

## *Outlook for Milk Prices*

Mark Stephenson, Ph.D.  
*Cornell Program on Dairy Markets & Policy*

### *Need an Excuse?*

- I have never seen so many factors that need to be considered in a milk price forecast as there are this year.
- Even though it is more complicated than usual, I think that the answer is actually straight-forward.

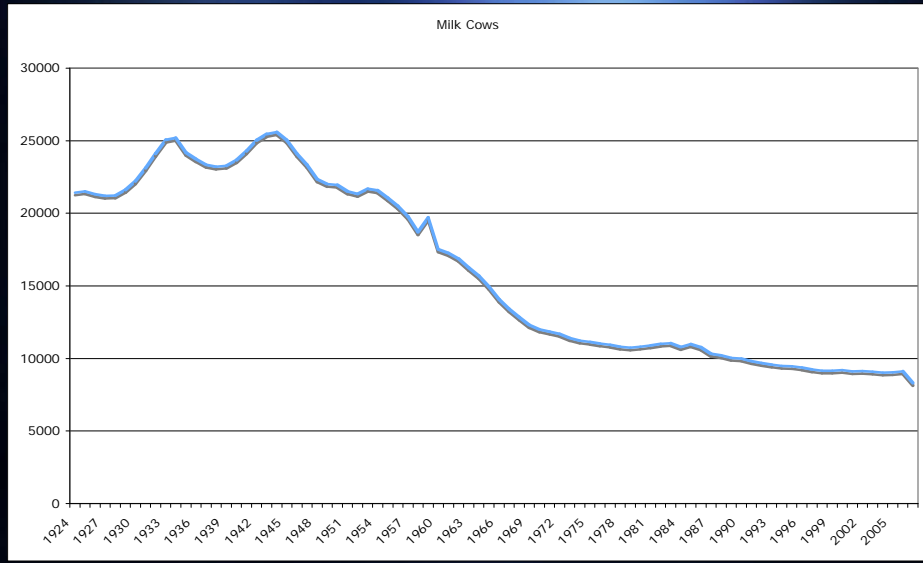
## Supply and Utilization

	2001	2002	2003	2004 <sup>a</sup>	2005	2006	2007 <sup>a</sup>	2008 <sup>b</sup>	2009 <sup>c</sup>
<b>Supply</b>									
Cows Numbers (thous.)	9,115	9,137	9,084	9,010	9,043	9,112	9,158	9,261	9,200
Production/cow (lbs)	18,139	18,612	18,748	18,958	19,565	19,951	20,267	20,423	20,627
Production	165.5	169.8	170.3	170.8	176.9	181.8	185.6	189.1	189.8
Farm Use	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0
Marketings	164.5	168.8	169.2	169.8	175.9	180.8	184.6	188.2	188.8
Beginning Commercial Stocks	6.1	5.3	9.9	8.3	7.2	8.0	9.5	10.4	12.8
Imports	5.7	5.1	5.0	5.3	5.1	5.0	4.6	3.3	4.0
<b>Total Supply</b>	<b>176.3</b>	<b>179.1</b>	<b>184.2</b>	<b>183.4</b>	<b>188.2</b>	<b>193.8</b>	<b>198.7</b>	<b>201.8</b>	<b>205.6</b>
<b>Utilization</b>									
Commercial Disappearance	169.1	168.9	174.7	176.4	180.2	184.3	188.4	189.0	189.5
Ending Commercial Stocks	7.0	9.9	8.3	7.2	8.0	9.5	10.4	12.8	14.0
DEIP	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Net Removals (excluding DEIP)	0.1	0.3	1.1	-0.2	0.0	0.0	0.0	0.0	2.1
<b>Total Use</b>	<b>176.3</b>	<b>179.1</b>	<b>184.2</b>	<b>183.4</b>	<b>188.2</b>	<b>193.8</b>	<b>198.7</b>	<b>201.8</b>	<b>205.6</b>

