

# Dairy Situation and Outlook for 2006

## 2005 Southern Region Outlook Conference



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# Before we start, let's look at impacts of Katrina on Dairy

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- Katrina devastated dairy farmers in South MS & Southeast LA
- Hardest hit areas is where about 400+ dairies were concentrated
- These dairies produced over 1M lbs/day
  - Compared to 480M lbs/day for U.S.
- Suffered tremendous damages from downed trees & lost electrical power
- 7-8 dairies sold out within days



# Assessment of Damages

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- Milk dumped for about 7 days
- Very few cows reported killed → ~ 2/farm
- Fences destroyed from fallen trees
- Wind damages to barns & outbuildings
- Biggest impact → 25% (or more) reduced milk output from cows stress
  - Missed milkings, heat, illnesses, diseases for an entire lactation



# Assessment of Damages

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- Let's look at estimates of damages for:
  - Mississippi → Total losses ~ \$21.1M or \$120,000 per farm
    - Compares to Production value of \$63.6M in 2004 or losses are 1/3 of Value of Production
  - Louisiana → Total Losses ~ \$24.6M or \$109,000 per farm
  - Combined areas impacted by Katrina → Total losses ~ \$48.8M or \$115,000 per farm

# Estimation of Economic Damages/Losses to Mississippi Dairy Industry from Katrina

<u>Dumped Milk Impacts/Losses</u>		<u>Immediate/Short-term Impacts/Losses</u>		<u>Longer-term Impacts/Losses</u>	
Number of dairies	175 farms	Damages to Barns, clean up	\$10,000	Annual Milk Production/cow	14,000 lbs
Number of cows/dairy	112 head	Damages to Outbuildings, etc. per farm	\$10,000	Estimated Milk Production Losses due to cow stress, illness, disease	25%
Pounds milk/cow/day	45 lbs	Damages to fences per farm	\$5,000	Estimated Milk Production Losses due to Delayed/Failed Ryegrass Planting	5%
Total Pounds/day	882,000 lbs	Additional Equip/Fuel costs	\$5,000		
Milk Price/cwt	\$16.50	Death of Cows/Heifers/Calves (2-3 animals) per farm	\$3,000	<b>Total Estimated Milk Losses</b>	<b>30%</b>
<b>Total Milk \$/day</b>	<b>\$145,530</b>			Estimated Production Loss/cow	4,200 lbs
<b>Losses Dumped Milk</b>		Hay Losses + Additional Feed Costs per Farm	\$4,000	Number of dairies	175 farms
for 3 days	\$436,590			Number of cows/dairy	112 head
for 4 days	\$582,120	<b>Total Wind/Water Damages</b>	<b>\$6,475,000</b>	Total number of cows affected	19,600 head
for 5 days	\$727,650	<b>Dumped Milk Losses (7 days)</b>	<b>\$1,018,710</b>	Reduction in Milk Production	82,320,000 lbs
for 6 days	\$873,180				
for 7 days	\$1,018,710	<b>Total Losses</b>	<b>\$7,493,710</b>		
for 8 days	\$1,164,240			Milk Price/cwt	\$16.50
for 9 days	\$1,309,770	<b>Total Losses per Farm</b>	<b>\$42,821</b>		
for 10 days	\$1,455,300			<b>Total Losses</b>	<b>\$13,582,800</b>
for 11 days	\$1,600,830			<b>Total Losses per Farm</b>	<b>\$77,616</b>
for 12 days	\$1,746,360				
<b>COMBINED SHORT &amp; LONGTERM LOSSES ... TOTAL</b>			<b>\$21,076,510</b>		
<b>COMBINED SHORT &amp; LONGTERM LOSSES ... PER FARM</b>			<b>\$120,437</b>		

