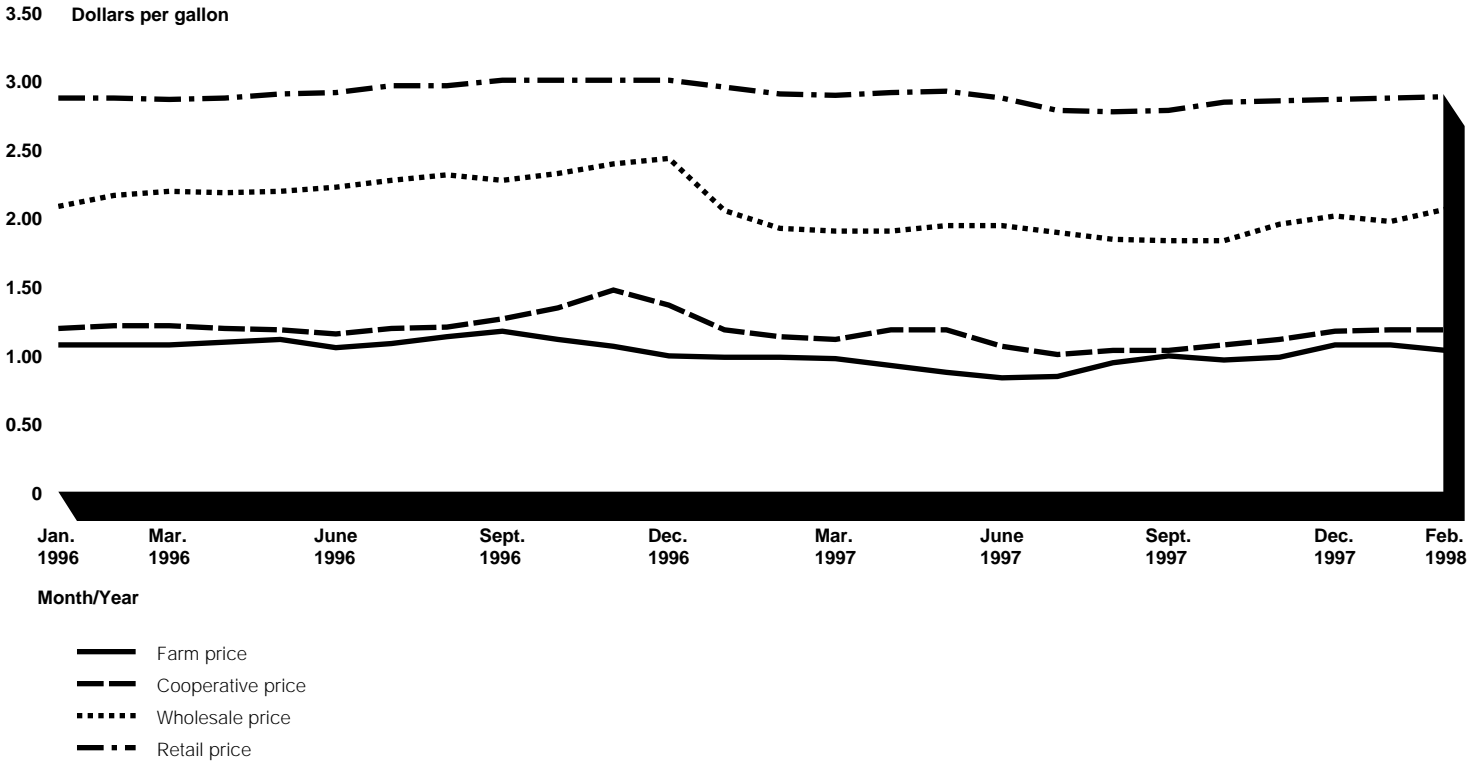
Figure III.14: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Milwaukee, Wis., Market



Note: For the Milwaukee, Wis., market, the farm price is the Chicago Regional mailbox price; the cooperative price is the announced cooperative price for Milwaukee; the wholesale price is the price charged by the commissary at the Great Lakes Naval Training Center; and the retail price is the A.C. Nielsen price for the Milwaukee market.

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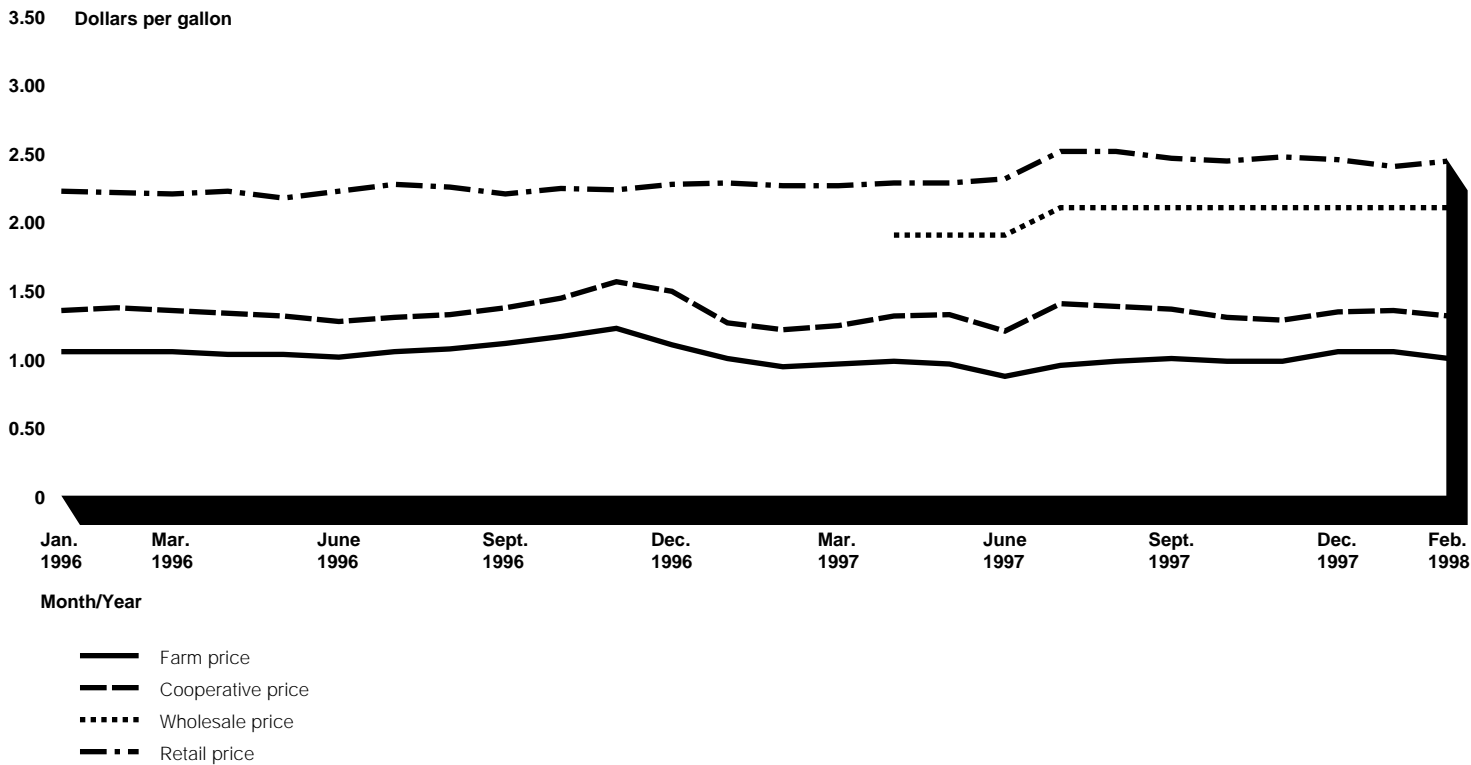
Figure III.15: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Minneapolis, Minn., Market



Note: For the Minneapolis, Minn., market, the farm price is the Upper Midwest mailbox price; the cooperative price is the announced cooperative price for Minneapolis; the wholesale price is the price charged by the commissary at Fort McCoy; and the retail price is the A.C. Nielsen price for the Minneapolis market.

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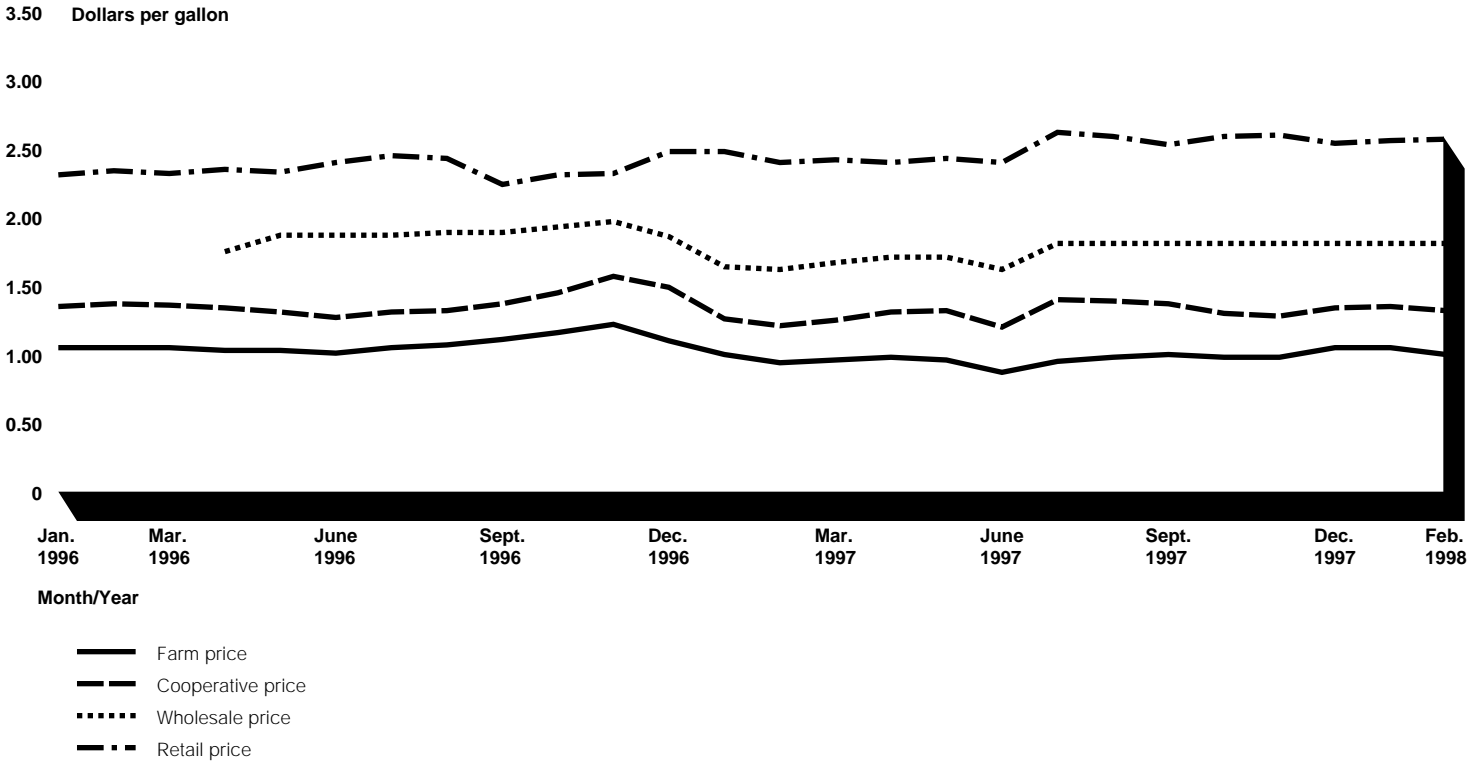
Figure III.16: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the New Hampshire Market



Note: For the New Hampshire market, the farm price is the New England mailbox price; the cooperative price is the estimated cooperative price (Boston cooperative price minus \$.0129 per gallon); the wholesale price is the price charged by the commissary at the Portsmouth Naval Shipyard; and the retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire.

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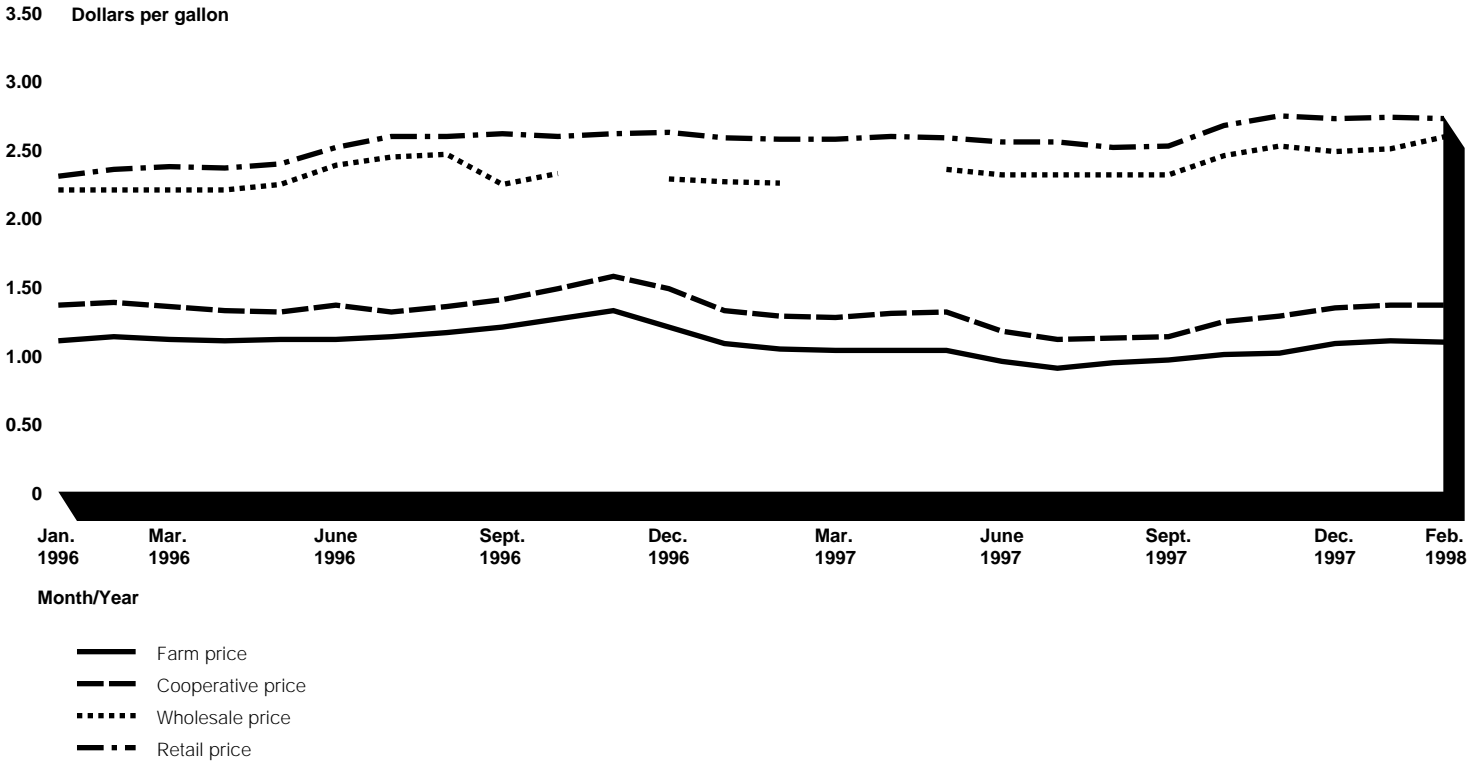
Figure III.17: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the New Haven, Conn., Market



Note: For the New Haven, Conn., market, the farm price is the New England mailbox price; the cooperative price is the announced cooperative price for Hartford; the wholesale price is the price charged by the commissary at the New London Naval Submarine Base; and the retail price is the A.C. Nielsen price for the Hartford-New Haven market.

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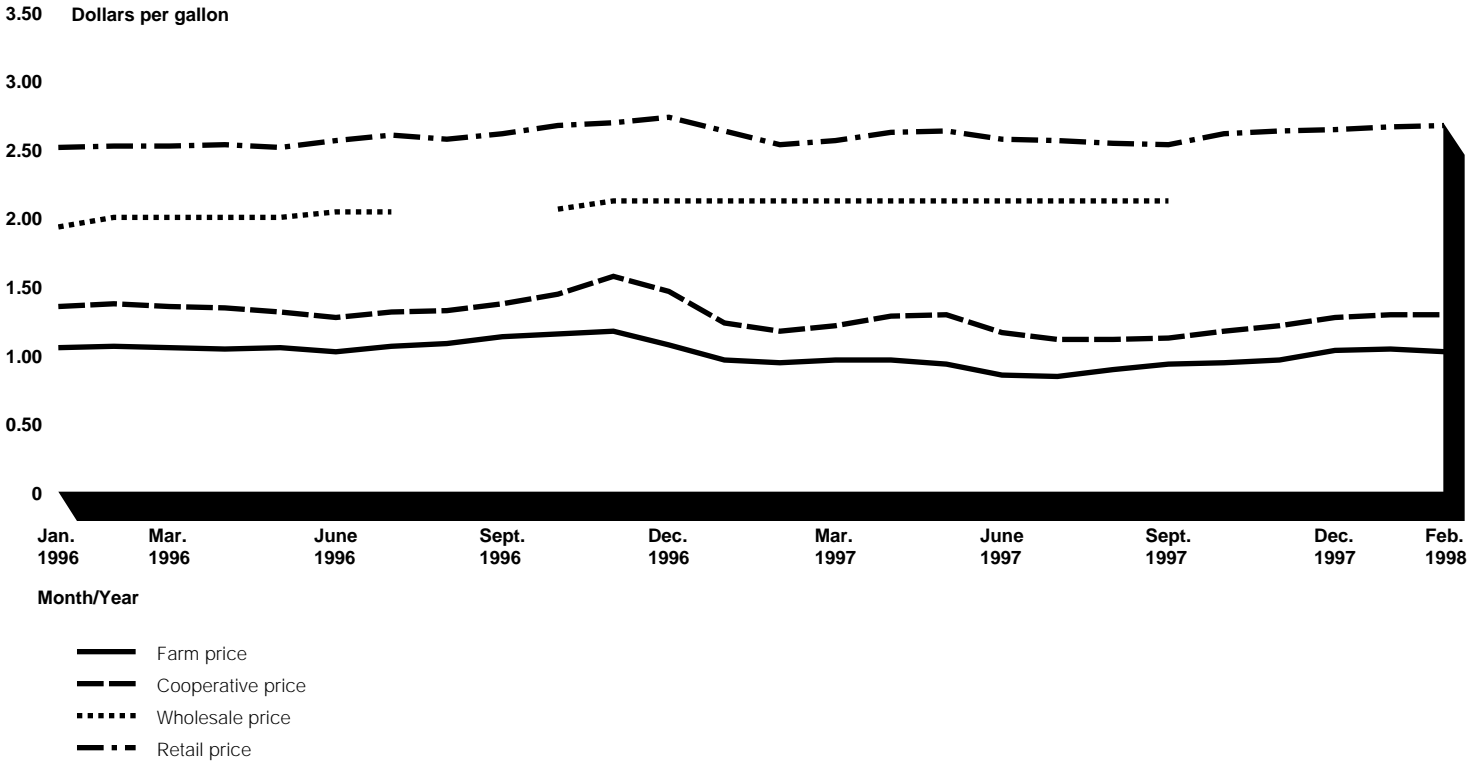
Figure III.18: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the New Orleans, La., Market



Note: For the New Orleans, La., market, the farm price is the Southeast mailbox price; the cooperative price is the announced cooperative price for New Orleans; the wholesale price is the price charged by the commissary at the New Orleans Naval Air Station; and the retail price is the A.C. Nielsen price for the New Orleans-Mobile market.

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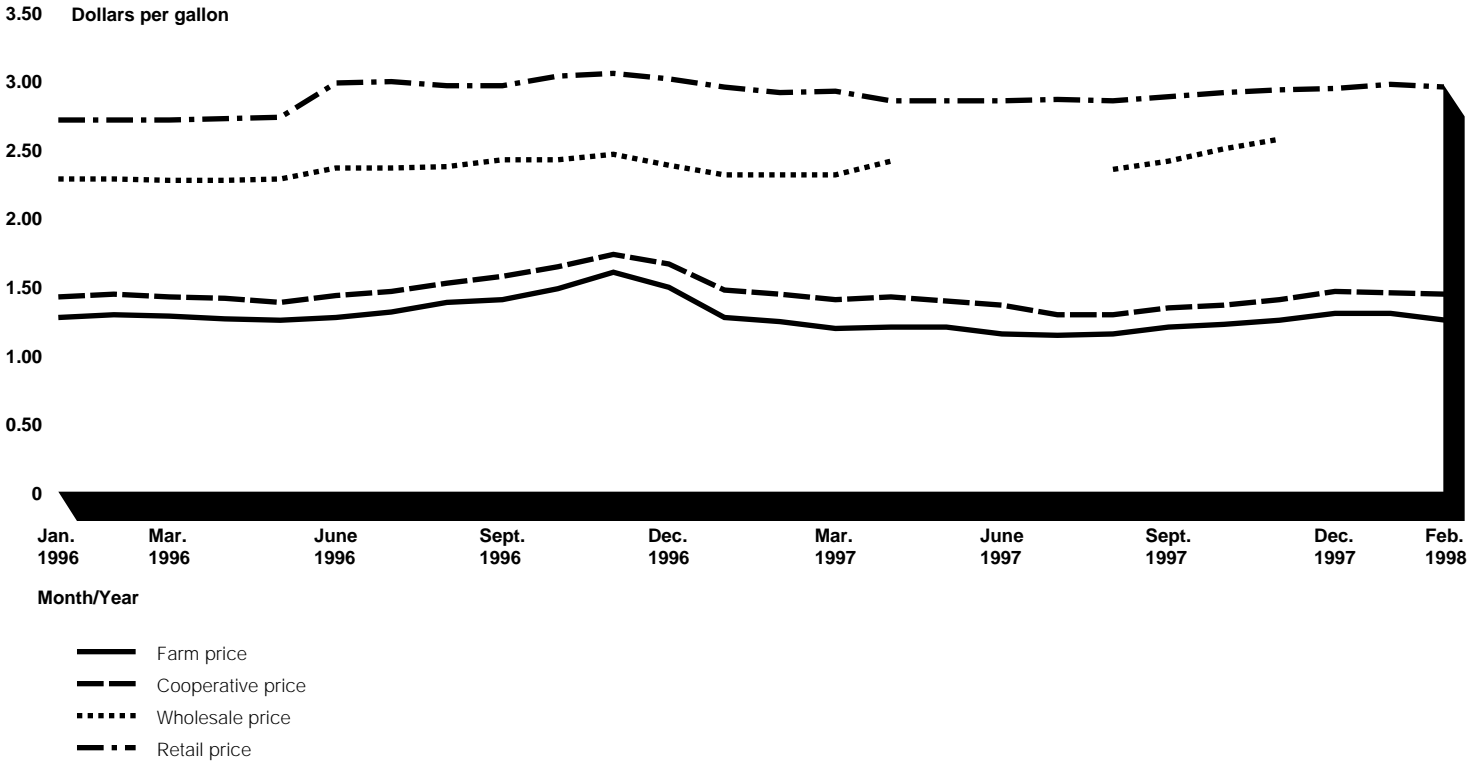
Figure III.19: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the New York, N.Y., Market



Note: For the New York, N.Y., market, the farm price is the New York-New Jersey mailbox price; the cooperative price is the estimated cooperative price (New York Order Class I price plus \$.0602 per gallon); the wholesale price is the price charged by the commissary at the United States Military Academy, West Point; and the retail price is the A.C. Nielsen price for the New York market.

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Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

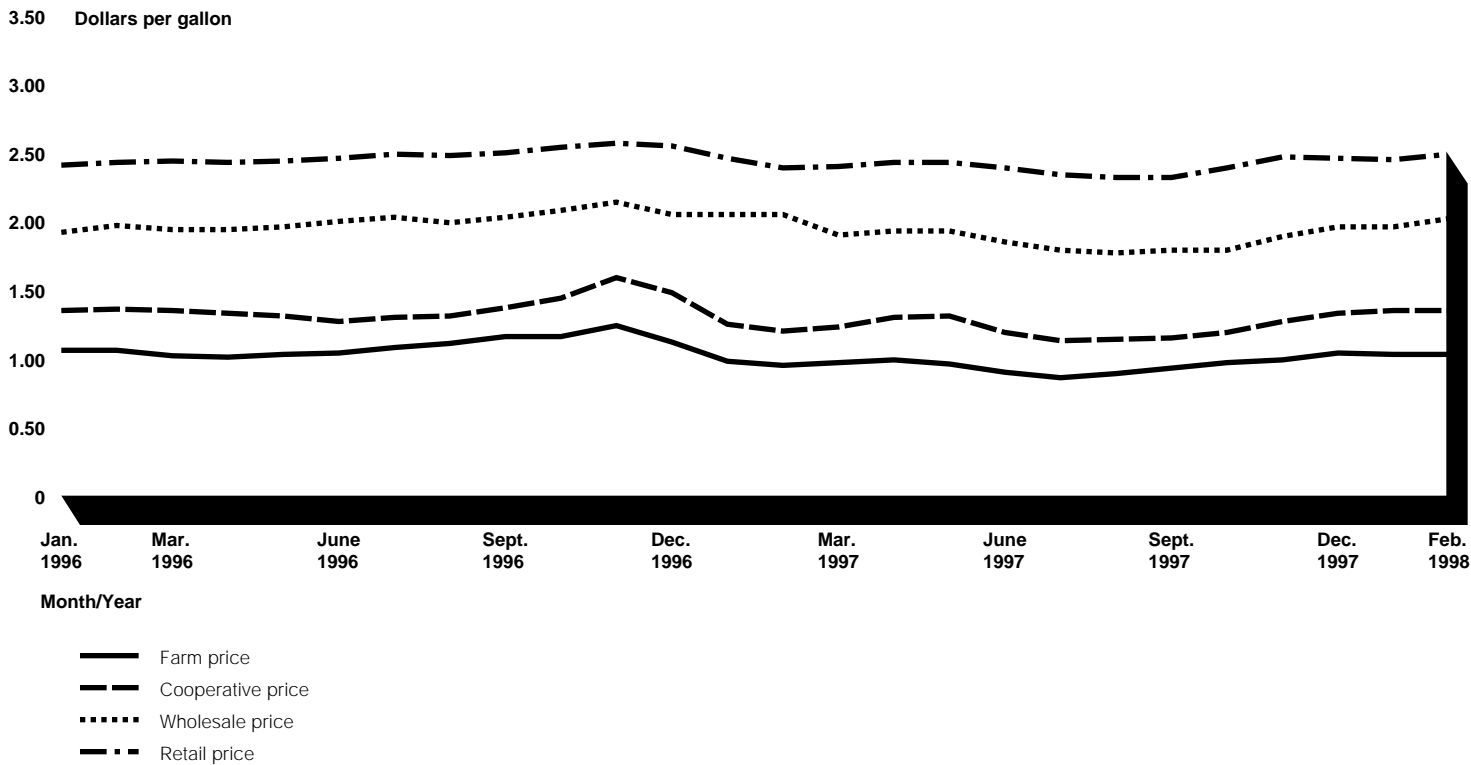
Figure III.20: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Orlando, Fla., Market



Note: For the Orlando, Fla., market, the farm price is the Florida mailbox price; the cooperative price is the estimated cooperative price (Miami cooperative price minus \$.0860 per gallon); the wholesale price is the price charged by the commissary at the Orlando Naval Training Center; and the retail price is the A.C. Nielsen price for the Orlando market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

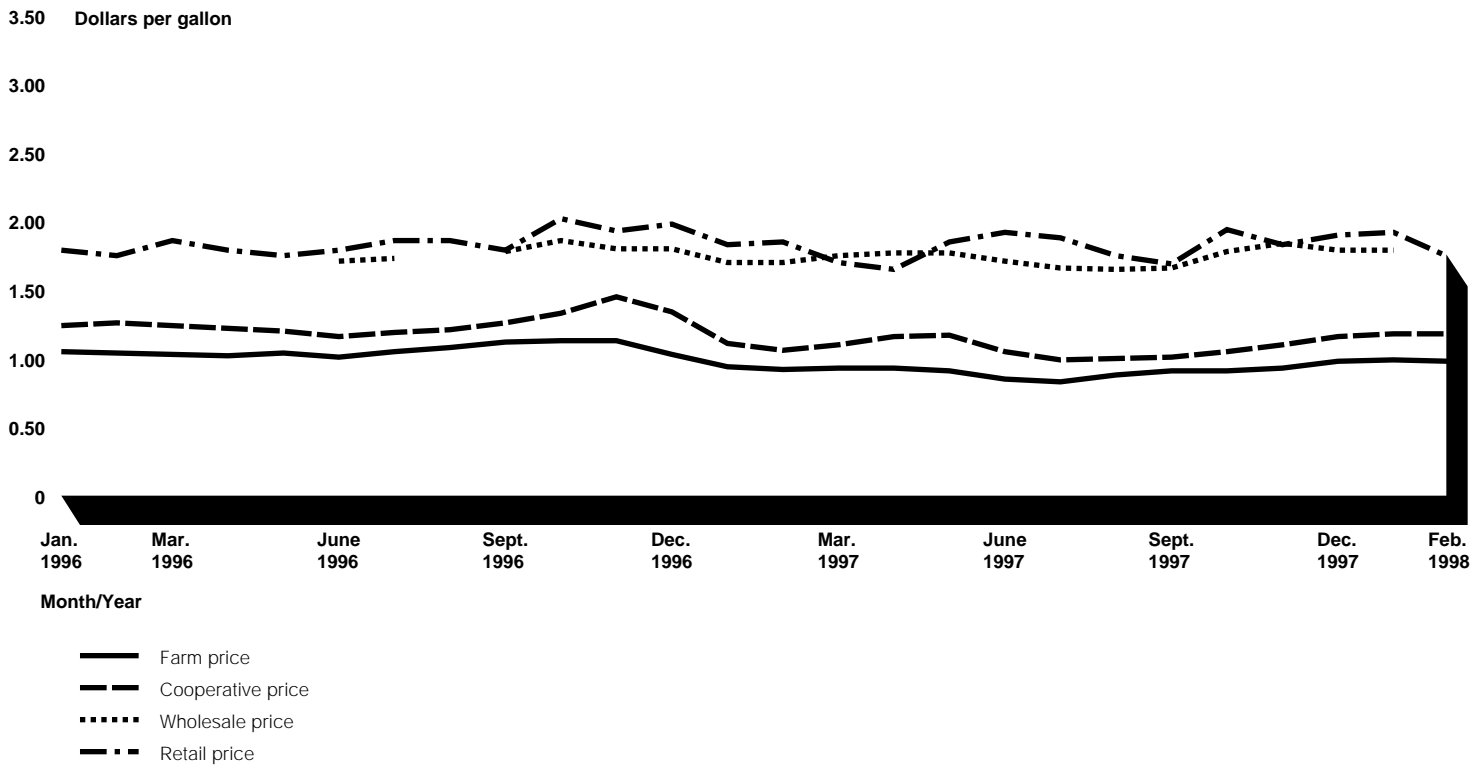
Figure III.21: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Philadelphia, Pa., Market



Note: For the Philadelphia, Pa., market, the farm price is the Middle Atlantic mailbox price; the cooperative price is the announced cooperative price for Philadelphia; the wholesale price is the price charged by the commissary at Carlisle Barracks; and the retail price is the A.C. Nielsen price for the Philadelphia market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

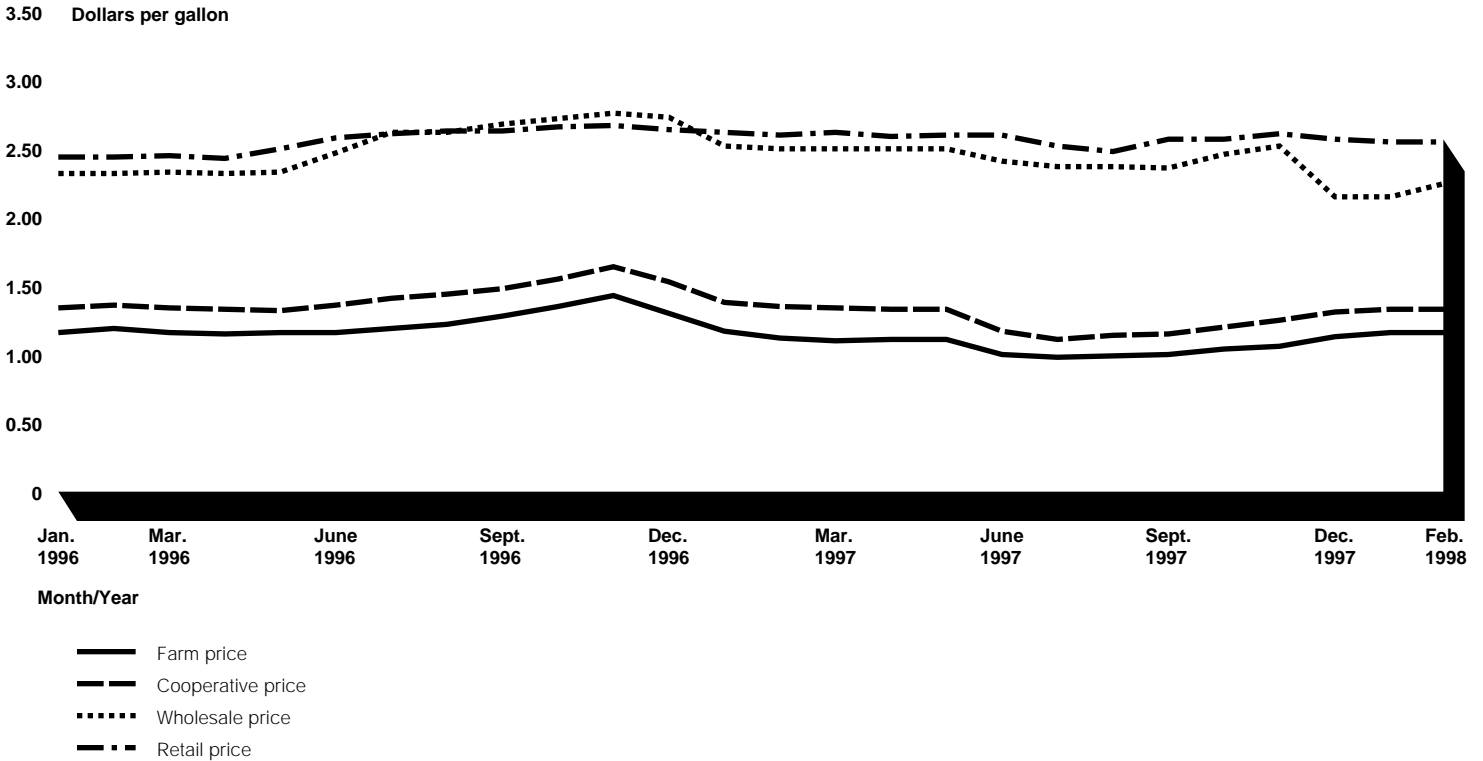
Figure III.22: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Phoenix, Ariz., Market



Note: For the Phoenix, Ariz., market, the farm price is the Central Arizona Blend price minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the announced cooperative price for Phoenix; the wholesale price is the price charged by the commissary at the Luke Air Force Base; and the retail price is the A.C. Nielsen price for the Phoenix market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

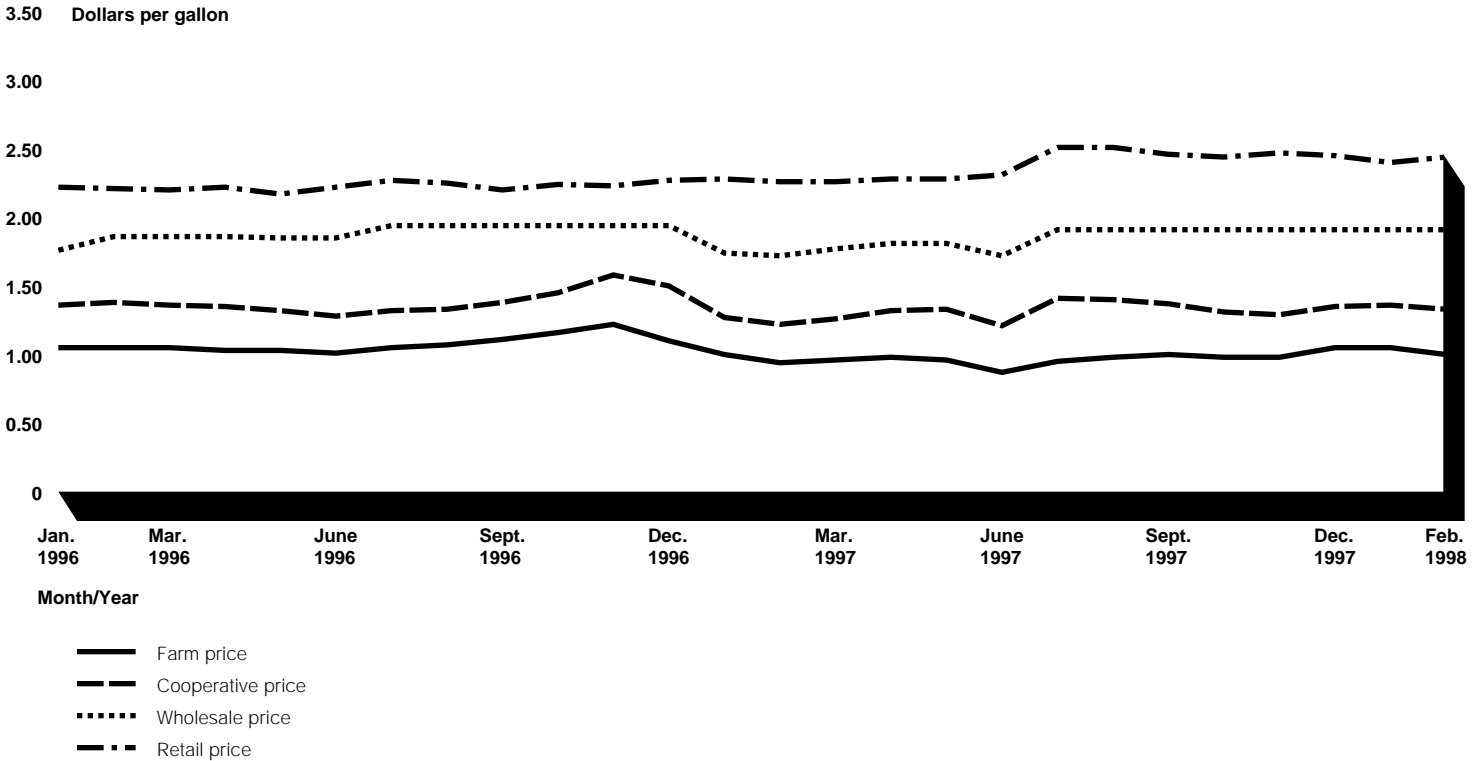
Figure III.23: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Raleigh, N.C., Market



Note: For the Raleigh, N.C., market, the farm price is the Carolina mailbox price; the cooperative price is the announced cooperative price for Charlotte; the wholesale price is the price charged by the commissary at Camp Lejeune; and the retail price is the A.C. Nielsen price for the Raleigh-Durham market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

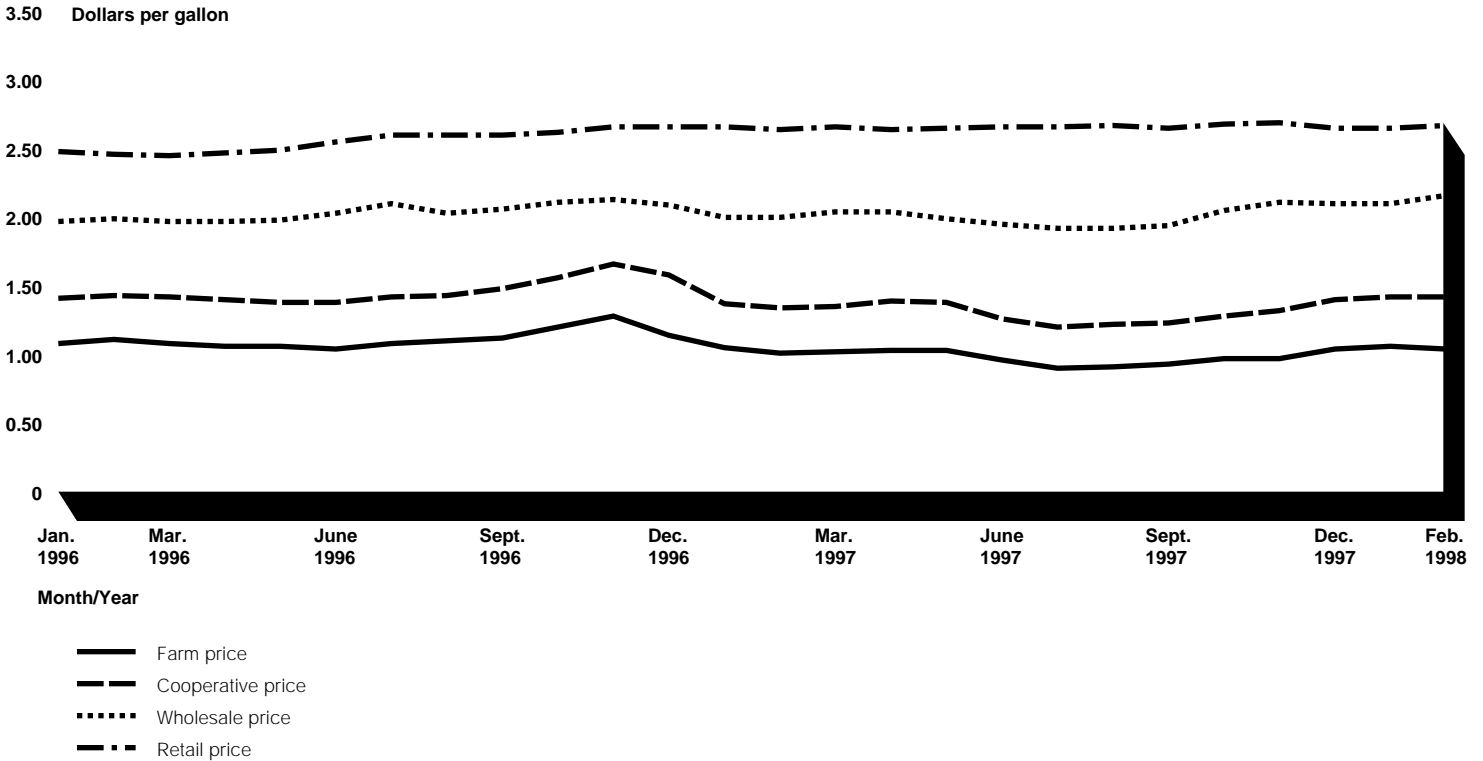
Figure III.24: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Rhode Island Market



Note: For the Rhode Island market, the farm price is the New England mailbox price; the cooperative price is the announced cooperative price for Boston; the wholesale price is the price charged by the commissary at the Newport Naval Education and Training Center; and the retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire.

Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets

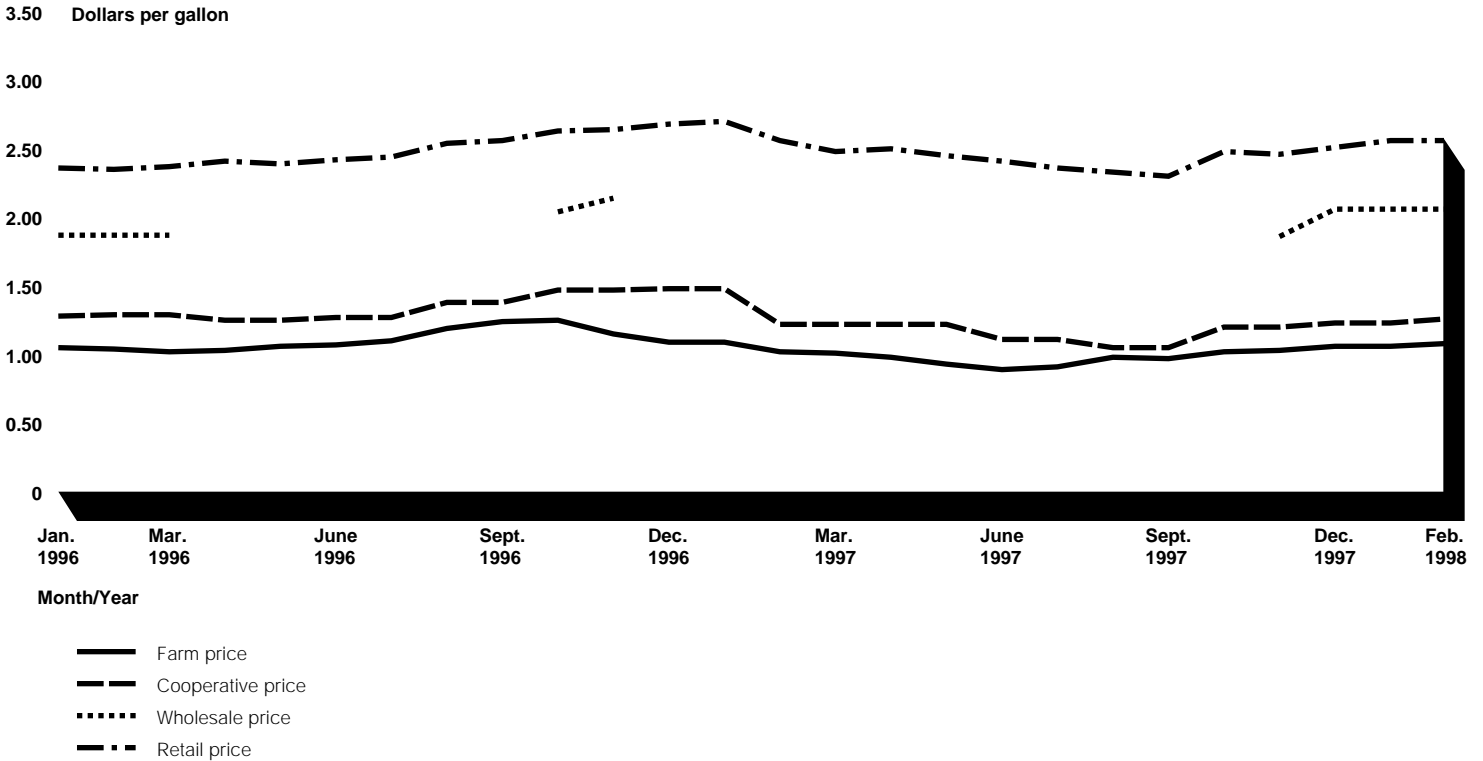
Figure III.25: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Richmond, Va., Market



Note: For the Richmond, Va., market, the farm price is based on data collected by the National Agricultural Statistics Service on the Grade A price paid to farmers in this area, minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the Virginia State Order Class I price; the wholesale price is the price charged by the commissary at Fort Lee; and the retail price is the A.C. Nielsen price for the Richmond-Norfolk market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

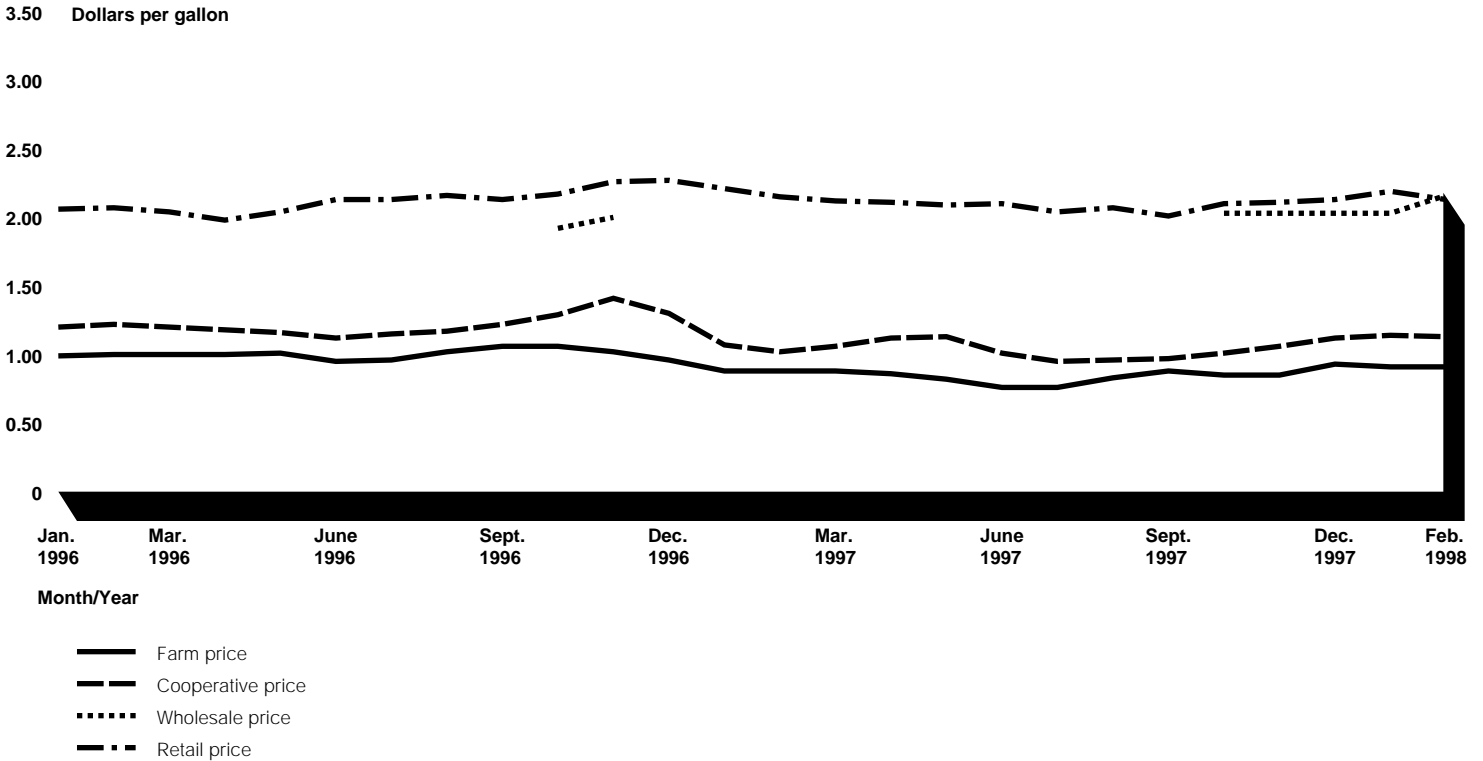
Figure III.26: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Sacramento, Calif., Market



Note: For the Sacramento, Calif., market, the farm price is the California mailbox price; the cooperative price is the Northern California Class I price; the wholesale price is the price charged by the commissary at the Stockton Naval Communications Station; and the retail price is the A.C. Nielsen price for the Sacramento market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

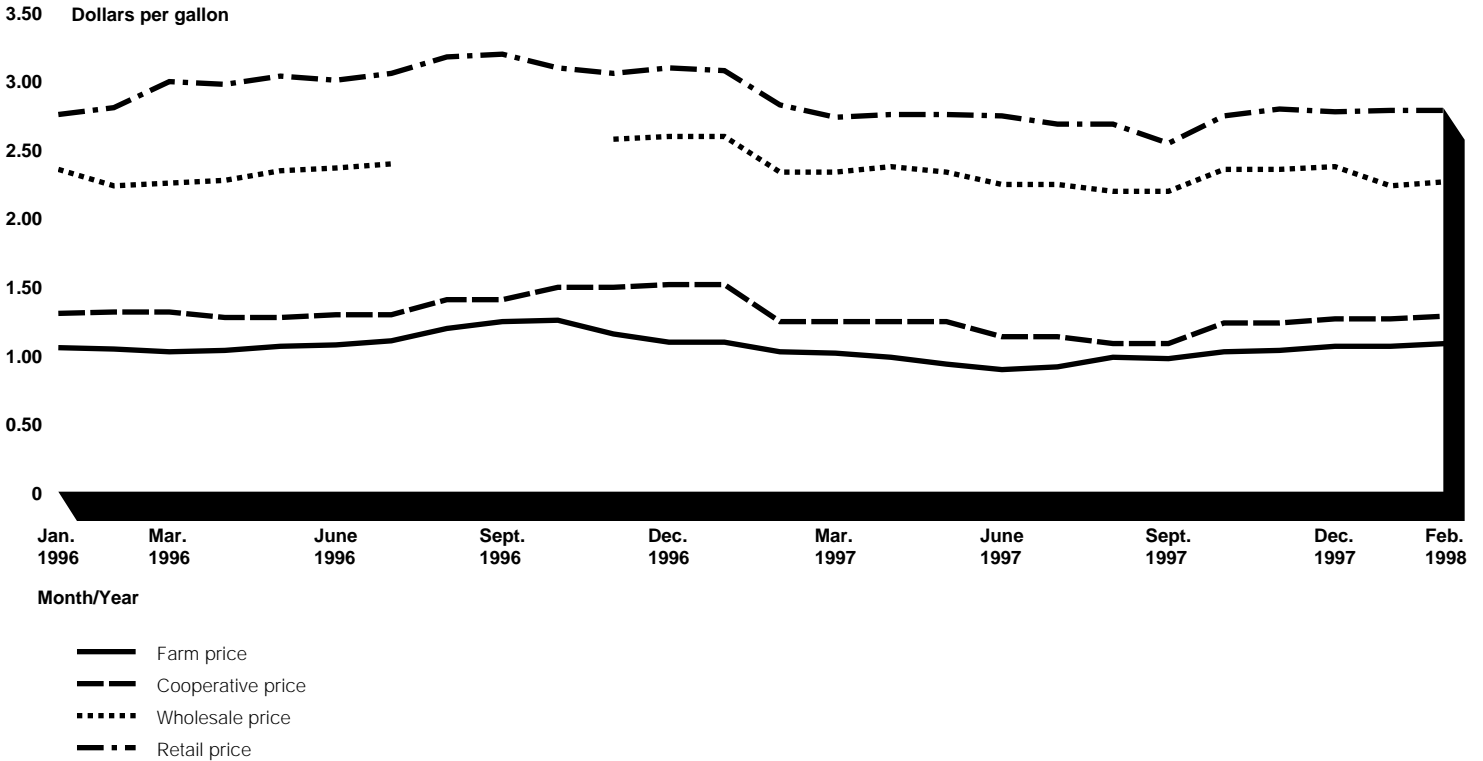
Figure III.27: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Salt Lake City, Utah, Market



Note: For the Salt Lake City, Utah, market, the farm price is the Great Basin mailbox price; the cooperative price is the announced cooperative price for Salt Lake City; the wholesale price is the price charged by the commissary at the Hill Air Force Base; and the retail price is the A.C. Nielsen price for the Salt Lake City-Boise market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

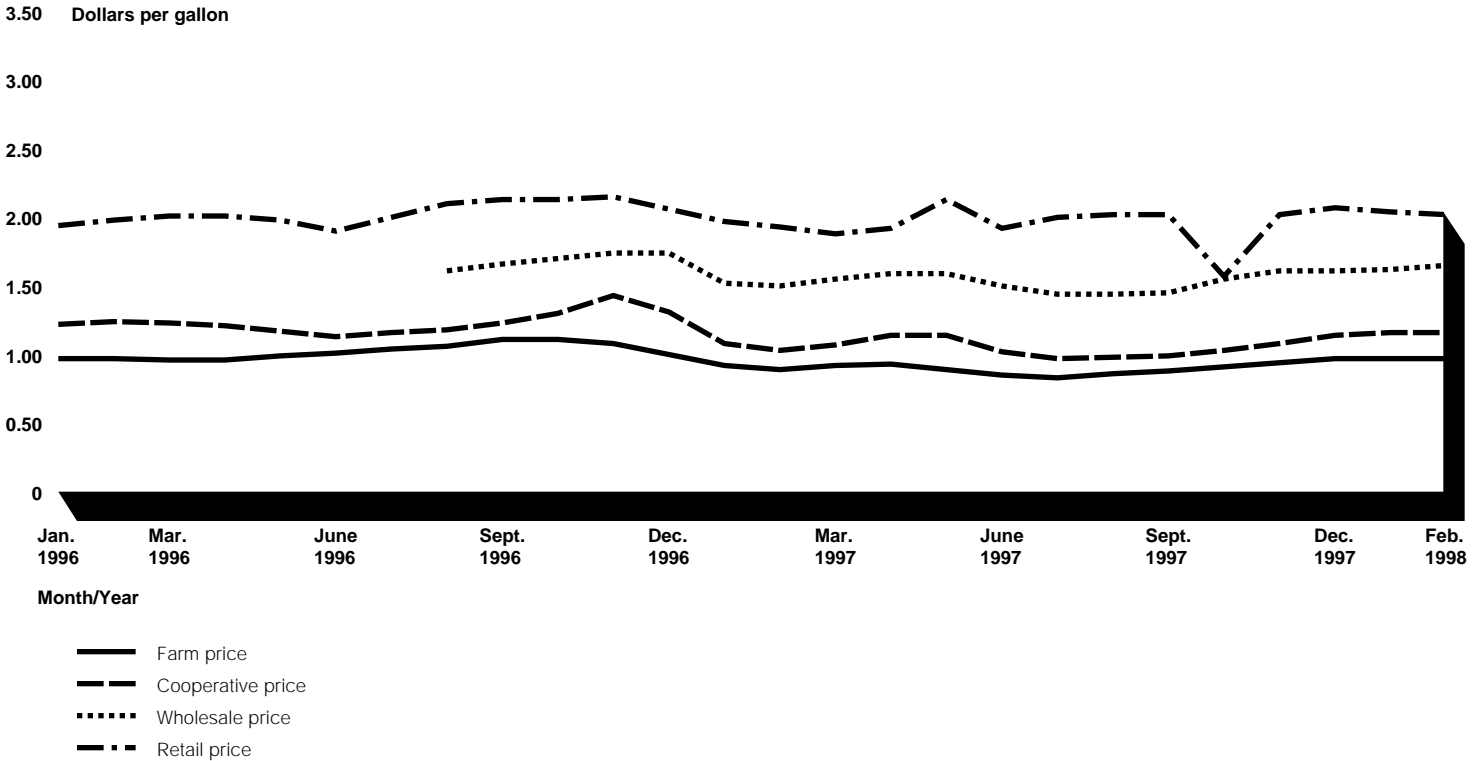
Figure III.28: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the San Diego, Calif., Market



Note: For the San Diego, Calif., market, the farm price is the California mailbox price; the cooperative price is the Southern California Class I price; the wholesale price is the price charged by the commissary at the San Diego Naval Station; and the retail price is the A.C. Nielsen price for the San Diego market.

**Appendix III
 Analysis of Farm-To-Retail Prices for
 2-Percent Milk in Selected Markets**

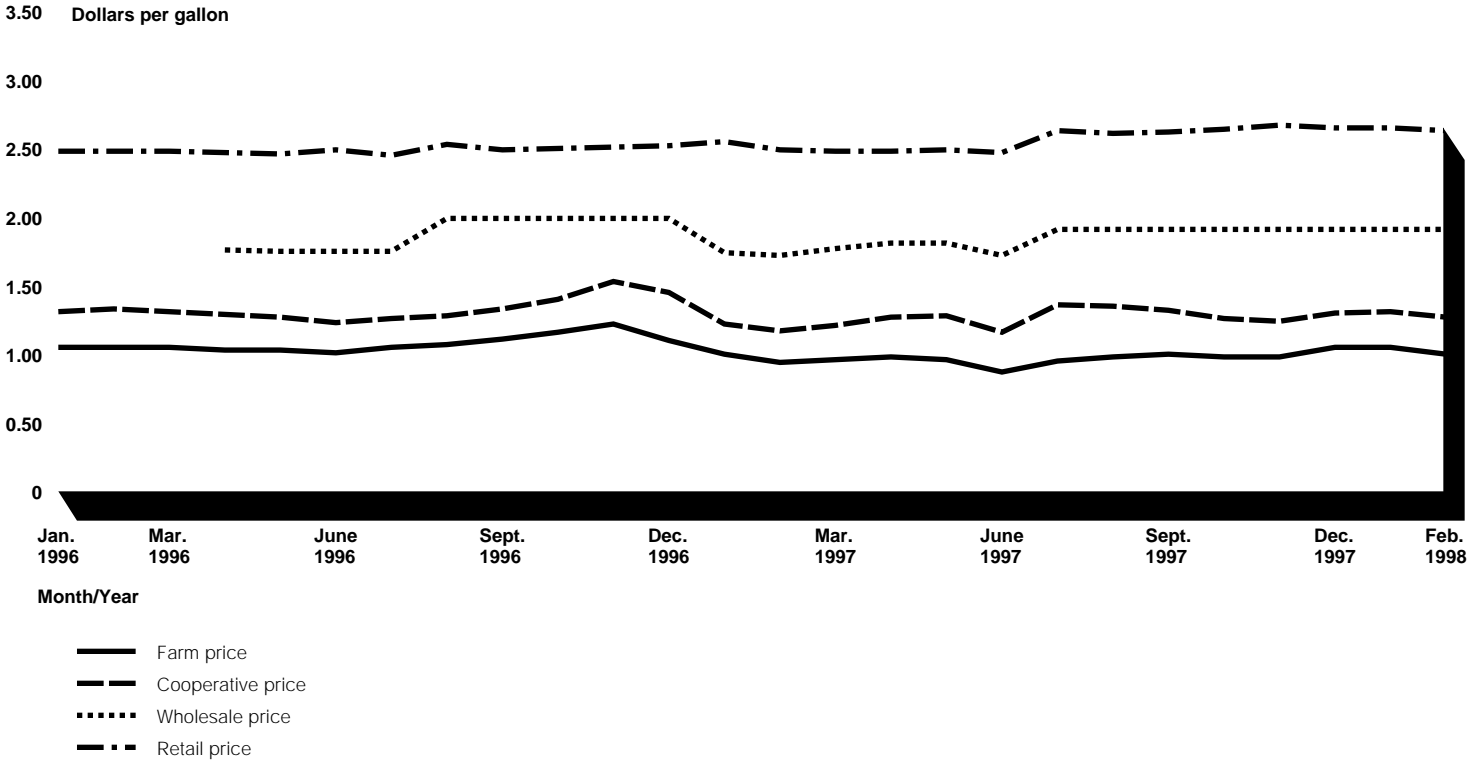
Figure III.29: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Seattle, Wash., Market



Note: For the Seattle, Wash., market, the farm price is the Pacific Northwest mailbox price; the cooperative price is the announced cooperative price for Seattle; the wholesale price is the price charged by the commissary at the Everett Naval Station; and the retail price is the A.C. Nielsen price for the Seattle market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

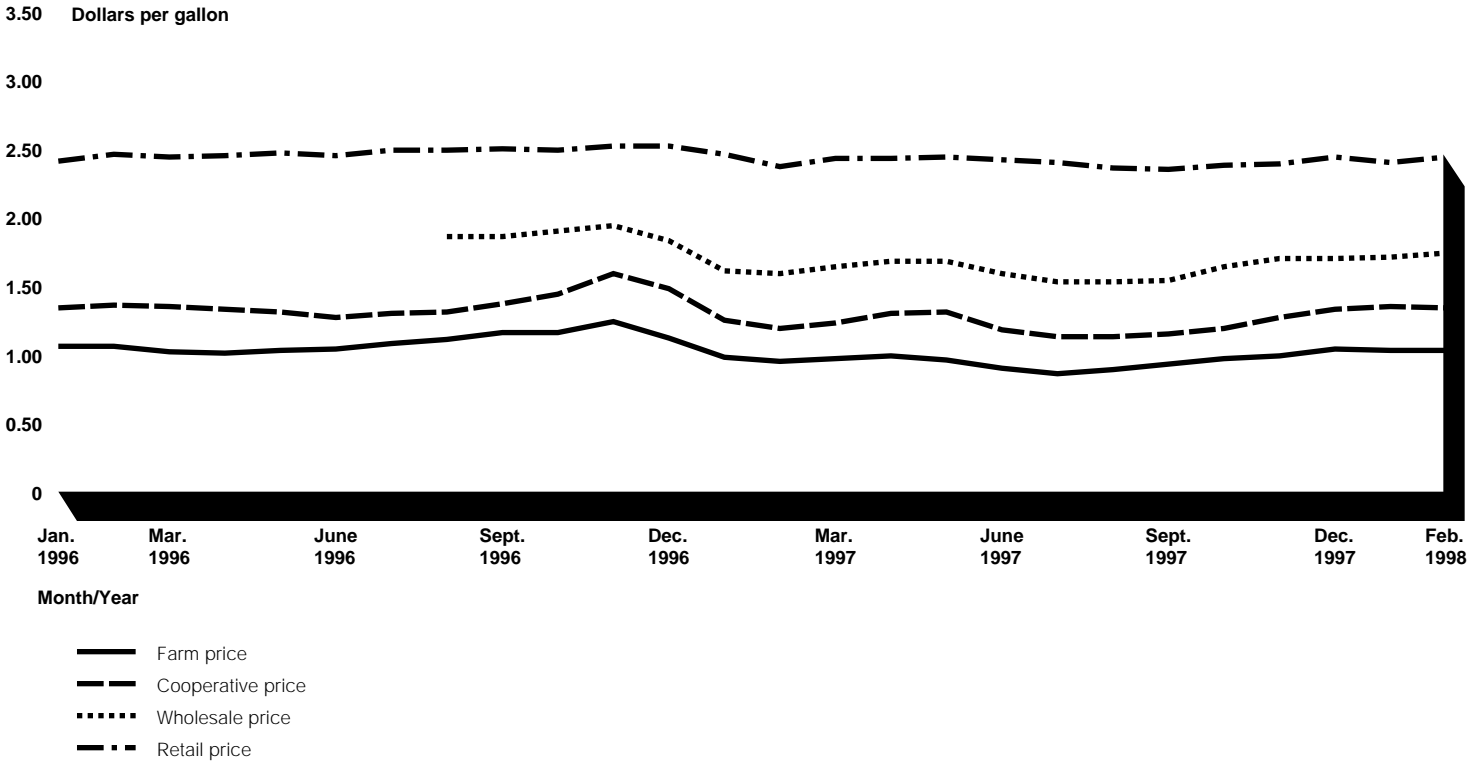
Figure III.30: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Vermont Market



Note: For the Vermont market, the farm price is the New England mailbox price; the cooperative price is the estimated cooperative price (Boston announced cooperative price minus \$.0516 per gallon); the wholesale price is the price charged by the commissary at the Hanscom Air Force Base; and the retail price is the price reported by the state milk control agency for the Vermont market.

**Appendix III
Analysis of Farm-To-Retail Prices for
2-Percent Milk in Selected Markets**

Figure III.31: Farm, Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Fluid Milk for the Washington, D.C., Market



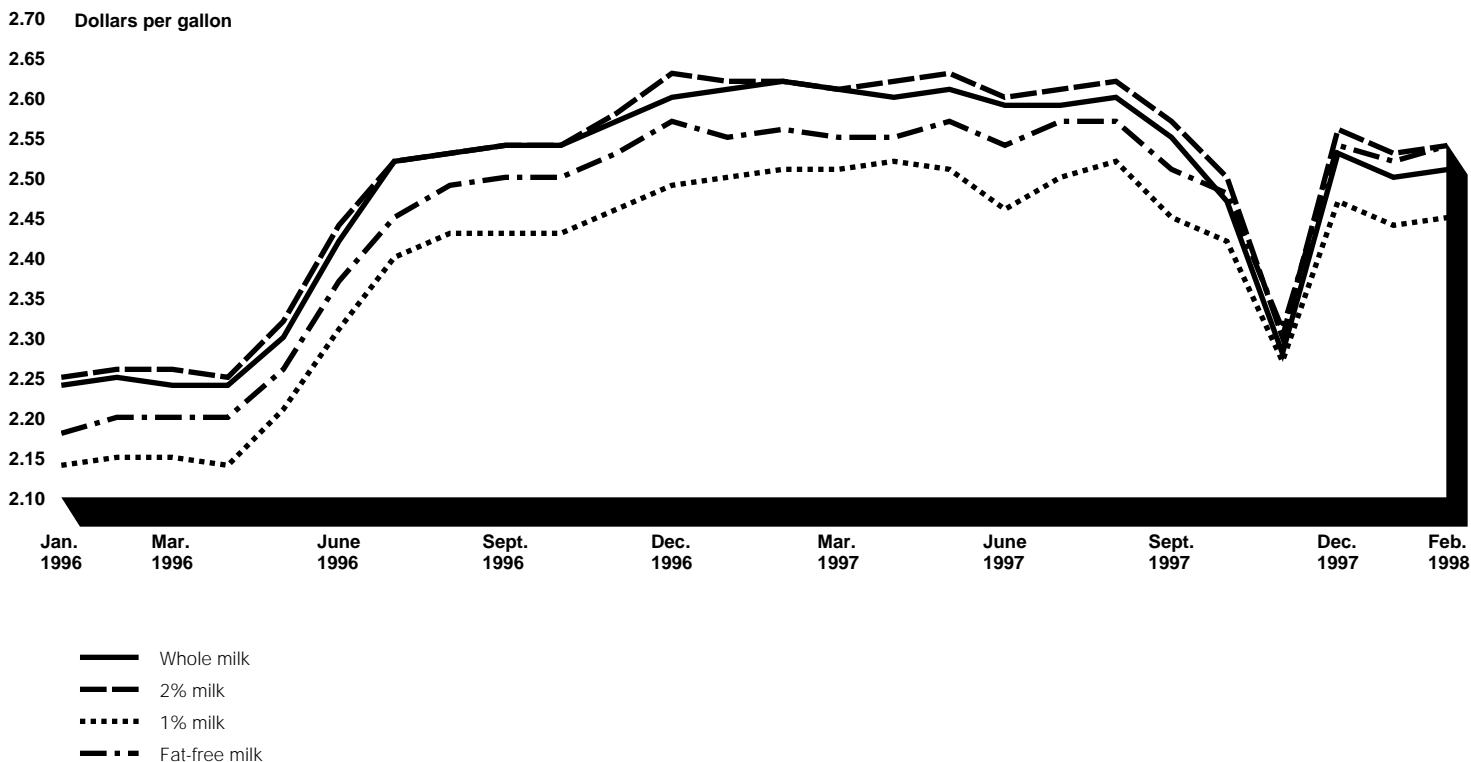
Note: For the Washington, D.C., market, the farm price is the Middle Atlantic mailbox price; the cooperative price is the announced cooperative price for Washington, D.C.; the wholesale price is the price charged by the commissary at the Bolling Air Force Base; and the retail price is the A.C. Nielsen price for the Washington, D.C., market.

Retail Pricing Relationships for Four Kinds of Fluid Milk in Selected Markets

This appendix provides information on the average retail price for whole, 2-percent, 1-percent, and fat-free milk in 31 selected markets for January 1996 through February 1998. We found that retail pricing relationships among the four kinds of milk varied significantly in the markets we analyzed. For example, in the Seattle market from January 1996 through February 1998, the average price for 2-percent milk was consistently lower than the average price for whole, 1-percent, or fat-free milk. On the other hand, for this period in the Minneapolis market, the average retail price for fat-free milk was consistently lower than the price of whole, 2-percent, or 1-percent milk. In other markets, such as New York, the lowest-priced milk shifted among 2-percent, 1-percent, and fat-free milk over the same period. Figures IV.1 through IV.31 provide information on the average retail price for each of the four kinds of milk for the 31 markets for January 1996 through February 1998.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

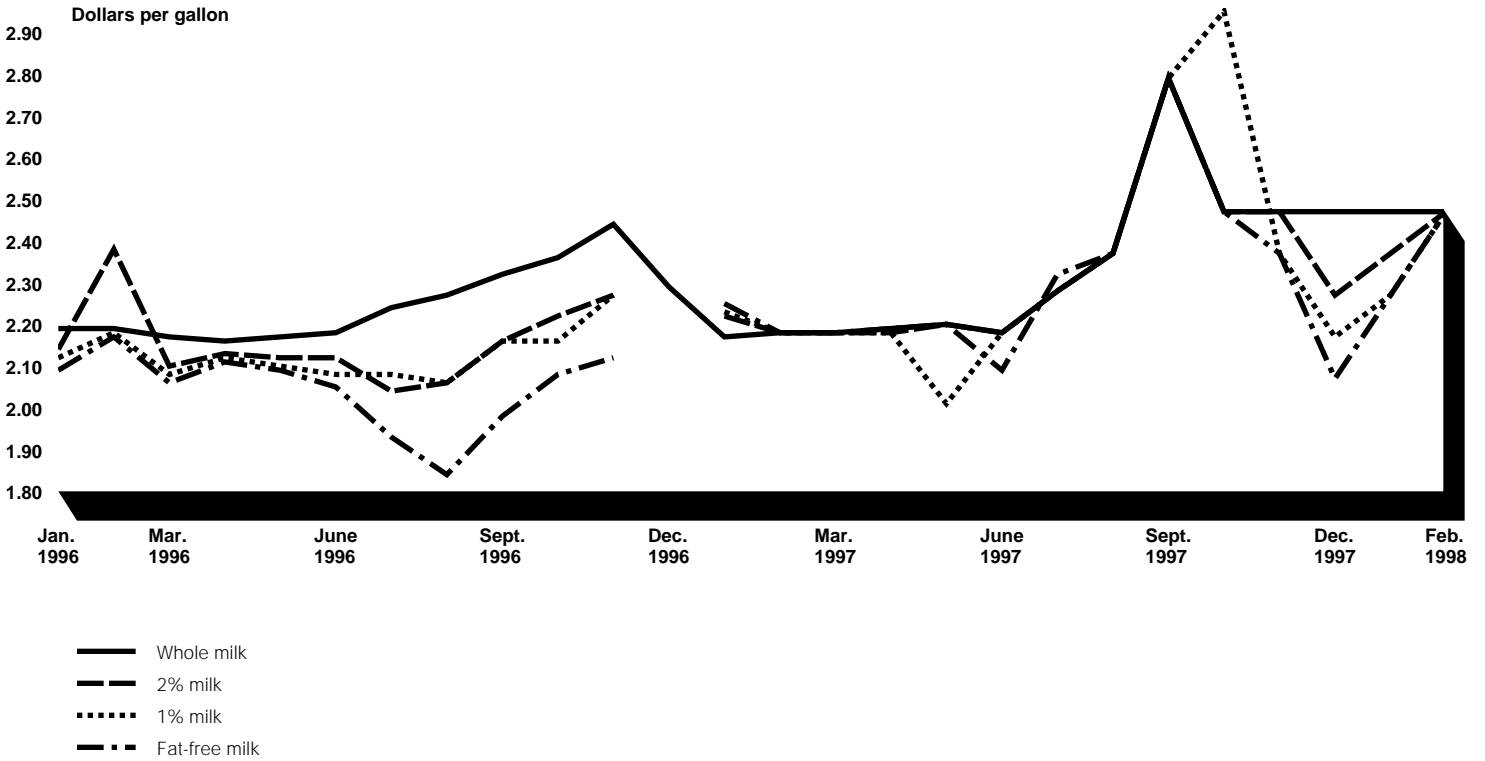
Figure IV.1: Atlanta, Ga., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Atlanta market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

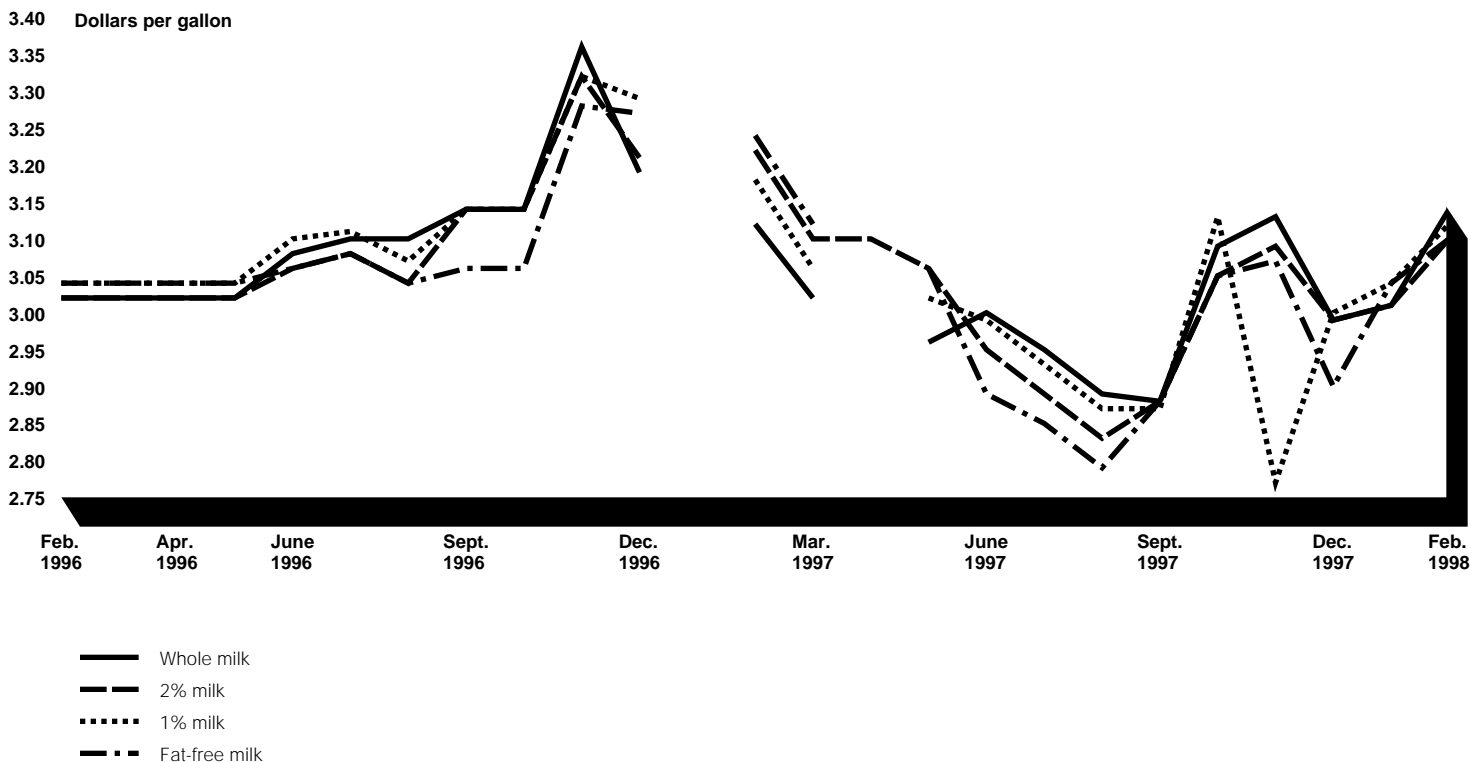
Figure IV.2: Augusta, Me., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the price reported by the state milk control agency for the Augusta market.

Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets

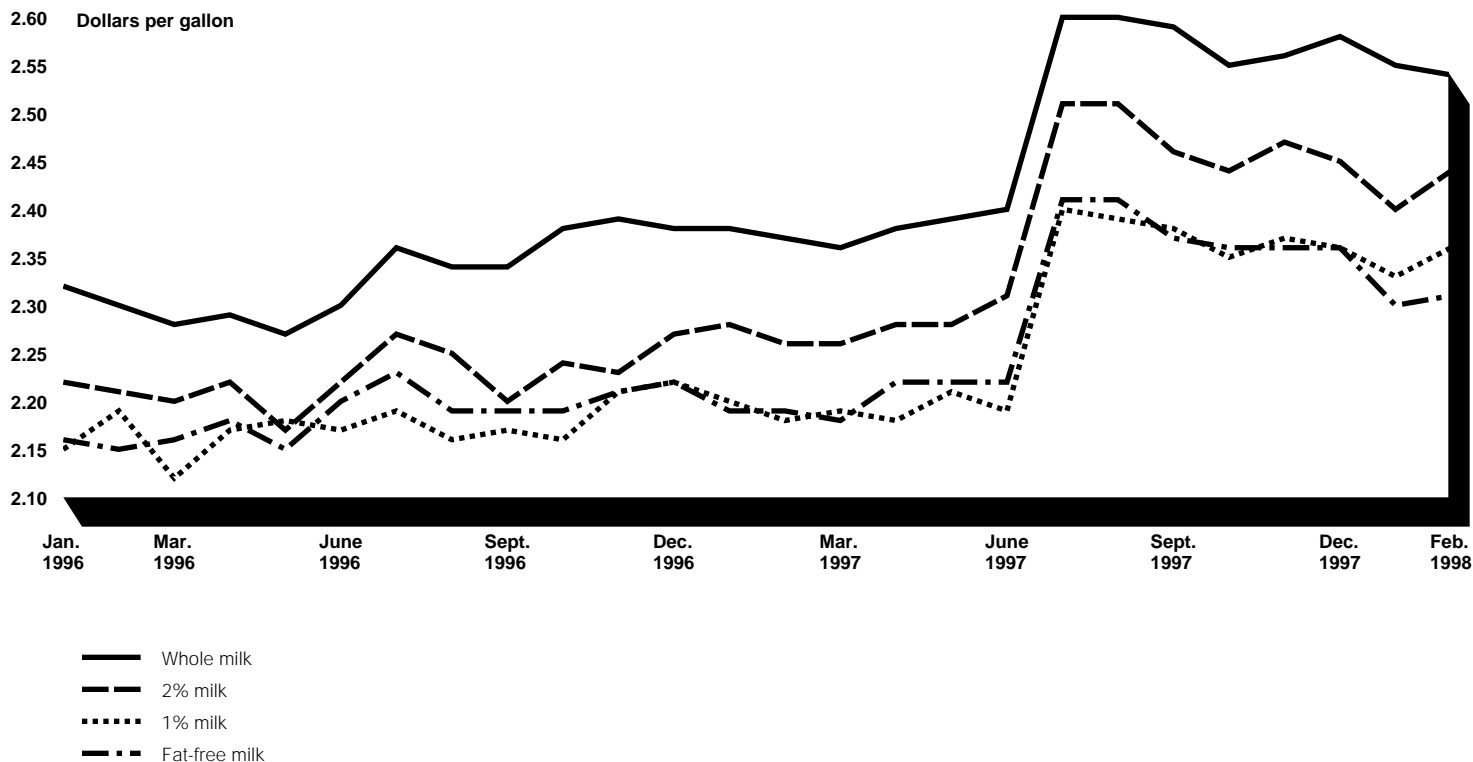
Figure IV.3: Bismarck, N.D., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the price reported by the state milk control agency for the Bismarck market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

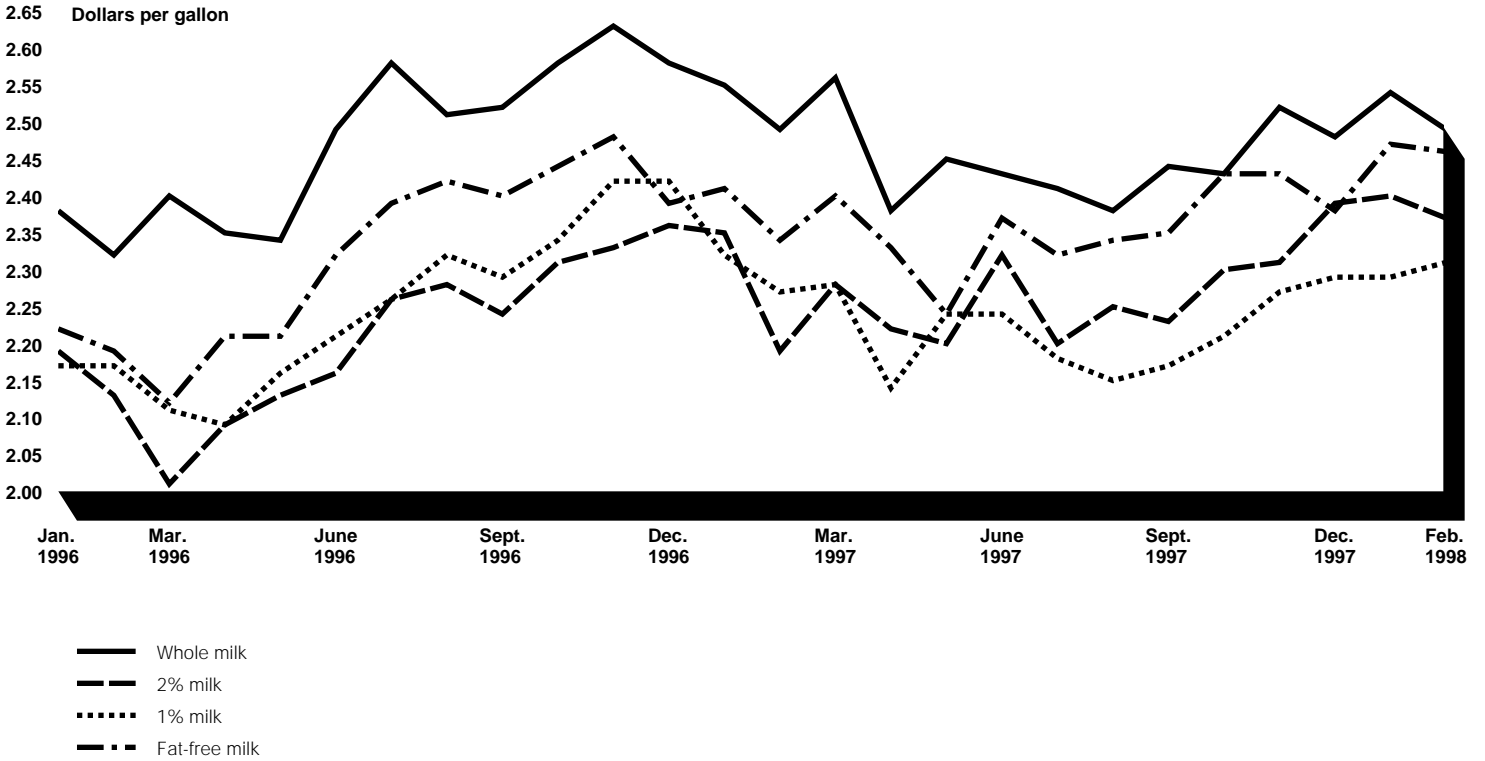
Figure IV.4: Boston, Mass., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

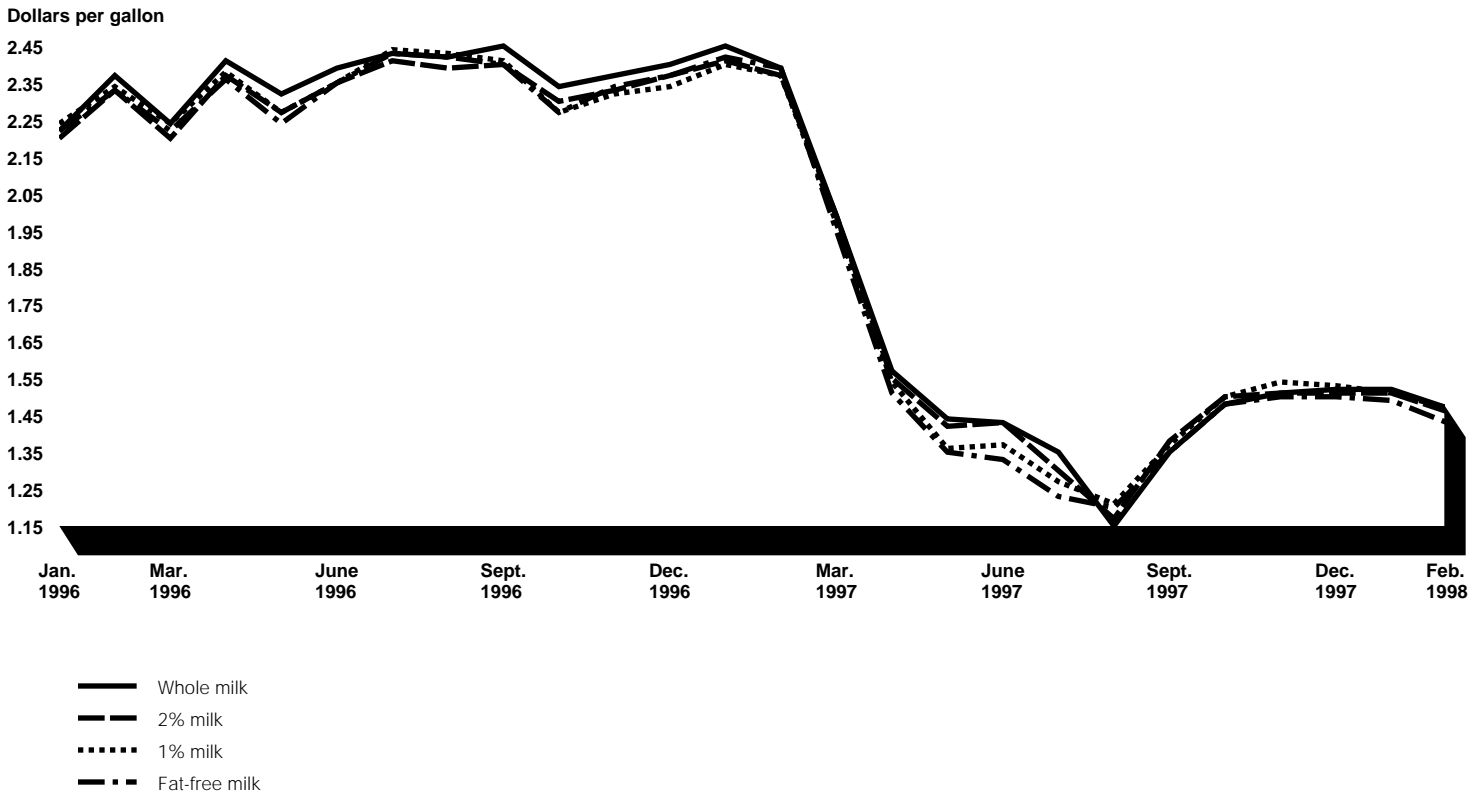
Figure IV.5: Chicago, Ill., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Chicago market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

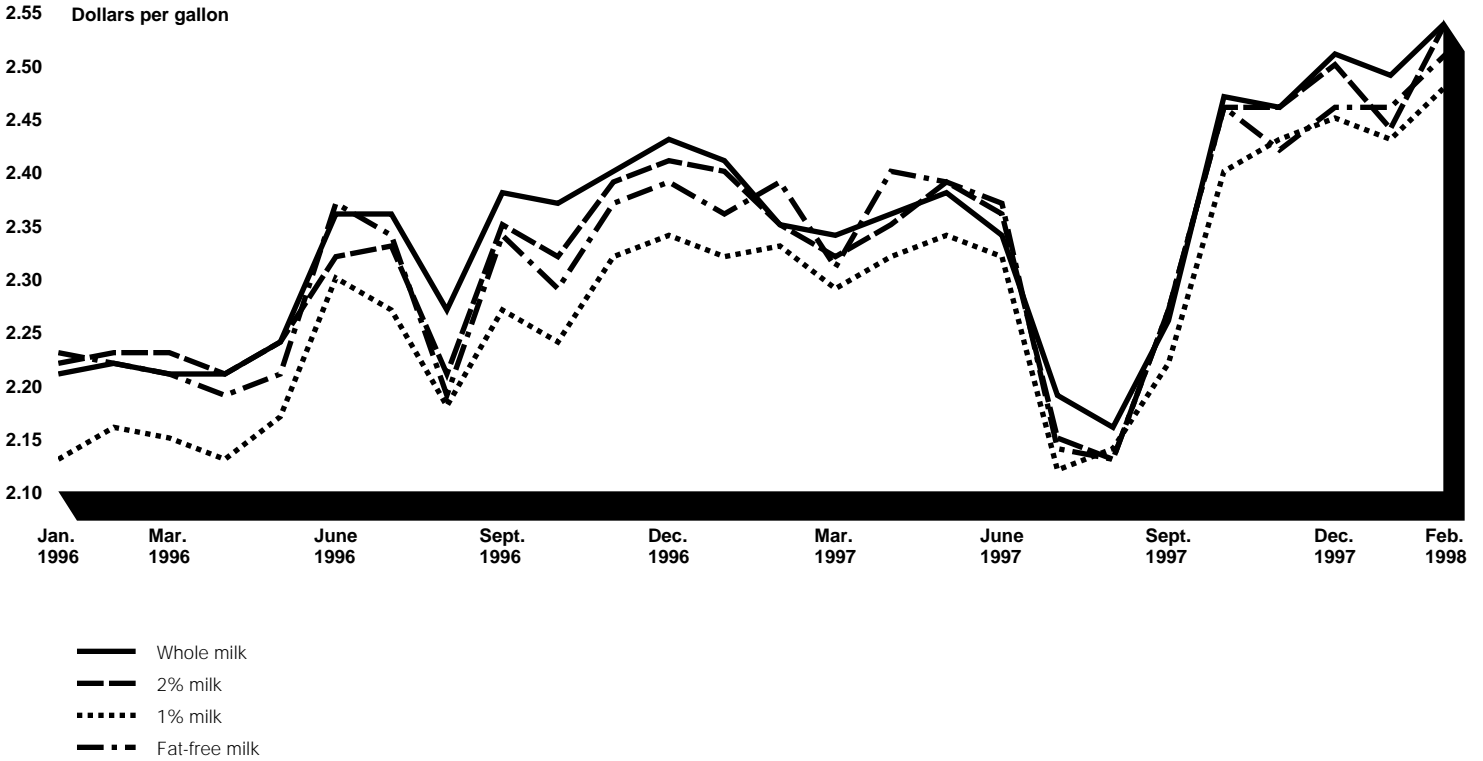
Figure IV.6: Cincinnati, Ohio, Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Cincinnati market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

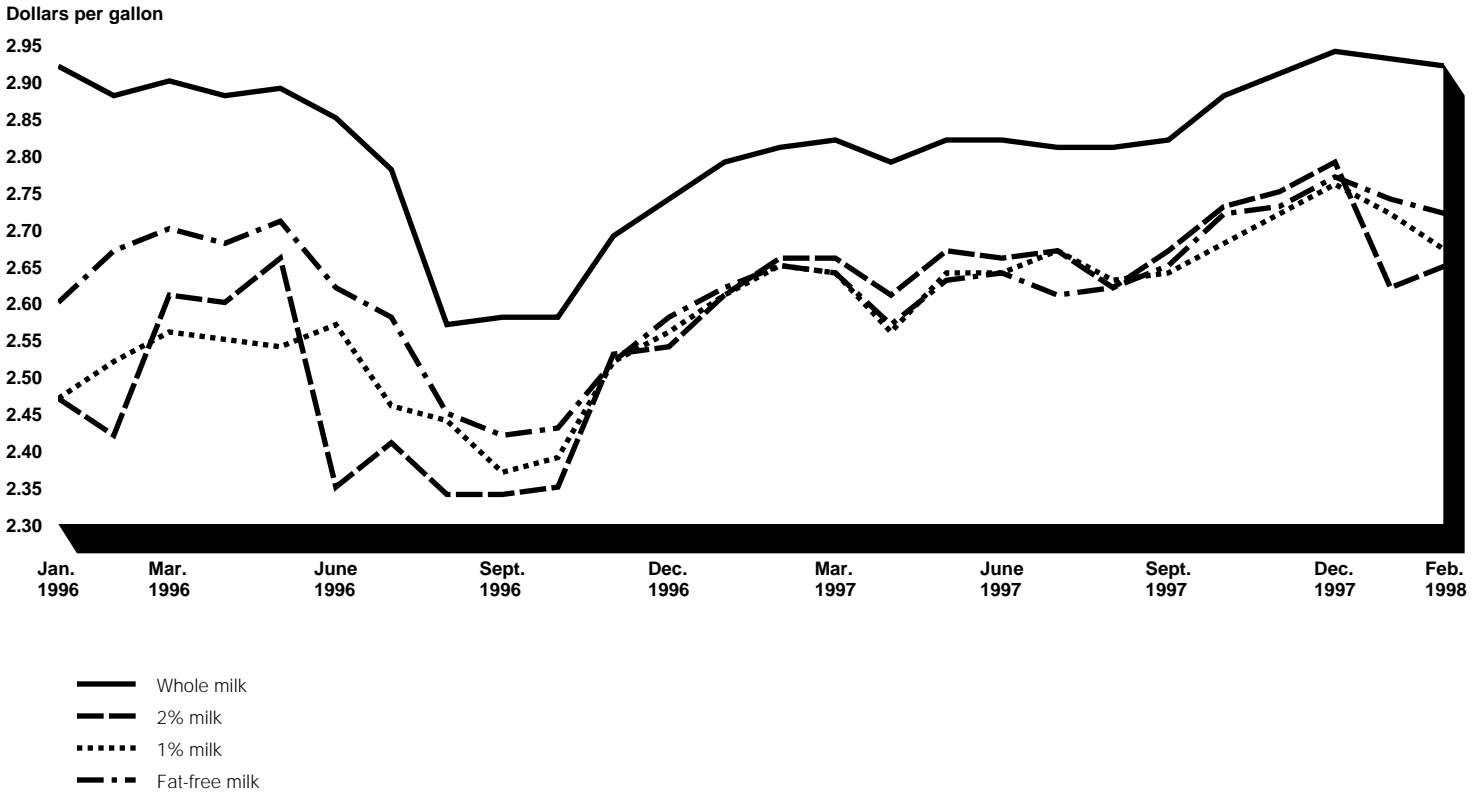
Figure IV.7: Dallas, Tex., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Dallas market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

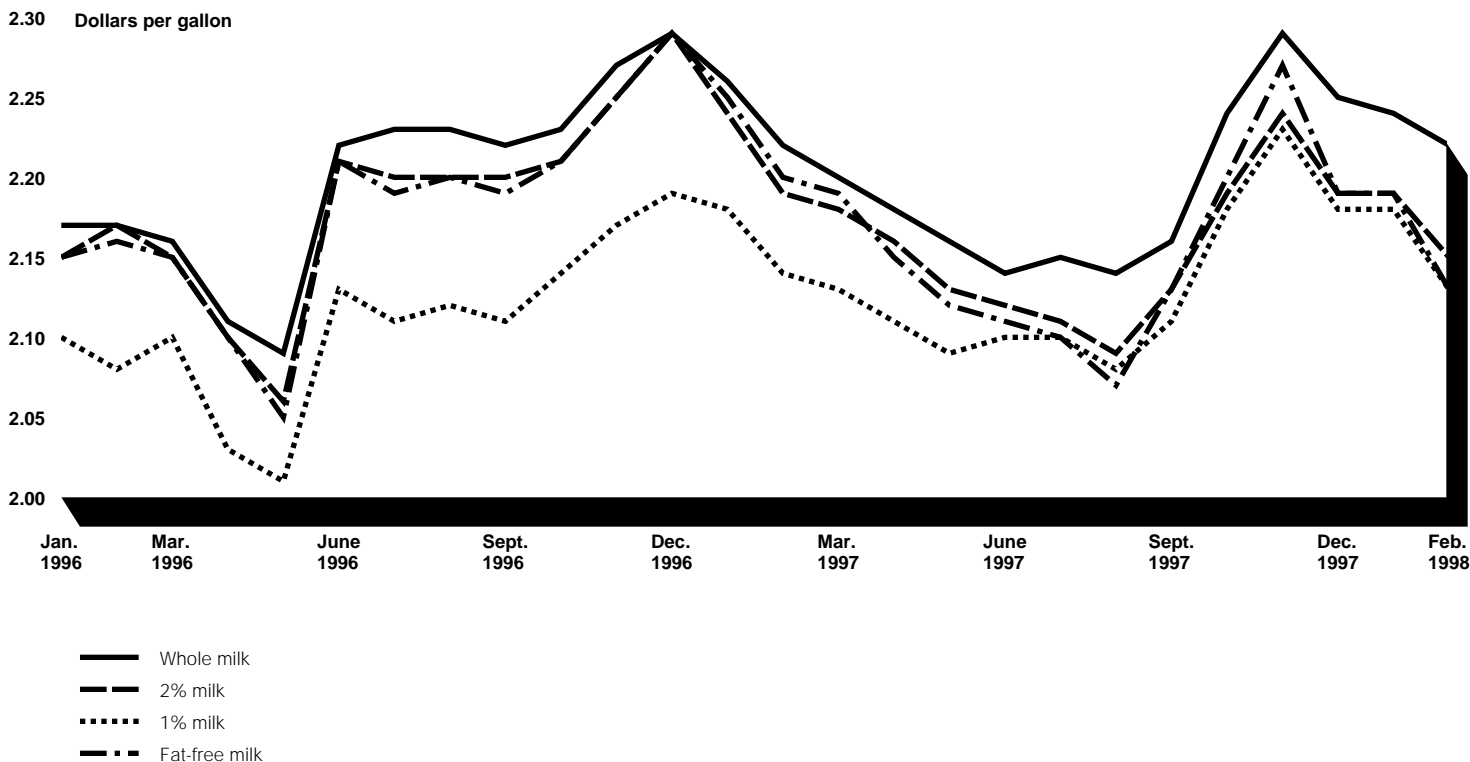
Figure IV.8: Denver, Colo., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Denver market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

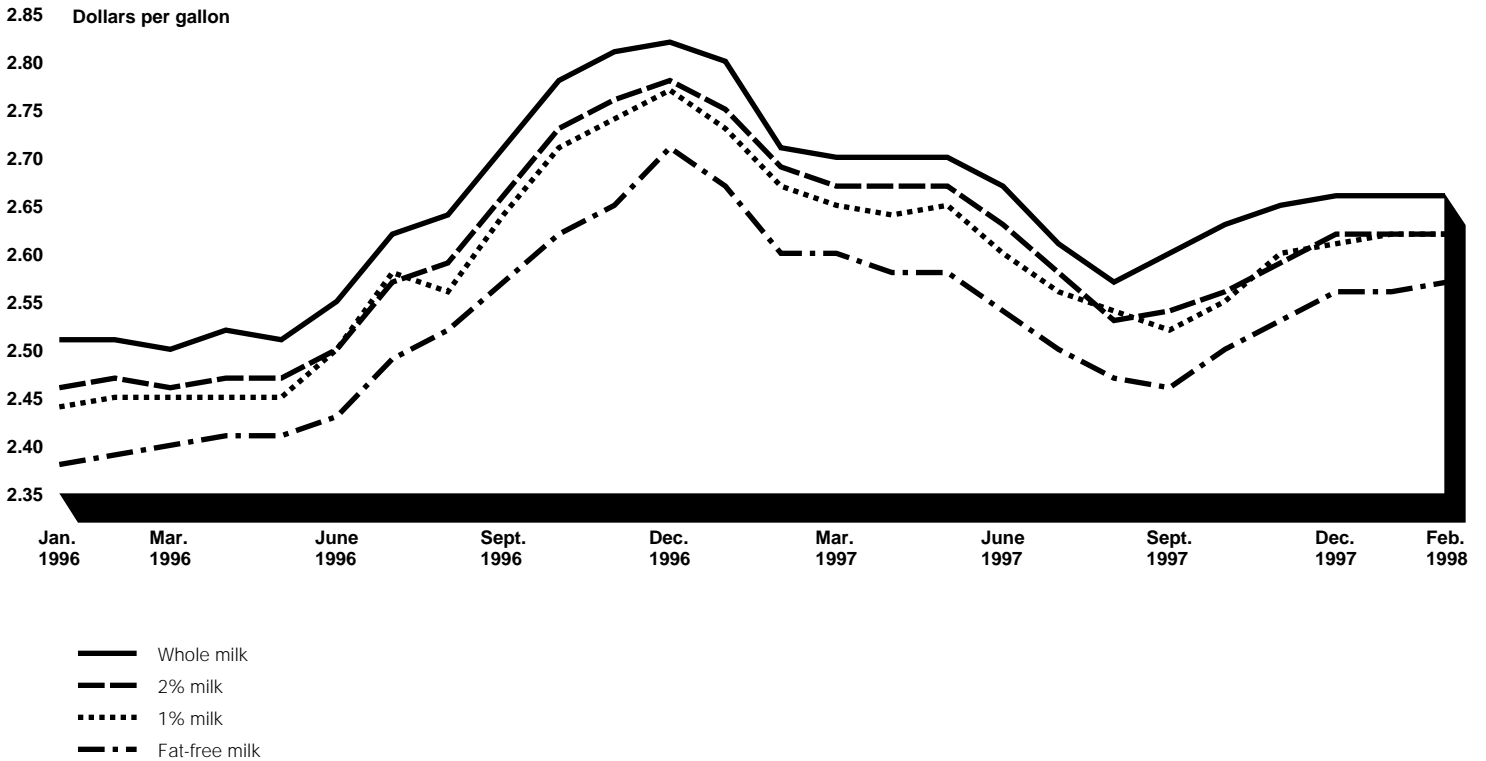
Figure IV.9: Houston, Tex., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Houston market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
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Figure IV.10: Kansas City, Mo., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Kansas City market.

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Retail Pricing Relationships for Four Kinds
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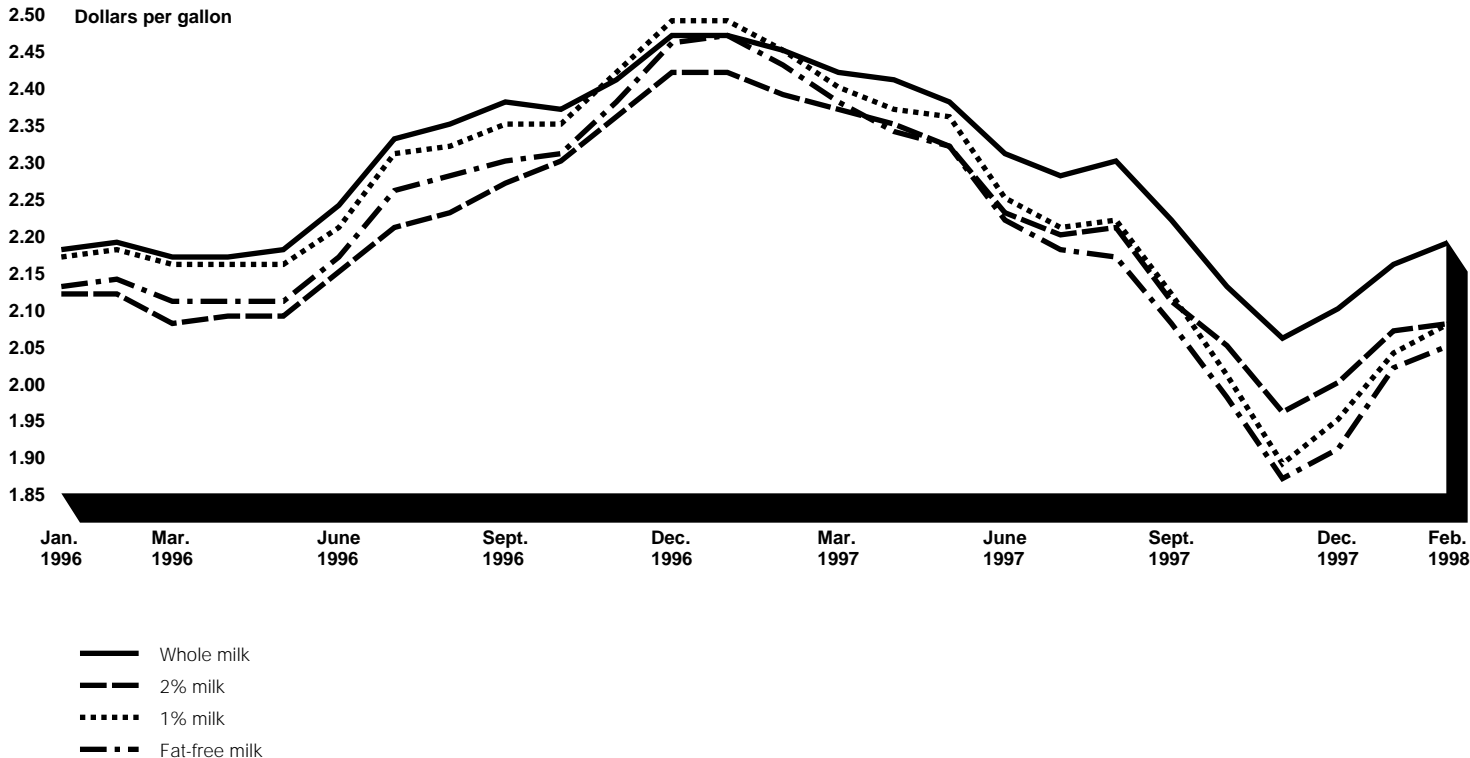
Figure IV.11: Las Vegas, Nev., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the price reported by the state milk control agency for the Las Vegas market.

Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets

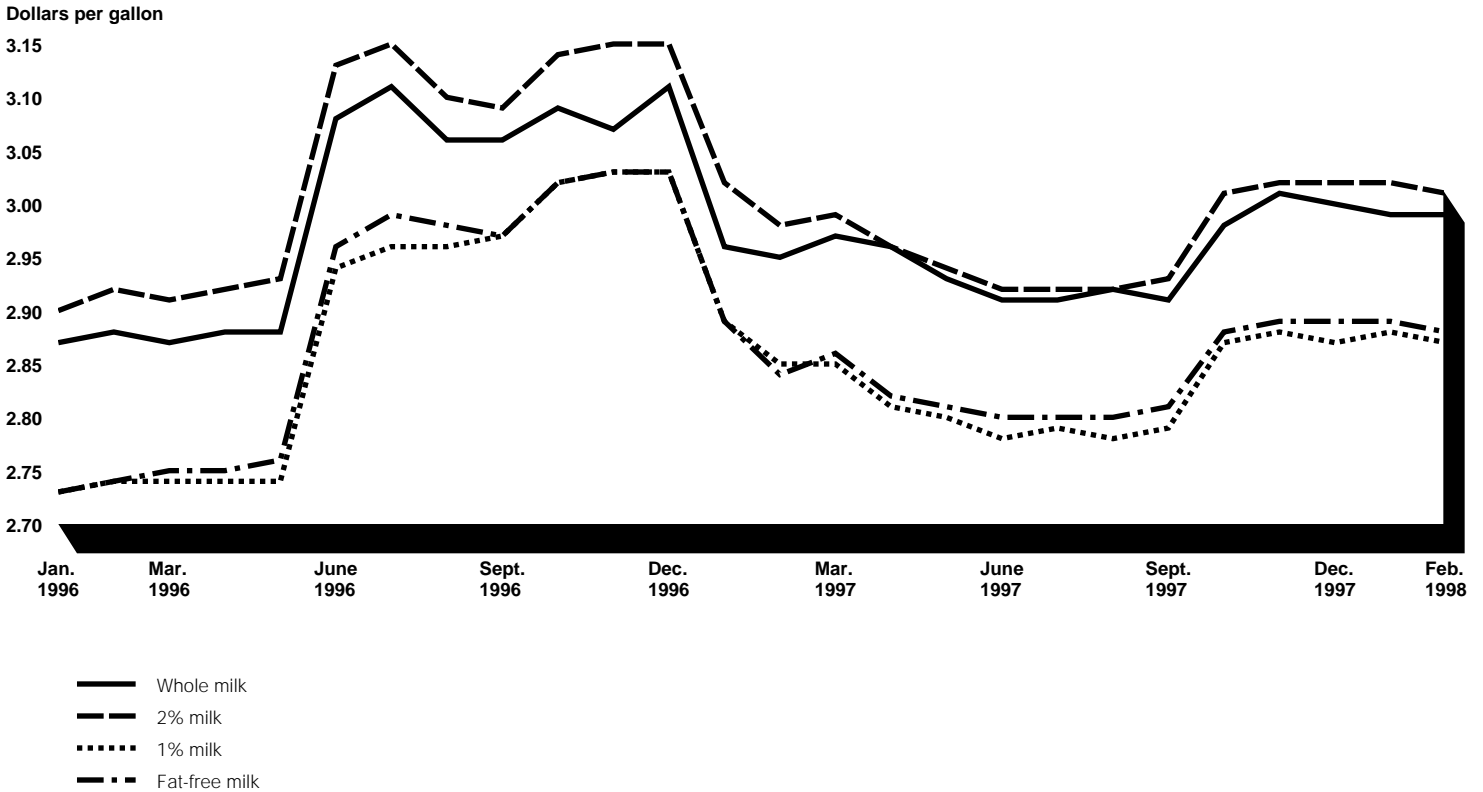
Figure IV.12: Louisville, Ky., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Louisville market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

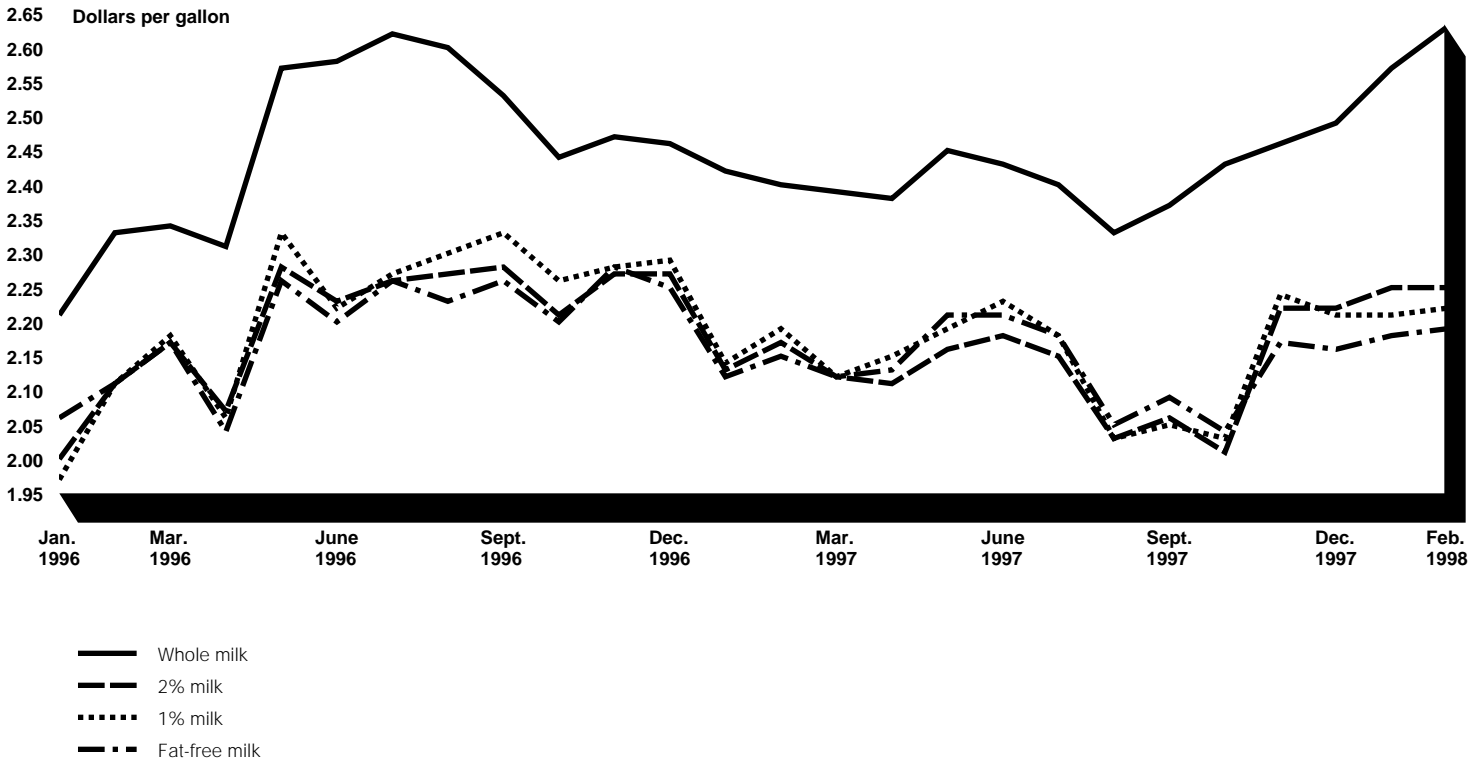
Figure IV.13: Miami, Fla., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Miami market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

