

# Recent Retail, Wholesale, and Farm Prices in New England and New York: Analysis of Excessive Retail Margins in New England

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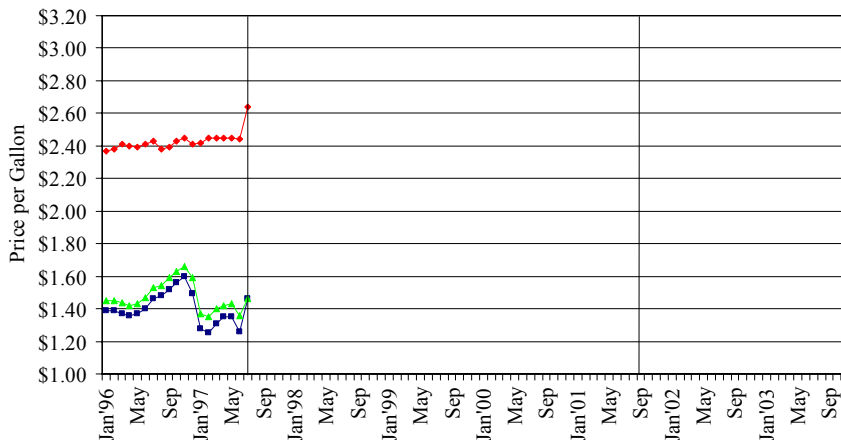
by  
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**Figure 1.** **Boston**  
**Market Level Retail and Farm Fluid Milk Price**  
**January 1996 – July 1997**



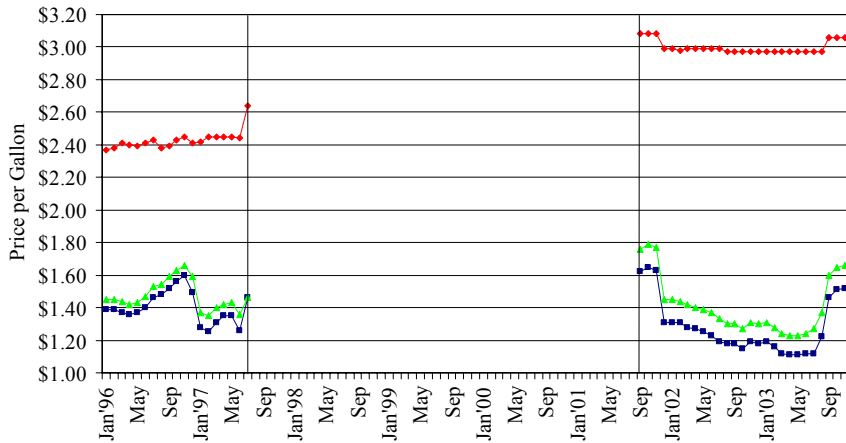
Source: Data from Order One Market Administrator and Dairy Market News

◆ Retail 
 ■ Compact/Class 1 
 ▲ Coop Price

Vertical lines indicate beginning and end of Northeast Dairy Compact

Figure 1.

**Boston**  
**Market Level Retail and Farm Fluid Milk Price**  
**January 1996 – July 1997 & September 2001 – November 2003**



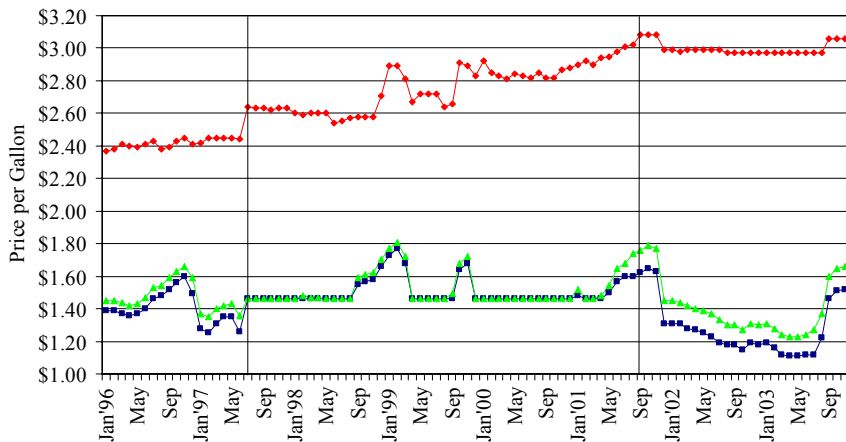
Source: Data from Order One Market Administrator and Dairy Market News