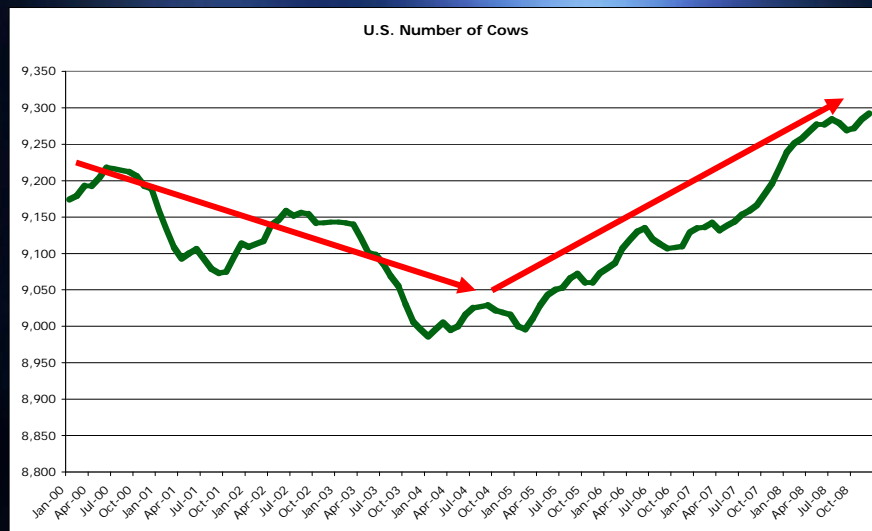
## Trends...

