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Agricultural Outlook Forum

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BEHIND THE TRENDS: LONG-RUN SHAPERS OF THE DAIRY INDUSTRY

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# Behind the Trends: Long-run Shapers of the Dairy Industry

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# Dairy demand growth rests on narrow base

- Use has grown slightly faster than population.
- Most demand growth due to cheese.
- Sales of fluid milk and most products flat or declining.
- Relative milkfat and skim solids demand cyclical.

# Cheese—the Dairy King

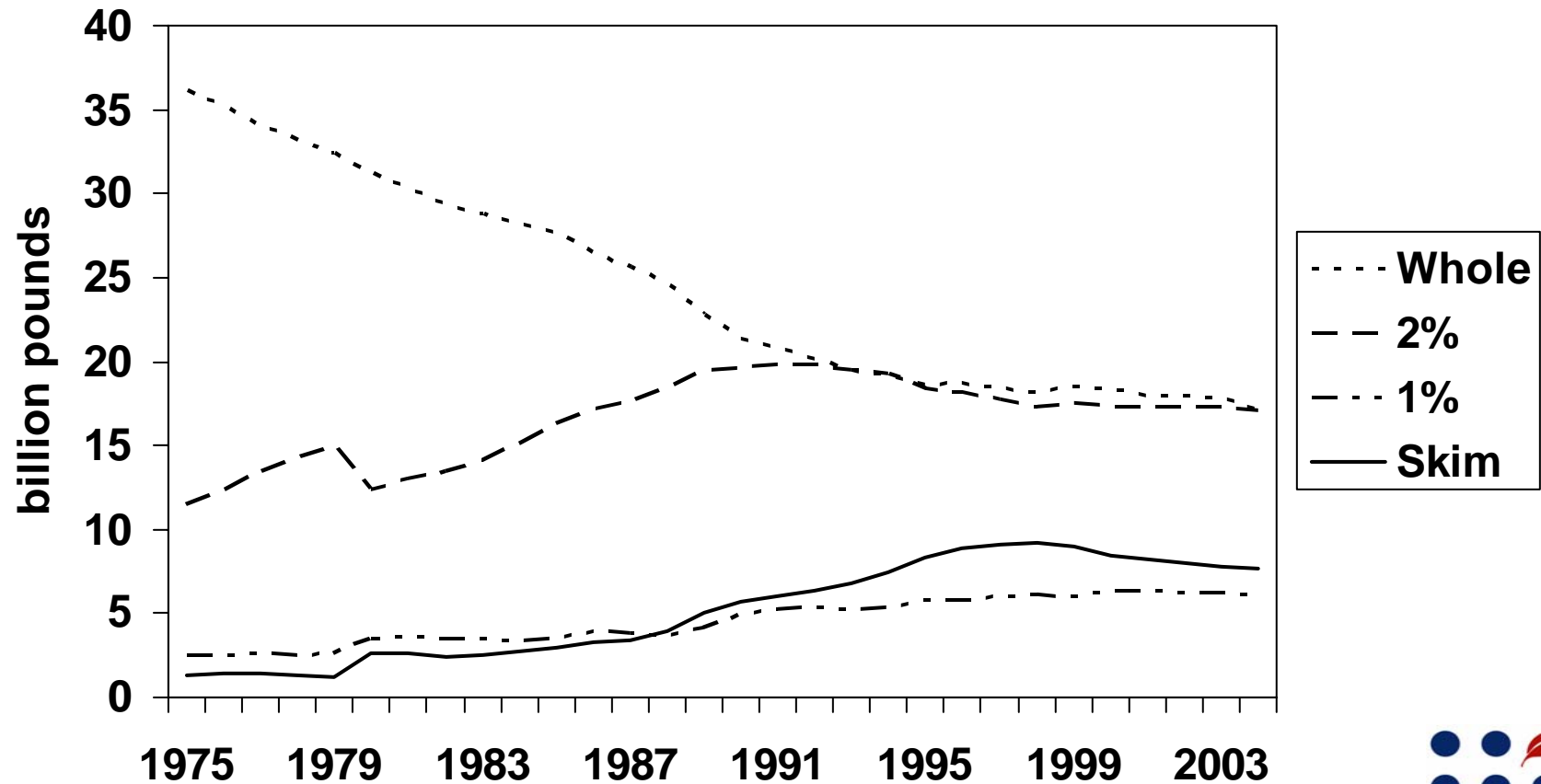
- Per capita use up 120 percent since 1975.
- Cheese now uses more than half the milk.
- Cheese easy way to add flavor.
- Cheese-heavy cuisines find favor.
- Growth formerly shared across varieties.
- Cheddar and Mozzarella account for three-fourths of growth since 1995.



