



**THE OHIO STATE UNIVERSITY**

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# U.S. Dairy Outlook & Policy

2014 Outlook and Dairy Policy Update



# Today's Topics



Markets and Prices 2014



Dairy Policy & Farm Bill

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Website @ AEDE/OSU:

<http://aede.osu.edu/research/ohio-dairy-web>



# Ohio Vital Statistics: Dairy 2012 & 2013

Last Update: November 2013

Ohio Vital Statistics	2013(p)	2012	Percent Change
Dairy Cows (avg ytd)	270,000	270,000	0.0%
Milk per cow (avg ytd)	1,650	1,637	0.8%
# /cow per day(avg /ytd)	54.5	53.8	1.3%
The data below represent a comparison of the most recent consecutive 12 month period for each year.			
Total Milk Production last 12 months (b #'s) *	5.37	5.32	0.9%
Gross Cash Revenue from sale of milk *	\$1,072,583,708	\$994,265,436	7.9%
FMMO Mailbox Price (12 month average) **	\$19.97	\$18.68	6.9%
FMMO Class 3 Price (12 month average) **	\$17.81	\$17.44	2.1%

\*) cumulative from the most recent reported 12 months

\*\*) most recent reported 12 months

Data source: USDA Reports / FMMO Statistics Cash revenue and FMMO data are for January – December

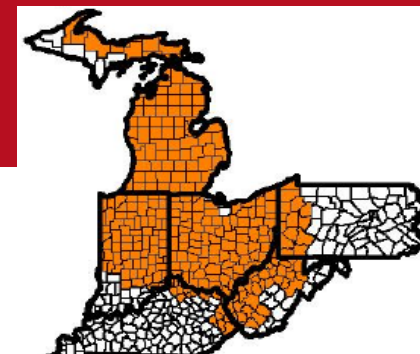


Ohio Licensed Dairies: 2001 - 2013				
	Grade A	Grade M	Total	Change
Licensed Dairies				
2001	2,905	1,378	4,283	
2013	2,149	717	2,866	<b>-1417</b>
% Change	-26%	-48%	-33%	

Average number of cows per dairy farm: **61** 2001 & **94** 2013

Average production per dairy farm: **1.0m** 2001 & **1.8m** #'s 2013

Source: Ohio Department of Agriculture Dairy Division  
<http://www.agri.ohio.gov/apps/DairyFarmsReport/FarmsReportPage.aspx>

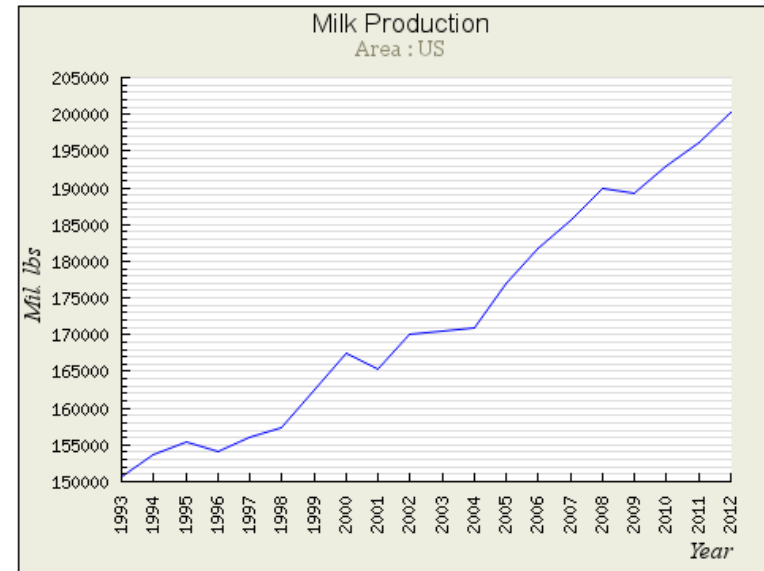
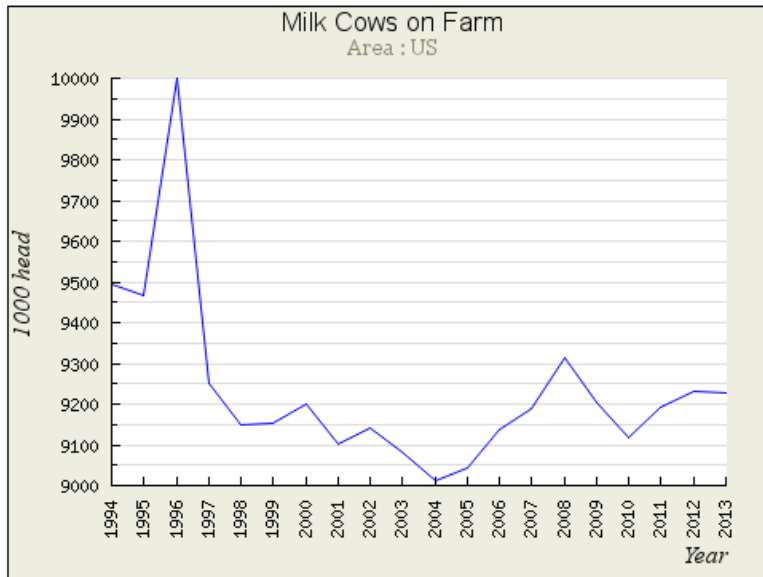