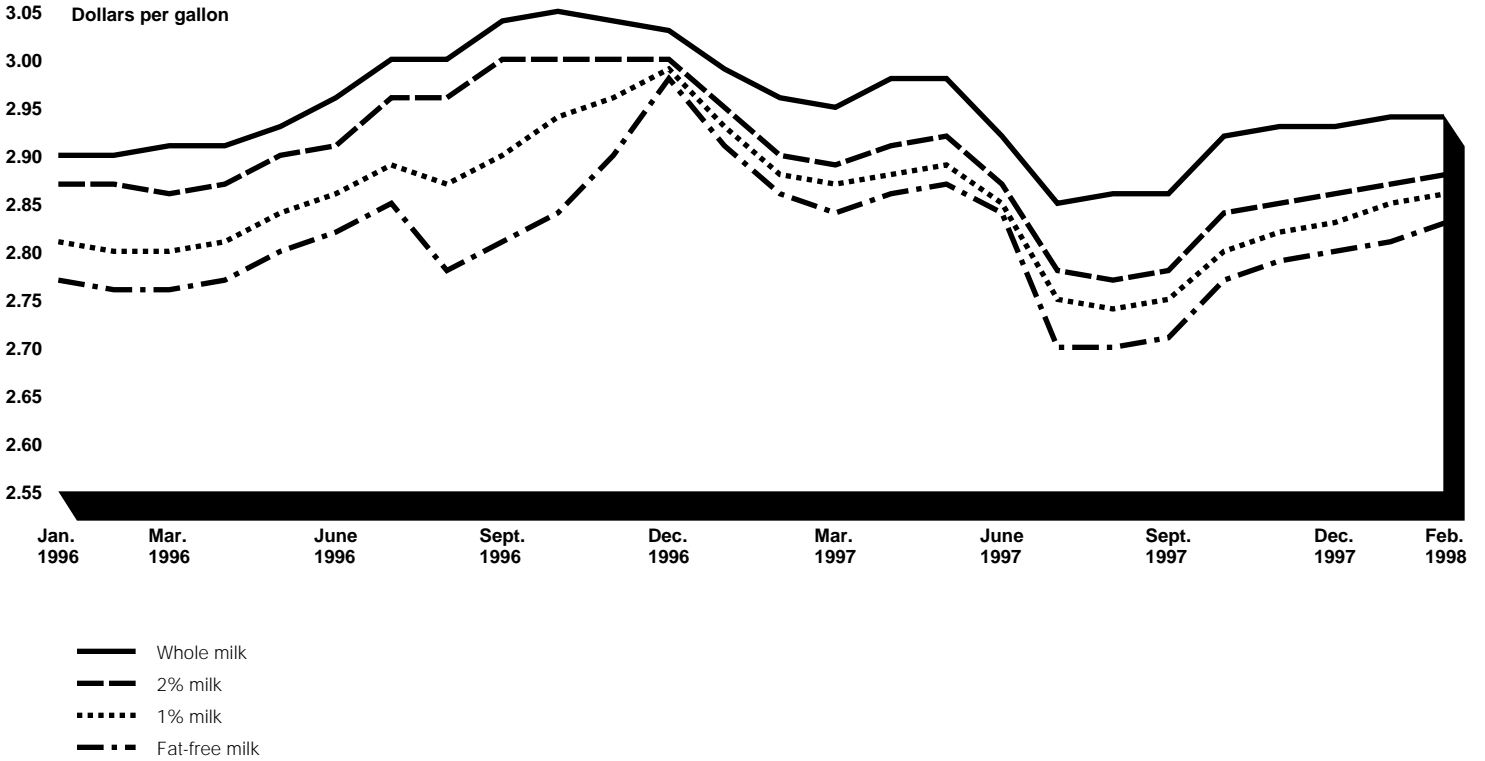
Figure IV.14: Milwaukee, Wis., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Milwaukee market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

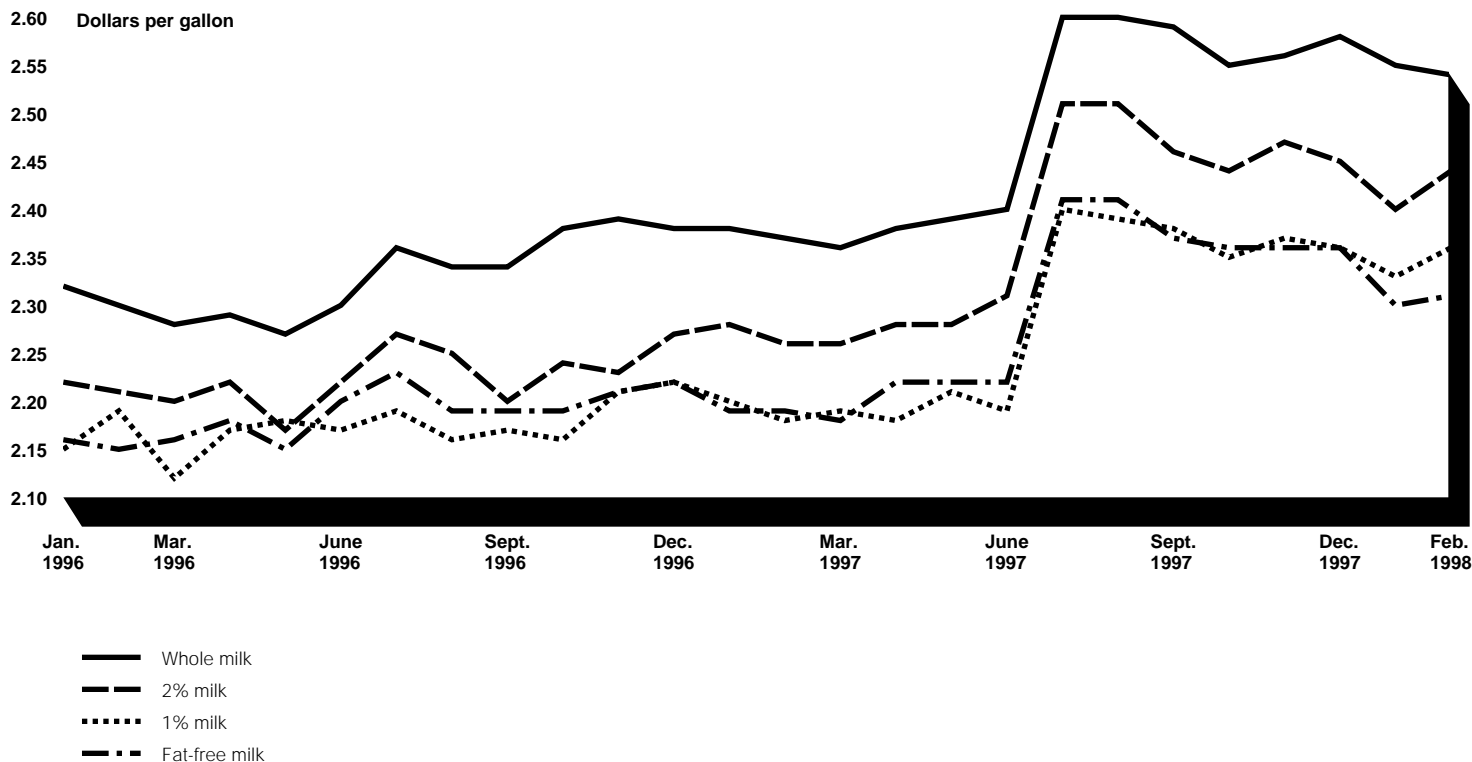
Figure IV.15: Minneapolis, Minn., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Minneapolis market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

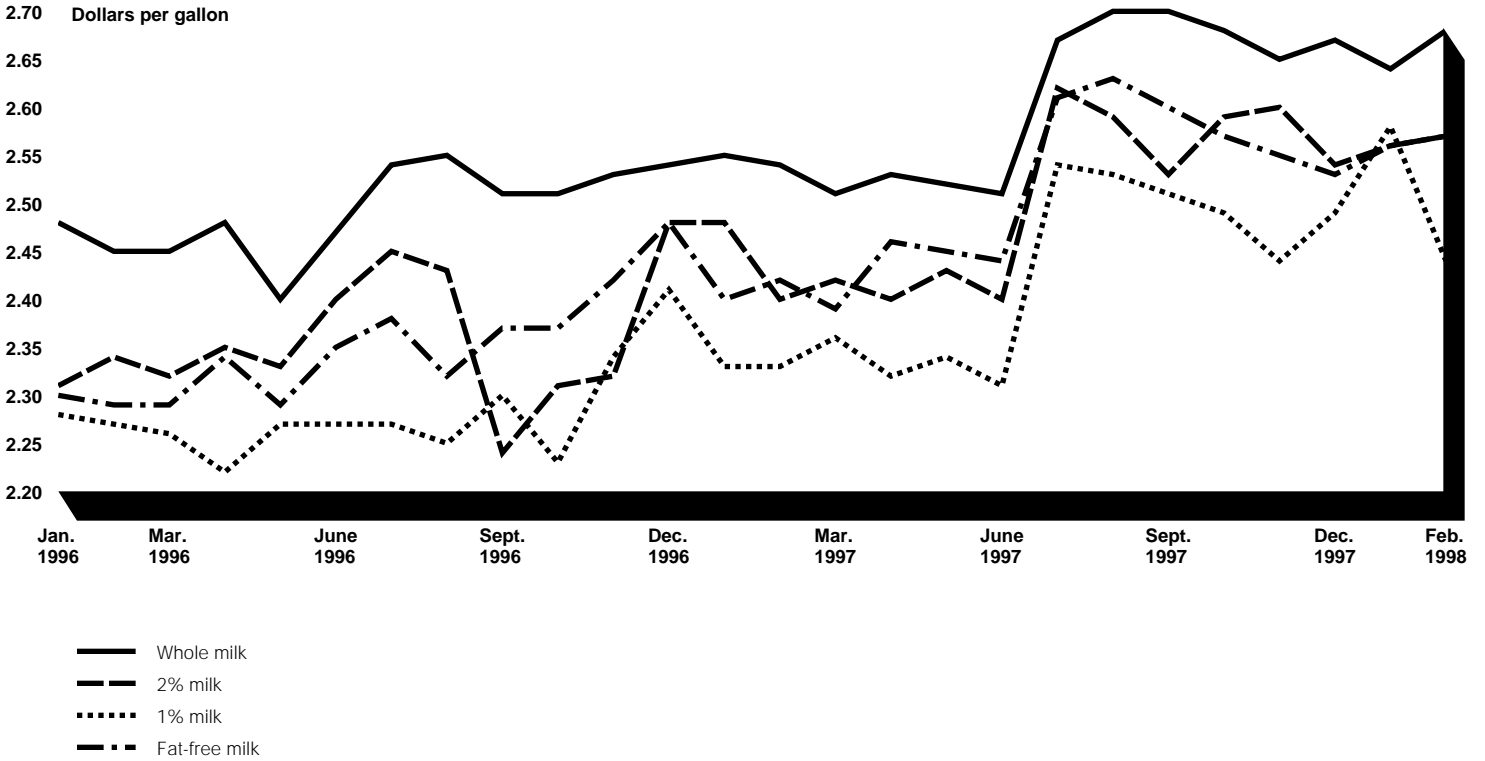
Figure IV.16: New Hampshire Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

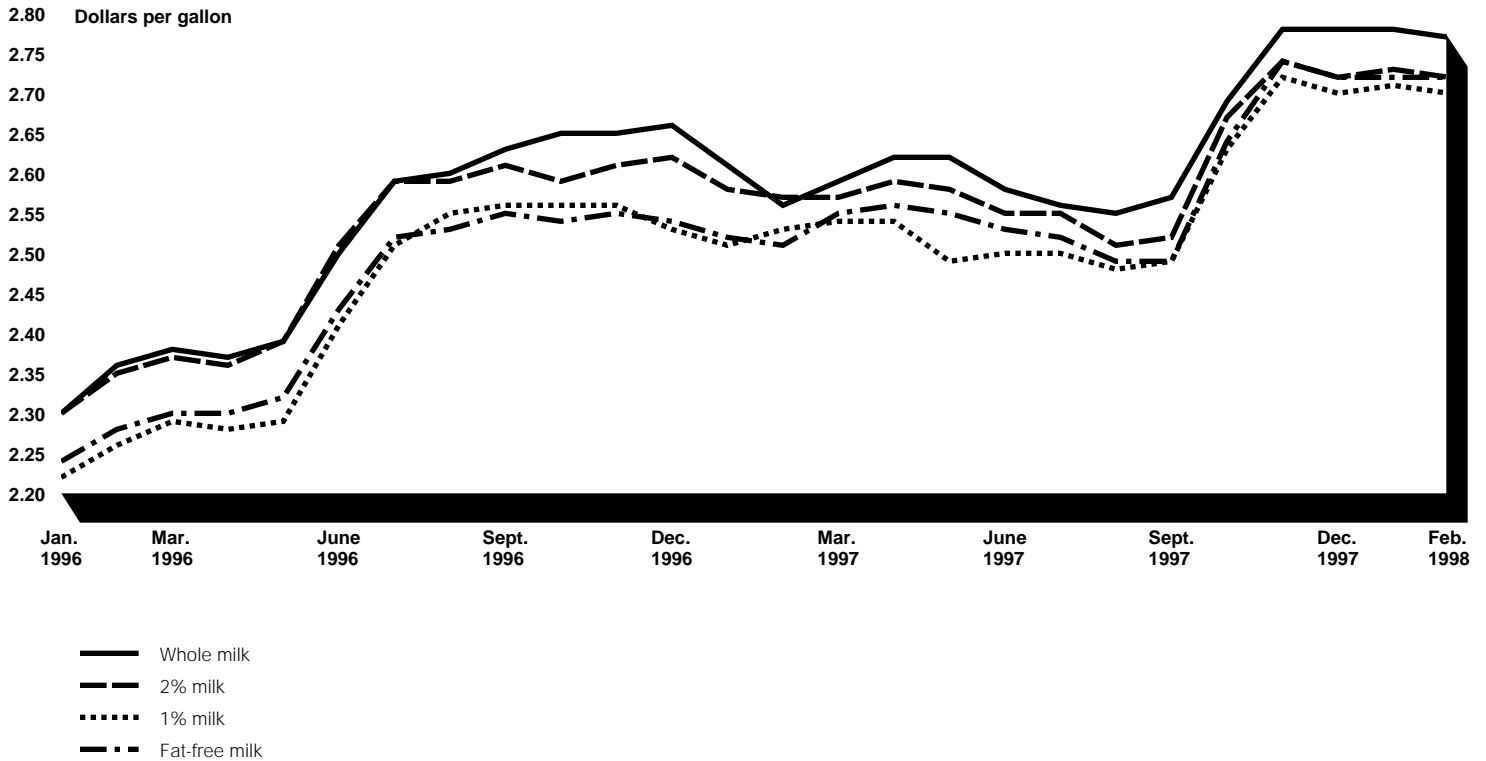
Figure IV.17: New Haven, Conn., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Hartford-New Haven market.

**Appendix IV
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of Fluid Milk in Selected Markets**

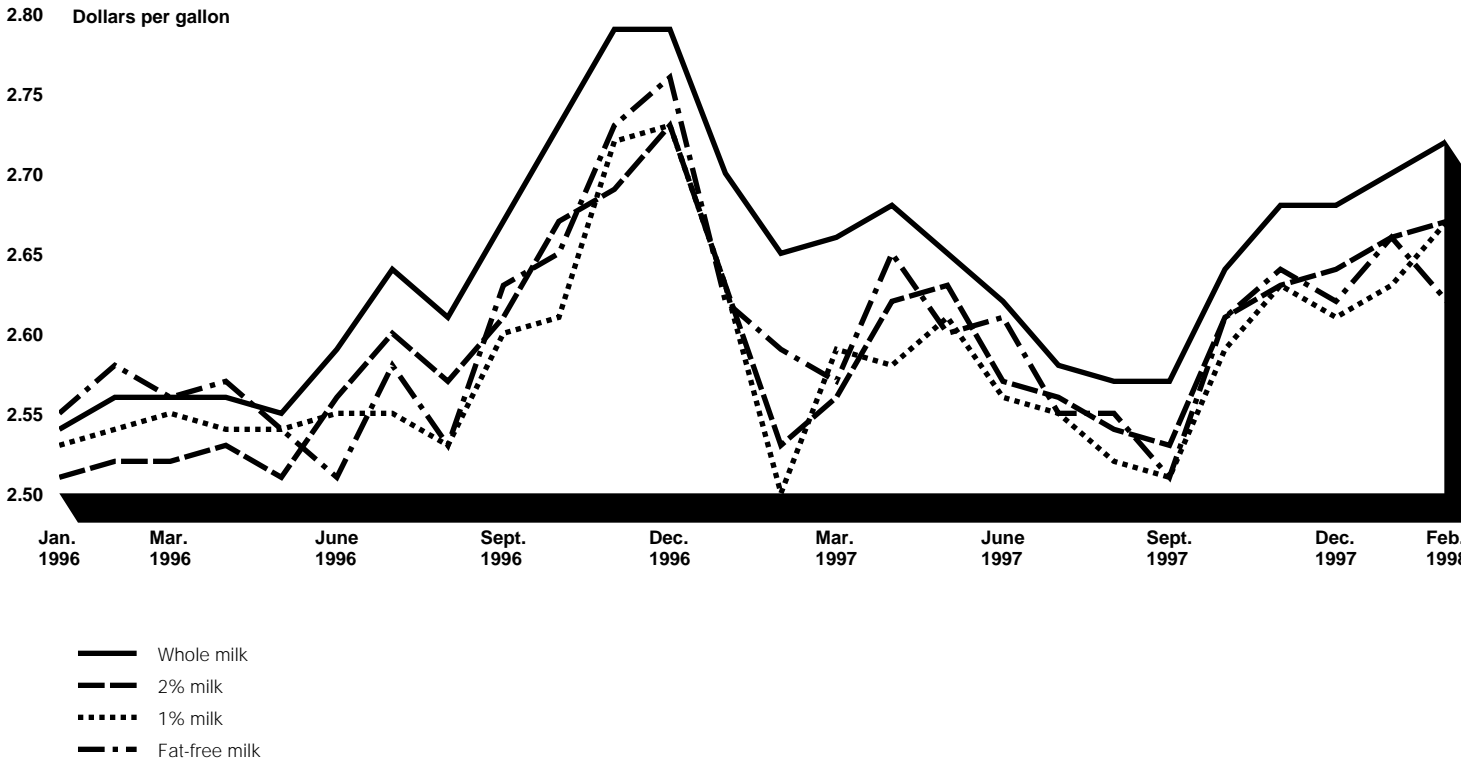
Figure IV.18: New Orleans, La., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the New Orleans-Mobile market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

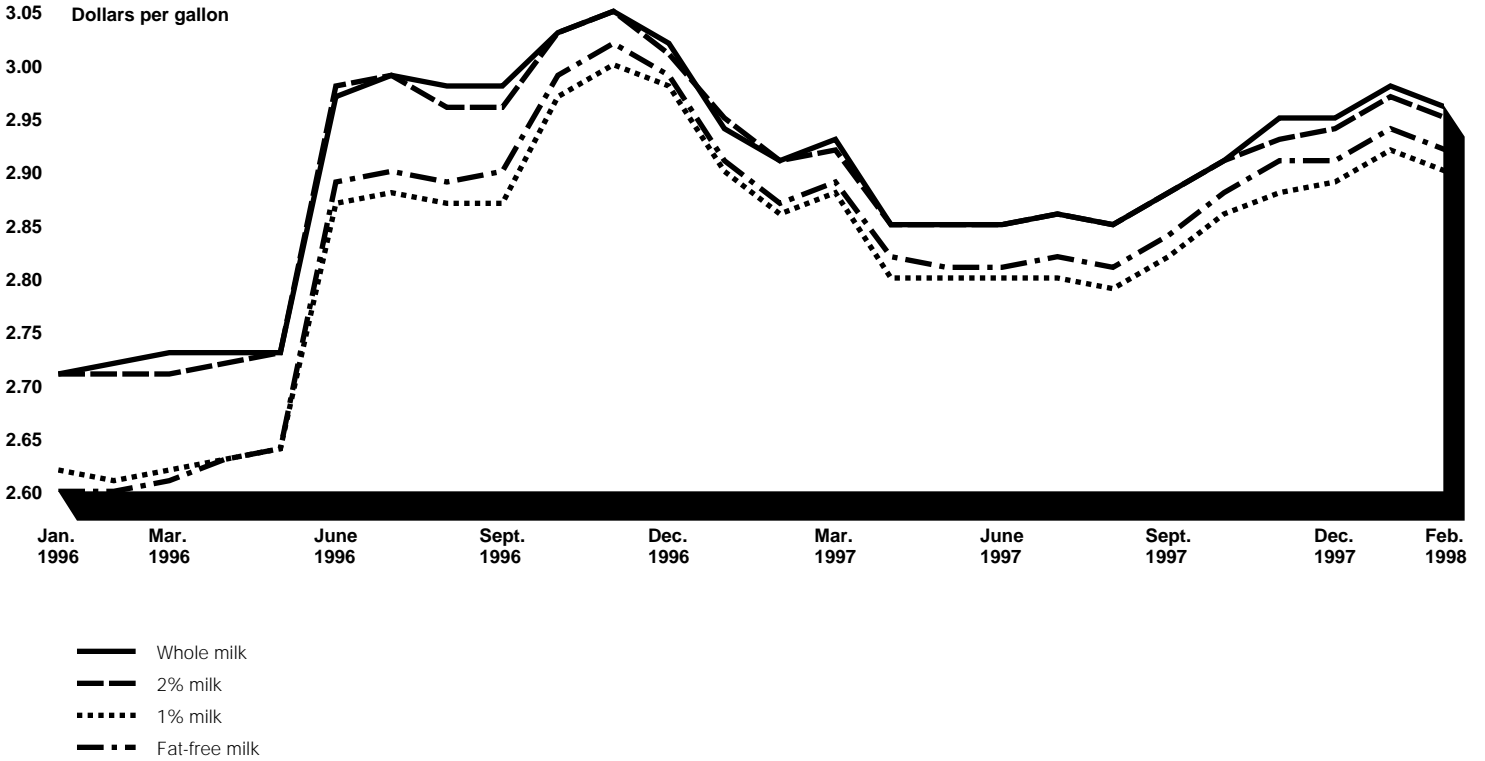
Figure IV.19: New York, N.Y., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the New York market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

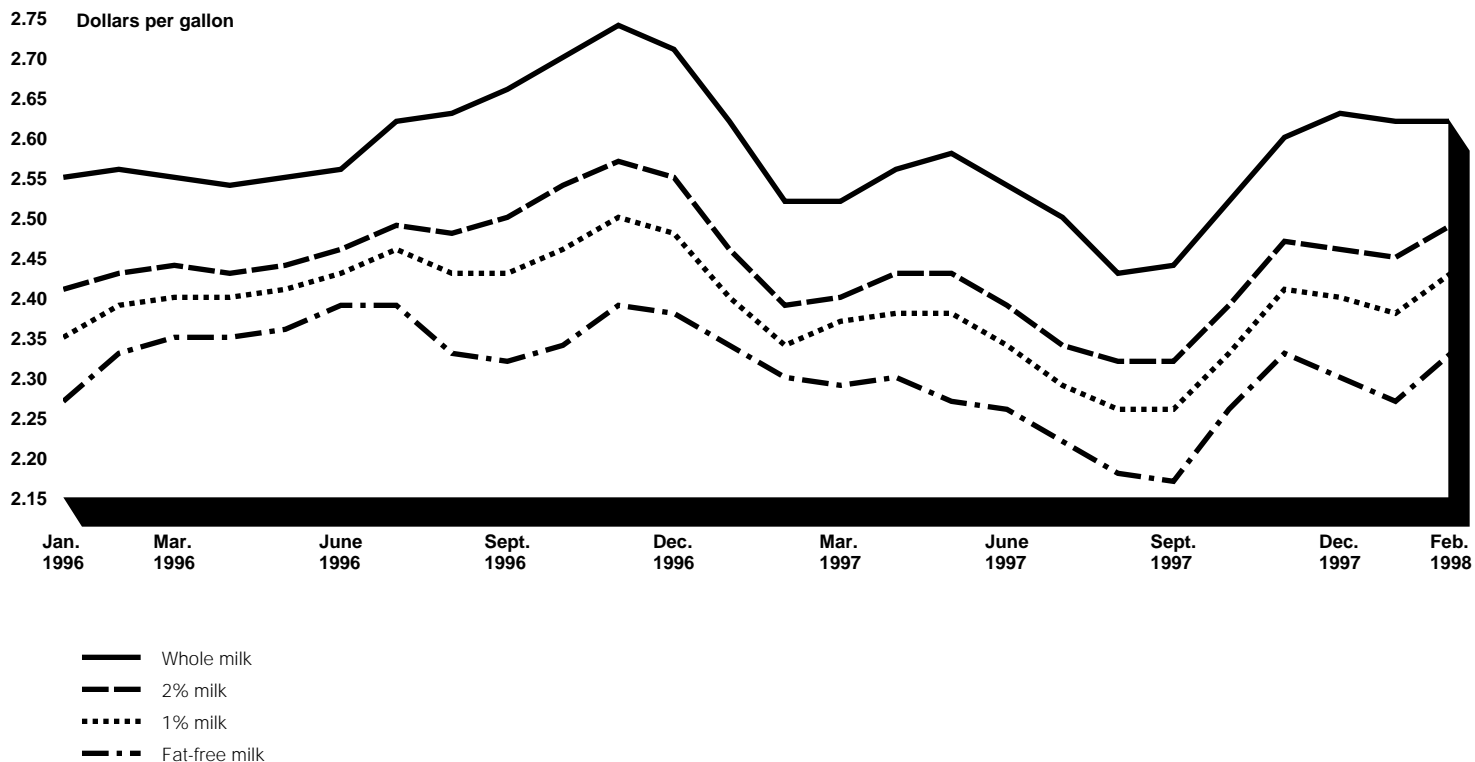
Figure IV.20: Orlando, Fla., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Orlando market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

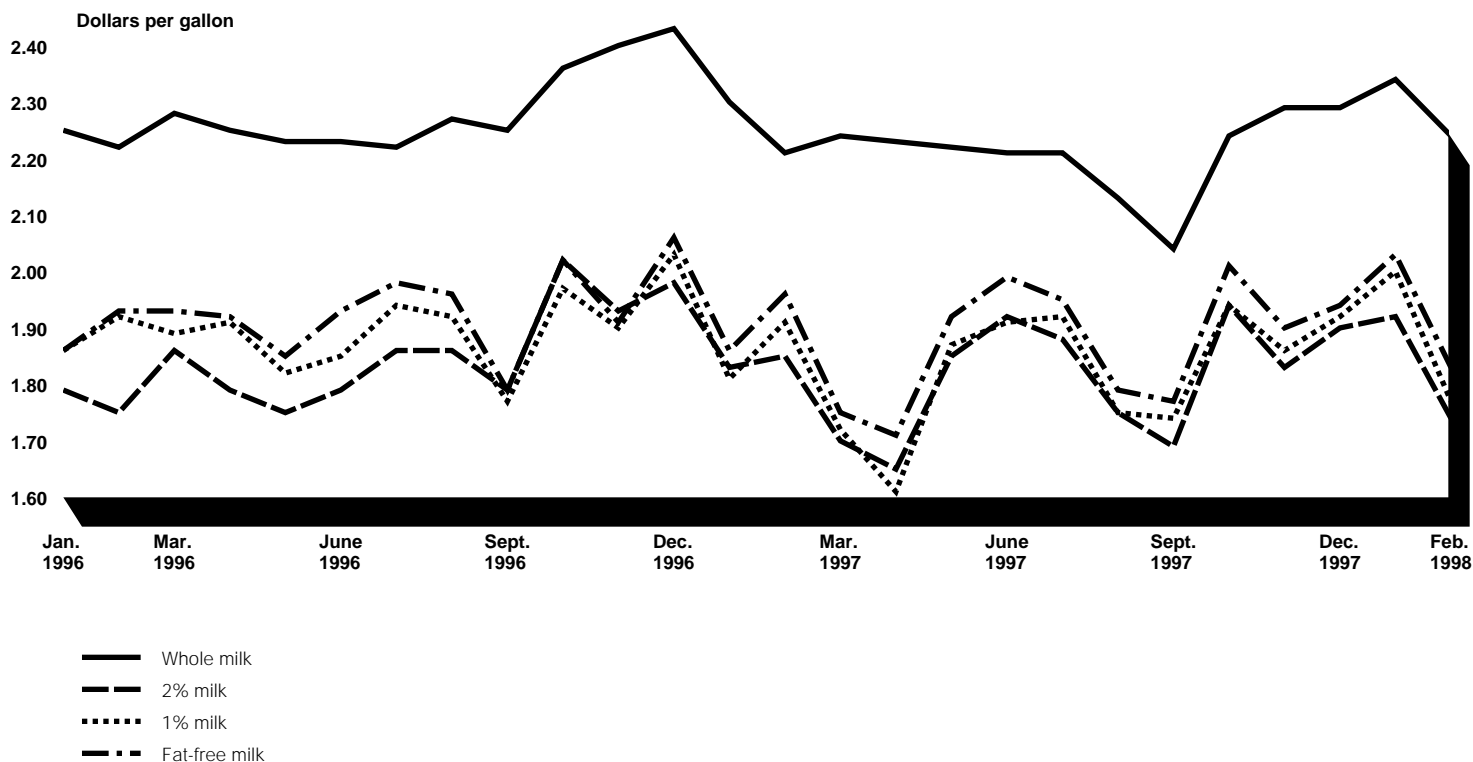
Figure IV.21: Philadelphia, Pa., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Philadelphia market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

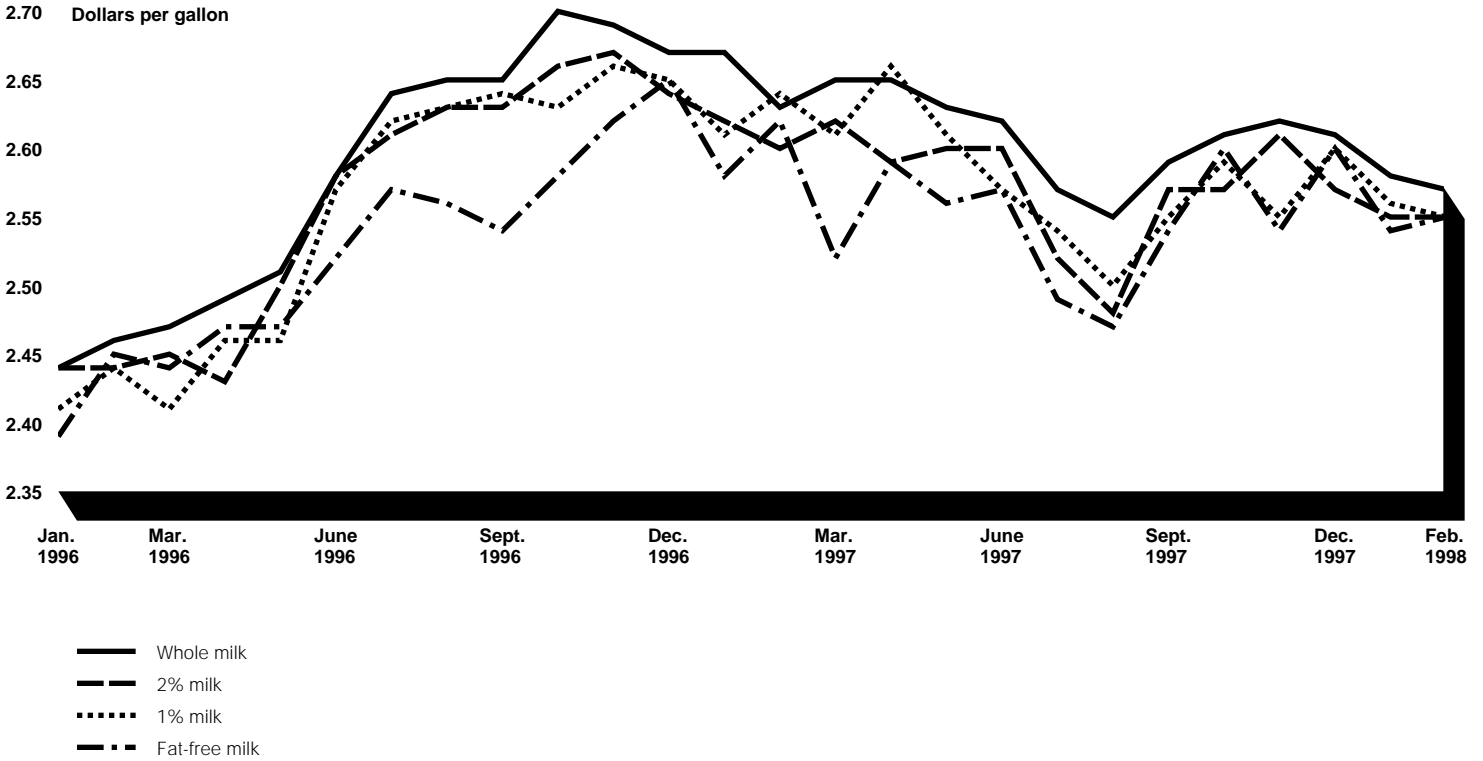
Figure IV.22: Phoenix, Ariz., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Phoenix market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

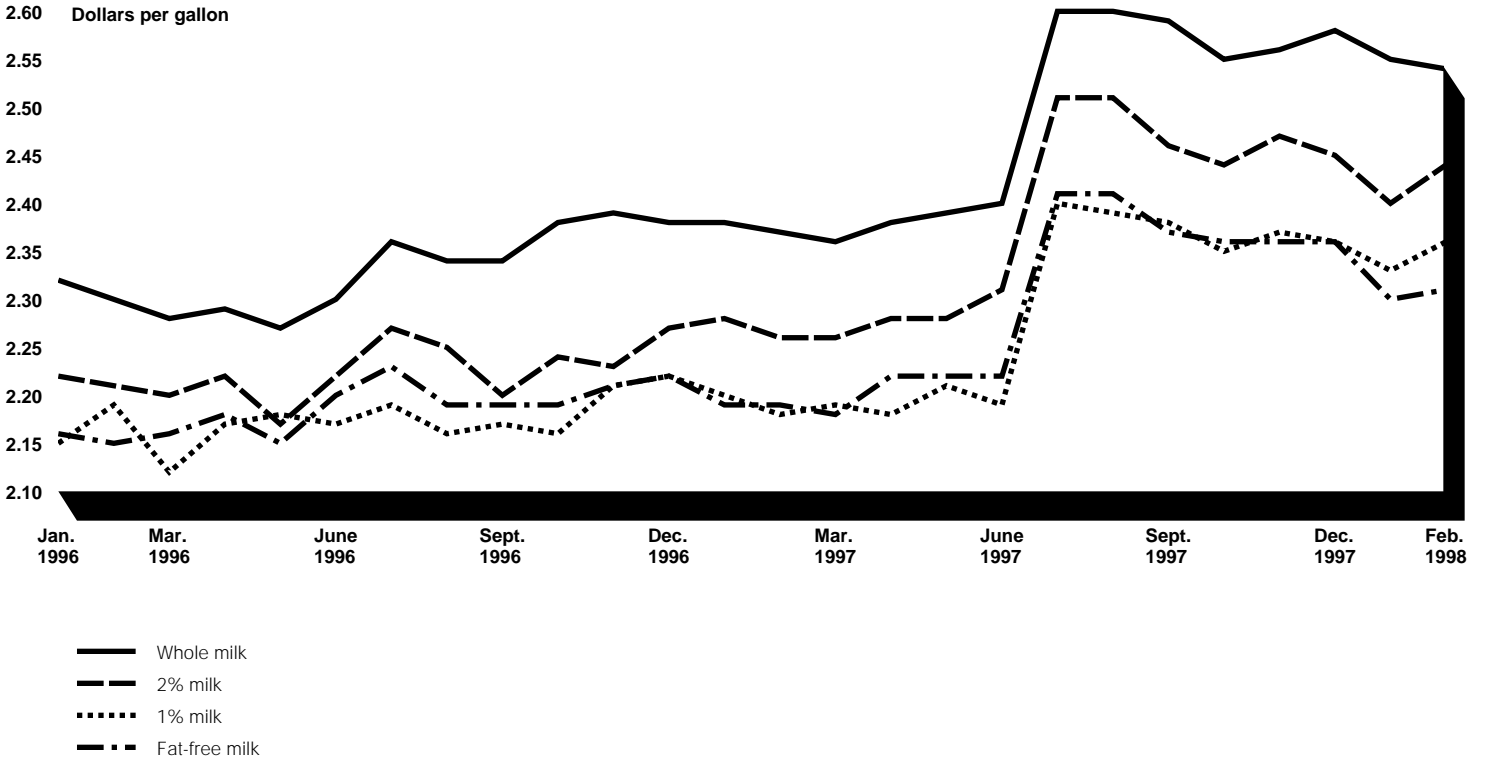
Figure IV.23: Raleigh, N.C., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Raleigh-Durham market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

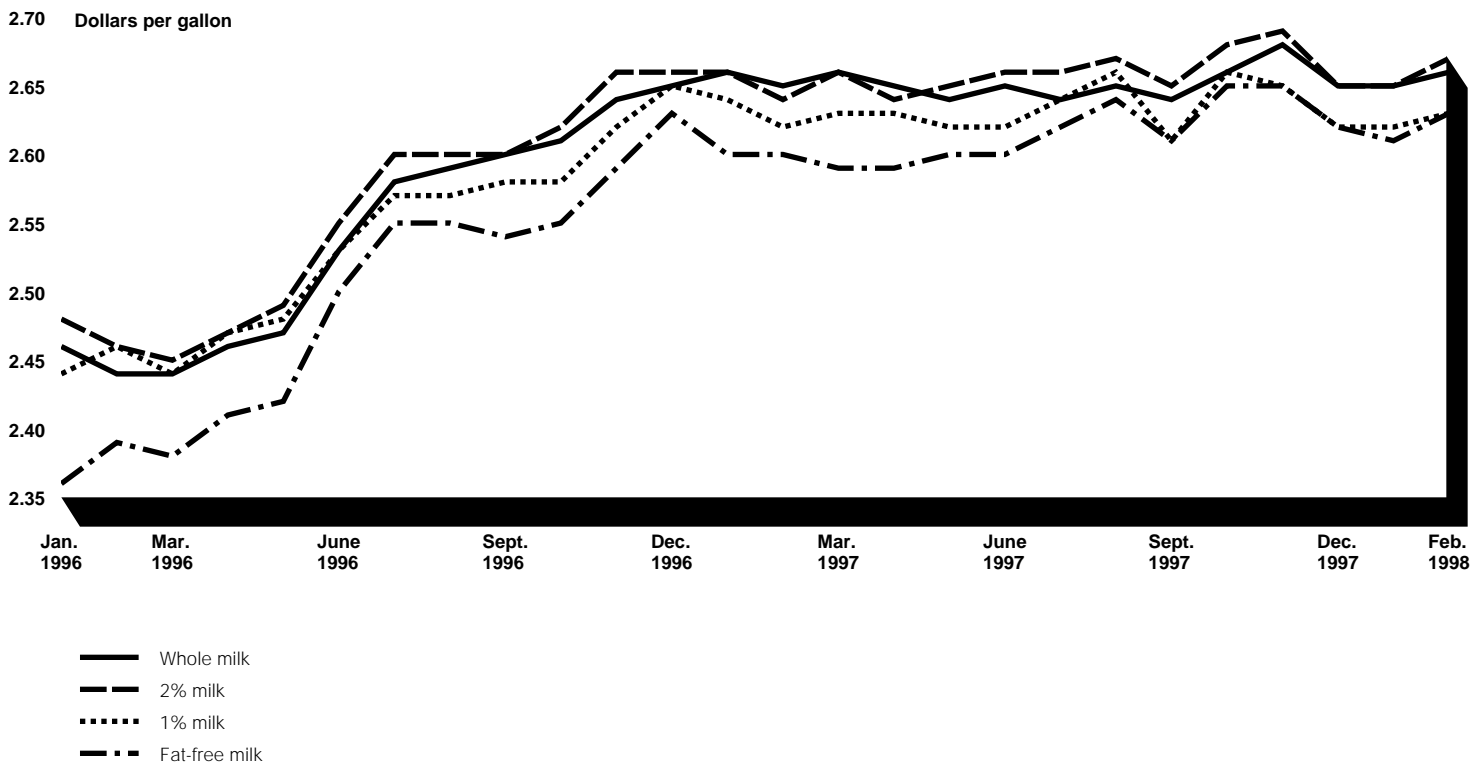
Figure IV.24: Rhode Island Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

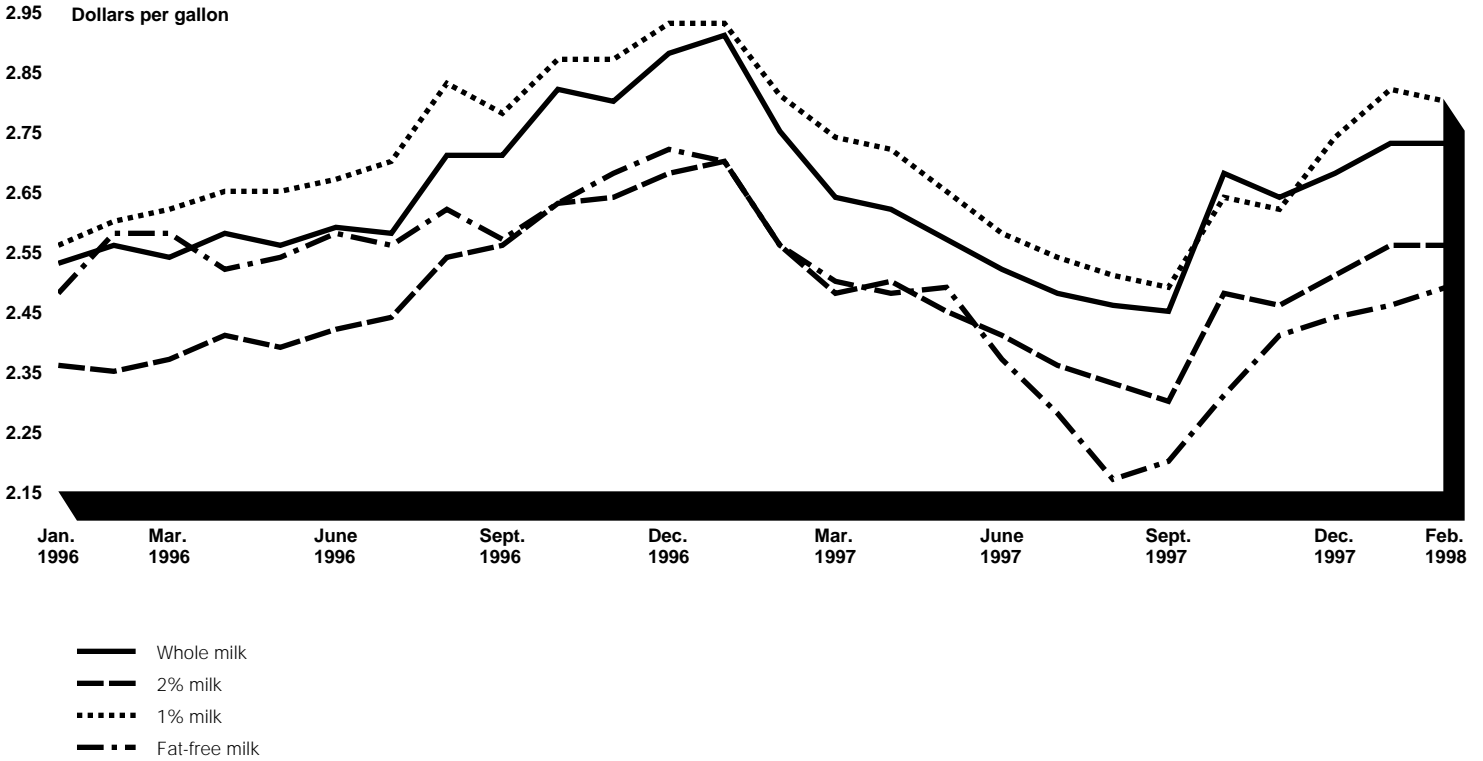
Figure IV.25: Richmond, Va., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Richmond-Norfolk market.

Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets

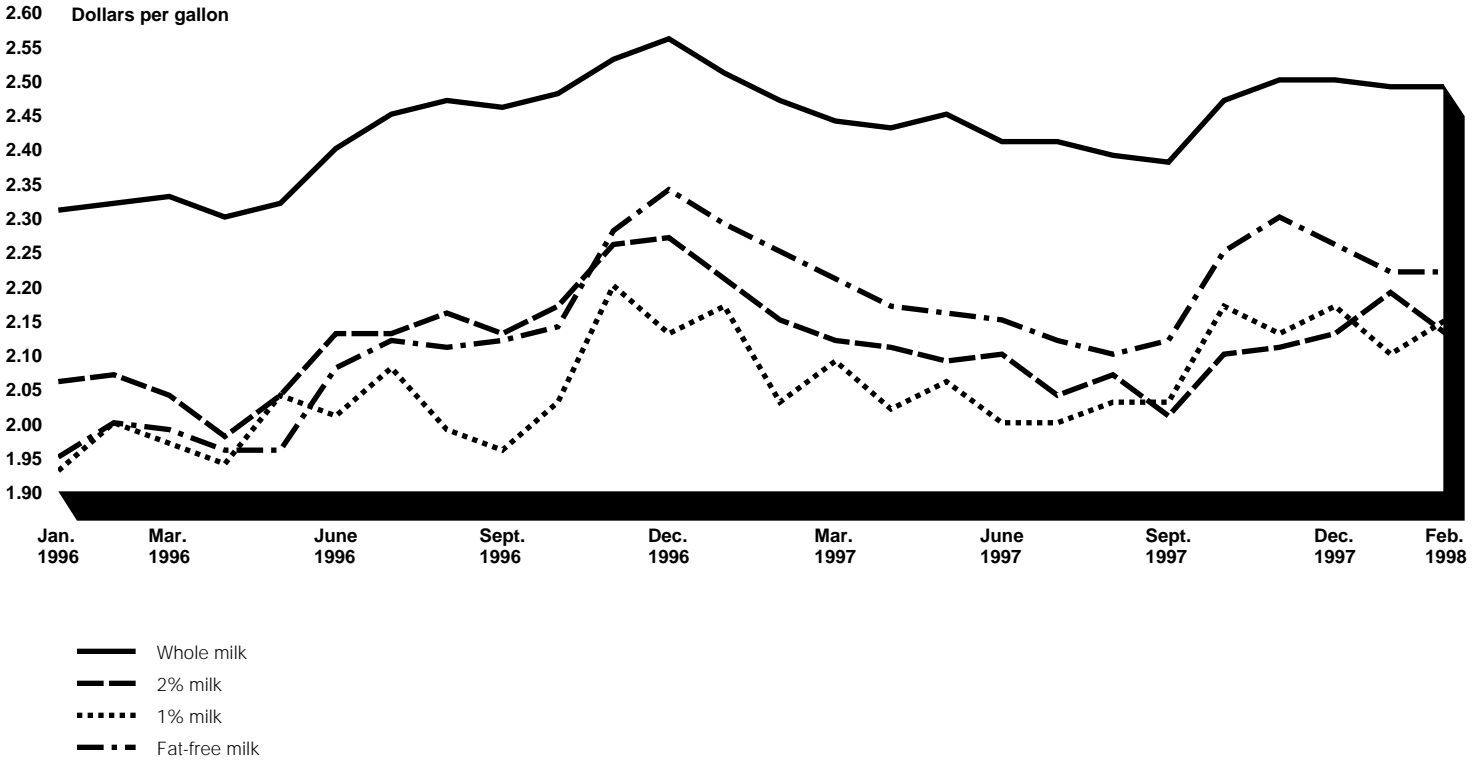
Figure IV.26: Sacramento, Calif., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Sacramento market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

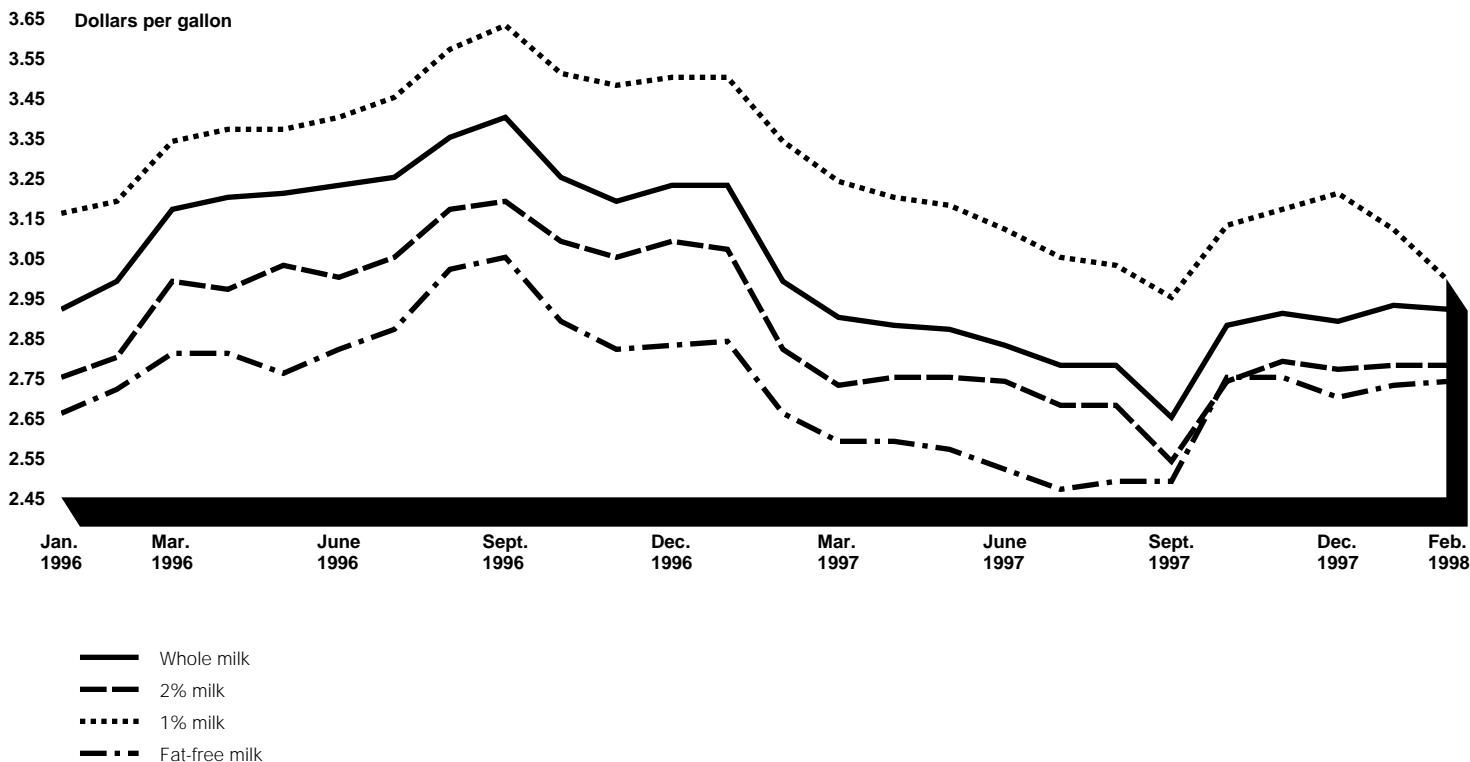
Figure IV.27: Salt Lake City, Utah, Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Salt Lake City-Boise market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

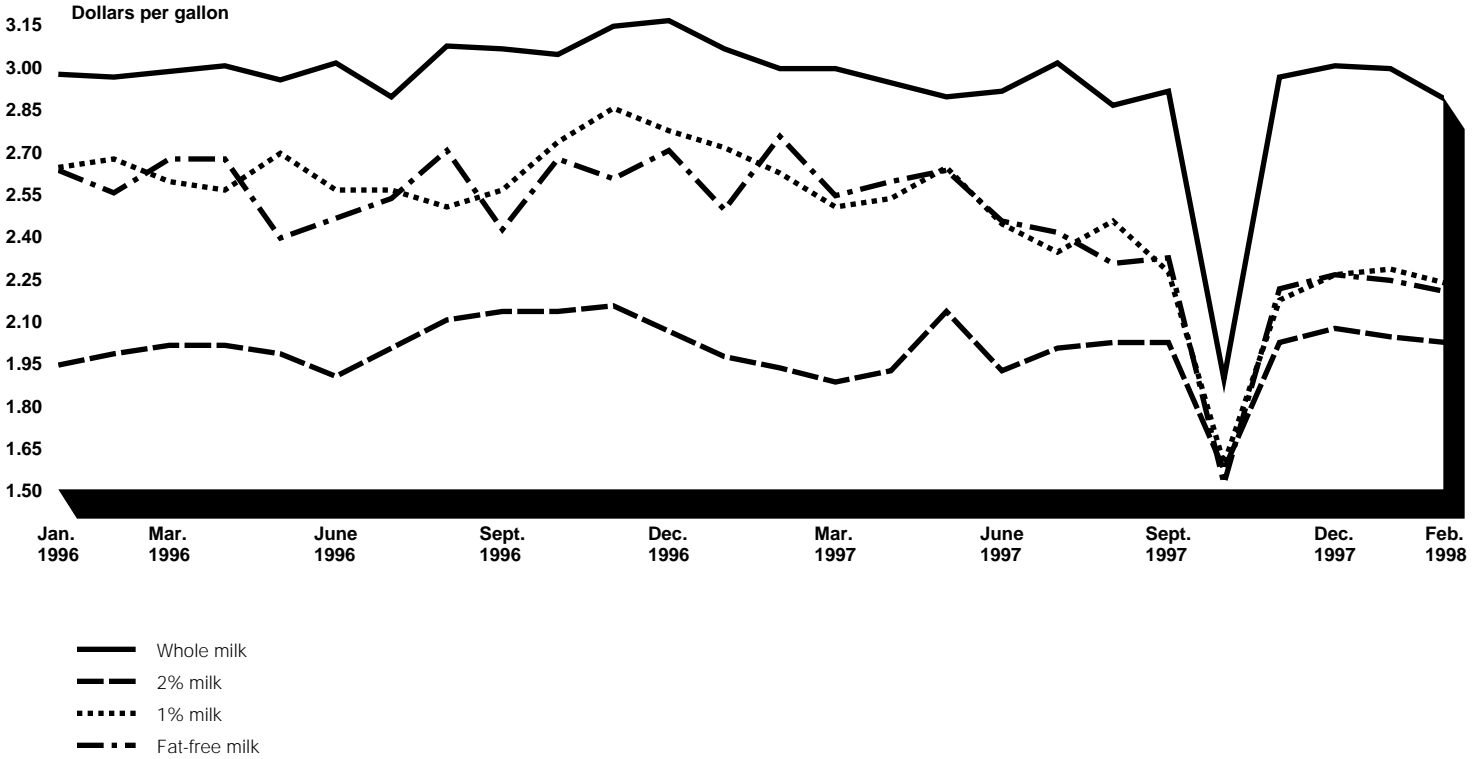
Figure IV.28: San Diego, Calif., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the San Diego market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

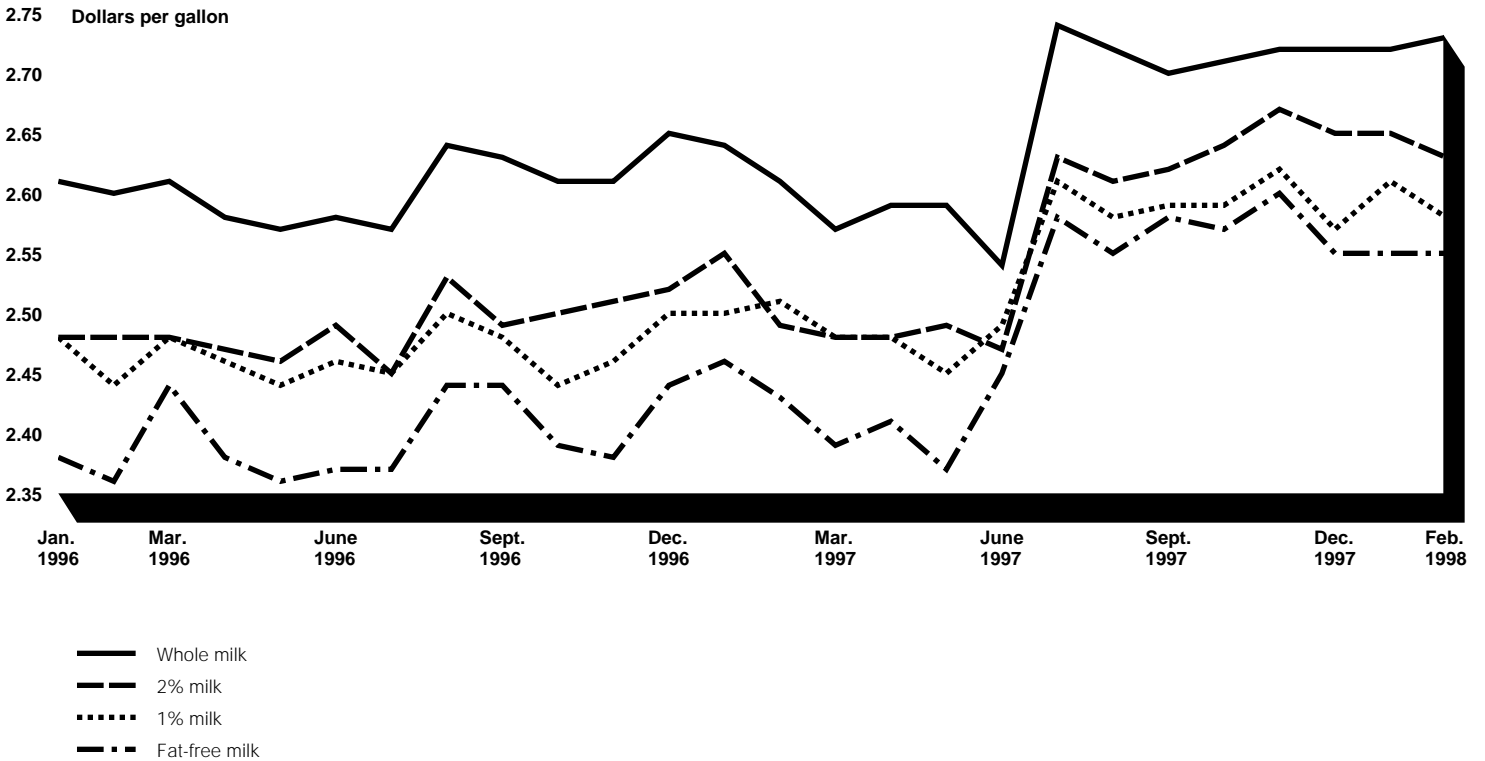
Figure IV.29: Seattle, Wash., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Seattle market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
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Figure IV.30: Vermont Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the price reported by the state milk control agency for the Vermont market.

**Appendix IV
Retail Pricing Relationships for Four Kinds
of Fluid Milk in Selected Markets**

Figure IV.31: Washington, D.C., Market Retail Prices for Whole, 2-Percent, 1-Percent, and Fat-Free Milk



Note: The retail price is the A.C. Nielsen price for the Washington, D.C. market.

Data on the Average Monthly Retail, Wholesale-, Cooperative-, and Farm-Level Prices for Four Kinds of Fluid Milk in Selected Markets

This appendix provides data for January 1996 through February 1998 on the average monthly retail-, wholesale-, cooperative-, and farm-level prices for a gallon of whole, 2-percent, 1-percent, and fat-free milk, for 31 selected markets. These data are presented in table V.1 through table V.31.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.1: Atlanta, Ga., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.24	\$2.25	\$2.24	\$2.24	\$2.30	\$2.42	\$2.52	\$2.53	\$2.54	\$2.54	\$2.57	\$2.60	\$2.42
2%	2.25	2.26	2.26	2.25	2.32	2.44	2.52	2.53	2.54	2.54	2.58	2.63	\$2.43
1%	2.14	2.15	2.15	2.14	2.21	2.31	2.40	2.43	2.43	2.43	2.46	2.49	\$2.31
Fat-free	2.18	2.20	2.20	2.20	2.26	2.37	2.45	2.49	2.50	2.50	2.53	2.57	\$2.37
Wholesale													
Whole	a	a	a	a	a	a	2.07	2.07	2.22	2.22	2.27	2.27	\$2.19
2%	a	a	a	a	a	a	2.05	2.05	2.20	2.20	2.25	2.25	\$2.17
1%	a	a	a	a	a	a	a	a	a	a	a	a	a
Fat-free	a	a	a	a	a	a	2.05	2.05	2.20	2.20	2.25	2.25	\$2.17
Cooperative													
	1.40	1.40	1.39	1.38	1.39	1.51	1.58	1.61	1.66	1.70	1.70	1.59	\$1.53
Mailbox													
	1.20	1.20	1.18	1.18	1.22	1.30	1.34	1.37	1.42	1.46	1.42	1.30	\$1.30

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.61	\$2.62	\$2.61	\$2.60	\$2.61	\$2.59	\$2.59	\$2.60	\$2.55	\$2.47	\$2.28	\$2.53	\$2.50	\$2.51	\$2.55
2.62	2.62	2.61	2.62	2.63	2.60	2.61	2.62	2.57	2.50	2.30	2.56	2.53	2.54	\$2.57
2.50	2.51	2.51	2.52	2.51	2.46	2.50	2.52	2.45	2.42	2.27	2.47	2.44	2.45	\$2.47
2.55	2.56	2.55	2.55	2.57	2.54	2.57	2.57	2.51	2.48	2.31	2.54	2.52	2.54	\$2.53
2.27	2.19	2.27	2.19	2.19	2.19	2.15	2.15	2.15	2.15	2.25	2.25	2.25	2.25	\$2.21
2.25	2.17	2.25	2.17	2.17	2.17	2.13	2.13	2.13	2.13	2.23	2.23	2.23	2.23	\$2.19
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
2.25	2.17	2.25	2.17	2.17	2.17	2.13	2.13	2.13	2.13	2.23	2.23	2.23	2.23	\$2.19
1.44	1.42	1.42	1.41	1.41	1.32	1.26	1.28	1.29	1.41	1.47	1.47	1.48	1.51	\$1.40
1.19	1.18	1.18	1.16	1.15	1.10	1.05	1.07	1.10	1.22	1.27	1.27	1.28	1.29	\$1.18

^aData not available.

Note: For the Atlanta, Ga., market, the farm price is the Southeast mailbox price; the cooperative price is the announced cooperative price for Atlanta; the wholesale price is the price charged by the commissary at the Athens Naval Supply Corps School; and the retail price is the A.C. Nielsen price for the Atlanta market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.2: Augusta, Me., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Dealer Cost Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.19	\$2.19	\$2.17	\$2.16	\$2.17	\$2.18	\$2.24	\$2.27	\$2.32	\$2.36	\$2.44	\$2.29	\$2.25
2%	2.14	2.38	2.10	2.13	2.12	2.12	2.04	2.06	2.16	2.22	2.27	^a	\$2.16
1%	2.12	2.18	2.08	2.12	2.10	2.08	2.08	2.06	2.16	2.16	2.27	^a	\$2.13
Fat-free	2.09	2.17	2.06	2.11	2.09	2.05	1.93	1.84	1.98	2.08	2.12	^a	\$2.05
Wholesale													
Whole	1.89	2.02	2.02	2.02	2.02	^a	^a	2.03	2.03	2.07	2.11	2.00	\$2.02
2%	1.84	1.97	1.97	1.97	1.97	^a	^a	1.86	1.86	1.90	1.94	1.83	\$1.91
1%	1.81	1.94	1.94	1.94	1.94	^a	^a	1.72	1.72	1.76	1.80	1.69	\$1.83
Fat-free	^a	^a	^a	^a	^a	^a	^a	^a	1.70	1.74	1.78	1.67	\$1.72
Dealer Cost													
	1.39	1.39	1.38	1.37	1.37	1.43	1.48	1.50	1.55	1.58	1.62	1.52	\$1.46
Mailbox													
	1.15	1.14	1.13	1.12	1.16	1.21	1.27	1.29	1.34	1.36	1.32	1.21	\$1.23

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.17	\$2.18	\$2.18	\$2.19	\$2.20	\$2.18	\$2.28	\$2.37	\$2.79	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.35
2.22	2.18	2.18	2.18	2.20	2.18	2.28	2.37	2.79	2.47	2.47	2.27	2.37	2.47	\$2.33
2.23	2.18	2.18	2.18	2.01	2.18	2.28	2.37	2.79	2.95	2.37	2.17	2.27	2.47	\$2.33
2.25	2.18	2.18	2.19	2.20	2.09	2.32	2.37	2.79	2.47	2.37	2.07	2.27	2.47	\$2.30
1.78	1.76	1.81	1.85	1.85	1.76	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	\$1.89
1.61	1.59	1.64	1.68	1.68	1.59	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	\$1.72
1.47	1.45	1.50	1.54	1.54	1.45	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	\$1.58
1.45	1.43	1.48	1.52	1.52	1.43	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	\$1.56
1.33	1.31	1.35	1.39	1.39	1.30	1.46	1.49	1.49	1.48	1.48	1.48	1.48	1.48	\$1.42
1.12	1.09	1.13	1.12	1.10	1.03	1.09	1.12	1.15	1.21	1.25	1.24	1.23	1.22	\$1.15

^aData not available.

Note: For the Augusta, Me., market, the farm price is the New England mailbox price; the cooperative price is the Maine dealer cost; the wholesale price is the price charged by the commissary at the Brunswick Naval Air Station; and the retail price is the price reported by the state milk control agency for the Augusta market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.3: Bismarck, N.D., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and North Dakota Class I and Grade A Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	^a	\$3.02	\$3.02	\$3.02	\$3.02	\$3.08	\$3.10	\$3.10	\$3.14	\$3.14	\$3.36	\$3.19	\$3.11
2%	^a	3.02	3.02	3.02	3.02	3.06	3.08	3.04	3.14	3.14	3.32	3.21	\$3.10
1%	^a	3.04	3.04	3.04	3.04	3.10	3.11	3.07	3.14	3.14	3.32	3.29	\$3.12
Fat-free	^a	3.04	3.04	3.04	3.04	3.06	3.08	3.04	3.06	3.06	3.28	3.27	\$3.09
Wholesale													
Whole	^a	^a	2.33	2.33	2.33	2.43	2.43	2.43	2.49	2.38	2.48	2.48	\$2.41
2%	^a	^a	2.32	2.32	2.32	2.42	2.42	2.42	2.41	2.35	2.45	2.45	\$2.39
1%	2.34	2.36	2.39	2.32	2.32	2.42	2.42	2.42	2.41	2.49	2.59	2.59	\$2.42
Fat-free	2.37	2.28	2.43	2.36	2.36	2.45	2.45	2.45	2.37	2.40	2.50	2.50	\$2.41
N.D. Class I	1.27	1.28	1.28	1.27	1.29	1.34	1.39	1.41	1.47	1.51	1.56	1.45	\$1.38
Grade A	1.11	1.10	1.09	1.12	1.14	1.15	1.20	1.25	1.31	1.28	1.15	1.09	\$1.17

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
a	\$3.12	\$3.02	a	\$2.96	\$3.00	\$2.95	\$2.89	\$2.88	\$3.09	\$3.13	\$2.99	\$3.01	\$3.14	\$3.02
a	3.22	3.10	3.10	3.06	2.95	2.89	2.83	2.88	3.05	3.09	2.99	3.01	3.10	\$3.02
a	3.18	3.06	a	3.02	2.99	2.93	2.87	2.87	3.13	2.77	3.00	3.04	3.12	\$3.00
a	3.24	3.12	a	3.06	2.89	2.85	2.79	2.88	3.05	3.07	2.90	3.04	3.10	\$3.00
2.40	2.40	2.28	a	a	a	a	a	a	a	a	a	a	a	\$2.36
2.37	2.37	2.23	a	a	a	a	a	a	a	a	a	a	a	\$2.32
2.51	2.51	2.37	a	a	a	a	a	a	a	a	a	a	a	\$2.46
2.42	2.42	2.25	a	a	a	a	a	a	a	a	a	a	a	\$2.36
1.38	1.38	1.31	1.30	1.31	1.21	1.15	1.17	1.18	1.27	1.33	1.33	1.34	1.36	\$1.29
1.09	1.10	1.07	1.02	0.96	0.92	0.93	1.02	1.07	1.13	1.19	1.20	1.19	1.17	\$1.08

^aData not available.

Note: For the Bismarck, N.D., market, the farm price is based on data collected by the National Agricultural Statistics Service on the Grade A price paid to farmers in this area minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the North Dakota State Order Class I price; the wholesale price is the price charged by the commissary at the Minot Air Force Base; and the retail price is the price reported by the state milk control agency for the Bismarck market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.4: Boston, Mass., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.32	\$2.30	\$2.28	\$2.29	\$2.27	\$2.30	\$2.36	\$2.34	\$2.34	\$2.38	\$2.39	\$2.38	\$2.33
2%	2.22	2.21	2.20	2.22	2.17	2.22	2.27	2.25	2.20	2.24	2.23	2.27	\$2.22
1%	2.15	2.19	2.12	2.17	2.18	2.17	2.19	2.16	2.17	2.16	2.21	2.22	\$2.17
Fat-free	2.16	2.15	2.16	2.18	2.15	2.20	2.23	2.19	2.19	2.19	2.21	2.22	\$2.19
Wholesale													
Whole	a	a	a	1.82	1.81	1.81	1.81	1.94	1.94	1.94	1.94	1.94	\$1.88
2%	a	a	a	1.76	1.75	1.75	1.75	1.99	1.99	1.99	1.99	1.99	\$1.88
1%	a	a	a	1.76	1.75	1.75	1.75	1.98	1.98	1.98	1.98	1.98	\$1.88
Fat-free	a	a	a	1.72	1.71	1.71	1.71	1.93	1.93	1.93	1.93	1.93	\$1.83
Cooperative													
	1.45	1.45	1.44	1.42	1.43	1.47	1.53	1.54	1.59	1.63	1.66	1.59	\$1.52
Mailbox													
	1.15	1.14	1.13	1.12	1.16	1.21	1.27	1.29	1.34	1.36	1.32	1.21	\$1.23

**Appendix V
Data on the Average Monthly Retail,
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Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.38	\$2.37	\$2.36	\$2.38	\$2.39	\$2.40	\$2.60	\$2.60	\$2.59	\$2.55	\$2.56	\$2.58	\$2.55	\$2.54	\$2.49
2.28	2.26	2.26	2.28	2.28	2.31	2.51	2.51	2.46	2.44	2.47	2.45	2.40	2.44	\$2.38
2.20	2.18	2.19	2.18	2.21	2.19	2.40	2.39	2.38	2.35	2.37	2.36	2.33	2.36	\$2.29
2.19	2.19	2.18	2.22	2.22	2.22	2.41	2.41	2.37	2.36	2.36	2.36	2.30	2.31	\$2.29
1.69	1.67	1.72	1.76	1.76	1.67	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	\$1.80
1.74	1.72	1.77	1.81	1.81	1.72	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	\$1.85
1.73	1.71	1.76	1.80	1.80	1.71	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	\$1.84
1.68	1.66	1.71	1.75	1.75	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	\$1.79
1.37	1.35	1.40	1.45	1.45	1.36	1.55	1.54	1.51	1.51	1.51	1.51	1.51	1.51	\$1.47
1.12	1.09	1.13	1.12	1.10	1.03	1.09	1.12	1.15	1.21	1.25	1.24	1.23	1.22	\$1.15

^aData not available.

Note: For the Boston, Mass., market, the farm price is the New England mailbox price; the cooperative price is the announced cooperative price for Boston; the wholesale price is the price charged by the commissary at the Hanscom Air Force Base; and the retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.5: Chicago, Ill., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.38	\$2.32	\$2.40	\$2.35	\$2.34	\$2.49	\$2.58	\$2.51	\$2.52	\$2.58	\$2.63	\$2.58	\$2.47
2%	2.19	2.13	2.01	2.09	2.13	2.16	2.26	2.28	2.24	2.31	2.33	2.36	\$2.21
1%	2.17	2.17	2.11	2.09	2.16	2.21	2.26	2.32	2.29	2.34	2.42	2.42	\$2.25
Fat-free	2.22	2.19	2.12	2.21	2.21	2.32	2.39	2.42	2.40	2.44	2.48	2.39	\$2.32
Wholesale													
Whole	a	a	a	a	a	a	a	a	1.93	2.00	2.07	2.07	\$2.02
2%	a	a	a	a	a	a	a	a	1.83	1.87	1.94	1.94	\$1.90
1%	a	a	a	a	a	a	a	a	1.82	1.85	1.92	1.92	\$1.88
Fat-free	a	a	a	a	a	a	a	a	1.82	1.83	1.90	1.90	\$1.86
Cooperative													
	1.37	1.37	1.35	1.34	1.35	1.39	1.45	1.46	1.52	1.59	1.62	1.54	\$1.45
Mailbox													
	1.18	1.16	1.18	1.19	1.26	1.27	1.32	1.37	1.42	1.35	1.18	1.12	\$1.25

**Appendix V
Data on the Average Monthly Retail,
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Prices for Four Kinds of Fluid Milk in
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1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.55	\$2.49	\$2.56	\$2.38	\$2.45	\$2.43	\$2.41	\$2.38	\$2.44	\$2.43	\$2.52	\$2.48	\$2.54	\$2.49	\$2.47
2.35	2.19	2.28	2.22	2.20	2.32	2.20	2.25	2.23	2.30	2.31	2.39	2.40	2.37	\$2.29
2.32	2.27	2.28	2.14	2.24	2.24	2.18	2.15	2.17	2.21	2.27	2.29	2.29	2.31	\$2.24
2.41	2.34	2.40	2.33	2.24	2.37	2.32	2.34	2.35	2.43	2.43	2.38	2.47	2.46	\$2.38
2.07	2.07	1.81	1.83	1.87	1.87	1.80	1.75	1.75	1.75	1.86	1.86	1.93	^a	\$1.86
1.94	1.94	1.79	1.80	1.85	1.85	1.79	1.74	1.74	1.74	1.86	1.86	1.93	^a	\$1.83
1.92	1.92	1.84	1.85	1.90	1.90	1.86	1.81	1.81	1.81	1.94	1.94	2.00	^a	\$1.88
1.90	1.90	1.89	1.90	1.94	1.94	1.92	1.87	1.87	1.87	2.00	2.00	2.02	^a	\$1.93
1.33	1.30	1.32	1.38	1.37	1.29	1.23	1.23	1.23	1.34	1.41	1.41	1.41	1.43	\$1.33
1.14	1.17	1.17	1.09	1.04	1.01	1.01	1.11	1.16	1.21	1.27	1.27	1.25	1.26	\$1.15

^aData not available.

Note: For the Chicago, Ill., market, the farm price is the Chicago Regional mailbox price; the cooperative price is the announced cooperative price for Chicago; the wholesale price is the price charged by the commissary at the Great Lakes Naval Training Center; and the retail price is the A.C. Nielsen price for the Chicago market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
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Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.6: Cincinnati, Ohio, Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.22	\$2.37	\$2.24	\$2.41	\$2.32	\$2.39	\$2.43	\$2.42	\$2.45	\$2.34	\$2.37	\$2.40	\$2.36
2%	2.20	2.33	2.20	2.37	2.27	2.35	2.41	2.39	2.40	2.30	2.33	2.37	\$2.33
1%	2.24	2.34	2.24	2.38	2.27	2.35	2.44	2.43	2.41	2.27	2.32	2.34	\$2.34
Fat-free	2.22	2.33	2.22	2.36	2.24	2.35	2.43	2.42	2.40	2.27	2.34	2.37	\$2.33
Wholesale													
Whole	1.89	2.09	1.98	1.98	a	a	2.04	2.10	2.10	2.10	2.10	2.10	\$2.05
2%	1.75	1.99	1.90	1.90	a	a	1.96	1.96	1.96	1.96	1.96	1.99	\$1.93
1%	1.69	1.95	1.81	1.81	a	a	1.87	1.87	1.87	1.87	1.87	1.97	\$1.86
Fat-free	1.67	1.98	1.79	1.79	a	a	1.85	1.85	1.85	1.85	1.85	1.95	\$1.84
Cooperative													
	1.34	1.34	1.33	1.32	1.33	1.40	1.46	1.47	1.53	1.57	1.61	1.50	\$1.43
Mailbox													
	1.18	1.17	1.16	1.16	1.18	1.21	1.27	1.29	1.35	1.39	1.37	1.27	\$1.25

Appendix V
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Selected Markets

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Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.45	\$2.39	\$1.99	\$1.57	\$1.44	\$1.43	\$1.35	\$1.15	\$1.35	\$1.48	\$1.51	\$1.52	\$1.52	\$1.47	\$1.62
2.41	2.37	1.99	1.55	1.42	1.43	1.30	1.17	1.38	1.50	1.51	1.51	1.51	1.46	\$1.61
2.40	2.37	1.97	1.54	1.36	1.37	1.27	1.21	1.37	1.50	1.54	1.53	1.51	1.47	\$1.60
2.42	2.39	1.95	1.51	1.35	1.33	1.23	1.20	1.35	1.48	1.50	1.50	1.49	1.43	\$1.58
1.90	1.90	1.90	1.90	1.90	1.95	1.95	1.95	1.95	1.95	2.05	2.10	2.15	2.15	\$1.98
1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.89	1.89	1.89	1.96	\$1.82
1.77	1.77	1.77	1.77	1.77	1.79	1.79	1.79	1.79	1.79	1.89	1.89	1.89	1.90	\$1.81
1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.85	1.85	1.85	1.86	\$1.78
1.31	1.29	1.34	1.37	1.36	1.30	1.23	1.27	1.28	1.38	1.44	1.45	1.45	1.47	\$1.35
1.12	1.10	1.14	1.15	1.10	1.04	0.99	1.02	1.05	1.18	1.26	1.25	1.24	1.25	\$1.14

^aData not available.