- Long-term trends
- Short-term trends
- Reasons to deviate from trends

## Annual U.S. Milk Cows

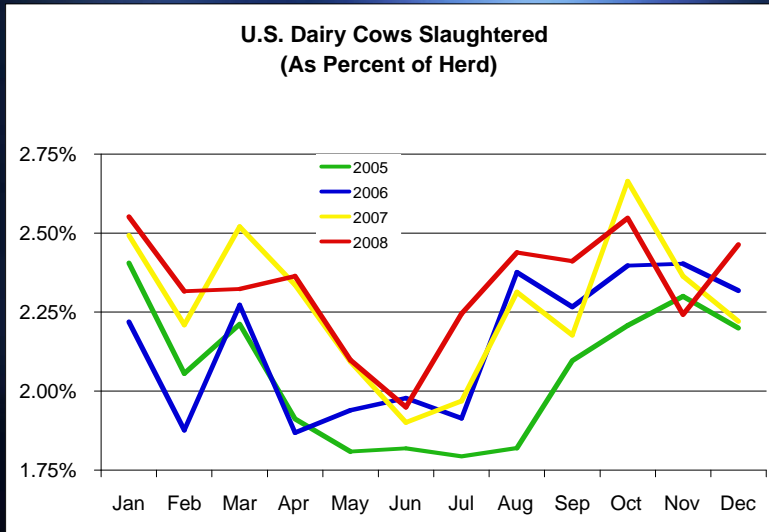


## Monthly U.S. Milk Cows

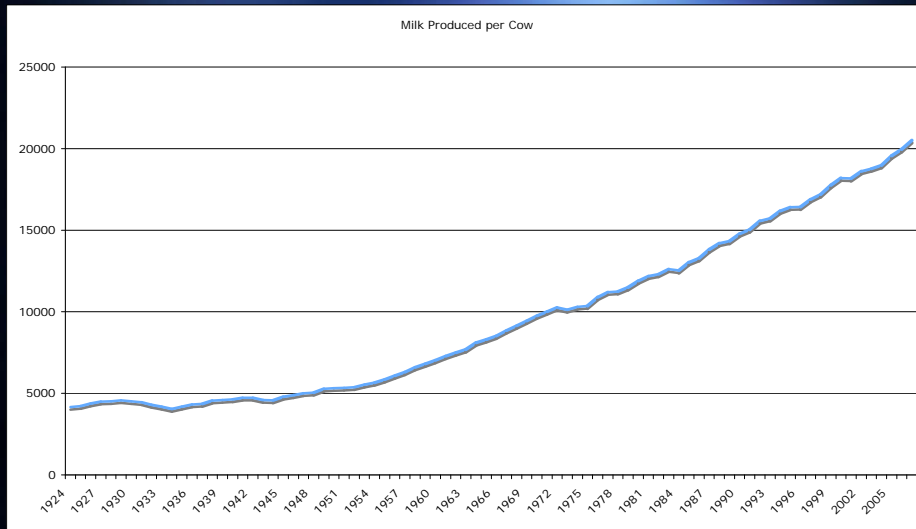


# Cow Slaughter

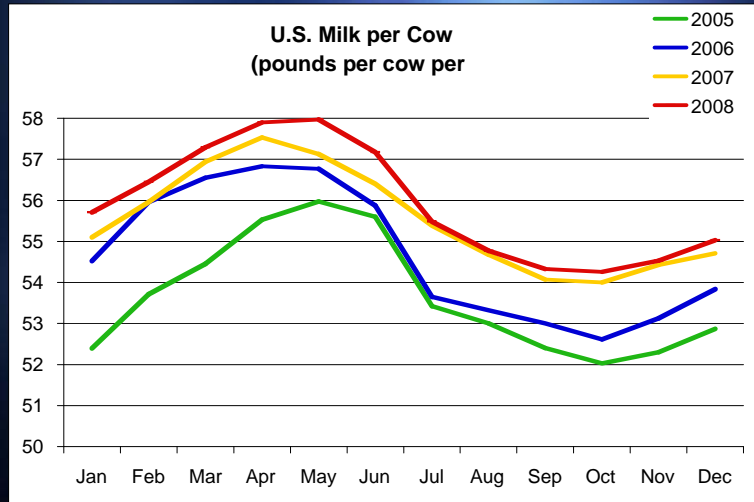
(CWT is trying to do their bit)