—●— Retail —■— Compact/Class 1 —▲— Coop Price

Vertical lines indicate beginning and end of Northeast Dairy Compact

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**Boston**  
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Source: Data from Order One Market Administrator and Dairy Market News

—●— Retail —■— Compact/Class 1 —▲— Coop Price

Vertical lines indicate beginning and end of Northeast Dairy Compact

## **Milk Channel Pricing in New England**

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- How can we analyze it?
- Three Approaches
  - Farm-to-retail price transmission studies
  - Studies of gross and net margins by stage in the market channel
  - Oligopoly models that measure both transmission rates and the amount of market power in the channel
    - Chidmi, Lopez, and Cotterill: “Dairy Compact, Market Market Power, and Milk Prices in Boston” (Handout at Conference)
    - Cotterill and Dhar: “Cost Pass Through in the Case of Sequential Oligopoly: An Empirical Study of the Fluid Milk Market” (<http://www.fmpc.uconn.edu>)

## **A Flawed Price Transmission Approach**

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- Professor Bailey’s Model  
(The IDFA Model in the Compact Debate)
  - Step 1
$$\frac{\text{Retail Price}}{\text{Farm Price}} = \text{Markup}$$
  - Step 2
$$(\text{Farm Price}) \times (\text{Markup}) = \text{Retail Price}$$

## **Bailey/IDFA Flawed Price Transmission Approach**

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- Step 3  
He looks at recent data and finds the Ratio of the Retail and Farm price is 1.7 or higher.  
Let's use 1.7
- Step 4  
He asserts Retail Price = 1.7 Farm Price  
So if Farm Price goes up 10 cents due to the Compact, Retail Price goes up 17 cents.
- Farm Program is Blamed for 7 cents Added Profit as well as 10 Cents that goes to Farmers.

## **Bailey/IDFA Flawed Price Transmission Approach**

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- Now look at what happened after the Compact
  - Farm price dropped 50 cents (see Figure 1)
  - According to Baily/IDFA retail prices should have dropped 85 cents
  - They dropped 10 cents

## **Bailey/IDFA Flawed Price Transmission Approach**

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- Conclusion:
  - The model overshoots
  - The impact is too high in both the Compact and the Post-Compact Period

## **Market Channel Analysis An Alternative Approach**

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- Key questions:
  - What are the prices, costs, and profits at each stage of the milk marketing channel?
  - Are they in line with a competitive market channel?
  - How do they change over the farm milk price cycle?
- The approach:
  - Extensive detailed retail milk surveys at 3 different points in the raw milk price cycle: November 2002, June 2003, October 2003.
  - Cost accounting measurement of in-store costs (Maine, NY, PA) and economic engineering measurement of processing and delivery costs (Dairy Technomics).

**Table 1: Average Lowest All Milk Price by Channel: November 2002 vs June 2003\***

Channel	New England		New York	
	June 2003	Change from Nov 2002	June 2003	Change from Nov 2002
Chain	2.87	-0.01	2.25	-0.10
Convenience	2.75	-0.09	2.50	0.01
Club	2.01	-0.05	1.89	-0.04
Limited	1.98	0.08	1.59	0.10

\*Boston raw milk price dropped 7 cents/gallon from Nov.2002 to Jun.2003 (Table A1).

NY Threshold price dropped 13 cents in the metro area and 14 cents upstate.

Source: Food Marketing Policy Center Survey November 2002 and June 2003.

## Concerning Table 1

Look: Retail milk prices are much lower in New York than New England

Look: Club and limited assortment stores are much cheaper than chain and convenience stores.

- Fact: Since these price differences persist over time, these outlets do not discipline chains or convenience stores.
- Conclusion: Chains and convenience stores do not compete with clubs and limited assortment stores for milk customers.

## Concerning Table 1

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- **Fact:** Most New England club and limited assortment stores (BJ's, Save-A-Lot, Midland Foods, Price Rite) get their milk from out of area processors (Byrne Dairy, Syracuse; Midland Farms, Albany; Shop Rite/Price Rite, New Jersey).
- **Conclusion:** New England processors and supermarket chains should have lower costs than these more extended distribution systems, but their prices are much higher

**Table 2: Average Lowest All Milk Price by Channel: June 2003 vs October 2003\***

Channel	New England		New York	
	Change from		Change from	
	Oct 2003	June 2003	Oct 2003	June 2003
Chain	3.02	0.15	2.80	0.55
Convenience	3.01	0.26	3.03	0.53
Club	2.38	0.37	2.38	0.49
Limited	2.38	0.40	1.49	-0.10

\*Boston raw milk price increased 41 cents/gallon from June 2003 to October 2003 (Table A1). NY threshold price went up 81 cents from \$2.44 to \$3.25 in NY metro area and up 77 cents from \$2.27 to \$3.04 in upstate area: June 2003 to October 2003.