# Estimation of Economic Damages/Losses to Louisiana Dairy Industry from Katrina

<u>Dumped Milk Impacts/Losses</u>		<u>Immediate/Short-term Impacts/Losses</u>		<u>Longer-term Impacts/Losses</u>	
Number of dairies	225 farms	Damages to Barns, clean up	\$10,000	Annual Milk Production/cow	12,000 lbs
Number of cows/dairy	112 head	Damages to Outbuildings, etc. per farm	\$10,000	Estimated Milk Production Losses due to cow stress, illness, disease	25%
Pounds milk/cow/day	45 lbs	Damages to fences per farm	\$5,000	Estimated Milk Production Losses due to Delayed/Failed Ryegrass Planting	5%
Total Pounds/day	1,134,000 lbs	Additional Equip/Fuel costs	\$5,000	<b>Total Estimated Milk Losses</b>	<b>30%</b>
Milk Price/cwt	\$16.50	Death of Cows/Heifers/Calves (2-3 animals) per farm	\$3,000	Estimated Production Loss/cow	3,600 lbs
<b>Total Milk \$/day</b>	<b>\$187,110</b>	Hay Losses + Additional Feed Costs per Farm	\$4,000	Number of dairies	225 farms
<b>Losses Dumped Milk</b>		<b>Total Wind/Water Damages</b>	<b>\$8,325,000</b>	Number of cows/dairy	112 head
for 3 days	\$561,330	<b>Dumped Milk Losses (7 days)</b>	<b>\$1,309,770</b>	Total number of cows affected	25,200 head
for 4 days	\$748,440	<b>Total Losses</b>	<b>\$9,634,770</b>	Reduction in Milk Production	90,720,000 lbs
for 5 days	\$935,550	<b>Total Losses per Farm</b>	<b>\$42,821</b>	Milk Price/cwt	\$16.50
for 6 days	\$1,122,660			<b>Total Losses</b>	<b>\$14,968,800</b>
for 7 days	\$1,309,770			<b>Total Losses per Farm</b>	<b>\$66,528</b>
for 8 days	\$1,496,880				
for 9 days	\$1,683,990				
for 10 days	\$1,871,100				
for 11 days	\$2,058,210				
for 12 days	\$2,245,320				
<b>COMBINED SHORT &amp; LONGTERM LOSSES ... TOTAL</b>			<b>\$24,603,570</b>		
<b>COMBINED SHORT &amp; LONGTERM LOSSES ... PER FARM</b>			<b>\$109,349</b>		

## Estimation of Economic Damages/Losses to Southeastern Dairy Industry from Katrina

<u>Dumped Milk Impacts/Losses</u>		<u>Immediate/Short-term Impacts/Losses</u>		<u>Longer-term Impacts/Losses</u>	
Number of dairies	425 farms	Damages to Barns, clean up	\$10,000	Annual Milk Production/cow	13,000 lbs
Number of cows/dairy	112 head	Damages to Outbuildings, etc. per farm	\$10,000	Estimated Milk Production Losses due to cow stress, illness, disease	25%
Pounds milk/cow/day	45 lbs	Damages to fences per farm	\$5,000	Estimated Milk Production Losses due to Delayed/Failed Ryegrass Planting	5%
Total Pounds/day	2,142,000 lbs	Additional Equip/Fuel costs	\$5,000	<b>Total Estimated Milk Losses</b>	<b>30%</b>
Milk Price/cwt	\$16.50	Death of Cows/Heifers/Calves (2-3 animals) per farm	\$3,000	Estimated Production Loss/cow	3,900 lbs
<b>Total Milk \$/day</b>	<b>\$353,430</b>	Hay Losses + Additional Feed Costs per Farm	\$4,000	Number of dairies	425 farms
<b>Losses Dumped Milk</b>		<b>Total Wind/Water Damages</b>	<b>\$15,725,000</b>	Number of cows/dairy	112 head
for 3 days	\$1,060,290	<b>Dumped Milk Losses (7 days)</b>	<b>\$2,474,010</b>	Total number of cows affected	47,600 head
for 4 days	\$1,413,720	<b>Total Losses</b>	<b>\$18,199,010</b>	Reduction in Milk Production	185,640,000 lbs
for 5 days	\$1,767,150	<b>Total Losses per Farm</b>	<b>\$42,821</b>	Milk Price/cwt	\$16.50
for 6 days	\$2,120,580			<b>Total Losses</b>	<b>\$30,630,600</b>
for 7 days	\$2,474,010			<b>Total Losses per Farm</b>	<b>\$72,072</b>
for 8 days	\$2,827,440				
for 9 days	\$3,180,870				
for 10 days	\$3,534,300				
for 11 days	\$3,887,730				
for 12 days	\$4,241,160				
<b>COMBINED SHORT &amp; LONGTERM LOSSES ... TOTAL</b>			<b>\$48,829,610</b>		
<b>COMBINED SHORT &amp; LONGTERM LOSSES ... PER FARM</b>			<b>\$114,893</b>		



# Question: Will the MS/LS Dairy Industry Survive Katrina?

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- Answer → YES ... but,
- There will likely be dramatic decreases in the number of dairy farms
- Conservative guess → 20% fewer
- Many farmers will exit instead of investing in needed long term repairs
- Will the remaining dairies be enough to sustain firms servicing these farms?