Note: For the Cincinnati, Ohio, market, the farm price is the Ohio Valley mailbox price; the cooperative price is the announced cooperative price for Cincinnati; the wholesale price is the price charged by the commissary at the Wright Patterson Air Force Base; and the retail price is the A.C. Nielsen price for the Cincinnati market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.7: Dallas, Tex., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.21	\$2.22	\$2.21	\$2.21	\$2.24	\$2.36	\$2.36	\$2.27	\$2.38	\$2.37	\$2.40	\$2.43	\$2.30
2%	2.22	2.23	2.23	2.21	2.24	2.32	2.33	2.21	2.35	2.32	2.39	2.41	\$2.29
1%	2.13	2.16	2.15	2.13	2.17	2.30	2.27	2.18	2.27	2.24	2.32	2.34	\$2.22
Fat-free	2.23	2.22	2.21	2.19	2.21	2.37	2.34	2.19	2.34	2.29	2.37	2.39	\$2.28
Wholesale													
Whole	^a	2.03	2.03	2.09	2.09	2.23	2.23	2.19	2.19	2.19	2.19	2.19	\$2.15
2%	^a	1.99	1.99	2.09	2.09	2.23	2.23	2.19	2.19	2.19	2.19	2.19	\$2.14
1%	^a	^a	1.85	1.99	1.99	2.13	2.13	2.19	2.19	2.19	2.19	2.19	\$2.10
Fat-free	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	2.19 \$2.19
Cooperative													
	1.40	1.40	1.38	1.37	1.38	1.50	1.51	1.52	1.56	1.60	1.64	1.53	\$1.48
Mailbox													
	1.14	1.12	1.10	1.12	1.16	1.20	1.28	1.31	1.35	1.36	1.31	1.19	\$1.22

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.41	\$2.35	\$2.34	\$2.36	\$2.38	\$2.34	\$2.19	\$2.16	\$2.26	\$2.47	\$2.46	\$2.51	\$2.49	\$2.54	\$2.38
2.40	2.35	2.32	2.35	2.39	2.36	2.15	2.13	2.27	2.46	2.46	2.50	2.44	2.54	\$2.36
2.32	2.33	2.29	2.32	2.34	2.32	2.12	2.14	2.22	2.40	2.43	2.45	2.43	2.48	\$2.33
2.36	2.39	2.31	2.40	2.39	2.37	2.14	2.13	2.27	2.46	2.42	2.46	2.46	2.51	\$2.36
2.19	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.34	2.40	2.40	2.40	2.40	\$2.25
2.19	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.34	2.40	2.40	2.40	2.40	\$2.25
2.19	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.34	2.40	2.40	2.40	2.40	\$2.25
2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.36	2.40	2.40	2.40	2.40	\$2.26
1.35	1.32	1.35	1.36	1.37	1.28	1.21	1.22	1.23	1.40	1.45	1.42	1.41	1.44	\$1.34
1.12	1.11	1.11	1.09	1.06	1.01	0.99	1.02	1.04	1.17	1.25	1.25	1.26	1.24	\$1.12

^aData not available.

Note: For the Dallas, Tex., market, the farm price is the Texas mailbox price; the cooperative price is the announced cooperative price for Dallas; the wholesale price is the price charged by the commissary at the Kelly Air Force Base; and the retail price is the A.C. Nielsen price for the Dallas market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.8: Denver, Colo., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.92	\$2.88	\$2.90	\$2.88	\$2.89	\$2.85	\$2.78	\$2.57	\$2.58	\$2.58	\$2.69	\$2.74	\$2.77
2%	2.47	2.42	2.61	2.60	2.66	2.35	2.41	2.34	2.34	2.35	2.53	2.54	\$2.47
1%	2.47	2.52	2.56	2.55	2.54	2.57	2.46	2.44	2.37	2.39	2.52	2.56	\$2.50
Fat-free	2.60	2.67	2.70	2.68	2.71	2.62	2.58	2.45	2.42	2.43	2.52	2.58	\$2.58
Wholesale													
Whole	1.92	1.92	1.85	1.85	1.85	1.85	1.85	1.92	1.98	2.00	2.08	2.00	\$1.92
2%	1.84	1.84	1.80	1.80	1.80	1.80	1.80	1.85	1.88	1.90	1.98	1.91	\$1.85
1%	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.80	1.79	1.80	1.89	1.85	\$1.79
Fat-free	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.74	1.74	1.78	1.84	1.86	\$1.74
Cooperative													
	1.40	1.41	1.39	1.38	1.39	1.42	1.48	1.44	1.49	1.53	1.57	1.46	\$1.45
Mailbox													
	1.15	1.13	1.12	1.14	1.17	1.19	1.24	1.25	1.33	1.34	1.23	1.13	\$1.20

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.79	\$2.81	\$2.82	\$2.79	\$2.82	\$2.82	\$2.81	\$2.81	\$2.82	\$2.88	\$2.91	\$2.94	\$2.93	\$2.92	\$2.85
2.61	2.66	2.66	2.61	2.67	2.66	2.67	2.62	2.67	2.73	2.75	2.79	2.62	2.65	\$2.67
2.61	2.65	2.64	2.56	2.64	2.64	2.67	2.63	2.64	2.68	2.72	2.76	2.72	2.67	\$2.66
2.62	2.65	2.64	2.57	2.63	2.64	2.61	2.62	2.65	2.72	2.73	2.77	2.74	2.72	\$2.67
1.83	1.79	1.84	1.90	1.89	1.81	1.74	1.74	1.75	1.86	1.93	1.93	1.93	1.96	\$1.85
1.76	1.70	1.72	1.76	1.73	1.67	1.60	1.58	1.60	1.70	1.76	1.71	1.70	1.79	\$1.70
1.80	1.69	1.65	1.65	1.62	1.57	1.50	1.50	1.52	1.60	1.66	1.56	1.54	1.67	\$1.61
1.84	1.67	1.67	1.66	1.61	1.57	1.52	1.46	1.48	1.60	1.66	1.52	1.50	1.66	\$1.60
1.25	1.22	1.27	1.32	1.32	1.23	1.17	1.17	1.18	1.29	1.35	1.35	1.36	1.39	\$1.28
1.05	1.05	1.08	1.05	1.01	0.96	0.96	1.01	1.05	1.13	1.15	1.16	1.17	1.20	\$1.07

Note: For the Denver, Colo., market, the farm price is the Eastern Colorado mailbox price; the cooperative price is the announced cooperative price for Denver; the wholesale price is the price charged by the commissary at the Fitzsimons U.S. Army Garrison; and the retail price is the A.C. Nielsen price for the Denver market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.9: Houston, Tex., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.17	\$2.17	\$2.16	\$2.11	\$2.09	\$2.22	\$2.23	\$2.23	\$2.22	\$2.23	\$2.27	\$2.29	\$2.20
2%	2.15	2.17	2.15	2.10	2.06	2.21	2.20	2.20	2.20	2.21	2.25	2.29	\$2.18
1%	2.10	2.08	2.10	2.03	2.01	2.13	2.11	2.12	2.11	2.14	2.17	2.19	\$2.11
Fat-free	2.15	2.16	2.15	2.10	2.05	2.21	2.19	2.20	2.19	2.21	2.25	2.29	\$2.18
Wholesale													
Whole	a	2.03	2.03	2.09	2.09	2.23	2.23	2.19	2.19	2.19	2.19	2.19	\$2.15
2%	a	1.99	1.99	2.09	2.09	2.23	2.23	2.19	2.19	2.19	2.19	2.19	\$2.14
1%	a	a	1.85	1.99	1.99	2.13	2.13	2.19	2.19	2.19	2.19	2.19	\$2.10
Fat-free	a	a	a	a	a	a	a	a	a	a	a	a	2.19 \$2.19
Cooperative													
	1.44	1.45	1.43	1.42	1.42	1.54	1.56	1.57	1.61	1.65	1.69	1.58	\$1.53
Mailbox													
	1.14	1.12	1.10	1.12	1.16	1.20	1.28	1.31	1.35	1.36	1.31	1.19	\$1.22

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.26	\$2.22	\$2.20	\$2.18	\$2.16	\$2.14	\$2.15	\$2.14	\$2.16	\$2.24	\$2.29	\$2.25	\$2.24	\$2.22	\$2.20
2.24	2.19	2.18	2.16	2.13	2.12	2.11	2.09	2.13	2.19	2.24	2.19	2.19	2.15	\$2.17
2.18	2.14	2.13	2.11	2.09	2.10	2.10	2.08	2.11	2.18	2.23	2.18	2.18	2.13	\$2.14
2.25	2.20	2.19	2.15	2.12	2.11	2.10	2.07	2.13	2.20	2.27	2.19	2.19	2.13	\$2.16
2.19	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.34	2.40	2.40	2.40	2.40	\$2.25
2.19	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.34	2.40	2.40	2.40	2.40	\$2.25
2.19	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.34	2.40	2.40	2.40	2.40	\$2.25
2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.36	2.40	2.40	2.40	2.40	\$2.26
1.39	1.37	1.39	1.41	1.41	1.32	1.26	1.26	1.27	1.44	1.50	1.46	1.45	1.48	\$1.39
1.12	1.11	1.11	1.09	1.06	1.01	0.99	1.02	1.04	1.17	1.25	1.25	1.26	1.24	\$1.12

^aData not available.

Note: For the Houston, Tex., market, the farm price is the Texas mailbox price; the cooperative price is the announced cooperative price for Houston; the wholesale price is the price charged by the commissary at the Kelly Air Force Base; and the retail price is the A.C. Nielsen price for the Houston market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.10: Kansas City, Mo., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Blend Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.51	\$2.51	\$2.50	\$2.52	\$2.51	\$2.55	\$2.62	\$2.64	\$2.71	\$2.78	\$2.81	\$2.82	\$2.62
2%	2.46	2.47	2.46	2.47	2.47	2.50	2.57	2.59	2.66	2.73	2.76	2.78	\$2.58
1%	2.44	2.45	2.45	2.45	2.45	2.50	2.58	2.56	2.64	2.71	2.74	2.77	\$2.56
Fat-free	2.38	2.39	2.40	2.41	2.41	2.43	2.49	2.52	2.57	2.62	2.65	2.71	\$2.50
Wholesale													
Whole	a	a	a	a	1.96	1.96	1.96	2.00	2.07	2.07	2.07	2.07	\$2.02
2%	a	a	a	a	1.89	1.93	1.93	1.93	2.00	2.00	2.00	2.00	\$1.96
1%	a	a	a	a	1.70	1.92	1.92	1.92	1.99	1.99	1.99	1.99	\$1.93
Fat-free	a	a	a	a	1.85	1.90	1.90	1.90	1.97	1.97	1.97	1.97	\$1.93
Cooperative													
	1.32	1.32	1.34	1.33	1.35	1.39	1.44	1.46	1.51	1.54	1.59	1.49	\$1.42
K.C. Blend													
	1.18	1.18	1.17	1.17	1.18	1.18	1.23	1.27	1.32	1.37	1.33	1.27	\$1.24

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.80	\$2.71	\$2.70	\$2.70	\$2.70	\$2.67	\$2.61	\$2.57	\$2.60	\$2.63	\$2.65	\$2.66	\$2.66	\$2.66	\$2.67
2.75	2.69	2.67	2.67	2.67	2.63	2.58	2.53	2.54	2.56	2.59	2.62	2.62	2.62	\$2.62
2.73	2.67	2.65	2.64	2.65	2.60	2.56	2.54	2.52	2.55	2.60	2.61	2.62	2.62	\$2.61
2.67	2.60	2.60	2.58	2.58	2.54	2.50	2.47	2.46	2.50	2.53	2.56	2.56	2.57	\$2.55
2.07	2.07	2.07	2.07	2.07	2.07	1.95	1.95	1.98	1.98	1.98	1.98	1.98	1.98	\$2.01
2.05	2.05	2.05	2.05	2.05	2.05	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	\$1.98
2.04	2.04	2.04	2.04	2.04	2.04	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	\$1.97
2.03	2.03	2.03	2.03	2.03	2.03	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	\$1.96
1.32	1.29	1.32	1.36	1.36	1.27	1.21	1.23	1.23	1.33	1.39	1.39	1.39	1.42	\$1.32
1.11	1.07	1.12	1.15	1.16	1.04	1.01	1.02	1.02	1.14	1.19	1.21	1.21	1.23	\$1.12

^aData not available.

Note: For the Kansas City, Mo., market, the farm price is the Greater Kansas City Blend price minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the announced cooperative price for Kansas City; the wholesale price is the price charged by the commissary at Fort Leavenworth; and the retail price is the A.C. Nielsen price for the Kansas City market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.11: Las Vegas, Nev., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	a	\$2.79	\$2.78	\$2.78	\$2.78	\$2.80	\$2.81	\$2.87	\$2.87	\$3.01	\$2.91	\$2.85	\$2.84
2%	a	2.77	2.77	2.78	2.77	2.81	2.82	2.86	2.86	3.02	2.89	2.85	\$2.84
1%	a	2.83	2.83	2.82	2.90	2.91	2.85	2.88	2.88	3.00	2.99	2.96	\$2.90
Fat-free	a	2.57	2.59	2.59	2.65	2.68	2.68	2.68	2.68	2.79	2.67	2.62	\$2.65
Wholesale													
Whole	a	a	a	a	a	a	a	a	a	2.04	2.12	a	\$2.08
2%	a	a	a	a	a	a	a	a	a	1.92	2.00	a	\$1.96
1%	a	a	a	a	a	a	a	a	a	1.83	1.91	a	\$1.87
Fat-free	a	a	a	a	a	a	a	a	a	1.77	1.84	a	\$1.81
Cooperative	1.26	1.26	1.25	1.23	1.25	1.28	1.33	1.35	1.40	1.44	1.47	1.37	\$1.32
Mailbox	1.09	1.08	1.08	1.08	1.12	1.13	1.16	1.23	1.28	1.25	1.12	1.06	\$1.14

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.86	\$2.76	\$2.71	\$2.79	\$2.79	\$2.68	\$2.43	\$2.43	\$2.65	\$2.81	\$2.77	\$2.83	\$2.83	\$2.79	\$2.72
2.85	2.73	2.71	2.71	2.76	2.77	2.44	2.44	2.69	2.77	2.77	2.84	2.84	2.79	\$2.72
2.98	2.86	2.85	2.85	2.81	2.63	2.76	2.76	2.75	2.89	2.95	2.97	2.97	2.79	\$2.84
2.69	2.55	2.52	2.61	2.63	2.56	2.91	2.91	2.45	2.61	2.52	2.62	2.62	2.69	\$2.64
a	a	a	a	a	a	a	a	a	2.17	2.23	2.23	2.23	2.28	\$2.23
a	a	a	a	a	a	a	a	a	2.03	2.03	2.03	2.03	2.16	\$2.06
a	a	a	a	a	a	a	a	a	1.96	2.02	2.02	2.02	2.07	\$2.01
a	a	a	a	a	a	a	a	a	1.89	1.95	1.95	1.95	1.95	\$1.94
1.15	1.13	1.18	1.22	1.22	1.13	1.07	1.07	1.08	1.19	1.25	1.25	1.26	1.29	\$1.18
1.00	1.02	1.04	0.99	0.94	0.91	0.91	0.97	1.02	1.07	1.11	1.12	1.08	1.11	\$1.02

^aData not available.

Note: For the Las Vegas, Nev., market, the farm price is the Great Basin mailbox price; the cooperative price is the estimated cooperative price (Salt Lake City cooperative price minus \$.0258 per gallon); the wholesale price is the price charged by the commissary at the Nellis Air Force Base; and the retail price is the price reported by the state milk control agency for the Las Vegas market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.12: Louisville, Ky., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.18	\$2.19	\$2.17	\$2.17	\$2.18	\$2.24	\$2.33	\$2.35	\$2.38	\$2.37	\$2.41	\$2.47	\$2.29
2%	2.12	2.12	2.08	2.09	2.09	2.15	2.21	2.23	2.27	2.30	2.36	2.42	\$2.20
1%	2.17	2.18	2.16	2.16	2.16	2.21	2.31	2.32	2.35	2.35	2.42	2.49	\$2.27
Fat-free	2.13	2.14	2.11	2.11	2.11	2.17	2.26	2.28	2.30	2.31	2.38	2.46	\$2.23
Wholesale													
Whole	1.89	1.89	1.89	1.89	1.91	1.93	1.99	1.99	1.99	2.06	2.06	2.06	\$1.96
2%	1.89	1.89	1.89	1.89	1.91	1.93	1.99	1.99	1.99	2.04	2.04	2.04	\$1.96
1%	1.89	1.89	1.89	1.89	1.91	1.93	1.99	1.99	1.99	2.02	2.02	2.02	\$1.95
Fat-free	1.89	1.89	1.89	1.89	1.92	1.93	1.99	1.99	1.99	2.01	2.01	2.01	\$1.95
Cooperative													
	1.32	1.33	1.32	1.31	1.32	1.48	1.54	1.47	1.51	1.55	1.58	1.47	\$1.43
Mailbox													
	1.18	1.18	1.17	1.15	1.18	1.24	1.31	1.32	1.37	1.42	1.42	1.31	\$1.27

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.47	\$2.45	\$2.42	\$2.41	\$2.38	\$2.31	\$2.28	\$2.30	\$2.22	\$2.13	\$2.06	\$2.10	\$2.16	\$2.19	\$2.28
2.42	2.39	2.37	2.35	2.32	2.23	2.20	2.21	2.11	2.05	1.96	2.00	2.07	2.08	\$2.20
2.49	2.45	2.40	2.37	2.36	2.25	2.21	2.22	2.12	2.01	1.89	1.95	2.04	2.08	\$2.20
2.47	2.43	2.38	2.34	2.32	2.22	2.18	2.17	2.08	1.98	1.87	1.91	2.02	2.05	\$2.17
2.06	1.98	1.98	1.98	1.99	1.94	1.94	1.89	a	a	a	a	a	a	\$1.97
2.04	1.94	1.94	1.94	1.99	1.94	1.94	1.89	a	a	a	a	a	a	\$1.95
2.02	1.92	1.92	1.92	1.99	1.94	1.94	1.89	a	a	a	a	a	a	\$1.94
2.01	1.94	1.94	1.94	1.99	1.94	1.94	1.89	a	a	a	a	a	a	\$1.95
1.29	1.26	1.32	1.36	1.36	1.27	1.18	1.19	1.20	1.30	1.36	1.36	1.37	1.40	\$1.30
1.14	1.13	1.17	1.15	1.16	1.09	1.03	1.04	1.07	1.18	1.25	1.24	1.26	1.29	\$1.16

^aData not available.

Note: For the Louisville, Ky., market, the farm price is the Louisville, Lexington, and Evansville mailbox price; the cooperative price is the announced cooperative price for Louisville; the wholesale price is the price charged by the commissary at Fort Knox; and the retail price is the A.C. Nielsen price for the Louisville market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.13: Miami, Fla., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.87	\$2.88	\$2.87	\$2.88	\$2.88	\$3.08	\$3.11	\$3.06	\$3.06	\$3.09	\$3.07	\$3.11	\$3.00
2%	2.90	2.92	2.91	2.92	2.93	3.13	3.15	3.10	3.09	3.14	3.15	3.15	\$3.04
1%	2.73	2.74	2.74	2.74	2.74	2.94	2.96	2.96	2.97	3.02	3.03	3.03	\$2.88
Fat-free	2.73	2.74	2.75	2.75	2.76	2.96	2.99	2.98	2.97	3.02	3.03	3.03	\$2.89
Wholesale													
Whole	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.51	2.51	2.51	2.56	2.56	\$2.48
2%	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.51	2.51	2.51	2.56	2.56	\$2.48
1%	a	a	a	a	a	a	a	a	a	a	a	a	a
Fat-free	a	a	a	a	a	a	a	a	a	a	a	a	a
Cooperative													
	1.60	1.60	1.58	1.57	1.58	1.70	1.76	1.82	1.86	1.90	1.90	1.83	\$1.72
Mailbox													
	1.37	1.37	1.35	1.34	1.36	1.46	1.53	1.60	1.62	1.66	1.69	1.58	\$1.49

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.96	\$2.95	\$2.97	\$2.96	\$2.93	\$2.91	\$2.91	\$2.92	\$2.91	\$2.98	\$3.01	\$3.00	\$2.99	\$2.99	\$2.95
3.02	2.98	2.99	2.96	2.94	2.92	2.92	2.92	2.93	3.01	3.02	3.02	3.02	3.01	\$2.98
2.89	2.85	2.85	2.81	2.80	2.78	2.79	2.78	2.79	2.87	2.88	2.87	2.88	2.87	\$2.84
2.89	2.84	2.86	2.82	2.81	2.80	2.80	2.80	2.81	2.88	2.89	2.89	2.89	2.88	\$2.85
2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	\$2.56
2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	\$2.56
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
1.66	1.66	1.63	1.63	1.60	1.60	1.52	1.52	1.56	1.65	1.71	1.71	1.68	1.71	\$1.63
1.38	1.37	1.34	1.33	1.33	1.31	1.29	1.29	1.35	1.44	1.49	1.48	1.47	1.45	\$1.38

^aProduct not carried by the commissary surveyed.

Note: For the Miami, Fla., market, the farm price is the Florida mailbox price; the cooperative price is the announced cooperative price for Miami; the wholesale price is the price charged by the commissary at the Key West Naval Air Station; and the retail price is the A.C. Nielsen price for the Miami market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.14: Milwaukee, Wis., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.21	\$2.33	\$2.34	\$2.31	\$2.57	\$2.58	\$2.62	\$2.60	\$2.53	\$2.44	\$2.47	\$2.46	\$2.46
2%	2.00	2.11	2.17	2.07	2.28	2.23	2.26	2.27	2.28	2.21	2.27	2.27	\$2.20
1%	1.97	2.11	2.18	2.06	2.33	2.22	2.27	2.30	2.33	2.26	2.28	2.29	\$2.22
Fat-free	2.06	2.11	2.17	2.04	2.26	2.20	2.26	2.23	2.26	2.20	2.28	2.25	\$2.19
Wholesale													
Whole	a	a	a	a	a	a	a	a	1.93	2.00	2.07	2.07	\$2.02
2%	a	a	a	a	a	a	a	a	1.83	1.87	1.94	1.94	\$1.90
1%	a	a	a	a	a	a	a	a	1.82	1.85	1.92	1.92	\$1.88
Fat-free	a	a	a	a	a	a	a	a	1.82	1.83	1.90	1.90	\$1.86
Cooperative													
	1.36	1.36	1.35	1.34	1.35	1.38	1.44	1.45	1.51	1.58	1.61	1.53	\$1.44
Mailbox													
	1.18	1.16	1.18	1.19	1.26	1.27	1.32	1.37	1.42	1.35	1.18	1.12	\$1.25

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.42	\$2.40	\$2.39	\$2.38	\$2.45	\$2.43	\$2.40	\$2.33	\$2.37	\$2.43	\$2.46	\$2.49	\$2.57	\$2.63	\$2.44
2.13	2.17	2.12	2.11	2.16	2.18	2.15	2.03	2.06	2.01	2.22	2.22	2.25	2.25	\$2.15
2.14	2.19	2.12	2.15	2.19	2.23	2.18	2.03	2.05	2.03	2.24	2.21	2.21	2.22	\$2.16
2.12	2.15	2.12	2.13	2.21	2.21	2.18	2.05	2.09	2.04	2.17	2.16	2.18	2.19	\$2.14
2.07	2.07	1.81	1.83	1.87	1.87	1.80	1.75	1.75	1.75	1.86	1.86	1.93	^a	\$1.86
1.94	1.94	1.79	1.80	1.85	1.85	1.79	1.74	1.74	1.74	1.86	1.86	1.93	^a	\$1.83
1.92	1.92	1.84	1.85	1.90	1.90	1.86	1.81	1.81	1.81	1.94	1.94	2.00	^a	\$1.88
1.90	1.90	1.89	1.90	1.94	1.94	1.92	1.87	1.87	1.87	2.00	2.00	2.02	^a	\$1.93
1.32	1.30	1.31	1.37	1.36	1.29	1.22	1.22	1.22	1.34	1.40	1.40	1.40	1.43	\$1.33
1.14	1.17	1.17	1.09	1.04	1.01	1.01	1.11	1.16	1.21	1.27	1.27	1.25	1.26	\$1.15

^aData not available.

Note: For the Milwaukee, Wis., market, the farm price is the Chicago Regional mailbox price; the cooperative price is the announced cooperative price for Milwaukee; the wholesale price is the price charged by the commissary at the Great Lakes Naval Training Center; and the retail price is the A.C. Nielsen price for the Milwaukee market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.15: Minneapolis, Minn., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.90	\$2.90	\$2.91	\$2.91	\$2.93	\$2.96	\$3.00	\$3.00	\$3.04	\$3.05	\$3.04	\$3.03	\$2.97
2%	2.87	2.87	2.86	2.87	2.90	2.91	2.96	2.96	3.00	3.00	3.00	3.00	\$2.93
1%	2.81	2.80	2.80	2.81	2.84	2.86	2.89	2.87	2.90	2.94	2.96	2.99	\$2.87
Fat-free	2.77	2.76	2.76	2.77	2.80	2.82	2.85	2.78	2.81	2.84	2.90	2.98	\$2.82
Wholesale													
Whole	2.18	2.22	2.24	2.22	2.22	2.25	2.31	2.37	2.37	2.44	2.51	2.55	\$2.32
2%	2.08	2.16	2.19	2.18	2.19	2.22	2.27	2.31	2.27	2.32	2.39	2.43	\$2.25
1%	2.03	2.13	2.18	2.17	2.19	2.22	2.27	2.28	2.20	2.23	2.30	2.34	\$2.21
Fat-free	1.98	2.11	2.17	2.16	2.19	2.22	2.27	2.26	2.16	2.18	2.25	2.29	\$2.19
Cooperative													
	1.27	1.28	1.28	1.27	1.29	1.34	1.39	1.41	1.47	1.51	1.56	1.45	\$1.38
Mailbox													
	1.17	1.15	1.16	1.18	1.24	1.25	1.30	1.35	1.40	1.32	1.16	1.10	\$1.23

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.99	\$2.96	\$2.95	\$2.98	\$2.98	\$2.92	\$2.85	\$2.86	\$2.86	\$2.92	\$2.93	\$2.93	\$2.94	\$2.94	\$2.93
2.95	2.90	2.89	2.91	2.92	2.87	2.78	2.77	2.78	2.84	2.85	2.86	2.87	2.88	\$2.86
2.93	2.88	2.87	2.88	2.89	2.85	2.75	2.74	2.75	2.80	2.82	2.83	2.85	2.86	\$2.84
2.91	2.86	2.84	2.86	2.87	2.84	2.70	2.70	2.71	2.77	2.79	2.80	2.81	2.83	\$2.81
2.18	1.98	1.96	1.96	2.02	2.02	1.95	1.89	1.89	1.89	2.00	2.06	2.06	2.10	\$2.00
2.05	1.92	1.90	1.90	1.94	1.94	1.89	1.84	1.83	1.83	1.95	2.01	1.97	2.06	\$1.93
1.95	1.90	1.88	1.88	1.90	1.90	1.86	1.81	1.79	1.79	1.91	1.97	1.89	2.02	\$1.89
1.90	1.88	1.86	1.86	1.86	1.86	1.83	1.79	1.76	1.76	1.89	1.95	1.84	1.99	\$1.86
1.28	1.26	1.26	1.30	1.30	1.21	1.15	1.17	1.17	1.27	1.33	1.33	1.33	1.36	\$1.27
1.11	1.13	1.14	1.07	1.01	0.99	0.99	1.09	1.14	1.20	1.25	1.26	1.25	1.25	\$1.13

Note: For the Minneapolis, Minn., market, the farm price is the Upper Midwest mailbox price; the cooperative price is the announced cooperative price for Minneapolis; the wholesale price is the price charged by the commissary at Fort McCoy; and the retail price is the A.C. Nielsen price for the Minneapolis market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.16: New Hampshire Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.32	\$2.30	\$2.28	\$2.29	\$2.27	\$2.30	\$2.36	\$2.34	\$2.34	\$2.38	\$2.39	\$2.38	\$2.33
2%	2.22	2.21	2.20	2.22	2.17	2.22	2.27	2.25	2.20	2.24	2.23	2.27	\$2.22
1%	2.15	2.19	2.12	2.17	2.18	2.17	2.19	2.16	2.17	2.16	2.21	2.22	\$2.17
Fat-free	2.16	2.15	2.16	2.18	2.15	2.20	2.23	2.19	2.19	2.19	2.21	2.22	\$2.19
Wholesale													
Whole	a	a	a	a	a	a	a	a	a	a	a	a	a
2%	a	a	a	a	a	a	a	a	a	a	a	a	a
1%	a	a	a	a	a	a	a	a	a	a	a	a	a
Fat-free	a	a	a	a	a	a	a	a	a	a	a	a	a
Cooperative	1.44	1.44	1.42	1.41	1.42	1.45	1.51	1.53	1.57	1.61	1.65	1.58	\$1.50
Mailbox	1.15	1.14	1.13	1.12	1.16	1.21	1.27	1.29	1.34	1.36	1.32	1.21	\$1.23

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.38	\$2.37	\$2.36	\$2.38	\$2.39	\$2.40	\$2.60	\$2.60	\$2.59	\$2.55	\$2.56	\$2.58	\$2.55	\$2.54	\$2.49
2.28	2.26	2.26	2.28	2.28	2.31	2.51	2.51	2.46	2.44	2.47	2.45	2.40	2.44	\$2.38
2.20	2.18	2.19	2.18	2.21	2.19	2.40	2.39	2.38	2.35	2.37	2.36	2.33	2.36	\$2.29
2.19	2.19	2.18	2.22	2.22	2.22	2.41	2.41	2.37	2.36	2.36	2.36	2.30	2.31	\$2.29
a	a	a	1.98	1.98	1.98	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	\$2.13
a	a	a	1.90	1.90	1.90	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	\$2.05
a	a	a	1.84	1.84	1.84	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	\$1.99
a	a	a	1.80	1.80	1.80	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	\$1.95
1.36	1.34	1.39	1.43	1.44	1.35	1.54	1.52	1.50	1.50	1.50	1.50	1.50	1.50	\$1.45
1.12	1.09	1.13	1.12	1.10	1.03	1.09	1.12	1.15	1.21	1.25	1.24	1.23	1.22	\$1.15

^aData not available.

Note: For the New Hampshire market, the farm price is the New England mailbox price; the cooperative price is the estimated cooperative price (Boston cooperative price minus \$.0129 per gallon); the wholesale price is the price charged by the commissary at the Portsmouth Naval Shipyard; and the retail price is the A.C. Nielsen price for the Boston market which includes Rhode Island and parts of New Hampshire. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.17: New Haven, Conn., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.48	\$2.45	\$2.45	\$2.48	\$2.40	\$2.47	\$2.54	\$2.55	\$2.51	\$2.51	\$2.53	\$2.54	\$2.49
2%	2.31	2.34	2.32	2.35	2.33	2.40	2.45	2.43	2.24	2.31	2.32	2.48	\$2.36
1%	2.28	2.27	2.26	2.22	2.27	2.27	2.27	2.25	2.30	2.23	2.34	2.41	\$2.28
Fat-free	2.30	2.29	2.29	2.34	2.29	2.35	2.38	2.32	2.37	2.37	2.42	2.48	\$2.35
Wholesale													
Whole	a	a	a	1.79	1.91	1.91	1.91	2.03	2.03	2.07	2.11	2.00	\$1.97
2%	a	a	a	1.75	1.87	1.87	1.87	1.89	1.89	1.93	1.97	1.86	\$1.88
1%	a	a	a	1.70	1.82	1.82	1.82	1.81	1.81	1.85	1.89	1.78	\$1.81
Fat-free	a	a	a	1.68	1.80	1.80	1.80	1.71	1.71	1.75	1.79	1.68	\$1.75
Cooperative													
	1.44	1.44	1.43	1.42	1.42	1.46	1.52	1.53	1.58	1.62	1.65	1.58	\$1.51
Mailbox													
	1.15	1.14	1.13	1.12	1.16	1.21	1.27	1.29	1.34	1.36	1.32	1.21	\$1.23

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.55	\$2.54	\$2.51	\$2.53	\$2.52	\$2.51	\$2.67	\$2.70	\$2.70	\$2.68	\$2.65	\$2.67	\$2.64	\$2.68	\$2.61
2.48	2.40	2.42	2.40	2.43	2.40	2.62	2.59	2.53	2.59	2.60	2.54	2.56	2.57	\$2.51
2.33	2.33	2.36	2.32	2.34	2.31	2.54	2.53	2.51	2.49	2.44	2.49	2.58	2.44	\$2.43
2.40	2.42	2.39	2.46	2.45	2.44	2.61	2.63	2.60	2.57	2.55	2.53	2.56	2.57	\$2.51
1.78	1.76	1.81	1.85	1.85	1.76	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	\$1.89
1.64	1.62	1.67	1.71	1.71	1.62	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	\$1.75
1.56	1.54	1.59	1.63	1.63	1.54	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	\$1.67
1.46	1.44	1.49	1.53	1.53	1.44	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	\$1.57
1.37	1.34	1.39	1.44	1.44	1.35	1.55	1.53	1.51	1.50	1.50	1.50	1.50	1.50	\$1.46
1.12	1.09	1.13	1.12	1.10	1.03	1.09	1.12	1.15	1.21	1.25	1.24	1.23	1.22	\$1.15

^aData not available.

Note: For the New Haven, Conn., market, the farm price is the New England mailbox price; the cooperative price is the announced cooperative price for Hartford; the wholesale price is the price charged by the commissary at the New London Naval Submarine Base; and the retail price is the A.C. Nielsen price for the Hartford-New Haven market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.18: New Orleans, La., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.30	\$2.36	\$2.38	\$2.37	\$2.39	\$2.50	\$2.59	\$2.60	\$2.63	\$2.65	\$2.65	\$2.66	\$2.51
2%	2.30	2.35	2.37	2.36	2.39	2.51	2.59	2.59	2.61	2.59	2.61	2.62	\$2.49
1%	2.22	2.26	2.29	2.28	2.29	2.41	2.51	2.55	2.56	2.56	2.56	2.53	\$2.42
Fat-free	2.24	2.28	2.30	2.30	2.32	2.43	2.52	2.53	2.55	2.54	2.55	2.54	\$2.43
Wholesale													
Whole	2.20	2.20	2.20	2.20	2.24	2.38	2.44	2.46	2.26	2.34	^a	2.30	\$2.29
2%	2.20	2.20	2.20	2.20	2.24	2.38	2.44	2.46	2.24	2.32	^a	2.28	\$2.29
1%	2.20	2.20	2.20	2.20	2.24	2.38	2.44	2.46	2.22	2.30	^a	2.26	\$2.28
Fat-free	2.20	2.20	2.20	2.20	2.24	2.38	2.44	2.46	2.19	2.27	^a	2.23	\$2.27
Cooperative													
	1.45	1.45	1.42	1.40	1.42	1.54	1.52	1.55	1.60	1.65	1.65	1.57	\$1.52
Mailbox													
	1.20	1.20	1.18	1.18	1.22	1.30	1.34	1.37	1.42	1.46	1.42	1.30	\$1.30

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.61	\$2.56	\$2.59	\$2.62	\$2.62	\$2.58	\$2.56	\$2.55	\$2.57	\$2.69	\$2.78	\$2.78	\$2.78	\$2.77	\$2.65
2.58	2.57	2.57	2.59	2.58	2.55	2.55	2.51	2.52	2.67	2.74	2.72	2.73	2.72	\$2.61
2.51	2.53	2.54	2.54	2.49	2.50	2.50	2.48	2.49	2.63	2.72	2.70	2.71	2.70	\$2.57
2.52	2.51	2.55	2.56	2.55	2.53	2.52	2.49	2.49	2.64	2.74	2.72	2.72	2.72	\$2.59
2.26	2.25	a	a	2.35	2.31	2.31	2.31	2.31	2.45	2.52	2.48	2.50	2.59	\$2.39
2.26	2.25	a	a	2.35	2.31	2.31	2.31	2.31	2.45	2.52	2.48	2.50	2.59	\$2.39
2.26	2.25	a	a	2.35	2.31	2.31	2.31	2.31	2.45	2.52	2.48	2.50	2.59	\$2.39
2.23	2.22	a	a	2.32	2.31	2.31	2.31	2.31	2.45	2.52	2.48	2.50	2.59	\$2.38
1.42	1.41	1.42	1.42	1.43	1.32	1.26	1.26	1.27	1.44	1.50	1.50	1.51	1.54	\$1.41
1.19	1.18	1.18	1.16	1.15	1.10	1.05	1.07	1.10	1.22	1.27	1.27	1.28	1.29	\$1.18

^aData not available.