# Fluid milk trends fall apart

- Trends strong until late 1980s.
  - Total fluid milk sales up less than population.
  - Whole milk down, 2% up, 1% and skim milk flat.
  - Consumers found compromise between lower fat and taste.
- Sales unpredictable during last 15 years.
- No stable trends or explanation apparent.

# Fluid milk sales

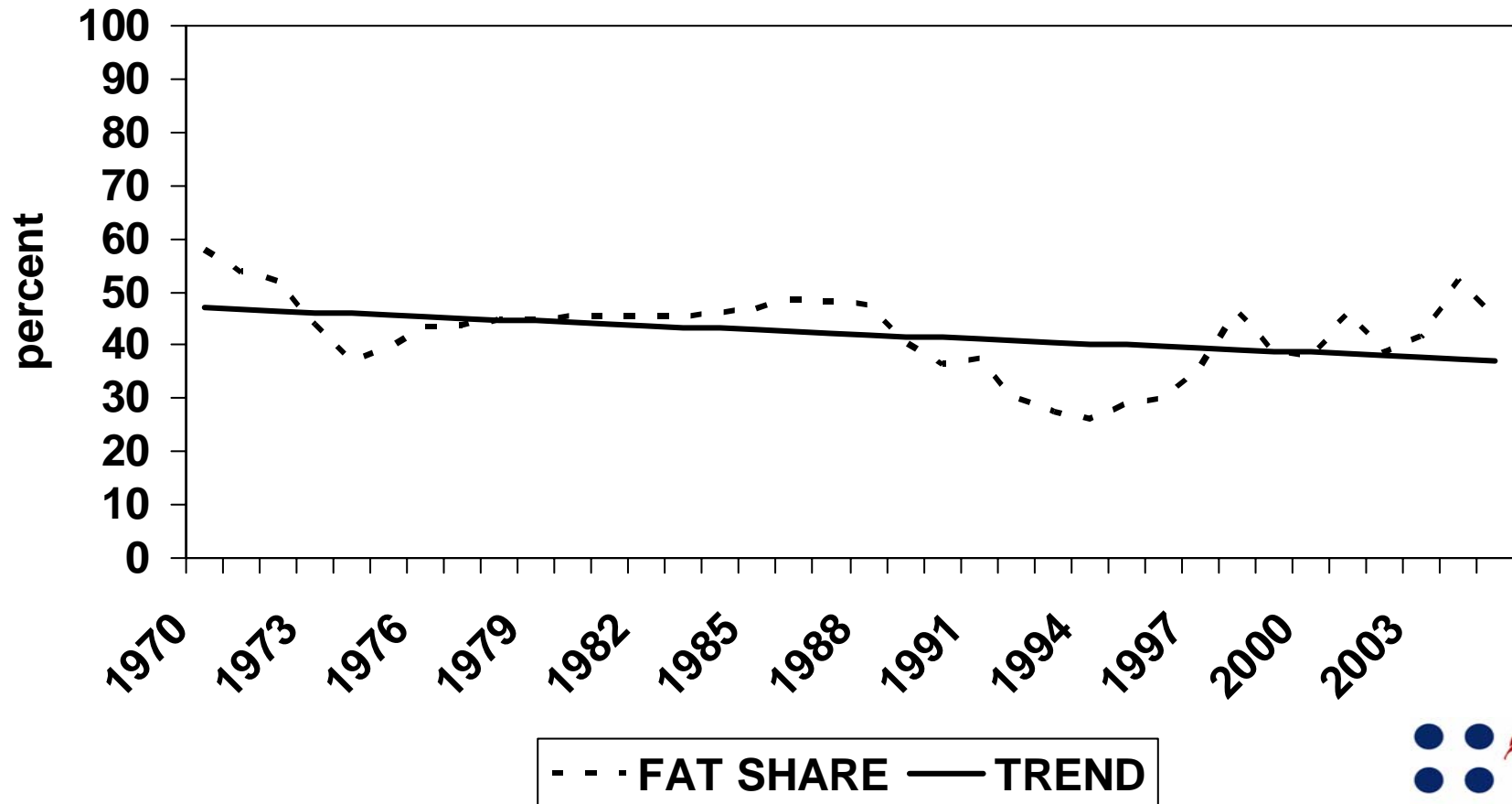


# Fat's share of milk value has slipped BUT

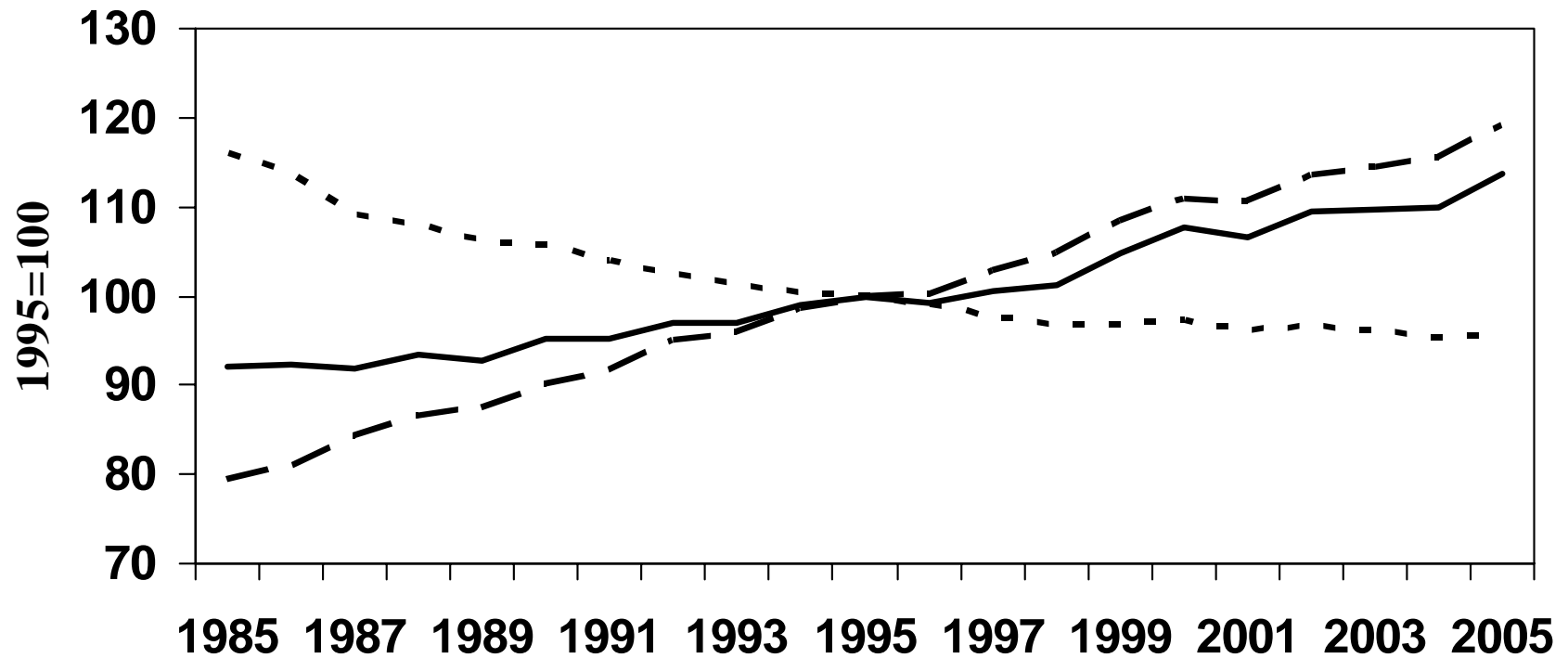
- Very gradual trend since 1970.
- Cyclical changes pronounced and much more important than trend.
- Direct consumer shifts less important than ingredient changes by food processors.



# Milkfat's share of the value of milk



# Cows, milk per cow, and milk production



- · - Milk cows   - - Milk per cow   — Milk production



# Production trends driven by input substitutions

- Concentrate feeds cheaper than labor and capital.
- Rising milk per cow and falling cow numbers represent the inevitable substitution.

# Milk per cow rose steadily because of...

- Genetic and management advances.
- Structural change, across and within regions.
- Increased feed.
- Boosting feeding much more complicated and difficult than in past.