***But, my task is to discuss  
Southern Dairy S&O .....***

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***and forecast milk prices for  
2006***





***Predicting milk prices .....***

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***ARE YOU KIDDING???***

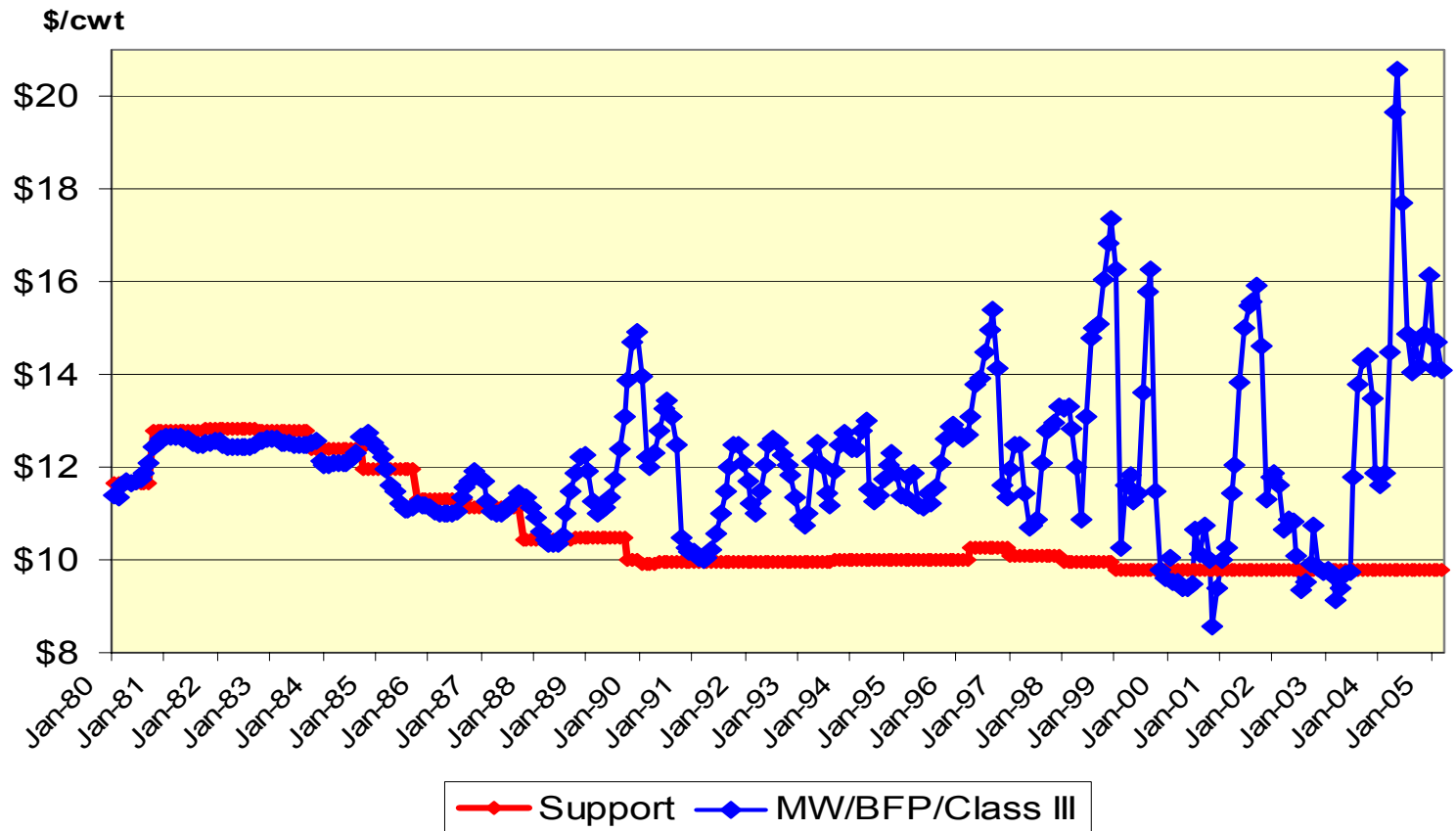
***or***

***DO YOU THINK I'M NUTS??***



# Milk Prices are Extremely Volatile ... & getting worse!!

**Monthly Dairy Support vs. MW/BFP/Class III Prices**  
January 1980 - March 2005





# Milk Price Volatility

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- Thus, extreme instability of milk and dairy prices caused great difficulty in forecasting (modeling)
- For example, Class III milk prices ranged from \$9 and \$20 between 2003 and 2004