Note: For the New Orleans, La., market, the farm price is the Southeast mailbox price; the cooperative price is the announced cooperative price for New Orleans; the wholesale price is the price charged by the commissary at the New Orleans Naval Air Station; and the retail price is the A.C. Nielsen price for the New Orleans-Mobile market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.19: New York, N.Y., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.54	\$2.56	\$2.56	\$2.56	\$2.55	\$2.59	\$2.64	\$2.61	\$2.67	\$2.73	\$2.79	\$2.79	\$2.63
2%	2.51	2.52	2.52	2.53	2.51	2.56	2.60	2.57	2.61	2.67	2.69	2.73	\$2.59
1%	2.53	2.54	2.55	2.54	2.54	2.55	2.55	2.53	2.60	2.61	2.72	2.73	\$2.58
Fat-free	2.55	2.58	2.56	2.57	2.54	2.51	2.58	2.53	2.63	2.65	2.73	2.76	\$2.60
Wholesale													
Whole	1.96	1.98	1.98	1.98	1.98	2.02	2.02	a	a	2.08	2.14	2.14	\$2.03
2%	1.93	2.00	2.00	2.00	2.00	2.04	2.04	a	a	2.06	2.12	2.12	\$2.03
1%	a	a	a	a	a	a	a	a	a	2.06	2.12	2.12	\$2.10
Fat-free	1.88	2.00	2.00	2.00	2.00	2.04	2.04	a	a	2.05	2.11	2.11	\$2.02
Cooperative													
	1.44	1.44	1.42	1.41	1.42	1.46	1.51	1.53	1.58	1.61	1.65	1.55	\$1.50
Mailbox													
	1.16	1.14	1.13	1.13	1.18	1.21	1.27	1.29	1.35	1.35	1.27	1.18	\$1.22

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.70	\$2.65	\$2.66	\$2.68	\$2.65	\$2.62	\$2.58	\$2.57	\$2.57	\$2.64	\$2.68	\$2.68	\$2.70	\$2.72	\$2.65
2.63	2.53	2.56	2.62	2.63	2.57	2.56	2.54	2.53	2.61	2.63	2.64	2.66	2.67	\$2.60
2.63	2.50	2.59	2.58	2.61	2.56	2.55	2.52	2.51	2.59	2.63	2.61	2.63	2.67	\$2.58
2.62	2.59	2.57	2.65	2.60	2.61	2.55	2.55	2.51	2.61	2.64	2.62	2.66	2.62	\$2.60
2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	a	a	a	a	a	\$2.14
2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	a	a	a	a	a	\$2.12
2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	a	a	a	a	a	\$2.12
2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	a	a	a	a	a	\$2.11
1.33	1.31	1.36	1.40	1.40	1.31	1.25	1.25	1.26	1.37	1.43	1.43	1.44	1.47	\$1.36
1.08	1.09	1.12	1.10	1.06	1.01	0.99	1.04	1.08	1.17	1.22	1.22	1.21	1.23	\$1.11

^aData not available.

Note: For the New York, N.Y., market, the farm price is the New York-New Jersey mailbox price; the cooperative price is the estimated cooperative price (New York Order Class I price plus \$.0602 per gallon); the wholesale price is the price charged by the commissary at the United States Military Academy, West Point; and the retail price is the A.C. Nielsen price for the New York market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.20: Orlando, Fla., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.71	\$2.72	\$2.73	\$2.73	\$2.73	\$2.97	\$2.99	\$2.98	\$2.98	\$3.03	\$3.05	\$3.02	\$2.89
2%	2.71	2.71	2.71	2.72	2.73	2.98	2.99	2.96	2.96	3.03	3.05	3.01	\$2.88
1%	2.62	2.61	2.62	2.63	2.64	2.87	2.88	2.87	2.87	2.97	3.00	2.98	\$2.80
Fat-free	2.60	2.60	2.61	2.63	2.64	2.89	2.90	2.89	2.90	2.99	3.02	2.99	\$2.80
Wholesale													
Whole	2.36	2.36	2.35	2.35	2.36	2.44	2.44	2.45	2.49	2.49	2.53	2.45	\$2.42
2%	2.28	2.28	2.27	2.27	2.28	2.36	2.36	2.37	2.42	2.42	2.46	2.38	\$2.35
1%	2.21	2.21	2.20	2.20	2.21	2.29	2.29	2.30	2.35	2.35	2.39	2.31	\$2.28
Fat-free	2.12	2.12	2.11	2.11	2.12	2.20	2.20	2.21	2.26	2.26	2.30	2.22	\$2.19
Cooperative	1.51	1.51	1.50	1.48	1.49	1.61	1.67	1.73	1.78	1.82	1.82	1.75	\$1.64
Mailbox	1.37	1.37	1.35	1.34	1.36	1.46	1.53	1.60	1.62	1.66	1.69	1.58	\$1.49

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.94	\$2.91	\$2.93	\$2.85	\$2.85	\$2.85	\$2.86	\$2.85	\$2.88	\$2.91	\$2.95	\$2.95	\$2.98	\$2.96	\$2.91
2.95	2.91	2.92	2.85	2.85	2.85	2.86	2.85	2.88	2.91	2.93	2.94	2.97	2.95	\$2.90
2.90	2.86	2.88	2.80	2.80	2.80	2.80	2.79	2.82	2.86	2.88	2.89	2.92	2.90	\$2.85
2.91	2.87	2.89	2.82	2.81	2.81	2.82	2.81	2.84	2.88	2.91	2.91	2.94	2.92	\$2.87
2.30	2.30	2.30	2.40	a	a	a	2.34	2.40	2.49	2.56	a	a	a	\$2.39
2.31	2.31	2.31	2.41	a	a	a	2.35	2.41	2.50	2.57	a	a	a	\$2.40
2.31	2.31	2.31	2.41	a	a	a	2.35	2.41	2.50	2.57	a	a	a	\$2.40
2.22	2.22	2.22	2.32	a	a	a	2.26	2.32	2.41	2.48	a	a	a	\$2.31
1.57	1.57	1.54	1.54	1.51	1.51	1.43	1.43	1.48	1.56	1.62	1.62	1.60	1.62	\$1.54
1.38	1.37	1.34	1.33	1.33	1.31	1.29	1.29	1.35	1.44	1.49	1.48	1.47	1.45	\$1.38

^aData not available.

Note: For the Orlando, Fla., market, the farm price is the Florida mailbox price; the cooperative price is the estimated cooperative price (Miami cooperative price minus \$.0860 per gallon); the wholesale price is the price charged by the commissary at the Orlando Naval Training Center; and the retail price is the A.C. Nielsen price for the Orlando market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.21: Philadelphia, Pa., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.55	\$2.56	\$2.55	\$2.54	\$2.55	\$2.56	\$2.62	\$2.63	\$2.66	\$2.70	\$2.74	\$2.71	\$2.61
2%	2.41	2.43	2.44	2.43	2.44	2.46	2.49	2.48	2.50	2.54	2.57	2.55	\$2.48
1%	2.35	2.39	2.40	2.40	2.41	2.43	2.46	2.43	2.43	2.46	2.50	2.48	\$2.43
Fat-free	2.27	2.33	2.35	2.35	2.36	2.39	2.39	2.33	2.32	2.34	2.39	2.38	\$2.35
Wholesale													
Whole	2.00	2.02	2.02	1.98	2.00	2.05	2.10	2.11	2.18	2.21	2.28	2.16	\$2.09
2%	1.92	1.97	1.94	1.94	1.96	2.00	2.03	1.99	2.03	2.08	2.14	2.05	\$2.00
1%	1.88	1.95	1.93	1.93	1.95	1.98	2.00	1.93	1.96	2.01	2.07	1.99	\$1.97
Fat-free	1.81	1.91	1.88	1.89	1.91	1.94	1.94	1.82	1.85	1.90	1.96	1.96	\$1.90
Cooperative													
	1.43	1.44	1.42	1.41	1.42	1.45	1.51	1.52	1.57	1.61	1.67	1.57	\$1.50
Mailbox													
	1.17	1.14	1.11	1.10	1.15	1.24	1.30	1.33	1.38	1.36	1.34	1.23	\$1.24

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.62	\$2.52	\$2.52	\$2.56	\$2.58	\$2.54	\$2.50	\$2.43	\$2.44	\$2.52	\$2.60	\$2.63	\$2.62	\$2.62	\$2.55
2.46	2.39	2.40	2.43	2.43	2.39	2.34	2.32	2.32	2.39	2.47	2.46	2.45	2.49	\$2.41
2.40	2.34	2.37	2.38	2.38	2.34	2.29	2.26	2.26	2.33	2.41	2.40	2.38	2.43	\$2.36
2.34	2.30	2.29	2.30	2.27	2.26	2.22	2.18	2.17	2.26	2.33	2.30	2.27	2.33	\$2.27
2.16	2.16	1.96	2.02	2.02	1.93	1.87	1.87	1.88	1.88	1.98	2.09	2.09	2.13	\$2.00
2.05	2.05	1.90	1.93	1.93	1.85	1.79	1.77	1.79	1.79	1.89	1.96	1.96	2.02	\$1.90
1.99	1.99	1.87	1.89	1.89	1.82	1.76	1.73	1.75	1.75	1.84	1.89	1.89	1.97	\$1.86
1.96	1.96	1.82	1.82	1.82	1.75	1.70	1.64	1.67	1.67	1.77	1.78	1.78	1.89	\$1.79
1.35	1.33	1.38	1.42	1.43	1.34	1.27	1.28	1.29	1.39	1.49	1.49	1.50	1.53	\$1.39
1.10	1.10	1.13	1.12	1.09	1.05	1.01	1.03	1.07	1.19	1.26	1.24	1.21	1.25	\$1.13

Note: For the Philadelphia, Pa., market, the farm price is the Middle Atlantic mailbox price; the cooperative price is the announced cooperative price for Philadelphia; the wholesale price is the price charged by the commissary at Carlisle Barracks; and the retail price is the A.C. Nielsen price for the Philadelphia market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.22: Phoenix, Ariz., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Blend Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.25	\$2.22	\$2.28	\$2.25	\$2.23	\$2.23	\$2.22	\$2.27	\$2.25	\$2.36	\$2.40	\$2.43	\$2.28
2%	1.79	1.75	1.86	1.79	1.75	1.79	1.86	1.86	1.79	2.02	1.93	1.98	\$1.85
1%	1.86	1.92	1.89	1.91	1.82	1.85	1.94	1.92	1.77	1.97	1.90	2.03	\$1.90
Fat-free	1.86	1.93	1.93	1.92	1.85	1.93	1.98	1.96	1.79	2.02	1.91	2.06	\$1.93
Wholesale													
Whole	a	a	a	a	a	1.77	1.84	a	1.93	2.01	1.91	1.91	\$1.89
2%	a	a	a	a	a	1.71	1.73	a	1.78	1.86	1.80	1.80	\$1.78
1%	a	a	a	a	a	1.67	1.67	a	1.69	1.77	1.73	1.73	\$1.71
Fat-free	a	a	a	a	a	1.63	1.63	a	1.61	1.69	1.67	1.67	\$1.65
Cooperative	1.32	1.33	1.31	1.30	1.31	1.34	1.40	1.41	1.46	1.50	1.54	1.43	\$1.39
Ariz. Blend	1.13	1.11	1.10	1.10	1.15	1.19	1.26	1.29	1.33	1.30	1.22	1.12	\$1.19

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.30	\$2.21	\$2.24	\$2.23	\$2.22	\$2.21	\$2.21	\$2.13	\$2.04	\$2.24	\$2.29	\$2.29	\$2.34	\$2.24	\$2.23
1.83	1.85	1.70	1.65	1.85	1.92	1.88	1.75	1.69	1.94	1.83	1.90	1.92	1.74	\$1.82
1.81	1.91	1.72	1.61	1.87	1.91	1.92	1.75	1.74	1.94	1.86	1.92	2.00	1.77	\$1.84
1.86	1.96	1.75	1.71	1.92	1.99	1.95	1.79	1.77	2.01	1.90	1.94	2.03	1.83	\$1.89
1.75	1.75	1.80	1.85	1.85	1.77	1.71	1.71	1.73	1.73	1.90	1.91	1.92	^a	\$1.80
1.70	1.70	1.75	1.77	1.77	1.71	1.66	1.65	1.66	1.78	1.84	1.79	1.79	^a	\$1.73
1.72	1.72	1.77	1.77	1.77	1.73	1.68	1.66	1.68	1.80	1.86	1.77	1.76	^a	\$1.75
1.67	1.67	1.72	1.72	1.72	1.69	1.64	1.61	1.63	1.75	1.82	1.70	1.68	^a	\$1.69
1.21	1.19	1.24	1.29	1.29	1.20	1.14	1.14	1.15	1.25	1.32	1.32	1.33	1.36	\$1.25
1.04	1.05	1.08	1.06	1.03	1.00	0.98	1.02	1.05	1.12	1.15	1.14	1.13	1.16	\$1.07

^aData not available.

Note: For the Phoenix, Ariz., market, the farm price is the Central Arizona Blend price minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the announced cooperative price for Phoenix; the wholesale price is the price charged by the commissary at the Luke Air Force Base; and the retail price is the A.C. Nielsen price for the Phoenix market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.23: Raleigh, N.C., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.44	\$2.46	\$2.47	\$2.49	\$2.51	\$2.58	\$2.64	\$2.65	\$2.65	\$2.70	\$2.69	\$2.67	\$2.58
2%	2.44	2.44	2.45	2.43	2.50	2.58	2.61	2.63	2.63	2.66	2.67	2.64	\$2.56
1%	2.41	2.44	2.41	2.46	2.46	2.57	2.62	2.63	2.64	2.63	2.66	2.65	\$2.55
Fat-free	2.39	2.45	2.44	2.47	2.47	2.52	2.57	2.56	2.54	2.58	2.62	2.65	\$2.52
Wholesale													
Whole	2.34	2.34	2.33	2.32	2.33	2.47	2.62	2.62	2.68	2.72	2.76	2.73	\$2.52
2%	2.32	2.32	2.33	2.32	2.33	2.47	2.62	2.62	2.68	2.72	2.76	2.73	\$2.52
1%	2.32	2.37	2.37	2.35	2.35	2.51	2.59	2.59	2.59	2.63	2.67	2.67	\$2.50
Fat-free	2.17	2.25	2.25	2.19	2.19	2.36	2.44	2.39	2.39	2.44	2.49	2.49	\$2.34
Cooperative													
	1.43	1.43	1.42	1.40	1.43	1.55	1.62	1.65	1.69	1.73	1.73	1.62	\$1.56
Mailbox													
	1.27	1.27	1.24	1.23	1.27	1.35	1.41	1.44	1.50	1.54	1.53	1.41	\$1.37

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.67	\$2.63	\$2.65	\$2.65	\$2.63	\$2.62	\$2.57	\$2.55	\$2.59	\$2.61	\$2.62	\$2.61	\$2.58	\$2.57	\$2.61
2.62	2.60	2.62	2.59	2.60	2.60	2.52	2.48	2.57	2.57	2.61	2.57	2.55	2.55	\$2.57
2.61	2.64	2.61	2.66	2.61	2.57	2.54	2.50	2.55	2.59	2.55	2.60	2.56	2.55	\$2.58
2.58	2.62	2.52	2.59	2.56	2.57	2.49	2.47	2.54	2.60	2.54	2.60	2.54	2.55	\$2.56
2.52	2.50	2.50	2.50	2.50	2.41	2.37	2.37	2.36	2.46	2.52	2.18	2.18	2.28	\$2.40
2.52	2.50	2.50	2.50	2.50	2.41	2.37	2.37	2.36	2.46	2.52	2.15	2.15	2.25	\$2.40
2.57	2.57	2.49	2.49	2.49	2.44	2.39	2.37	2.37	2.39	2.39	2.39	2.39	2.39	\$2.44
2.49	2.49	2.44	2.39	2.39	2.35	2.30	2.27	2.27	2.39	2.39	2.39	2.09	2.25	\$2.35
1.48	1.48	1.48	1.45	1.45	1.32	1.26	1.28	1.29	1.41	1.47	1.47	1.48	1.51	\$1.42
1.29	1.27	1.25	1.24	1.24	1.16	1.13	1.13	1.14	1.27	1.33	1.32	1.33	1.38	\$1.25

Note: For the Raleigh, N.C., market, the farm price is the Carolina mailbox price; the cooperative price is the announced cooperative price for Charlotte; the wholesale price is the price charged by the commissary at Camp Lejeune; and the retail price is the A.C. Nielsen price for the Raleigh-Durham market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.24: Rhode Island Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.32	\$2.30	\$2.28	\$2.29	\$2.27	\$2.30	\$2.36	\$2.34	\$2.34	\$2.38	\$2.39	\$2.38	\$2.33
2%	2.22	2.21	2.20	2.22	2.17	2.22	2.27	2.25	2.20	2.24	2.23	2.27	\$2.22
1%	2.15	2.19	2.12	2.17	2.18	2.17	2.19	2.16	2.17	2.16	2.21	2.22	\$2.17
Fat-free	2.16	2.15	2.16	2.18	2.15	2.20	2.23	2.19	2.19	2.19	2.21	2.22	\$2.19
Wholesale													
Whole	1.82	1.92	1.92	1.92	1.91	1.91	2.01	2.01	2.01	2.01	2.01	2.01	\$1.96
2%	1.76	1.86	1.86	1.86	1.85	1.85	1.94	1.94	1.94	1.94	1.94	1.94	\$1.89
1%	a	a	a	a	a	a	a	a	a	a	a	a	a
Fat-free	a	a	a	a	a	a	a	a	a	a	a	a	a
Cooperative													
	1.45	1.45	1.44	1.42	1.43	1.47	1.53	1.54	1.59	1.63	1.66	1.59	\$1.52
Mailbox													
	1.15	1.14	1.13	1.12	1.16	1.21	1.27	1.29	1.34	1.36	1.32	1.21	\$1.23

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.38	\$2.37	\$2.36	\$2.38	\$2.39	\$2.40	\$2.60	\$2.60	\$2.59	\$2.55	\$2.56	\$2.58	\$2.55	\$2.54	\$2.49
2.28	2.26	2.26	2.28	2.28	2.31	2.51	2.51	2.46	2.44	2.47	2.45	2.40	2.44	\$2.38
2.20	2.18	2.19	2.18	2.21	2.19	2.40	2.39	2.38	2.35	2.37	2.36	2.33	2.36	\$2.29
2.19	2.19	2.18	2.22	2.22	2.22	2.41	2.41	2.37	2.36	2.36	2.36	2.30	2.31	\$2.29
1.81	1.79	1.84	1.88	1.88	1.79	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	\$1.92
1.74	1.72	1.77	1.81	1.81	1.72	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	\$1.85
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
1.37	1.35	1.40	1.45	1.45	1.36	1.55	1.54	1.51	1.51	1.51	1.51	1.51	1.51	\$1.47
1.12	1.09	1.13	1.12	1.10	1.03	1.09	1.12	1.15	1.21	1.25	1.24	1.23	1.22	\$1.15

^aData not available.

Note: For the Rhode Island market, the farm price is the New England mailbox price; the cooperative price is the announced cooperative price for Boston; the wholesale price is the price charged by the commissary at the Newport Naval Education and Training Center; and the retail price is the A.C. Nielsen price for the Boston market, which includes Rhode Island, and parts of New Hampshire. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.25: Richmond, Va., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Virginia Class I and Grade A Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.46	\$2.44	\$2.44	\$2.46	\$2.47	\$2.53	\$2.58	\$2.59	\$2.60	\$2.61	\$2.64	\$2.65	\$2.54
2%	2.48	2.46	2.45	2.47	2.49	2.55	2.60	2.60	2.60	2.62	2.66	2.66	\$2.55
1%	2.44	2.46	2.44	2.47	2.48	2.53	2.57	2.57	2.58	2.58	2.62	2.65	\$2.53
Fat-free	2.36	2.39	2.38	2.41	2.42	2.50	2.55	2.55	2.54	2.55	2.59	2.63	\$2.49
Wholesale													
Whole	2.01	2.03	2.02	2.00	2.01	2.06	2.14	2.12	2.14	2.18	2.20	2.12	\$2.09
2%	1.97	1.99	1.97	1.97	1.98	2.03	2.10	2.03	2.06	2.11	2.13	2.09	\$2.04
1%	1.92	1.96	1.94	1.94	1.95	2.00	2.06	1.97	2.02	2.07	2.09	2.08	\$2.00
Fat-free	1.90	1.94	1.92	1.92	1.93	1.98	2.04	1.93	2.00	2.04	2.06	2.06	\$1.98
Va. Class I	1.50	1.50	1.49	1.47	1.49	1.57	1.63	1.64	1.69	1.73	1.75	1.67	\$1.59
Grade A	1.19	1.20	1.16	1.14	1.18	1.23	1.29	1.31	1.33	1.38	1.38	1.24	\$1.25

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.66	\$2.65	\$2.66	\$2.65	\$2.64	\$2.65	\$2.64	\$2.65	\$2.64	\$2.66	\$2.68	\$2.65	\$2.65	\$2.66	\$2.65
2.66	2.64	2.66	2.64	2.65	2.66	2.66	2.67	2.65	2.68	2.69	2.65	2.65	2.67	\$2.66
2.64	2.62	2.63	2.63	2.62	2.62	2.64	2.66	2.61	2.66	2.65	2.62	2.62	2.63	\$2.63
2.60	2.60	2.59	2.59	2.60	2.60	2.62	2.64	2.61	2.65	2.65	2.62	2.61	2.63	\$2.62
2.02	2.02	2.05	2.07	2.05	1.99	1.96	1.96	1.98	2.09	2.16	2.16	2.16	2.19	\$2.06
2.00	2.00	2.04	2.04	1.99	1.95	1.92	1.92	1.94	2.05	2.11	2.10	2.10	2.16	\$2.02
1.99	1.99	2.03	2.04	1.99	1.95	1.94	1.93	1.95	2.05	2.11	2.09	2.09	2.15	\$2.02
1.98	1.98	2.03	2.04	1.99	1.95	1.92	1.89	1.91	2.04	2.10	2.01	2.03	2.12	\$2.00
1.47	1.47	1.49	1.52	1.50	1.41	1.35	1.36	1.37	1.48	1.54	1.56	1.57	1.60	\$1.48
1.16	1.15	1.17	1.16	1.15	1.11	1.04	1.05	1.07	1.19	1.23	1.23	1.23	1.26	\$1.16

Note: For the Richmond, Va., market, the farm price is based on data collected by the National Agricultural Statistics Service on the Grade A price paid to farmers in this area, minus \$.0602 per gallon for hauling costs and other fees; the cooperative price is the Virginia State Order Class I price; the wholesale price is the price charged by the commissary at Fort Lee; and the retail price is the A.C. Nielsen price for the Richmond-Norfolk market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.26: Sacramento, Calif., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and California Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.53	\$2.56	\$2.54	\$2.58	\$2.56	\$2.59	\$2.58	\$2.71	\$2.71	\$2.82	\$2.80	\$2.88	\$2.66
2%	2.36	2.35	2.37	2.41	2.39	2.42	2.44	2.54	2.56	2.63	2.64	2.68	\$2.48
1%	2.56	2.60	2.62	2.65	2.65	2.67	2.70	2.83	2.78	2.87	2.87	2.93	\$2.73
Fat-free	2.48	2.58	2.58	2.52	2.54	2.58	2.56	2.62	2.57	2.63	2.68	2.72	\$2.59
Wholesale													
Whole	1.86	1.86	1.86	a	a	a	a	a	a	2.04	2.15	a	\$1.95
2%	1.87	1.87	1.87	a	a	a	a	a	a	2.04	2.14	a	\$1.96
1%	1.87	1.87	1.87	a	a	a	a	a	a	2.05	2.14	a	\$1.96
Fat-free	a	a	a	a	a	a	a	a	a	1.86	1.92	a	\$1.89
Calif. Class I	1.30	1.31	1.31	1.27	1.27	1.29	1.29	1.41	1.41	1.51	1.51	1.53	\$1.37
Mailbox	1.05	1.02	1.01	1.01	1.06	1.14	1.17	1.29	1.34	1.33	1.16	1.10	\$1.14

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.91	\$2.75	\$2.64	\$2.62	\$2.57	\$2.52	\$2.48	\$2.46	\$2.45	\$2.68	\$2.64	\$2.68	\$2.73	\$2.73	\$2.63
2.70	2.56	2.48	2.50	2.45	2.41	2.36	2.33	2.30	2.48	2.46	2.51	2.56	2.56	\$2.48
2.93	2.81	2.74	2.72	2.65	2.58	2.54	2.51	2.49	2.64	2.62	2.74	2.82	2.80	\$2.69
2.70	2.56	2.50	2.48	2.49	2.37	2.28	2.17	2.20	2.31	2.41	2.44	2.46	2.49	\$2.42
a	a	a	a	a	a	a	a	a	a	1.89	2.09	2.09	2.09	\$2.04
a	a	a	a	a	a	a	a	a	a	1.86	2.06	2.06	2.06	\$2.01
a	a	a	a	a	a	a	a	a	a	1.86	2.06	2.06	2.06	\$2.01
a	a	a	a	a	a	a	a	a	a	1.73	1.93	1.93	1.93	\$1.88
1.53	1.23	1.23	1.23	1.23	1.14	1.14	1.07	1.07	1.24	1.24	1.27	1.27	1.30	\$1.23
1.11	1.06	1.06	1.03	0.97	0.96	0.97	1.04	1.01	1.12	1.15	1.15	1.13	1.17	\$1.07

^aData not available.

Note: For the Sacramento, Calif., market, the farm price is the California mailbox price; the cooperative price is the Northern California Class I price; the wholesale price is the price charged by the commissary at the Stockton Naval Communications Station; and the retail price is the A.C. Nielsen price for the Sacramento market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.27: Salt Lake City, Utah, Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.31	\$2.32	\$2.33	\$2.30	\$2.32	\$2.40	\$2.45	\$2.47	\$2.46	\$2.48	\$2.53	\$2.56	\$2.41
2%	2.06	2.07	2.04	1.98	2.04	2.13	2.13	2.16	2.13	2.17	2.26	2.27	\$2.12
1%	1.93	2.00	1.97	1.94	2.04	2.01	2.08	1.99	1.96	2.03	2.20	2.13	\$2.02
Fat-free	1.95	2.00	1.99	1.96	1.96	2.08	2.12	2.11	2.12	2.14	2.28	2.34	\$2.09
Wholesale													
Whole	a	a	a	a	a	a	a	a	a	2.04	2.12	a	\$2.08
2%	a	a	a	a	a	a	a	a	a	1.92	2.00	a	\$1.96
1%	a	a	a	a	a	a	a	a	a	1.83	1.91	a	\$1.87
Fat-free	a	a	a	a	a	a	a	a	a	1.77	1.84	a	\$1.80
Cooperative													
	1.28	1.29	1.27	1.26	1.27	1.30	1.36	1.37	1.42	1.46	1.50	1.39	\$1.35
Mailbox													
	1.09	1.08	1.08	1.08	1.12	1.13	1.16	1.23	1.28	1.25	1.12	1.06	\$1.14

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.51	\$2.47	\$2.44	\$2.43	\$2.45	\$2.41	\$2.41	\$2.39	\$2.38	\$2.47	\$2.50	\$2.50	\$2.49	\$2.49	\$2.45
2.21	2.15	2.12	2.11	2.09	2.10	2.04	2.07	2.01	2.10	2.11	2.13	2.19	2.13	\$2.11
2.17	2.03	2.09	2.02	2.06	2.00	2.00	2.03	2.03	2.17	2.13	2.17	2.10	2.15	\$2.08
2.29	2.25	2.21	2.17	2.16	2.15	2.12	2.10	2.12	2.25	2.30	2.26	2.22	2.22	\$2.20
a	a	a	a	a	a	a	a	a	2.17	2.23	2.23	2.23	2.28	\$2.23
a	a	a	a	a	a	a	a	a	2.03	2.03	2.03	2.03	2.16	\$2.06
a	a	a	a	a	a	a	a	a	1.96	2.02	2.02	2.02	2.07	\$2.01
a	a	a	a	a	a	a	a	a	1.89	1.95	1.95	1.95	1.95	\$1.94
1.17	1.15	1.20	1.25	1.25	1.16	1.10	1.10	1.11	1.21	1.28	1.28	1.29	1.32	\$1.21
1.00	1.02	1.04	0.99	0.94	0.91	0.91	0.97	1.02	1.07	1.11	1.12	1.08	1.11	\$1.02

^aData not available.

Note: For the Salt Lake City, Utah, market, the farm price is the Great Basin mailbox price; the cooperative price is the announced cooperative price for Salt Lake City; the wholesale price is the price charged by the commissary at the Hill Air Force Base; and the retail price is the A.C. Nielsen price for the Salt Lake City-Boise market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.28: San Diego, Calif., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and California Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.92	\$2.99	\$3.17	\$3.20	\$3.21	\$3.23	\$3.25	\$3.35	\$3.40	\$3.25	\$3.19	\$3.23	\$3.20
2%	2.75	2.80	2.99	2.97	3.03	3.00	3.05	3.17	3.19	3.09	3.05	3.09	\$3.02
1%	3.16	3.19	3.34	3.37	3.37	3.40	3.45	3.57	3.63	3.51	3.48	3.50	\$3.41
Fat-free	2.66	2.72	2.81	2.81	2.76	2.82	2.87	3.02	3.05	2.89	2.82	2.83	\$2.84
Wholesale													
Whole	2.35	2.25	2.27	2.29	2.34	2.36	2.39	a	a	a	2.57	2.59	\$2.38
2%	2.35	2.23	2.25	2.27	2.34	2.36	2.39	a	a	a	2.57	2.59	\$2.37
1%	2.35	2.25	2.27	2.27	2.34	2.36	2.39	a	a	a	2.57	2.59	\$2.38
Fat-free	2.08	1.99	2.01	2.03	2.03	2.05	2.07	a	a	a	2.20	2.24	\$2.08
Calif. Class I	1.32	1.33	1.33	1.29	1.29	1.31	1.31	1.43	1.43	1.53	1.53	1.55	\$1.39
Mailbox	1.05	1.02	1.01	1.01	1.06	1.14	1.17	1.29	1.34	1.33	1.16	1.10	\$1.14

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$3.23	\$2.99	\$2.90	\$2.88	\$2.87	\$2.83	\$2.78	\$2.78	\$2.65	\$2.88	\$2.91	\$2.89	\$2.93	\$2.92	\$2.89
3.07	2.82	2.73	2.75	2.75	2.74	2.68	2.68	2.54	2.74	2.79	2.77	2.78	2.78	\$2.76
3.50	3.34	3.24	3.20	3.18	3.12	3.05	3.03	2.95	3.13	3.17	3.21	3.12	2.99	\$3.16
2.84	2.66	2.59	2.59	2.57	2.52	2.47	2.49	2.49	2.75	2.75	2.70	2.73	2.74	\$2.63
2.59	2.33	2.33	2.37	2.33	2.24	2.24	2.19	2.19	2.37	2.37	2.39	2.28	2.32	\$2.32
2.59	2.33	2.33	2.37	2.33	2.24	2.24	2.19	2.19	2.35	2.35	2.37	2.23	2.26	\$2.31
2.59	2.33	2.33	2.37	2.33	2.24	2.24	2.19	2.19	2.34	2.34	2.31	2.18	2.21	\$2.30
2.24	2.09	2.09	2.13	2.09	1.99	1.99	1.95	1.95	2.05	2.05	2.01	1.89	1.91	\$2.03
1.55	1.25	1.25	1.25	1.25	1.16	1.16	1.10	1.10	1.26	1.26	1.30	1.30	1.33	\$1.25
1.11	1.06	1.06	1.03	0.97	0.96	0.97	1.04	1.01	1.12	1.15	1.15	1.13	1.17	\$1.07

^aData not available.

Note: For the San Diego, Calif., market, the farm price is the California mailbox price; the cooperative price is the Southern California Class I price; the wholesale price is the price charged by the commissary at the San Diego Naval Station; and the retail price is the A.C. Nielsen price for the San Diego market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.29: Seattle, Wash., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.97	\$2.96	\$2.98	\$3.00	\$2.95	\$3.01	\$2.89	\$3.07	\$3.06	\$3.04	\$3.14	\$3.16	\$3.02
2%	1.94	1.98	2.01	2.01	1.98	1.90	2.00	2.10	2.13	2.13	2.15	2.06	\$2.03
1%	2.64	2.67	2.59	2.56	2.69	2.56	2.56	2.50	2.56	2.73	2.85	2.77	\$2.64
Fat-free	2.63	2.55	2.67	2.67	2.39	2.46	2.53	2.70	2.42	2.67	2.60	2.70	\$2.58
Wholesale													
Whole	a	a	a	a	a	a	a	1.79	1.84	1.88	1.92	1.92	\$1.87
2%	a	a	a	a	a	a	a	1.61	1.66	1.70	1.74	1.74	\$1.69
1%	a	a	a	a	a	a	a	1.48	1.53	1.57	1.61	1.61	\$1.56
Fat-free	a	a	a	a	a	a	a	1.35	1.40	1.44	1.48	1.48	\$1.43
Cooperative	1.31	1.31	1.30	1.28	1.28	1.31	1.37	1.39	1.44	1.47	1.51	1.40	\$1.37
Mailbox	1.07	1.05	1.04	1.04	1.10	1.20	1.25	1.28	1.33	1.30	1.18	1.11	\$1.16

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$3.06	\$2.99	\$2.99	\$2.94	\$2.89	\$2.91	\$3.01	\$2.86	\$2.91	\$1.89	\$2.96	\$3.00	\$2.99	\$2.88	\$2.88
1.97	1.93	1.88	1.92	2.13	1.92	2.00	2.02	2.02	1.57	2.02	2.07	2.04	2.02	\$1.97
2.71	2.62	2.50	2.53	2.64	2.44	2.34	2.45	2.27	1.59	2.17	2.26	2.28	2.23	\$2.36
2.49	2.75	2.54	2.59	2.63	2.45	2.41	2.30	2.32	1.52	2.21	2.26	2.24	2.20	\$2.35
1.70	1.68	1.73	1.77	1.77	1.68	1.62	1.62	1.63	1.73	1.79	1.79	1.80	1.83	\$1.72
1.52	1.50	1.55	1.59	1.59	1.50	1.44	1.44	1.45	1.55	1.61	1.61	1.62	1.65	\$1.54
1.39	1.37	1.42	1.46	1.46	1.37	1.31	1.31	1.32	1.42	1.48	1.48	1.49	1.52	\$1.41
1.24	1.22	1.27	1.31	1.31	1.22	1.16	1.16	1.17	1.27	1.33	1.33	1.34	1.37	\$1.26
1.19	1.16	1.22	1.26	1.26	1.17	1.12	1.12	1.13	1.23	1.30	1.30	1.31	1.34	\$1.22
1.04	1.04	1.08	1.06	1.02	1.00	0.98	1.01	1.03	1.14	1.19	1.16	1.15	1.18	\$1.08

^aData not available.

Note: For the Seattle, Wash., market, the farm price is the Pacific Northwest mailbox price; the cooperative price is the announced cooperative price for Seattle; the wholesale price is the price charged by the commissary at the Everett Naval Station; and the retail price is the A.C. Nielsen price for the Seattle market. Prices may not average due to rounding.

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

Table V.30: Vermont Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.61	\$2.60	\$2.61	\$2.58	\$2.57	\$2.58	\$2.57	\$2.64	\$2.63	\$2.61	\$2.61	\$2.65	\$2.61
2%	2.48	2.48	2.48	2.47	2.46	2.49	2.45	2.53	2.49	2.50	2.51	2.52	\$2.49
1%	2.48	2.44	2.48	2.46	2.44	2.46	2.45	2.50	2.48	2.44	2.46	2.50	\$2.47
Fat-free	2.38	2.36	2.44	2.38	2.36	2.37	2.37	2.44	2.44	2.39	2.38	2.44	\$2.40
Wholesale													
Whole	a	a	a	1.82	1.81	1.81	1.81	1.94	1.94	1.94	1.94	1.94	\$1.88
2%	a	a	a	1.76	1.75	1.75	1.75	1.99	1.99	1.99	1.99	1.99	\$1.88
1%	a	a	a	1.76	1.75	1.75	1.75	1.98	1.98	1.98	1.98	1.98	\$1.88
Fat-free	a	a	a	1.72	1.71	1.71	1.71	1.93	1.93	1.93	1.93	1.93	\$1.83
Cooperative													
	1.40	1.40	1.38	1.37	1.38	1.42	1.47	1.49	1.54	1.57	1.61	1.54	\$1.46
Mailbox													
	1.15	1.14	1.13	1.12	1.16	1.21	1.27	1.29	1.34	1.36	1.32	1.21	\$1.23

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.64	\$2.61	\$2.57	\$2.59	\$2.59	\$2.54	\$2.74	\$2.72	\$2.70	\$2.71	\$2.72	\$2.72	\$2.72	\$2.73	\$2.66
2.55	2.49	2.48	2.48	2.49	2.47	2.63	2.61	2.62	2.64	2.67	2.65	2.65	2.63	\$2.58
2.50	2.51	2.48	2.48	2.45	2.49	2.61	2.58	2.59	2.59	2.62	2.57	2.61	2.58	\$2.55
2.46	2.43	2.39	2.41	2.37	2.45	2.58	2.55	2.58	2.57	2.60	2.55	2.55	2.55	\$2.50
1.69	1.67	1.72	1.76	1.76	1.67	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	\$1.80
1.74	1.72	1.77	1.81	1.81	1.72	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	\$1.85
1.73	1.71	1.76	1.80	1.80	1.71	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	\$1.84
1.68	1.66	1.71	1.75	1.75	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	\$1.79
1.32	1.30	1.35	1.40	1.40	1.31	1.50	1.48	1.46	1.46	1.46	1.46	1.46	1.46	\$1.42
1.12	1.09	1.13	1.12	1.10	1.03	1.09	1.12	1.15	1.21	1.25	1.24	1.23	1.22	\$1.15

^aData not available.

Note: For the Vermont market, the farm price is the New England mailbox price; the cooperative price is the estimated cooperative price (Boston announced cooperative price minus \$.0516 per gallon); the wholesale price is the price charged by the commissary at the Hanscom Air Force Base; and the retail price is the price reported by the state milk control agency for the Vermont market. Prices may not average due to rounding.

**Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets**

Table V.31: Washington, D.C., Market Milk Prices Per Gallon—Retail and Wholesale Prices, and Announced Cooperative Class I and Mailbox Prices (Both Unadjusted for Butterfat Content), 1996-February 1998

	1996												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Retail													
Whole	\$2.43	\$2.49	\$2.47	\$2.48	\$2.48	\$2.47	\$2.53	\$2.53	\$2.55	\$2.55	\$2.58	\$2.59	\$2.51
2%	2.41	2.46	2.44	2.45	2.47	2.45	2.49	2.49	2.50	2.49	2.52	2.52	\$2.47
1%	2.40	2.48	2.47	2.47	2.48	2.45	2.49	2.47	2.48	2.47	2.50	2.50	\$2.47
Fat-free	2.33	2.40	2.37	2.38	2.39	2.37	2.40	2.38	2.37	2.36	2.38	2.39	\$2.38
Wholesale													
Whole	a	a	a	a	a	a	a	1.94	1.94	1.98	2.02	1.91	\$1.96
2%	a	a	a	a	a	a	a	1.86	1.86	1.90	1.94	1.83	\$1.88
1%	a	a	a	a	a	a	a	a	a	a	a	a	a
Fat-free	a	a	a	a	a	a	a	1.74	1.74	1.78	1.82	1.71	\$1.76
Cooperative	1.43	1.44	1.42	1.41	1.42	1.45	1.51	1.52	1.57	1.61	1.67	1.57	\$1.50
Mailbox	1.17	1.14	1.11	1.10	1.15	1.24	1.30	1.33	1.38	1.36	1.34	1.23	\$1.24

Appendix V
Data on the Average Monthly Retail,
Wholesale-, Cooperative-, and Farm-Level
Prices for Four Kinds of Fluid Milk in
Selected Markets

1997-98

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
\$2.51	\$2.41	\$2.48	\$2.48	\$2.49	\$2.47	\$2.44	\$2.39	\$2.40	\$2.42	\$2.43	\$2.50	\$2.42	\$2.37	\$2.44
2.46	2.37	2.43	2.43	2.44	2.42	2.40	2.36	2.35	2.38	2.39	2.44	2.40	2.44	\$2.41
2.45	2.38	2.42	2.41	2.42	2.41	2.38	2.33	2.35	2.36	2.37	2.42	2.36	2.44	\$2.39
2.36	2.29	2.31	2.31	2.33	2.33	2.29	2.26	2.27	2.27	2.27	2.32	2.30	2.36	\$2.31
1.69	1.67	1.72	1.76	1.76	1.67	1.61	1.61	1.62	1.72	1.78	1.78	1.79	1.82	\$1.71
1.61	1.59	1.64	1.68	1.68	1.59	1.53	1.53	1.54	1.64	1.70	1.70	1.71	1.74	\$1.63
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
1.49	1.47	1.52	1.56	1.56	1.47	1.41	1.41	1.42	1.52	1.58	1.58	1.59	1.62	\$1.51
1.35	1.33	1.38	1.42	1.42	1.33	1.27	1.27	1.28	1.39	1.48	1.49	1.50	1.53	\$1.39
1.10	1.10	1.13	1.12	1.09	1.05	1.01	1.03	1.07	1.19	1.26	1.24	1.21	1.25	\$1.13

^aData not available.