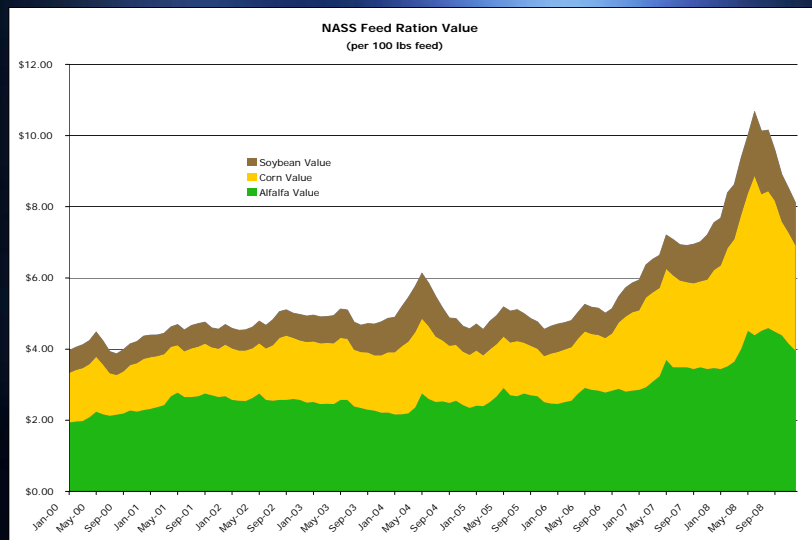
# Annual U.S. Milk per Cow



## Milk per Cow lbs per cow per day

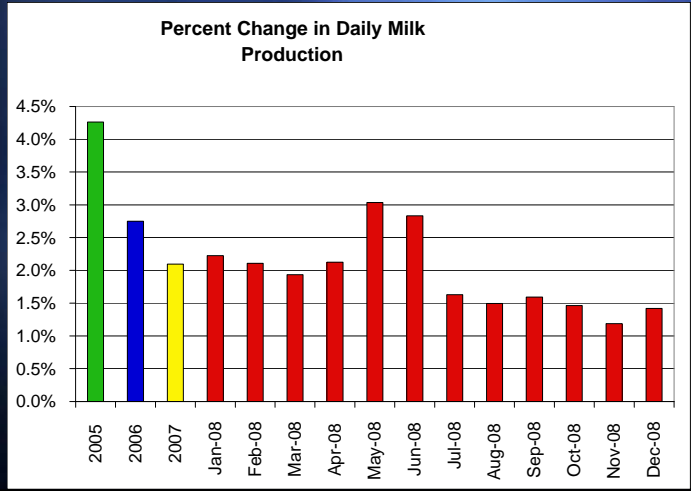


## Feed Costs Have Been Way Up

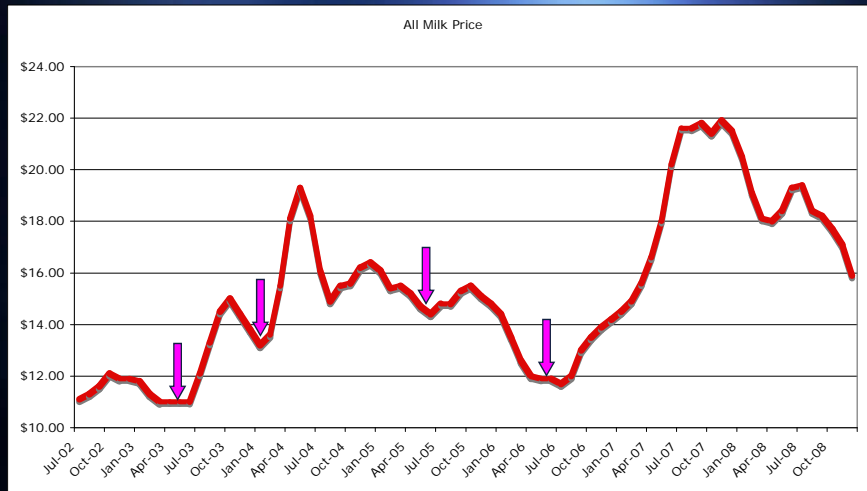