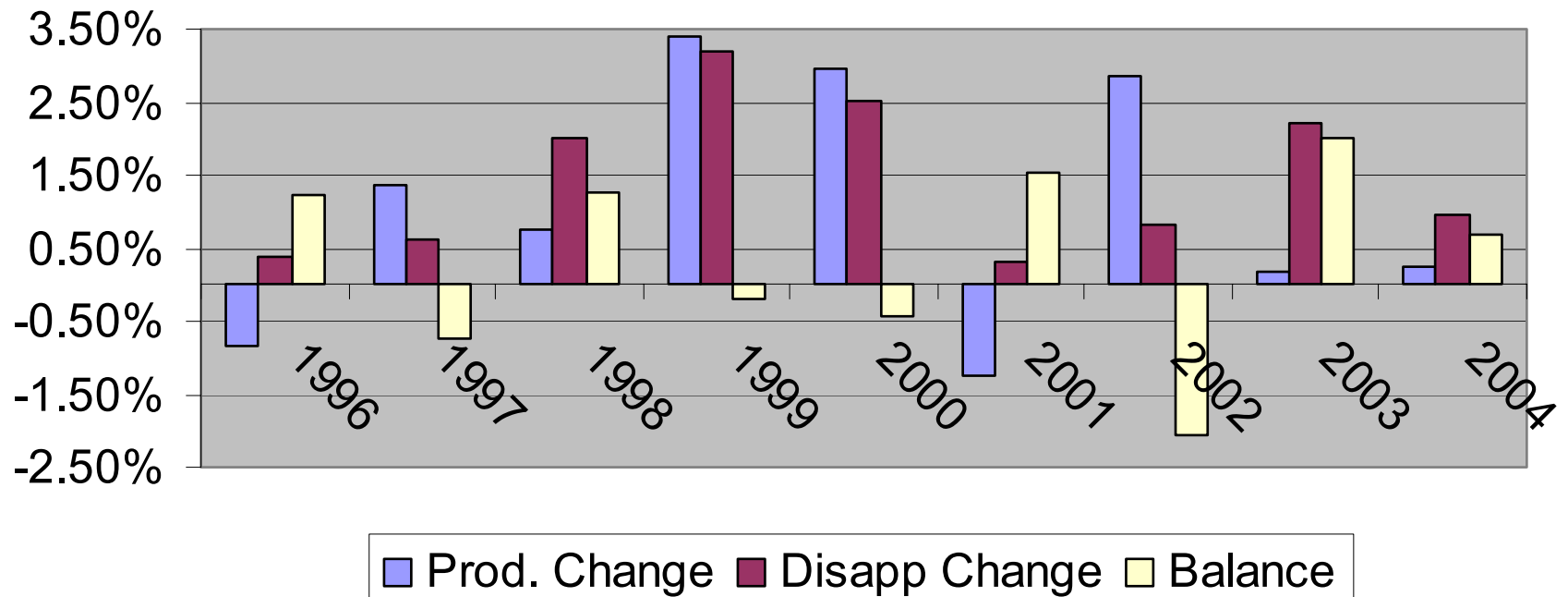
# Price Volatility ... Root Cause?