# Cow numbers change because of investment decisions

- Capacity more binding than in past.
- Capacity added by expansions and entry, lost by exits.
- Capacity changes driven by intermediate and long-run prospects.
- Short-run conditions have little impact on changes in numbers, may affect how soon full effects of structural change felt.

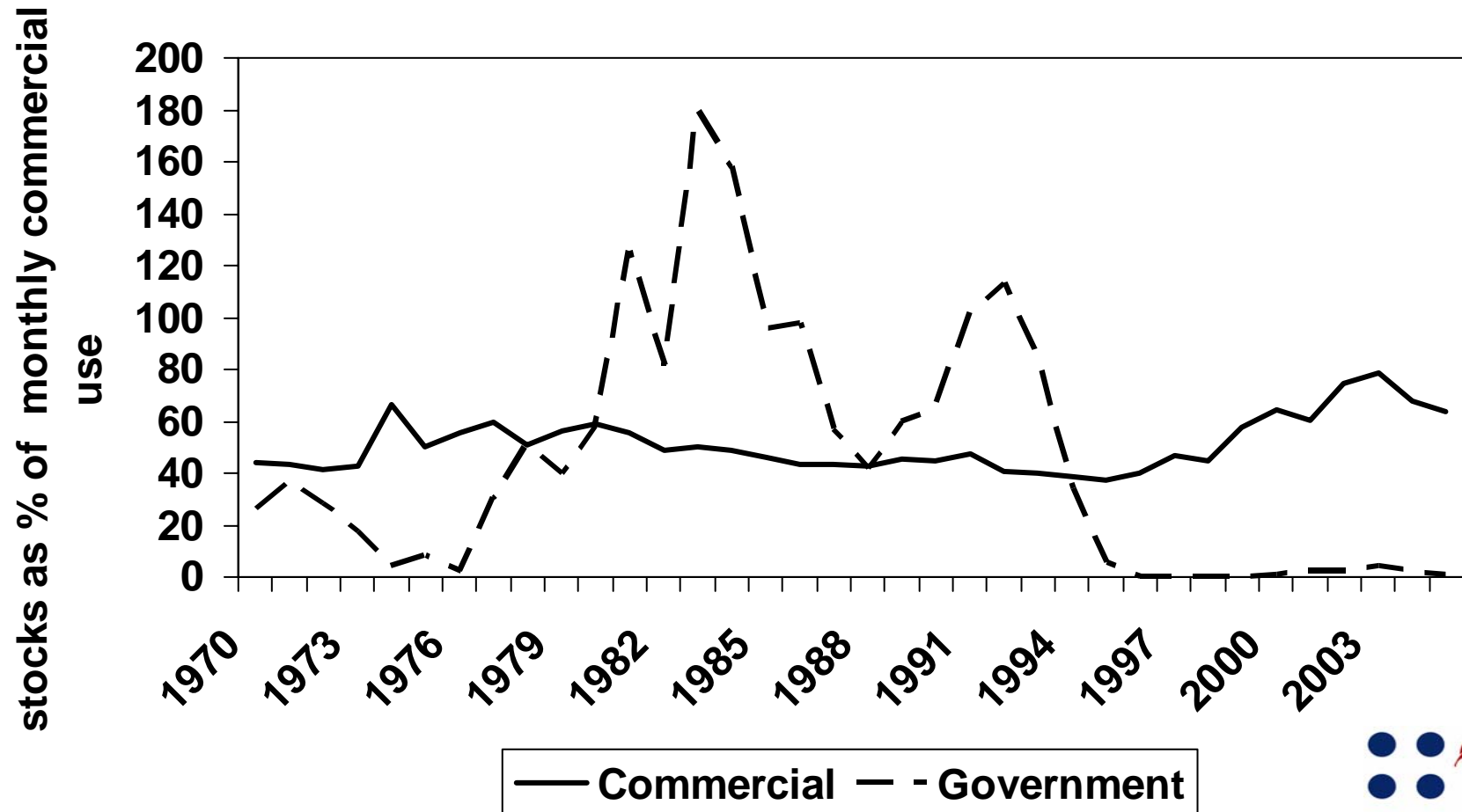
# Industry less willing to carry stocks

- Information and handling technology have lessened need for stocks.
- Commercial stocks up slightly in recent years--but Government stocks gone.
- Recent stock levels too small to buffer price swings.
- Significant factor in price volatility.