Source: Food Marketing Policy Center Survey June 2003 and October 2003.

## Concerning Table 2

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Look! In New England the club and limited assortment stores increased retail prices by almost identical amount of raw milk price increase (37 and 40 cents versus 41 cent raw milk increase).

- These operators increase are effectively competitive and have little leeway to do otherwise.
- They still are by far the cheapest retail outlets

## Concerning Table 2

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Look! New England supermarket chain and convenience stores increased milk prices less than the raw milk price increase (15 and 26 cents versus 41 cents raw milk increase).

- Economic theory predicts that price transmission in monopolistic markets is less than competitive markets. Here we have confirmation (club and limited assortment stores are competitive, chain and convenience stores are not).
- So What!! Supermarket chain stores still have the highest prices (and as we will show, excessive profit margins).
- What will happen when farm prices drops? These players may, as in the past, not drop retail price much if at all.



## **Concerning Table 2**

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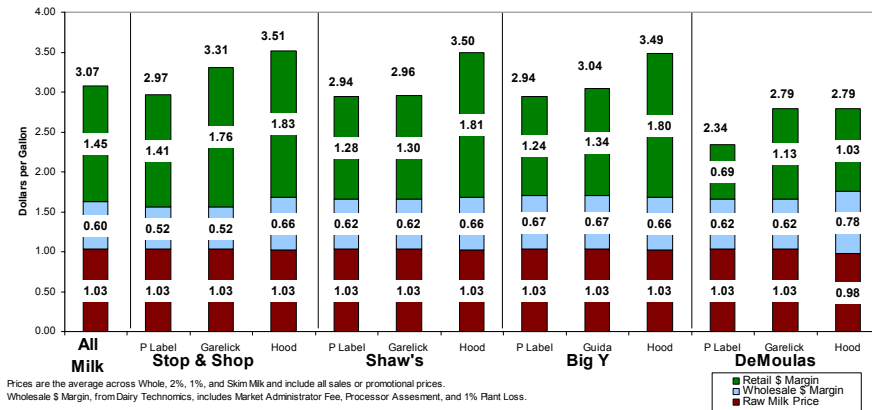
Look! In New York for chain and convenience stores price increases (55 cents and 53 cents respectively) are greater than the 41 cent raw milk price increase but these increases are far below the increase in price gouge law threshold level increase.

## **Concerning Table 2**

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- Conclusion: the price gouge law drives retail prices down during low farm price periods and retailers do not raise retail prices to threshold level during “high” farm price periods.
- In fact, in upstate NY, retail prices were usually below threshold levels even during low farm milk price periods. The region has intense competition in the milk marketing channel.

**Figure 2: Actual Raw Milk, Estimated Wholesale, and Actual Retail Milk Pricing by Brand for the Four Leading Supermarket Chains in Southern New England: June 2003**



**Comments on Figure 2: Situation in June 2003**

Fact: DeMoulas is cheaper than others.

Look at “All Milk” Column:

- Farmers got \$1.03 per gallon.
- Processors kept 60 cents for processing and distribution, so the wholesale price was \$1.63.
- Retailers charged \$3.07 per gallon and kept \$1.45 for in-store costs and net profits.

### **Comments on Figure 2: Situation in June 2003**

Fact: Criner and others estimate in-store costs plus a competitive profit are approximately 45 cents per gallon.

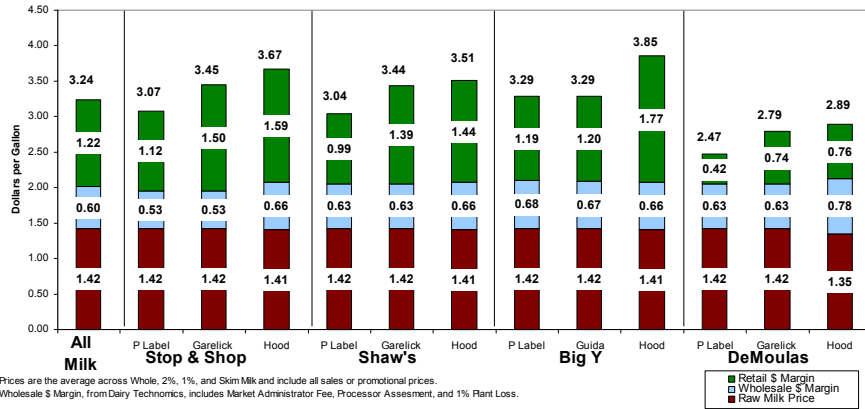
Conclusion: In June 2003, and during the entire low milk price period, these retailers kept about \$1 per gallon of excessive profits.