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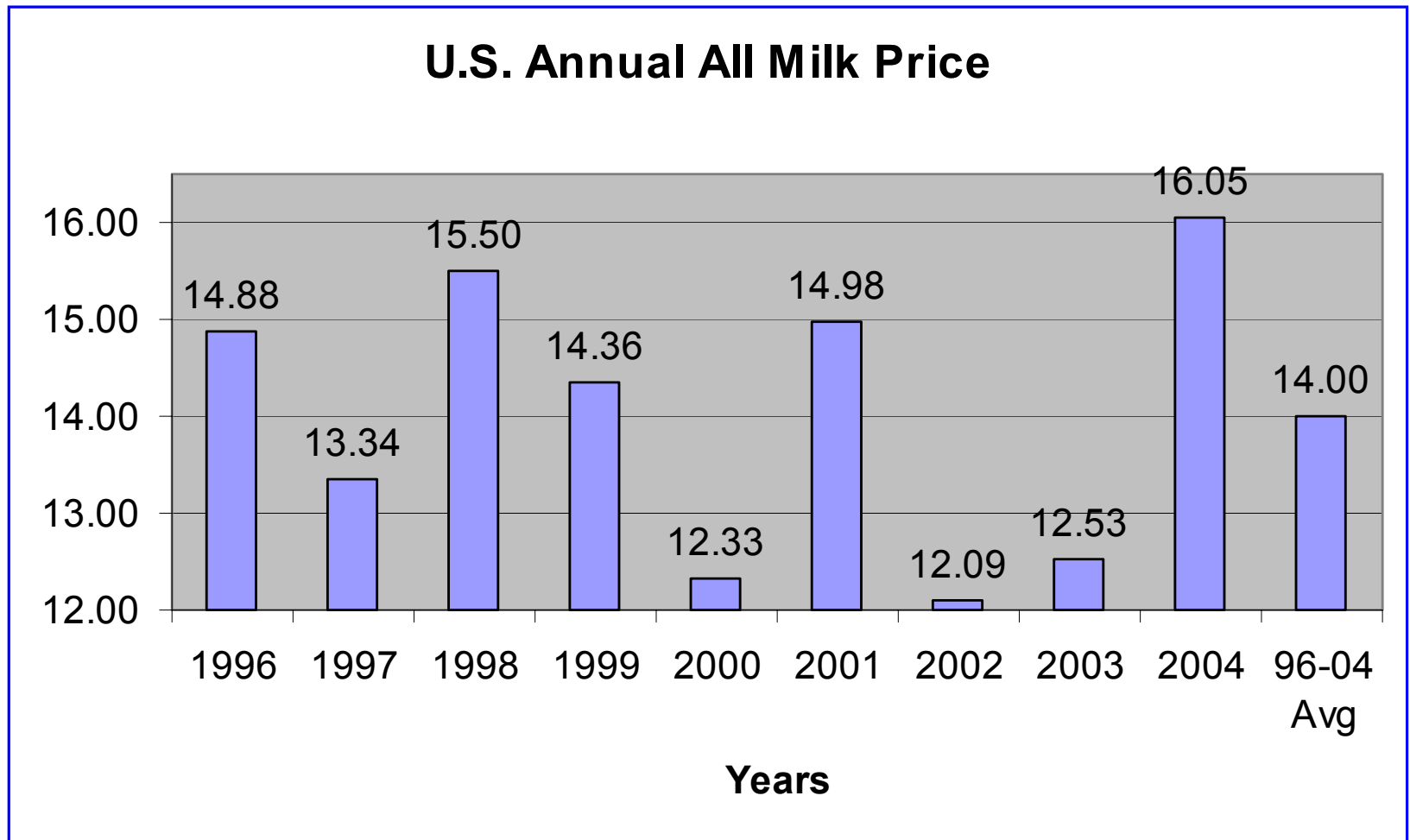
- Milk/dairy markets are very sensitive to changes in demand & supply
- Extreme price movements when supply-demand balance changes
- Imbalance of more than 1% causes huge price swings
- Review some numbers/graph

# Look at Yellow Bar ... Balance

## Comparing Annual Percentage Change in Milk Production vs. Commercial Disappearance



# When Balance is Positive ... Prices are above the \$14 avg





# OK ... so, I am NUTS ... let's go

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- Review milk supply and dairy product demand situation
- Review dairy product prices
- Provide forecasts – guesses – for milk prices for 2006
- National Dairy Policy/Programs for 2006 and the “New” Farm Bill
- WTO & Dairy Trade Issues/Concerns



# Milk/Dairy Supply-Demand Balance remains “good”

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- Milk supplies/production is growing
  - Tremendous growth in milk output
  - Produced by BOTH more cows and sharp increases in productivity per cow
- Demand continues to grow
  - “New” international, export market for U.S. dairy products
- So, milk & dairy product prices remain “above normal” (above 5-year average)



# Current Dairy Supply Situation

## – U.S./National

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- Number of milk cows increasing, slightly ... NO??
  - In August, 9.074 M cows in national dairy herd
  - +45,000 more cows during Aug '05 vs Aug '04, or 0.5%
  - Since February, adding ~ 4,100 cows/week
- Significantly greater milk output per cow
  - In August, milk output/cow up +60 lbs/cow, or 3.8%
  - Thru first 8 months of '05, output/cow up 44 lbs, or 2.7%
  - About 90% of growth in production is from ↑ output/cow
- U.S. milk production is increasing due to favorable milk prices, low feed costs and good weather
  - Past 4 months has seen 4% or greater increases in output
  - Thru first 8 months of '05, production up by 3.04%
  - 2005 forecast annual increase of 3.3% is largest since 1999