# Milk Production

Percent Change from Year Earlier



# All Milk Price



## *Restaurant Performance Index*

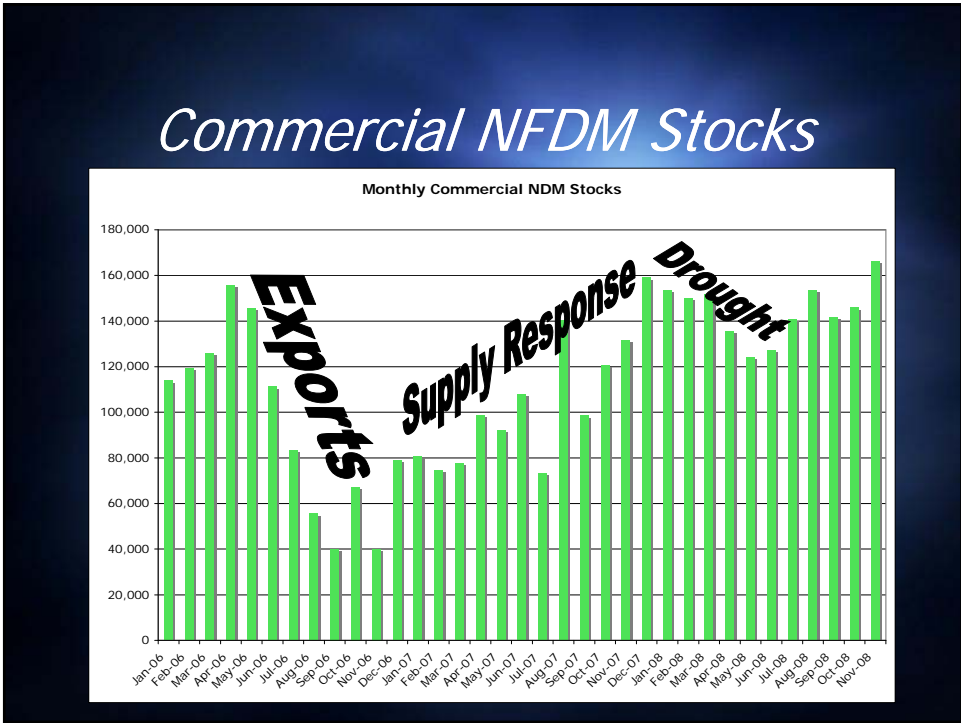
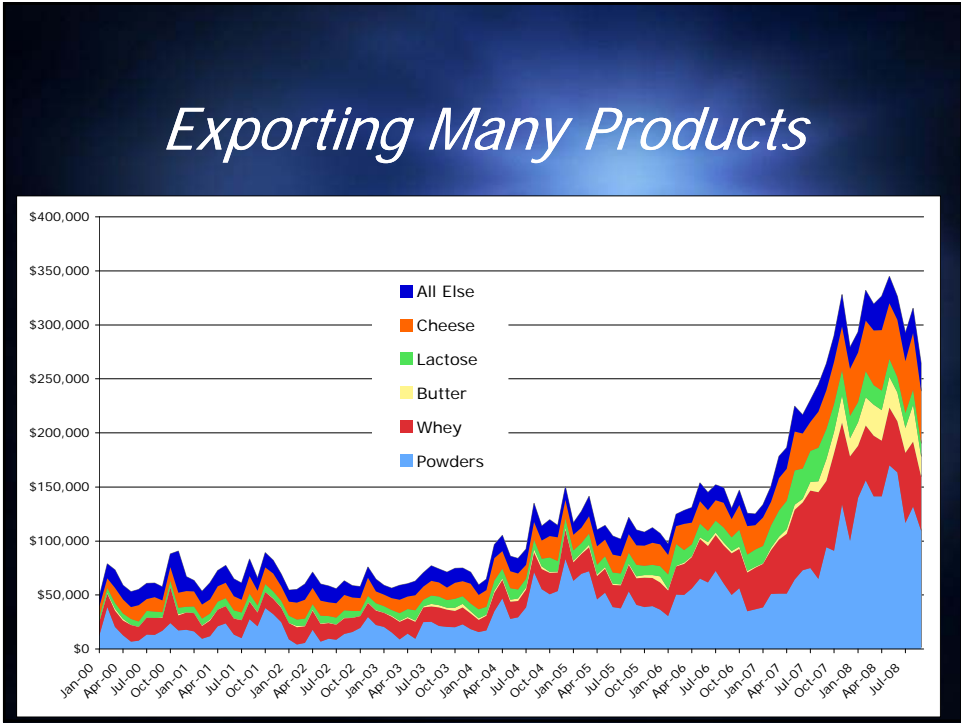


QuickTime™ and a decompressor are needed to see this picture.