### **Comments on Figure 2: Situation in June 2003**

Conclusion: During the recent milk price depression, supermarket retailers net bottom line profits were roughly equal to the price paid farmers for this raw milk.

Conclusion: This is inefficient milk channel pricing and by almost any standard, unfair milk pricing.

**Figure 3: Actual Raw Milk, Estimated Wholesale, and Actual Retail Milk Pricing by Brand for the Four Leading Supermarket Chains in Southern New England: October 2003**



**Comments on Figure 3: Situation in Oct. 2003**

Again Note: DeMoulas is cheaper the cheapest and barely raised prices.

Looking at All Milk Results:

- Raw milk price goes up 39 cents from June 2003.
- Processors margin is unchanged so wholesale delivered prices go up 39 cents.
- Retail prices go up only 17 cents to \$3.24 per gallon so retail margins drop 23 cents to \$1.22 per gallon.

### **Comments on Figure 3: Situation in Oct. 2003**

Fact: These margins are still far above the estimated 45 cents competitive retail margins. Retailers now have 77 cents in excess profits per gallon.

**CONCLUSION: CHANNEL PRICING IS STILL INEFFICIENT AND BY A COMPETITIVE MARKET STANDARD UNFAIR TO OTHER CHANNEL PARTICIPANTS.**

### **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

- IDFA, Food Marketing Institute (FMI) and Chicago School Economists (Their Friends) Argue as Follows:
  - Dairy Compact and Milk Market Orders are Public Cartels that Exercise Market Power to Raise Retail Fluid Milk Prices
  - Getting Rid of Them Will Lower Retail Prices

## **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

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- We have already covered the Dairy Compact. When farm prices dropped after the Dairy Compact, retail prices did not drop in a commensurate fashion.
- Now let's look at Market Orders

## **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

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- University of Wisconsin economists, Ed Jesse, Tom Cox, Bob Cropp, and Randy Fortenbery call the Class 1 price differentials, "Pricing Distortions."
- For example, one adds \$1.55 per cwt to the Eau Claire Dairy Class 1 price differential (\$1.70 per cwt) to set the Boston Class 1 differential at \$3.25 over manufacturing milk price. This is a "pricing distortion."
- According to Jesse, et al. the federal market orders have been relaxed so that over-order premiums, i.e. market forces, now determine fluid milk prices throughout the country.

## **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

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- From Jesse, Cox, Cropp, and Fortenbery  
“Rethinking Dairyland, The Effects of Federal Dairy Programs on the Competitiveness of Dairying in Wisconsin” September 2002.

“...competition has operated both within and outside the orders to mitigate the effect of these pricing distortions. For example, low Class 1 differentials in Wisconsin are augmented by large over-order Class 1 price premiums negotiated by cooperatives. Cooperatives premiums are relatively low in other markets and nonexistent in some. This tends to equilibrate *effective* Class 1 prices, even though the order *minimum* prices may be distorted.”  
p.21

## **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

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- Moreover, since manufacturing milk prices are also determined by the market via premiums over the support price, according to Jesse et al., one now has an effectively competitive raw milk market in the U.S.
- If this is indeed the case, farm gate or mailbox prices should be higher in the Northeast than the Midwest. In a competitive market economy, Northeast prices should be equal to Wisconsin prices plus the cost to transport milk or milk products from there to the Northeast.

## **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

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- In fact, Northeast farm mailbox prices have often been equal to or lower than in Wisconsin. In June 2003, the Wisconsin mailbox price was \$12.26 and it was \$11.63 in the Northeast.
- Why? There is more competition for milk and thus higher cheese and fluid milk premiums in Wisconsin than there is in the Northeast.
- Why? Northeast farmers face concentrated and powerful buyers. Supermarket chains drive tough terms onto processors and they in turn must drive tough terms (low premiums) onto farmers.