# Current Dairy Supply Situation

## – SE States and MS vs West

- 11 SE States – Milk Production up +0.25% during 2<sup>nd</sup> qtr of 2005 vs 2004 ... **WOW!!**
  - MS, +4.8%; LA, -5.4%; AL, -4.6%; AR, -3.5%; TX, +7.4%; TN, -4.8%; KY, -1.6%, FL, +3.4%; GA, 0.0%
- Selected Western States – 2<sup>nd</sup> Qtr Statistics
  - CA, +4.4%; ID, +11.7%; IN, +4.1%; NM, +2.7%; WI, +3.9%
- U.S. – 2<sup>nd</sup> Qtr Statistics
  - Up +4.1% ... and accelerating
- *There is a "flood" of milk coming down the pipe*



# What caused this dramatic increase in milk output?

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- Dairy farmers have & are responding to improved milk prices ... profitability, too?
  - 24 months of “favorable” milk prices
  - All-time record high price (\$20+/cwt) in '04
- Low feed costs → high quality rations
- Coincidentally, prolonged period of very good weather
- Bottomline, more cows producing more milk



# Can Demand Keep Pace?

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- YES, so far anyway ....
  - Continued strength of the U.S. economy & demand for dairy products
  - Cooperative Working Together programs
    - Herd retirement → plan to remove 70+K head
    - Export subsidy when cheese \$\$ falls below \$1.40
  - Lower dairy exports in EU, New Zealand & Australia → deficit being filled by U.S.
  - Demand/consumption expected to increase ~ 2.2 – 2.8% in 2005



# Milk & Dairy Product Prices

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- Milk prices are directly linked to dairy product prices → mostly cheeses
  - Nearly 45% of all milk produced in U.S. is used to make various cheeses
  - Almost 30% is used for “bottled” milk products
  - Remaining used to manufacture butter, milk powders, ice cream, yogurts, etc.
- Important note: Dairy products receive govt. price supports ... **not milk!!**



# Current Dairy Product Prices

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- Cheddar Cheese and Butter prices have fluctuated 20-25% ... but STABLE??
  - On 5 different occasions in 2005, cheese and butter prices have reacted to a variety of issues
  - But, cheese prices remained steady in \$1.40 - \$1.75/lb range
  - Butter prices ranged between \$1.45 - \$1.75
- Nonfat Dry Milk Prices has remained constant at 98.25¢/lb since April



# Dairy Product Prices – cont'd.

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- Last Friday, September 23<sup>rd</sup> on CME ...
  - 40# Block Cheddar Cheese price was \$1.5950/lb
  - 500# Barrel Cheddar Cheese price was \$1.4875/lb
  - Grade AA Butter price was \$1.7025/lb
  - Grade A Nonfat Dry Milk price was 98.25¢/lb
- Compared to the Support Prices of:
  - 40# Block Cheese Support Price is \$1.13/lb
  - 500# Barrel Cheddar Cheese price is \$1.10/lb
  - Grade AA Butter price was \$1.05/lb
  - Grade A Nonfat Dry Milk price was 80¢/lb



# Dairy Product Prices – cont'd.

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- So, current dairy product prices are “well above” govt. support levels → 25-70% above
- Reflects the robust demand for milk/dairy both in the domestic and ... surprisingly, in the international markets
  - U.S. dairy exports was to \$1.5B in 2004 & is expected to grow to \$2.0B in 2005 → up 25-30%
  - New Zealand has imported over \$1B of nonfat dry milk & is reformulating into casein, etc. for their customers
- International demand/export sales continues to bolster U.S. milk/dairy prices in 2004/05



# Dairy Price Forecasts for 2006

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- Impacts of Hurricanes Katrina & Rita will likely dampen U.S. economic growth & push down prices
  - Katrina alone is forecast to lower GDP growth 1%
    - Katrina recovery costs estimated at \$200B → Rita ???
  - Dairy prices are sensitive to GDP growth because about 1/3 of dairy product consumption occurs in restaurants/fast food
- Increasing U.S. milk production will also hold down milk/dairy prices
- So, most forecasts expect prices to fall ~\$2.00/cwt

# Class I Milk Price Forecasts for Remainder of 2005 & early 2006

## Atlanta Zone "Advanced" Class I Milk Prices

	<u>2003</u>	<u>2004</u>	<u>2005</u>
October	\$17.37	\$17.88	\$17.37
November	\$17.47	\$17.39	\$16.50*
December	\$16.95	\$17.53	\$15.00*
<b>Average</b>	<b>\$14.49</b>	<b>\$18.08</b>	<b>\$17.27*</b>
	<u>2004</u>	<u>2005</u>	<u>2006</u>
January	\$14.95	\$19.75	\$14.75*
February	\$14.69	\$16.89	\$14.50*
March	\$15.04	\$18.53	\$14.00*

The average Class I milk price is predicted to be 80¢-\$1.00/cwt.  
lower in 2005 compared to 2004.