# Stocks:sales ratios

Milkfat basis



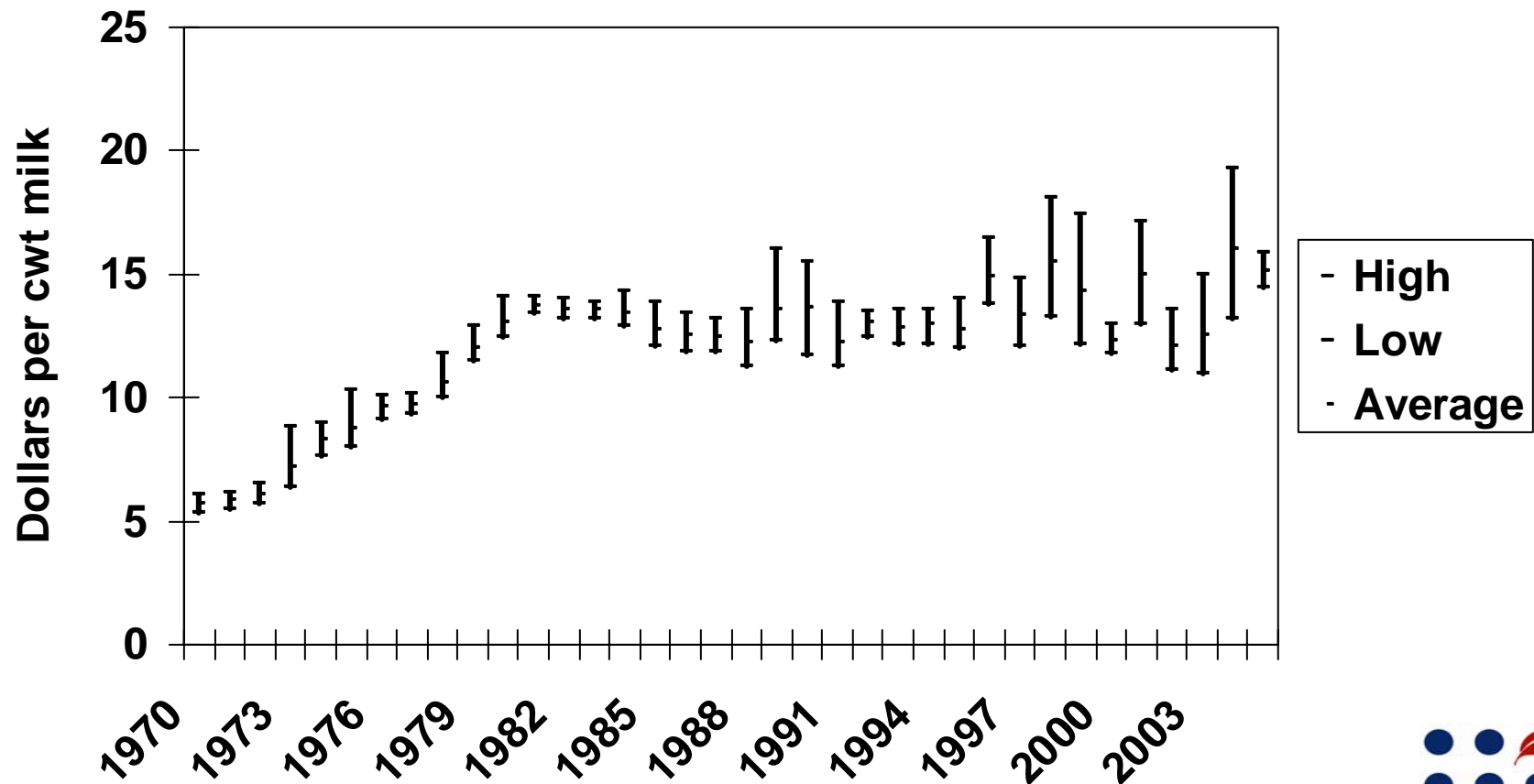
# Industry concentration increases

- More concentrated at all levels.
- Dairy little different from other industries.
- Concentration has aggravated thin market problems.





# Low stocks, concentration contribute to price volatility



# Industry has less dairy identity

- Companies less likely to be long-time dairy.
- Personnel less likely to have dairy background.
- Background diversity brings pluses and minuses.
- Companies and people jump industries much easier.



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