Note: For the Washington, D.C., market, the farm price is the Middle Atlantic mailbox price; the cooperative price is the announced cooperative price for Washington, D.C.; the wholesale price is the price charged by the commissary at the Bolling Air Force Base; and the retail price is the A.C. Nielsen price for the Washington, D.C. market. Prices may not average due to rounding.

Alternative Farm-Level Price for Fluid Milk

This appendix provides the results of our analysis using an alternative method for calculating farm-level prices for fluid milk. When we met with USDA officials to obtain their comments on a draft of this report, officials from the Economic Research Service (ERS) suggested an alternative method by which we could better estimate the farm-level price of a gallon of fluid milk compared with the mailbox price. These officials believe that the farm value of fluid milk is better defined as the minimum order Class I price minus the difference between the minimum order blend price and the mailbox price. This methodology for an alternative farm-level price assumes that all classes of milk are equally profitable to the cooperative at the prevailing prices. ERS officials acknowledged that this is not the case in some markets. Nevertheless, they believe that their recommended approach may be the only practical method by which to determine the farm-level value of fluid milk within the reporting timeframes. Because the ERS method relies on the federal minimum order Class I price, we could only apply it to those markets in our sample of 31 selected markets that are under the federal milk marketing order program. Consequently, this appendix provides data for only 24 of the 31 markets that we included in our analysis in appendixes III and IV.

In comparing the results of the alternative farm-level price analysis to our analysis using the mailbox price series we found the following:

- Using the alternative farm-level price, farmers received a greater portion and cooperatives received a smaller portion of the retail price compared to what they received under our analysis using the mailbox price series. We found that by using the alternative farm-level price farmers, on average, received 47 percent of the retail price for a gallon of 2-percent milk instead of 43 percent, and cooperatives received 6 percent of the retail price instead of 10 percent in the 24 markets from January 1996 through February 1998.¹
- Consistent with the results of our analysis using the mailbox price series we found that farm prices decreased or stayed constant in all of the 24 markets over the 26-month period that we analyzed. Consequently, over this period the farm-to-retail price spread increased in 22 of the 24 markets. However, as would be expected, we found that some of the values changed, for increases or decreases in farm prices and the farm-to-retail price spread over the 26-month period, when we used the alternative farm price. For example, the farm-level prices in several markets in the North Atlantic Region, such as Vermont and Boston, Mass.,

¹According to USDA officials, a portion of the amount received by cooperatives may be used to pay costs, such as hauling, in some markets.

remained constant when we used the alternative farm-level price instead of decreasing as they did when we used the mailbox price series. As a result, when we used the alternative farm-level price the farm-to-retail price spread in these markets was not as large as when we used the mailbox price.

- Also, as in our mailbox price analysis, we found a strong correlation between changes in prices at the farm-level and changes in cooperative prices. (Using the alternative farm-level price, we found a strong correlation between changes in farm prices and changes in cooperative prices in all 24 markets whereas when we used mailbox prices we found a strong correlation in 21 of the 24 markets.) However, the degree of correlation was greater in almost all of the 24 markets when we used the alternative farm-level price. Moreover, as would be expected, when we used the alternative farm-level price the strongest correlation still occurred between changes in prices at a given level in the milk marketing chain and changes in prices at the adjacent level.

Table VI.1 through VI.4 present data for a gallon of 2-percent milk for January 1996 through February 1998, using the ERS method to calculate the alternative farm price. Specifically these tables detail (1) the farm value of a gallon of 2-percent milk (see table VI.1), (2) the portion of the retail price of a gallon of 2-percent milk that is received by farmers and cooperatives (see table VI.2), (3) changes in farm and retail prices and their effect on the price spread for 2-percent milk (see table VI.3), and (4) the way changes in the alternative farm price are reflected in changes in prices at the cooperative, wholesale, and retail levels (see table VI.4).

**Appendix VI
Alternative Farm-Level Price for Fluid Milk**

Table VI.1: Comparison of the Mailbox Price With the Alternative Farm Price for a Gallon of Milk Adjusted to Two Percent Butterfat Content for Twenty-Four Markets, 1996-February 1998

	1996											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Atlanta, Ga.												
Alternative farm price	\$1.16	\$1.19	\$1.18	\$1.16	\$1.16	\$1.15	\$1.16	\$1.19	\$1.25	\$1.31	\$1.41	\$1.31
Mailbox price	1.10	1.13	1.11	1.10	1.11	1.11	1.13	1.16	1.20	1.26	1.32	1.20
Difference	\$0.05	\$0.06	\$0.07	\$0.06	\$0.05	\$0.04	\$0.03	\$0.03	\$0.05	\$0.05	\$0.08	\$0.11
Boston, Mass.												
Alternative farm price	\$1.18	\$1.21	\$1.19	\$1.17	\$1.15	\$1.10	\$1.14	\$1.15	\$1.20	\$1.28	\$1.41	\$1.30
Mailbox price	1.05	1.05	1.05	1.03	1.03	1.01	1.05	1.07	1.11	1.16	1.22	1.10
Difference	\$0.14	\$0.15	\$0.15	\$0.14	\$0.12	\$0.09	\$0.09	\$0.08	\$0.09	\$0.12	\$0.19	\$0.20
Chicago, Ill.												
Alternative farm price	\$1.17	\$1.19	\$1.18	\$1.16	\$1.17	\$1.09	\$1.13	\$1.18	\$1.21	\$1.28	\$1.40	\$1.29
Mailbox price	1.07	1.08	1.09	1.10	1.13	1.06	1.10	1.15	1.19	1.14	1.07	1.01
Difference	\$0.10	\$0.11	\$0.09	\$0.06	\$0.04	\$0.03	\$0.03	\$0.03	\$0.02	\$0.14	\$0.33	\$0.27
Cincinnati, Ohio												
Alternative farm price	\$1.14	\$1.16	\$1.15	\$1.13	\$1.11	\$1.07	\$1.11	\$1.13	\$1.18	\$1.25	\$1.39	\$1.29
Mailbox price	1.07	1.09	1.08	1.07	1.05	1.01	1.06	1.08	1.13	1.18	1.27	1.16
Difference	\$0.07	\$0.07	\$0.08	\$0.07	\$0.05	\$0.06	\$0.06	\$0.05	\$0.05	\$0.07	\$0.12	\$0.13
Dallas, Tex.												
Alternative farm price	\$1.19	\$1.21	\$1.20	\$1.18	\$1.17	\$1.13	\$1.18	\$1.19	\$1.22	\$1.29	\$1.40	\$1.30
Mailbox price	1.04	1.04	1.02	1.03	1.05	1.02	1.08	1.10	1.14	1.18	1.21	1.09
Difference	\$0.15	\$0.17	\$0.18	\$0.15	\$0.12	\$0.10	\$0.10	\$0.08	\$0.09	\$0.11	\$0.19	\$0.21
Denver, Colo.												
Alternative farm price	\$1.17	\$1.18	\$1.17	\$1.15	\$1.13	\$1.09	\$1.13	\$1.11	\$1.19	\$1.29	\$1.39	\$1.27
Mailbox price	1.04	1.05	1.04	1.05	1.05	0.99	1.03	1.03	1.11	1.15	1.13	1.03
Difference	\$0.13	\$0.13	\$0.13	\$0.10	\$0.08	\$0.10	\$0.10	\$0.08	\$0.08	\$0.14	\$0.25	\$0.25
Houston, Tex.												
Alternative farm price	\$1.19	\$1.21	\$1.20	\$1.18	\$1.17	\$1.13	\$1.18	\$1.19	\$1.22	\$1.29	\$1.40	\$1.30
Mailbox price	1.04	1.04	1.02	1.03	1.05	1.02	1.08	1.10	1.14	1.18	1.21	1.09
Difference	\$0.15	\$0.17	\$0.18	\$0.15	\$0.12	\$0.10	\$0.10	\$0.08	\$0.09	\$0.11	\$0.19	\$0.21
Las Vegas, Nev.												
Alternative farm price	\$1.08	\$1.10	\$1.10	\$1.07	\$1.05	\$1.01	\$1.02	\$1.06	\$1.12	\$1.19	\$1.30	\$1.18
Mailbox price	0.99	1.00	1.00	1.00	1.01	0.95	0.96	1.02	1.06	1.06	1.02	0.96
Difference	\$0.09	\$0.11	\$0.10	\$0.07	\$0.04	\$0.06	\$0.06	\$0.05	\$0.06	\$0.13	\$0.28	\$0.23

**Appendix VI
Alternative Farm-Level Price for Fluid Milk**

1997-98													26-	
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	month average
\$1.13	\$1.09	\$1.10	\$1.12	\$1.13	\$1.02	\$0.95	\$0.97	\$0.99	\$1.04	\$1.06	\$1.13	\$1.15	\$1.14	\$1.14
1.08	1.04	1.03	1.03	1.03	0.95	0.90	0.94	0.96	1.00	1.01	1.08	1.10	1.09	\$1.08
\$0.05	\$0.05	\$0.07	\$0.09	\$0.10	\$0.07	\$0.05	\$0.04	\$0.03	\$0.03	\$0.05	\$0.04	\$0.05	\$0.06	\$0.06
\$1.10	\$1.02	\$1.06	\$1.13	\$1.13	\$1.01	\$1.20	\$1.20	\$1.20	\$1.14	\$1.13	\$1.20	\$1.21	\$1.16	\$1.17
1.00	0.94	0.96	0.98	0.96	0.87	0.95	0.98	1.00	0.98	0.98	1.05	1.05	1.00	\$1.02
\$0.10	\$0.09	\$0.10	\$0.15	\$0.17	\$0.14	\$0.26	\$0.23	\$0.20	\$0.16	\$0.14	\$0.15	\$0.16	\$0.16	\$0.14
\$1.07	\$1.04	\$1.05	\$1.10	\$1.10	\$0.98	\$0.93	\$0.98	\$1.00	\$1.01	\$1.07	\$1.12	\$1.14	\$1.12	\$1.12
1.01	1.01	1.00	0.94	0.90	0.85	0.86	0.96	1.00	0.97	1.00	1.07	1.08	1.04	\$1.03
\$0.06	\$0.03	\$0.05	\$0.15	\$0.21	\$0.13	\$0.07	\$0.02	(\$0.01)	\$0.03	\$0.07	\$0.05	\$0.06	\$0.08	\$0.09
\$1.05	\$1.00	\$1.03	\$1.10	\$1.09	\$0.98	\$0.92	\$0.92	\$0.94	\$1.00	\$1.06	\$1.11	\$1.13	\$1.10	\$1.10
1.00	0.95	0.97	1.01	0.98	0.89	0.84	0.88	0.90	0.95	0.99	1.05	1.06	1.03	\$1.03
\$0.06	\$0.05	\$0.06	\$0.09	\$0.11	\$0.09	\$0.07	\$0.05	\$0.04	\$0.05	\$0.07	\$0.06	\$0.07	\$0.07	\$0.07
\$1.11	\$1.06	\$1.08	\$1.14	\$1.14	\$1.01	\$0.96	\$0.97	\$0.97	\$1.05	\$1.10	\$1.17	\$1.18	\$1.16	\$1.14
1.00	0.97	0.96	0.97	0.94	0.87	0.86	0.89	0.90	0.96	0.99	1.06	1.08	1.04	\$1.02
\$0.11	\$0.09	\$0.12	\$0.17	\$0.20	\$0.15	\$0.10	\$0.07	\$0.07	\$0.09	\$0.11	\$0.10	\$0.10	\$0.12	\$0.13
\$1.04	\$0.99	\$1.03	\$1.09	\$1.08	\$0.97	\$0.93	\$0.95	\$0.96	\$1.00	\$1.00	\$1.07	\$1.12	\$1.12	\$1.10
0.93	0.91	0.92	0.92	0.88	0.81	0.81	0.88	0.91	0.91	0.89	0.97	1.01	1.00	\$0.98
\$0.11	\$0.08	\$0.11	\$0.17	\$0.20	\$0.16	\$0.12	\$0.07	\$0.05	\$0.09	\$0.11	\$0.10	\$0.11	\$0.12	\$0.12
\$1.11	\$1.06	\$1.08	\$1.14	\$1.14	\$1.01	\$0.96	\$0.97	\$0.97	\$1.05	\$1.10	\$1.17	\$1.18	\$1.16	\$1.14
1.00	0.97	0.96	0.97	0.94	0.87	0.86	0.89	0.90	0.96	0.99	1.06	1.08	1.04	\$1.02
\$0.11	\$0.09	\$0.12	\$0.17	\$0.20	\$0.15	\$0.10	\$0.07	\$0.07	\$0.09	\$0.11	\$0.10	\$0.10	\$0.12	\$0.13
\$0.95	\$0.91	\$0.94	\$1.00	\$1.00	\$0.89	\$0.85	\$0.87	\$0.90	\$0.91	\$0.94	\$1.00	\$0.99	\$1.00	\$1.02
0.88	0.88	0.88	0.86	0.82	0.76	0.76	0.83	0.88	0.85	0.85	0.93	0.91	0.91	\$0.92
\$0.07	\$0.04	\$0.07	\$0.14	\$0.18	\$0.13	\$0.09	\$0.04	\$0.01	\$0.05	\$0.08	\$0.07	\$0.08	\$0.09	\$0.09

(continued)

**Appendix VI
Alternative Farm-Level Price for Fluid Milk**

	1996											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Louisville, Ky.												
Alternative farm price	\$1.12	\$1.15	\$1.14	\$1.11	\$1.10	\$1.08	\$1.13	\$1.14	\$1.19	\$1.27	\$1.38	\$1.27
Mailbox price	1.08	1.10	1.09	1.07	1.07	1.05	1.10	1.12	1.16	1.23	1.32	1.20
Difference	\$0.04	\$0.05	\$0.05	\$0.04	\$0.03	\$0.03	\$0.03	\$0.02	\$0.03	\$0.04	\$0.06	\$0.06
Miami, Fla.												
Alternative farm price	\$1.30	\$1.36	\$1.31	\$1.27	\$1.27	\$1.30	\$1.33	\$1.40	\$1.43	\$1.51	\$1.62	\$1.54
Mailbox price	1.27	1.29	1.28	1.26	1.25	1.27	1.31	1.38	1.40	1.48	1.60	1.49
Difference	\$0.03	\$0.06	\$0.03	\$0.01	\$0.02	\$0.03	\$0.02	\$0.02	\$0.03	\$0.03	\$0.02	\$0.05
Milwaukee, Wis.												
Alternative farm price	\$1.17	\$1.19	\$1.18	\$1.16	\$1.17	\$1.09	\$1.13	\$1.18	\$1.21	\$1.28	\$1.40	\$1.29
Mailbox price	1.07	1.08	1.09	1.10	1.13	1.06	1.10	1.15	1.19	1.14	1.07	1.01
Difference	\$0.10	\$0.11	\$0.09	\$0.06	\$0.04	\$0.03	\$0.03	\$0.03	\$0.02	\$0.14	\$0.33	\$0.27
Minneapolis, Minn.												
Alternative farm price	\$1.16	\$1.18	\$1.17	\$1.14	\$1.14	\$1.07	\$1.11	\$1.14	\$1.19	\$1.24	\$1.40	\$1.27
Mailbox price	1.07	1.07	1.07	1.09	1.11	1.05	1.08	1.13	1.17	1.11	1.06	0.99
Difference	\$0.10	\$0.11	\$0.09	\$0.06	\$0.03	\$0.03	\$0.03	\$0.01	\$0.02	\$0.13	\$0.34	\$0.28
New Hampshire												
Alternative farm price	\$1.18	\$1.21	\$1.19	\$1.17	\$1.15	\$1.10	\$1.14	\$1.15	\$1.20	\$1.28	\$1.41	\$1.30
Mailbox price	1.05	1.05	1.05	1.03	1.03	1.01	1.05	1.07	1.11	1.16	1.22	1.10
Difference	\$0.14	\$0.15	\$0.15	\$0.14	\$0.12	\$0.09	\$0.09	\$0.08	\$0.09	\$0.12	\$0.19	\$0.20
New Haven, Conn.												
Alternative farm price	\$1.18	\$1.21	\$1.19	\$1.17	\$1.15	\$1.10	\$1.14	\$1.15	\$1.20	\$1.28	\$1.41	\$1.30
Mailbox price	1.05	1.05	1.05	1.03	1.03	1.01	1.05	1.07	1.11	1.16	1.22	1.10
Difference	\$0.14	\$0.15	\$0.15	\$0.14	\$0.12	\$0.09	\$0.09	\$0.08	\$0.09	\$0.12	\$0.19	\$0.20
New Orleans, La.												
Alternative farm price	\$1.16	\$1.19	\$1.18	\$1.16	\$1.16	\$1.15	\$1.16	\$1.19	\$1.25	\$1.31	\$1.41	\$1.31
Mailbox price	1.10	1.13	1.11	1.10	1.11	1.11	1.13	1.16	1.20	1.26	1.32	1.20
Difference	\$0.05	\$0.06	\$0.07	\$0.06	\$0.05	\$0.04	\$0.03	\$0.03	\$0.05	\$0.05	\$0.08	\$0.11
New York, N.Y.												
Alternative farm price	\$1.19	\$1.21	\$1.19	\$1.17	\$1.16	\$1.12	\$1.15	\$1.17	\$1.22	\$1.30	\$1.42	\$1.31
Mailbox price	1.05	1.06	1.05	1.04	1.05	1.02	1.06	1.08	1.13	1.15	1.17	1.07
Difference	\$0.14	\$0.15	\$0.14	\$0.13	\$0.10	\$0.10	\$0.10	\$0.09	\$0.09	\$0.15	\$0.25	\$0.24
Orlando, Fla.												
Alternative farm price	\$1.29	\$1.31	\$1.29	\$1.27	\$1.26	\$1.29	\$1.33	\$1.39	\$1.42	\$1.51	\$1.63	\$1.54
Mailbox price	1.27	1.29	1.28	1.26	1.25	1.27	1.31	1.38	1.40	1.48	1.60	1.49
Difference	\$0.02	\$0.02	\$0.01	\$0.01	\$0.02	\$0.02	\$0.02	\$0.01	\$0.02	\$0.03	\$0.03	\$0.05

**Appendix VI
Alternative Farm-Level Price for Fluid Milk**

1997-98													26-month average	
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.		Feb.
\$1.05	\$1.01	\$1.04	\$1.08	\$1.09	\$0.97	\$0.91	\$0.93	\$0.95	\$0.99	\$1.03	\$1.09	\$1.12	\$1.11	\$1.09
1.02	0.98	1.01	1.02	1.04	0.93	0.88	0.90	0.93	0.96	0.98	1.05	1.08	1.07	\$1.06
\$0.03	\$0.03	\$0.03	\$0.06	\$0.05	\$0.03	\$0.03	\$0.03	\$0.02	\$0.03	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04
\$1.31	\$1.27	\$1.23	\$1.24	\$1.23	\$1.19	\$1.17	\$1.17	\$1.21	\$1.24	\$1.28	\$1.32	\$1.33	\$1.28	\$1.31
1.27	1.24	1.19	1.20	1.20	1.15	1.14	1.15	1.20	1.22	1.25	1.30	1.30	1.25	\$1.28
\$0.04	\$0.03	\$0.04	\$0.04	\$0.03	\$0.04	\$0.02	\$0.02	\$0.01	\$0.02	\$0.03	\$0.02	\$0.03	\$0.03	\$0.03
\$1.07	\$1.04	\$1.05	\$1.10	\$1.10	\$0.98	\$0.93	\$0.98	\$1.00	\$1.01	\$1.07	\$1.12	\$1.14	\$1.12	\$1.12
1.01	1.01	1.00	0.94	0.90	0.85	0.86	0.96	1.00	0.97	1.00	1.07	1.08	1.04	\$1.03
\$0.06	\$0.03	\$0.05	\$0.15	\$0.21	\$0.13	\$0.07	\$0.02	(\$0.01)	\$0.03	\$0.07	\$0.05	\$0.06	\$0.08	\$0.09
\$1.04	\$0.98	\$1.01	\$1.08	\$1.08	\$0.96	\$0.91	\$0.94	\$0.97	\$0.99	\$1.05	\$1.12	\$1.13	\$1.12	\$1.10
0.98	0.98	0.97	0.92	0.87	0.83	0.84	0.94	0.99	0.96	0.98	1.07	1.07	1.03	\$1.02
\$0.06	\$0.01	\$0.04	\$0.16	\$0.21	\$0.13	\$0.07	\$0.00	(\$0.01)	\$0.03	\$0.07	\$0.05	\$0.06	\$0.08	\$0.08
\$1.10	\$1.02	\$1.06	\$1.13	\$1.13	\$1.01	\$1.20	\$1.20	\$1.20	\$1.14	\$1.13	\$1.20	\$1.21	\$1.16	\$1.17
1.00	0.94	0.96	0.98	0.96	0.87	0.95	0.98	1.00	0.98	0.98	1.05	1.05	1.00	\$1.02
\$0.10	\$0.09	\$0.10	\$0.15	\$0.17	\$0.14	\$0.26	\$0.23	\$0.20	\$0.16	\$0.14	\$0.15	\$0.16	\$0.16	\$0.14
\$1.10	\$1.02	\$1.06	\$1.13	\$1.13	\$1.01	\$1.20	\$1.20	\$1.20	\$1.14	\$1.13	\$1.20	\$1.21	\$1.16	\$1.17
1.00	0.94	0.96	0.98	0.96	0.87	0.95	0.98	1.00	0.98	0.98	1.05	1.05	1.00	\$1.02
\$0.10	\$0.09	\$0.10	\$0.15	\$0.17	\$0.14	\$0.26	\$0.23	\$0.20	\$0.16	\$0.14	\$0.15	\$0.16	\$0.16	\$0.14
\$1.13	\$1.09	\$1.10	\$1.12	\$1.13	\$1.02	\$0.95	\$0.97	\$0.99	\$1.04	\$1.06	\$1.13	\$1.15	\$1.14	\$1.14
1.08	1.04	1.03	1.03	1.03	0.95	0.90	0.94	0.96	1.00	1.01	1.08	1.10	1.09	\$1.08
\$0.05	\$0.05	\$0.07	\$0.09	\$0.10	\$0.07	\$0.05	\$0.04	\$0.03	\$0.03	\$0.05	\$0.04	\$0.05	0.06	\$0.06
\$1.08	\$1.03	\$1.07	\$1.14	\$1.15	\$1.02	\$0.97	\$0.97	\$0.99	\$1.03	\$1.08	\$1.14	\$1.16	\$1.15	\$1.14
0.96	0.94	0.96	0.96	0.93	0.85	0.84	0.89	0.93	0.94	0.96	1.03	1.04	1.02	\$1.01
\$0.12	\$0.09	\$0.12	\$0.18	\$0.21	\$0.17	\$0.12	\$0.08	\$0.06	\$0.10	\$0.12	\$0.11	\$0.12	\$0.13	\$0.13
\$1.29	\$1.26	\$1.22	\$1.24	\$1.23	\$1.19	\$1.16	\$1.17	\$1.21	\$1.24	\$1.28	\$1.31	\$1.32	\$1.26	\$1.30
1.27	1.24	1.19	1.20	1.20	1.15	1.14	1.15	1.20	1.22	1.25	1.30	1.30	1.25	\$1.28
\$0.02	\$0.02	\$0.03	\$0.04	\$0.02	\$0.04	\$0.01	\$0.02	\$0.01	\$0.02	\$0.03	\$0.01	\$0.02	\$0.01	\$0.02

(continued)

**Appendix VI
Alternative Farm-Level Price for Fluid Milk**

	1996											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Philadelphia, Pa.												
Alternative farm price	\$1.21	\$1.23	\$1.22	\$1.19	\$1.18	\$1.14	\$1.16	\$1.19	\$1.24	\$1.28	\$1.44	\$1.33
Mailbox price	1.06	1.06	1.02	1.01	1.03	1.04	1.08	1.11	1.16	1.16	1.24	1.12
Difference	\$0.15	\$0.18	\$0.20	\$0.19	\$0.14	\$0.09	\$0.09	\$0.08	\$0.08	\$0.12	\$0.20	\$0.21
Raleigh, N.C.												
Alternative farm price	\$1.20	\$1.23	\$1.22	\$1.19	\$1.19	\$1.21	\$1.23	\$1.26	\$1.33	\$1.39	\$1.49	\$1.37
Mailbox price	1.16	1.19	1.16	1.15	1.16	1.16	1.19	1.22	1.28	1.35	1.43	1.30
Difference	\$0.04	\$0.04	\$0.06	\$0.05	\$0.04	\$0.05	\$0.03	\$0.04	\$0.05	\$0.04	\$0.06	\$0.07
Rhode Island												
Alternative farm price	\$1.18	\$1.21	\$1.19	\$1.17	\$1.15	\$1.10	\$1.14	\$1.15	\$1.20	\$1.28	\$1.41	\$1.30
Mailbox price	1.05	1.05	1.05	1.03	1.03	1.01	1.05	1.07	1.11	1.16	1.22	1.10
Difference	\$0.14	\$0.15	\$0.15	\$0.14	\$0.12	\$0.09	\$0.09	\$0.08	\$0.09	\$0.12	\$0.19	\$0.20
Salt Lake City, Utah												
Alternative farm price	\$1.08	\$1.10	\$1.10	\$1.07	\$1.05	\$1.01	\$1.02	\$1.06	\$1.12	\$1.19	\$1.30	\$1.18
Mailbox price	0.99	1.00	1.00	1.00	1.01	0.95	0.96	1.02	1.06	1.06	1.02	0.96
Difference	\$0.09	\$0.11	\$0.10	\$0.07	\$0.04	\$0.06	\$0.06	\$0.05	\$0.06	\$0.13	\$0.28	\$0.23
Seattle, Wash.												
Alternative farm price	\$1.13	\$1.15	\$1.14	\$1.11	\$1.10	\$1.05	\$1.09	\$1.11	\$1.17	\$1.24	\$1.36	\$1.25
Mailbox price	0.97	0.97	0.96	0.96	0.99	1.01	1.04	1.06	1.11	1.11	1.08	1.00
Difference	\$0.16	\$0.18	\$0.18	\$0.16	\$0.11	\$0.04	\$0.04	\$0.04	\$0.06	\$0.13	\$0.29	\$0.25
Vermont												
Alternative farm price	\$1.18	\$1.21	\$1.19	\$1.17	\$1.15	\$1.10	\$1.14	\$1.15	\$1.20	\$1.28	\$1.41	\$1.30
Mailbox price	1.05	1.05	1.05	1.03	1.03	1.01	1.05	1.07	1.11	1.16	1.22	1.10
Difference	\$0.14	\$0.15	\$0.15	\$0.14	\$0.12	\$0.09	\$0.09	\$0.08	\$0.09	\$0.12	\$0.19	\$0.20
Washington, D.C.												
Alternative farm price	\$1.21	\$1.23	\$1.22	\$1.19	\$1.18	\$1.14	\$1.16	\$1.19	\$1.24	\$1.28	\$1.44	\$1.33
Mailbox price	1.06	1.06	1.02	1.01	1.03	1.04	1.08	1.11	1.16	1.16	1.24	1.12
Difference	\$0.15	\$0.18	\$0.20	\$0.19	\$0.14	\$0.09	\$0.09	\$0.08	\$0.08	\$0.12	\$0.20	\$0.21

**Appendix VI
Alternative Farm-Level Price for Fluid Milk**

1997-98													26-month average	
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.		Feb.
\$1.10	\$1.05	\$1.09	\$1.15	\$1.16	\$1.04	\$0.98	\$0.99	\$1.00	\$1.05	\$1.10	\$1.17	\$1.18	\$1.18	\$1.16
0.98	0.95	0.97	0.99	0.96	0.90	0.86	0.89	0.93	0.97	0.99	1.04	1.03	1.03	\$1.02
\$0.12	\$0.10	\$0.12	\$0.17	\$0.20	\$0.14	\$0.11	\$0.09	\$0.08	\$0.09	\$0.10	\$0.12	\$0.15	\$0.14	\$0.13
\$1.20	\$1.17	\$1.16	\$1.17	\$1.18	\$1.06	\$1.02	\$1.03	\$1.03	\$1.07	\$1.11	\$1.17	\$1.20	\$1.21	\$1.19
1.17	1.12	1.10	1.11	1.11	1.00	0.98	0.99	1.00	1.04	1.06	1.13	1.16	1.16	\$1.15
\$0.03	\$0.04	\$0.06	\$0.06	\$0.07	\$0.06	\$0.04	\$0.04	\$0.03	\$0.03	\$0.05	\$0.04	\$0.04	\$0.04	\$0.05
\$1.10	\$1.02	\$1.06	\$1.13	\$1.13	\$1.01	\$1.20	\$1.20	\$1.20	\$1.14	\$1.13	\$1.20	\$1.21	\$1.16	\$1.17
1.00	0.94	0.96	0.98	0.96	0.87	0.95	0.98	1.00	0.98	0.98	1.05	1.05	1.00	\$1.02
\$0.10	\$0.09	\$0.10	\$0.15	\$0.17	\$0.14	\$0.26	\$0.23	\$0.20	\$0.16	\$0.14	\$0.15	\$0.16	\$0.16	\$0.14
\$0.95	\$0.91	\$0.94	\$1.00	\$1.00	\$0.89	\$0.85	\$0.87	\$0.90	\$0.91	\$0.94	\$1.00	\$0.99	\$1.00	\$1.02
0.88	0.88	0.88	0.86	0.82	0.76	0.76	0.83	0.88	0.85	0.85	0.93	0.91	0.91	\$0.92
\$0.07	\$0.04	\$0.07	\$0.14	\$0.18	\$0.13	\$0.09	\$0.04	\$0.01	\$0.05	\$0.08	\$0.07	\$0.08	\$0.09	\$0.09
\$1.02	\$0.95	\$0.99	\$1.07	\$1.07	\$0.95	\$0.90	\$0.91	\$0.91	\$0.97	\$1.01	\$1.07	\$1.09	\$1.08	\$1.07
0.92	0.89	0.92	0.93	0.89	0.85	0.83	0.86	0.88	0.91	0.94	0.97	0.97	0.97	\$0.96
\$0.10	\$0.05	\$0.07	\$0.14	\$0.18	\$0.10	\$0.07	\$0.05	\$0.03	\$0.05	\$0.08	\$0.10	\$0.12	\$0.11	\$0.11
\$1.10	\$1.02	\$1.06	\$1.13	\$1.13	\$1.01	\$1.20	\$1.20	\$1.20	\$1.14	\$1.13	\$1.20	\$1.21	\$1.16	\$1.17
1.00	0.94	0.96	0.98	0.96	0.87	0.95	0.98	1.00	0.98	0.98	1.05	1.05	1.00	\$1.02
\$0.10	\$0.09	\$0.10	\$0.15	\$0.17	\$0.14	\$0.26	\$0.23	\$0.20	\$0.16	\$0.14	\$0.15	\$0.16	\$0.16	\$0.14
\$1.10	\$1.05	\$1.09	\$1.15	\$1.16	\$1.04	\$0.98	\$0.99	\$1.00	\$1.05	\$1.10	\$1.17	\$1.18	\$1.18	\$1.16
0.98	0.95	0.97	0.99	0.96	0.90	0.86	0.89	0.93	0.97	0.99	1.04	1.03	1.03	\$1.02
\$0.12	\$0.10	\$0.12	\$0.17	\$0.20	\$0.14	\$0.11	\$0.09	\$0.08	\$0.09	\$0.10	\$0.12	\$0.15	\$0.14	\$0.13

Note: Prices may not total or average due to rounding.

Appendix VI
Alternative Farm-Level Price for Fluid Milk

Table VI.2: Portion of the Retail Price of a Gallon of 2-Percent Milk Received by Farmers and Cooperatives Using the Alternative Farm Price, January 1996 Through February 1998

Selected market area	Percent received by farmers using the mailbox price	Percent received by farmers using the alternative farm price	Percent received by cooperatives using the mailbox price	Percent received by cooperatives using the alternative farm price
North Atlantic Region				
Boston, Mass.	44	51	14	8
New Hampshire	44	51	13	7
New Haven, Conn.	42	48	13	7
New York, N.Y.	39	44	11	6
Philadelphia, Pa.	42	47	11	6
Rhode Island	44	51	14	8
Vermont	40	46	11	5
Washington, D.C.	42	47	11	6
Southeastern Region				
Atlanta, Ga.	43	46	9	7
Louisville, Ky.	48	50	7	6
Miami, Fla.	43	44	8	7
New Orleans, La.	42	45	9	7
Orlando, Fla.	44	45	6	5
Raleigh, N.C.	45	47	7	6
East-North Central Region				
Chicago, Ill.	46	50	9	5
Cincinnati, Ohio	53	57	11	8
Milwaukee, Wis.	48	52	9	5
West-North Central Region				
Minneapolis, Minn.	35	38	6	3
West-South Central Region				
Dallas, Tex.	44	49	11	5
Houston, Tex.	47	53	13	8
Mountain Pacific Region				
Denver, Colo.	38	43	9	4
Las Vegas, Nev.	33	37	6	3
Seattle, Wash.	48	54	9	4
Salt Lake City, Utah	44	48	10	5
Average for the 24 markets	43	47	10	6

Note: These percentages are based on milk prices adjusted for 2-percent butterfat content.

Appendix VI
Alternative Farm-Level Price for Fluid Milk

Table VI.3: Increases or Decreases in the Farm-To-Retail Price Spread for a Gallon of 2-Percent Milk Using the Alternative Farm Price, January 1996 Through February 1998

Selected market area	Increases or decreases in the alternative farm-level prices	Increases or decreases in retail prices	Increases or decreases in the farm-to-retail price spread
North Atlantic Region			
Boston, Mass.	a	\$.30	\$.30
New Hampshire	a	.30	.30
New Haven, Conn.	a	.28	.28
New York, N.Y.	\$(.16)	.09	.25
Philadelphia, Pa.	(.15)	a	.15
Rhode Island	a	.30	.30
Vermont	a	.19	.19
Washington, D.C.	(.15)	(.08)	.07
Southeastern Region			
Atlanta, Ga.	(.16)	.25	.41
Louisville, Ky.	(.15)	a	.15
Miami, Fla.	a	a	a
New Orleans, La.	(.16)	.31	.47
Orlando, Fla.	a	.14	.14
Raleigh, N.C.	(.17)	a	.17
East-North Central Region			
Chicago, Ill.	(.17)	.22	.39
Cincinnati, Ohio	(.15)	(1.23)	(1.08)
Milwaukee, Wis.	(.17)	a	.17
West-North Central Region			
Minneapolis, Minn.	(.16)	(.09)	.07
West-South Central Region			
Dallas, Tex.	(.15)	.20	.35
Houston, Tex.	(.15)	a	.15
Mountain Pacific Region			
Denver, Colo.	(.18)	.29	.47
Las Vegas, Nev.	(.20)	a	.20
Seattle, Wash.	(.17)	a	.17
Salt Lake City, Utah	(.19)	a	.19

(Table notes on next page)

Appendix VI
Alternative Farm-Level Price for Fluid Milk

Note: The values used to calculate increases or decreases in retail- and farm-level prices in table VI.3 are based on statistical estimates of initial and final prices for these two levels, not the actual observed prices recorded in the first and last month of the period for which we have data. The method for calculating these estimates is described in app. I. The changes in the farm-to-retail price spreads are the differences between the changes in retail- and farm-level prices from January 1996 to February 1998 and consequently are determined from the statistically estimated initial and final prices for the retail and farm levels.

^aIndicates that no statistically significant change was observed in the price over the 26-month period and therefore represents a constant price for that market.

Appendix VI
Alternative Farm-Level Price for Fluid Milk

Table VI.4: Correlation Between Alternative-Farm-Level-Price Changes and Changes in Cooperative, Wholesale, and Retail Prices for a Gallon of 2-Percent Milk, January 1996 Through February 1998

Selected market area	Correlation coefficients for cooperative prices	Correlation coefficients for wholesale prices	Correlation coefficients for retail prices
North Atlantic Region			
Boston, Mass.	.98*	.65*	.27
New Hampshire	.98*	.79*	.27
New Haven, Conn.	.99*	.82*	.15
New York, N.Y.	.99*	.35	.64*
Philadelphia, Pa.	.99*	.41*	.72*
Rhode Island	.98*	.77*	.27
Vermont	.99*	.65*	.32
Washington, D.C.	.99*	.89*	.56*
Southeastern Region			
Atlanta, Ga.	.96*	.31	.12
Louisville, Ky.	.91*	.31	.18
Miami, Fla.	.94*	.30	.51*
New Orleans, La.	.92*	.07	.30
Orlando, Fla.	.95*	.64*	.38
Raleigh, N.C.	.96*	.35	.26
East-North Central Region			
Chicago, Ill.	.95*	.25	.07
Cincinnati, Ohio	.98*	.51	-0.13
Milwaukee, Wis.	.94*	.25	.34
West-North Central Region			
Minneapolis, Minn.	.96*	.61*	.52*
West-South Central Region			
Dallas, Tex.	.93*	.21	.29
Houston, Tex.	.92*	.21	.18
Mountain Pacific Region			
Denver, Colo.	.97*	.69*	.03
Las Vegas, Nev.	.97*	.15	.18
Seattle, Wash.	.99*	.87*	.24
Salt Lake City, Utah	.98*	.15	.29

Note: In calculating the correlation coefficients for each market, we omitted the months for which data were missing.

*Indicates that the correlation coefficient is statistically significant (i.e. $p < .05$). However, we have not included the p-values in the table.

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