\* Projections

# "Blend" Price Forecast for 2006

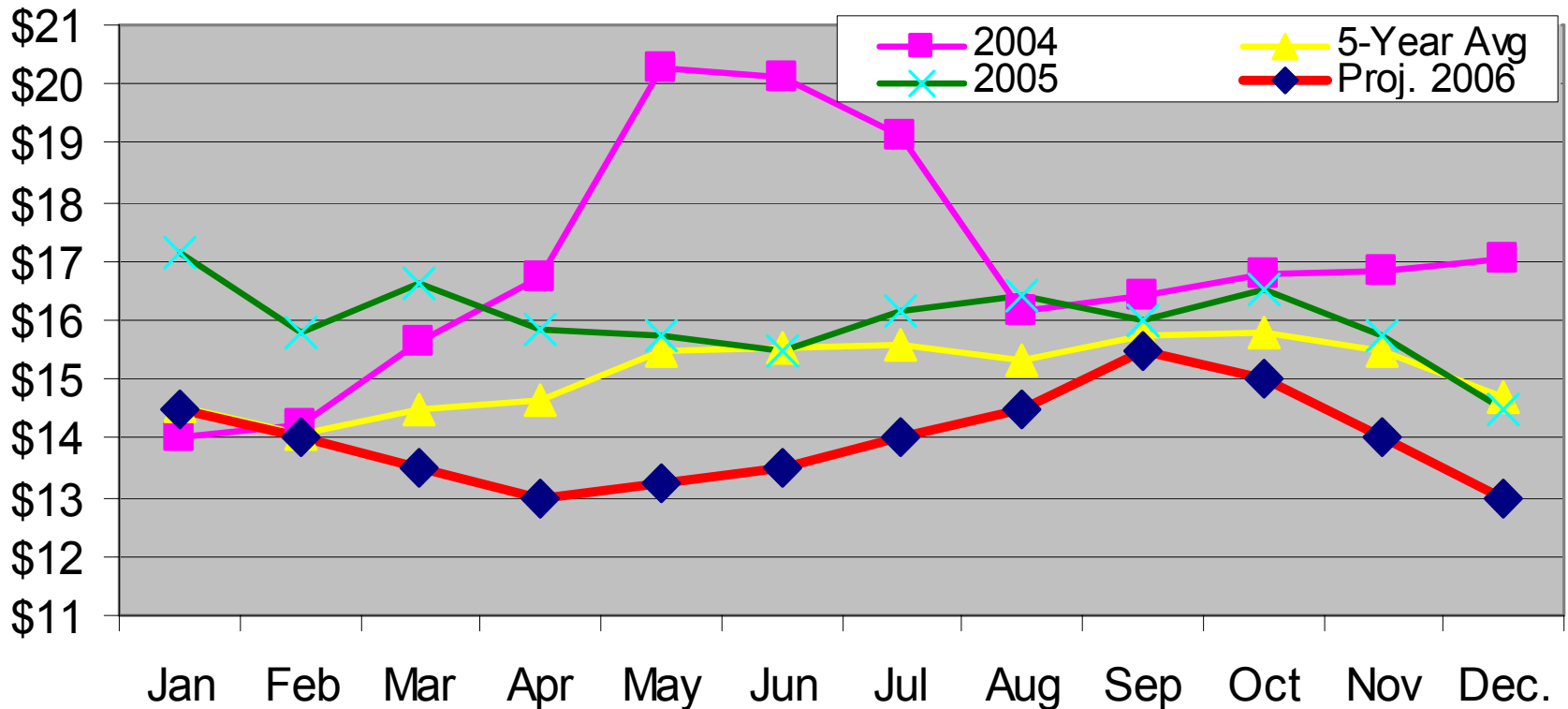
## Atlanta/Starkville Zone "Blend" Milk Prices

	<u>2004</u>	<u>2005</u>	<u>2005</u>
January	\$14.02	\$17.16	\$14.25*
February	\$14.23	\$15.80	\$14.00*
March	\$15.61	\$16.63	\$13.50*
April	\$16.72	\$15.85	\$13.00*
May	\$20.27	\$15.73	\$13.25*
June	\$20.11	\$15.47	\$13.50*
July	\$19.10	\$16.18	\$14.00*
August	\$16.17	\$16.44	\$14.50*
September	\$16.43	\$16.00*	\$15.50*
October	\$16.78	\$16.50*	\$15.00*
November	\$16.83	\$15.75*	\$14.00*
December	\$17.03	\$14.50*	\$13.00*
<u>Average</u>	<u>\$16.94</u>	<u>\$16.00*</u>	<u>\$13.98*</u>