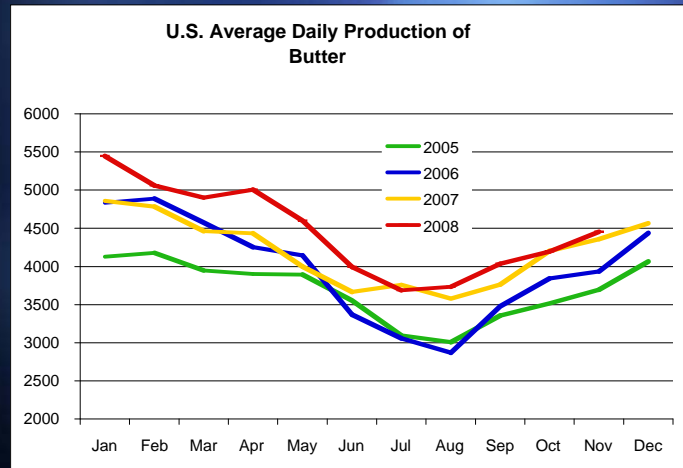


## *Exports*

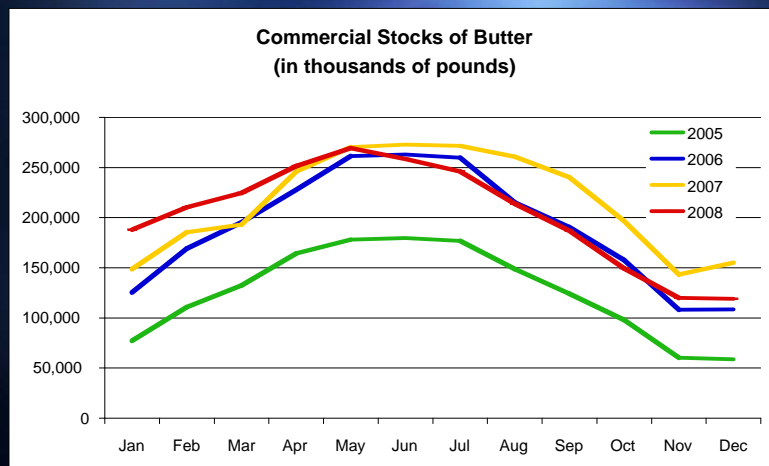
- We are exporting 11-12% of milk solids
- A few years ago it was about 2-3%
- We exported more than \$3 billion in 2008
- We will have a positive dollar trade balance in dairy in 2008



## Butter Production



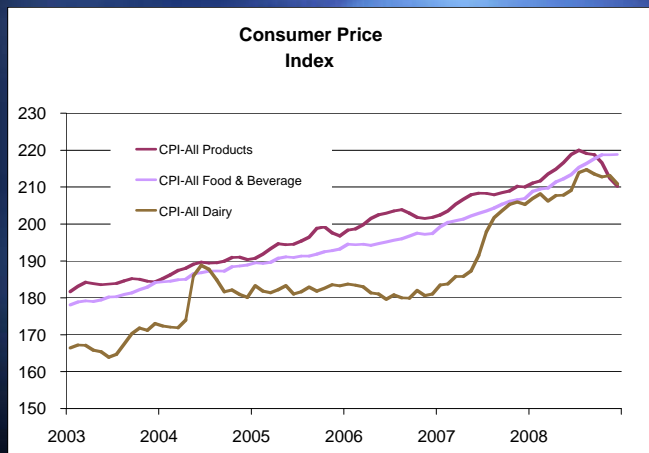
## Commercial Butter Stocks

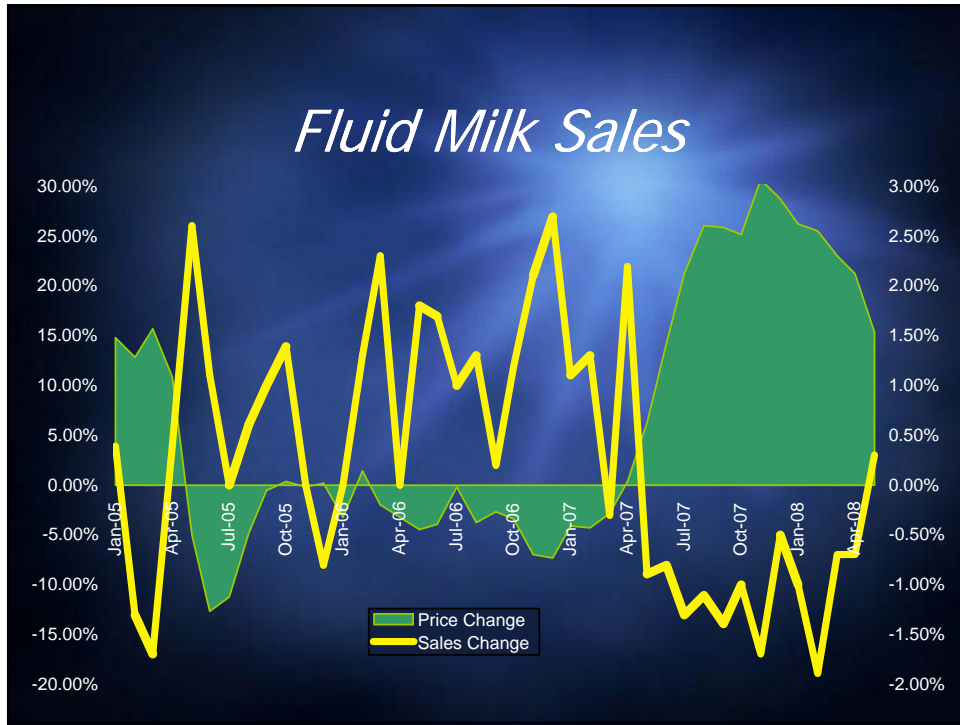


## *Talking Points...*

- Domestic demand has been down—we just haven't felt it
- Until recently, exports have been strong and picking up the slack
- What happens if exports can't hold up?