## **Market Power in the Milk Channel Who Has It and Who Does it Hurt?**

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- Who gets hurt from market power in the Northeast milk marketing channel?
  - Farmers get hurt. There is a need to increase farm raw milk prices in New England.
  - There may be other reasons as well to increase farm milk prices in New England (Open space, rural communities, etc).



## **Market Power in the Milk Channel Conclusions**

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- Private market power is on the rise in milk marketing channels and in many local market areas far outweighs the impact on consumers of public milk policies.
- Private market power in the Northeast depresses farm mailbox prices to levels that are out of line with prices in the Midwest.
- IDFA, FMI, and their economists use economic models that sweep the private power question under the rug. They focus only on the “pricing distortions” of public policies and ignore the pricing distortions of private market power.

## **Market Power in the Milk Channel Policy Options**

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- A Little History Please!
  - Market Orders and the Cooperative Pools that preceded them in the Early 20<sup>th</sup> Century were established to do what?
  - To Offset the Monopsonistic Bargaining Power of Fluid Processors.
  - Today, in the Northeast, we need to devise policies that not only do that, but also address the monopolistic power of channel firms against consumers in markets where competition fails.

**Table A1: Hartford and Boston Retail  
Milk Prices and Raw Fluid Milk  
Prices: 3.5% Butterfat**

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Provided in handout of slides.

**Table A2: Weighted Average All Milk Price by  
Chain: November 2002 vs June 2003**

Chain	New England		New York	
	June 2003	Change from Nov 2002	June 2003	Change from Nov 2002
Stop & Shop	3.12	0.03	2.45	-0.14
Shaw's / Star Market	2.97	-0.01	-	-
DeMoulas / Market Basket	2.49	-0.05	-	-
Roche Bros	2.83	0.10	-	-
Big Y	2.92	-0.13	-	-
A & P / Waldbaums	3.15	0.00	2.52	-0.18
Shop Rite	3.15	0.25	2.24	-0.20
Price Chopper	3.26	0.09	2.23	-0.10
Ro Jacks	3.07	0.04	-	-
Hannaford	N/A	N/A	2.24	-0.09
King Kullen	-	-	2.44	-0.13
Wal-Mart	2.54	-0.25	2.10	-0.05
Pathmark	-	-	2.44	-0.13

Note: - means chain not in area, N/A means no observations in data  
Source: Food Marketing Policy Center Survey November 2002 and June 2003.

**Table A3: Weighted Average All Milk Price by  
Channel : November 2002 vs June 2003\***

Channel	New England		New York	
	June 2003	Change from Nov 2002	June 2003	Change from Nov 2002
Chain	3.01	0.00	2.31	-0.11
Convenience	2.76	-0.08	2.50	0.01
Club	2.00	-0.06	1.89	-0.03
Limited	1.99	0.07	1.59	0.10

\*Boston raw milk price dropped 7 cents/gallon from Nov.2002 to Jun.2003 (Table A1).  
NY threshold price dropped 13 cents in the metro area and 14 cents upstate.

Source: Food Marketing Policy Center Survey November 2002 and June 2003.

**Table A4: Weighted Average All Milk Price by  
Channel: June 2003 vs October 2003**

Channel	New England		New York	
	Oct 2003	Change from June 2003	Oct 2003	Change from June 2003
Chain	3.19	0.18	2.87	0.56
Convenience	3.01	0.25	3.03	0.53
Club	2.38	0.38	2.38	0.49
Limited	2.38	0.39	1.49	-0.10

Source: Food Marketing Policy Center Survey November 2002 and June 2003.

**Table A5: Weighted Average All Milk Price by  
Chain: June 2003 vs October 2003**

Chain	New England		New York	
	Oct 2003	Change from June 2003	Oct 2003	Change from June 2003
Stop & Shop	3.25	0.13	3.04	0.59
Shaw's / Star Market	3.14	0.17	-	-
DeMoulas / Market Basket	2.59	0.10	-	-
Roche Bros	3.10	0.27	-	-
Big Y	3.24	0.32	-	-
A & P / Waldbaums	3.53	0.38	3.27	0.75
Shop Rite	3.24	0.09	2.79	0.55
Price Chopper	3.22	-0.04	2.87	0.64
Ro Jacks	3.11	0.04	-	-
Hannaford	N/A	N/A	2.76	0.52
King Kullen	-	-	3.25	0.81
Wal-Mart	3.06	0.52	2.44	0.34
Pathmark	-	-	3.25	0.81

Note: - means chain not in area, N/A means no observations in data

Source: Food Marketing Policy Center Survey November 2002 and June 2003.