\* Projections

# FO#7 "Blend" Price Forecasts for 2006

## FO# 7/Southeast Monthly "Blend" Milk Prices





# Price Outlook Summary

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- 2005 prices remain relatively strong because of international demand & related factors
  - **BUT!! → milk output is increasing...sharply!**
- Dairy & milk prices have “bounced around” frequently in 2005 → but, relatively stable
- 2006 forecast much lower milk prices with a \$2.00/cwt (down 10-15%)
- Key factor: Continued robust international demand for U.S. dairy products → ???



# Various Dairy Policy Issues

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1. Merger of the Southeast & Appalachian Federal Milk Orders
2. Extension of MILC program
3. Opening Canadian Border for cattle imports  
→ BSE issues on both sides of border
4. Supreme Court recent ruling on the Beef Checkoff Program → implications for dairy
5. Trade → WTO, AUSTA, CAFTA, etc.



# USDA Ruling for Federal Milk Order Merger

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- USDA announced on Sept 21 its final decision on merger of Appalachian & Southeast FOs
  - Recommended **NOT to merge** Southeast & Appalachian FOs → as proposed by DFA
  - Did **NOT** recommend to split the Southeast FO into separate east & west Orders by creating a new Mississippi Valley FO → as proposed by Dean Foods
  - **DID** recommend to add most of southwest Virginia to Appalachian FO → as proposed by several parties
  - **DID** recommend to eliminate the pooling of the same milk on federal & state milk orders, simultaneously



# Extension of MILC Payments

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- MILC Program set to terminate Sept 30, 2005
- President's FY06 Budget calls to extend MILC for 2 years → **at same amounts & prices**
- Ag Approps Bill has passed House with no language for extending MILC → Senate??
- **3 major obstacles for extension of MILC**
  1. Move by Congress to reduce the large federal deficits & ... now add hurricane recovery costs
  2. Members of Congress from Western states still do not support MILC & its quantity limits
  3. **WTO trade negotiations and limits on ag. supports**



# BSE & Opening Canadian Border

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- First, USDA's plan to open border for live cattle imports does **NOT** affect movements of dairy replacements → Why?
  - Plan requires all Canadian live cattle imports must be slaughtered before reaching 30 months of age
- Prior to Canadian BSE case, U.S. imported about 75,000 head of dairy replacements

# Supreme Court Rules on Beef Checkoff Program



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- On May 23, the U.S. Supreme Court issued its ruling on the constitutionality of the beef checkoff program → *found it to legal or constitutional*
- On June 1, the Supreme Court “vacated” the lower court’s ruling on the dairy checkoff
  - So, dairy checkoff program will remain in place & dairy farmers and processors will be required to contribute to these checkoff programs
- All checkoff programs “saved” by this ruling



# WTO & other Trade Negotiations

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- WTO and various other trade negotiations continue → may alter U.S. dairy policy
  - Many underdeveloped nations are placing pressure on the EU, U.S. and Japan to reduce domestic ag. price supports
- U.S. facing tremendous pressures during WTO talks with cotton & dairy farm programs targeted for “significant” reductions in supports
- Timing of WTO negotiations and writing the next (2007 or 2008) Farm Bill will be critical



# Other Trade Negotiations

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- AUSTA implemented and went into effect January 1, 2005 → dairy trade issues
  - Quantity & value of duty-free Australian dairy imports were increased slightly by 0.17% of U.S. production (or ↑ ~\$40M)
  - These amounts of duty-free dairy imports will increase ***gradually*** over a 18-year period
- CAFTA is expected to increase U.S. dairy product exports → 3 to 4 times greater than current levels (↑ from \$80M/yr to \$300M/yr)
  - Congress passed CAFTA ... very narrow margin



# Summary and Conclusions

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- Milk & Dairy Product Prices expected to fall sharply in 2006 → down \$2.00/cwt
- Increasing milk production with an uncertain demand both domestically and internationally
- Dairy programs being challenged by:
  - Budget deficits/hurricane recovery costs
  - WTO negotiations to reduce farm price supports
- 2005 has already been a very interesting year for milk prices → but we say that every year!