## *Consumer Price Index*

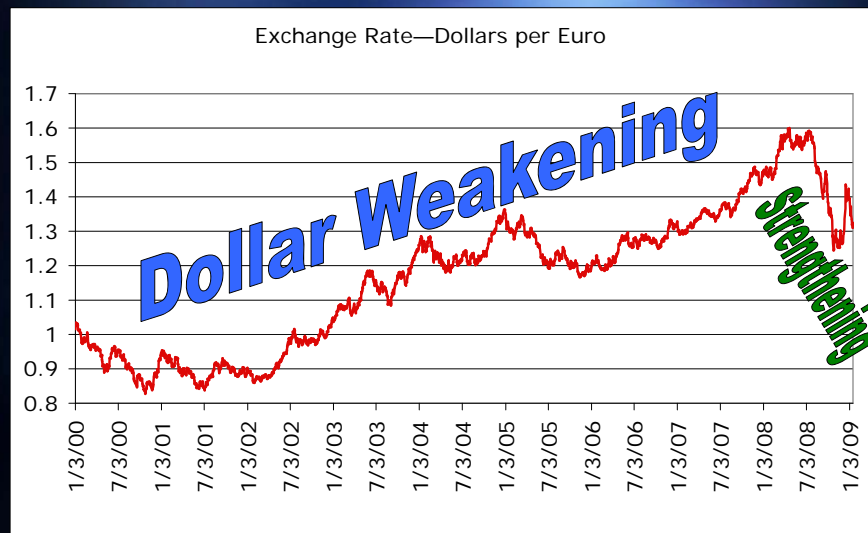




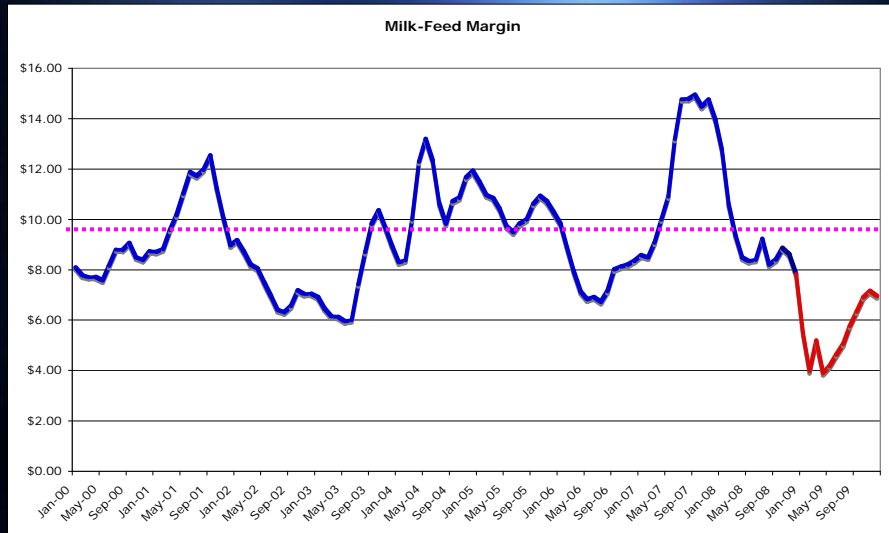
## *Big Unknowns...*

- Production in Oceania (new season)
- Production in EU (increased quota, resumed interventions & subsidies)
- Overseas demand
  - Global recession?
  - Food scares
- Exchange Rates

## *USD vs Euro*



## Milk-Feed Margin



## Implications of Milk-Feed Margin

- Instead of 2-3% milk production increases, I think that our domestic and export opportunities only have room for less than 0.5% increase—maybe even no increase.
- Futures Milk-Feed Margin is probably bad enough to slow production down that far (but MILC will temper the correction).
- Some production is below variable costs.

## Supply & Utilization

	2001	2002	2003	2004	2005	2006	2007	2008*	2009*
<b>Supply</b>									
Cows Numbers (thous.)	9,115	9,137	9,084	9,010	9,043	9,112	9,158	9,261	9,200
Production/cow (lbs)	18,139	18,612	18,748	18,958	19,565	19,951	20,267	20,423	20,627
Production	165.5	169.8	170.3	170.8	176.9	181.8	185.6	189.1	189.8
Farm Use	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0
Marketings	164.5	168.8	169.2	169.8	175.9	180.8	184.6	188.2	188.8
Beginning Commercial Stocks	6.1	5.3	9.9	8.3	7.2	8.0	9.5	10.4	12.8
Imports	5.7	5.1	5.0	5.3	5.1	5.0	4.6	3.3	4.0
<b>Total Supply</b>	<b>176.3</b>	<b>179.1</b>	<b>184.2</b>	<b>183.4</b>	<b>188.2</b>	<b>193.8</b>	<b>198.7</b>	<b>201.8</b>	<b>205.6</b>
<b>Utilization</b>									
Commercial Disappearance	169.1	168.9	174.7	176.4	180.2	184.3	188.4	189.0	189.5
Ending Commercial Stocks	7.0	9.9	8.3	7.2	8.0	9.5	10.4	12.8	14.0
DEIP	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Net Removals (excluding DEIP)	0.1	0.3	1.1	-0.2	0.0	0.0	0.0	0.0	2.1
<b>Total Use</b>	<b>176.3</b>	<b>179.1</b>	<b>184.2</b>	<b>183.4</b>	<b>188.2</b>	<b>193.8</b>	<b>198.7</b>	<b>201.8</b>	<b>205.6</b>

## Price Forecast

Date	CI Mover	Class II	Class III	Class IV	Boston Uniform	MILC
Jan-09	\$15.74	\$10.41	\$10.78	\$9.59	\$13.91	NA
Feb-09	\$10.72	\$10.89	\$9.35	\$10.10	\$12.35	\$1.34
Mar-09	\$10.10	\$10.63	\$9.75	\$10.15	\$11.86	\$1.61
Apr-09	\$10.10	\$11.05	\$10.30	\$10.50	\$12.36	\$1.61
May-09	\$10.43	\$11.38	\$10.65	\$11.00	\$12.89	\$1.52
Jun-09	\$10.92	\$11.51	\$11.55	\$11.00	\$13.16	\$1.33
Jul-09	\$11.45	\$11.76	\$12.25	\$11.10	\$13.74	\$0.98
Aug-09	\$12.10	\$11.99	\$13.25	\$11.45	\$14.45	\$0.53
Sep-09	\$13.14	\$12.18	\$14.00	\$11.70	\$15.10	\$0.22
Oct-09	\$13.94	\$12.57	\$14.50	\$12.10	\$15.71	NA
Nov-09	\$14.51	\$12.72	\$14.60	\$12.20	\$15.90	NA
Dec-09	\$14.62	\$12.91	\$14.60	\$12.25	\$15.94	NA
Average	\$12.32	\$11.76	\$12.13	\$11.11	\$13.95	\$0.76

## *MILC*

- New MILC program adjusts trigger price with feed costs
- Increases payout percentage to 45%
- Increases eligible milk volume to 2.985 million pounds

## *Bottom Line...*

- Milk prices will be well down in 2009
- Feed prices will also be down
- Unless we can find export markets for a fair amount of product, milk prices will have to curtail production
  - I have All-Milk price down \$4.88
  - May be some room for improvement in Fall
  - MILC will add about \$0.75 per cwt on all milk
- 150,000,000 lbs of NFDM have already been sold to the CCC from October until the present

## *Perspective...*

- We are currently experiencing an alignment of bad things but longer-term fundamentals look good for dairy
- Domestic and international demand trends will continue as economies recover
- The U.S. will need to find a role as something other than “global balancer” given our capability to produce dairy products
- Dairy products can still find channel opportunities through the recession