# Ohio Vital Statistics: Mideast FMMO

Last Update: November 2013

<b>FMMO 33: Mideast Statistics</b>	<b>2013</b>	<b>2012</b>	<b>Percent Change</b>
<b>Producers Delivering</b>	6,158	6,381	-3.5%
<b>Producers Delivering Ohio</b>	<b>2,057</b>	<b>2,041</b>	0.8%
<b>Producer Receipts (ytd)</b>	13,994,807,000	14,018,443,000	-0.2%
<b>Prices YTD Averages</b>			
<b>Class I Price</b>	20.55	19.46	5.6%
<b>Class II Price</b>	18.9	16.64	13.6%
<b>Class III Price</b>	17.97	17.44	3.0%
<b>Class IV Price</b>	18.49	16.01	15.5%
<b>FMMO Mideast PPD</b>	1.12	0.18	522.2%
<b>Utilization YTD Averages</b>			
<b>Class I</b>	37.3	37	0.30
<b>Class II</b>	15.6	19.3	-3.70
<b>Class III</b>	33	30.3	2.70
<b>Class IV</b>	14.2	13.4	0.80

Data source: FMMO 33 Mideast Statistics  
<http://www.fmmaclev.com/Statistical%20Summary/2013.pdf>



- ✓ **U.S. total dairy cow numbers are flat at approximately 9.2 million.**
- ✓ **U.S. total milk production continues to expand reaching over 200 billion pounds in 2013.**



## What's UP

- Feed Concentrate Prices
- Machinery Prices
- Herbicide Prices
- Fertilizer Prices
- Insecticide Prices

## What's Down

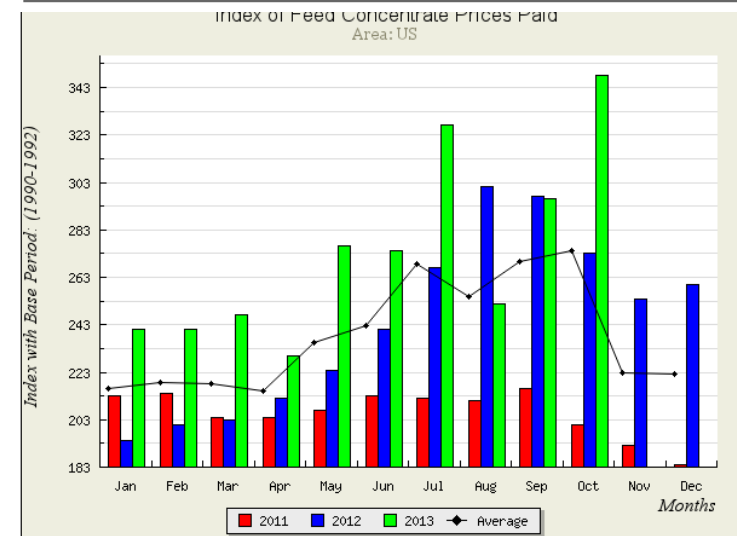
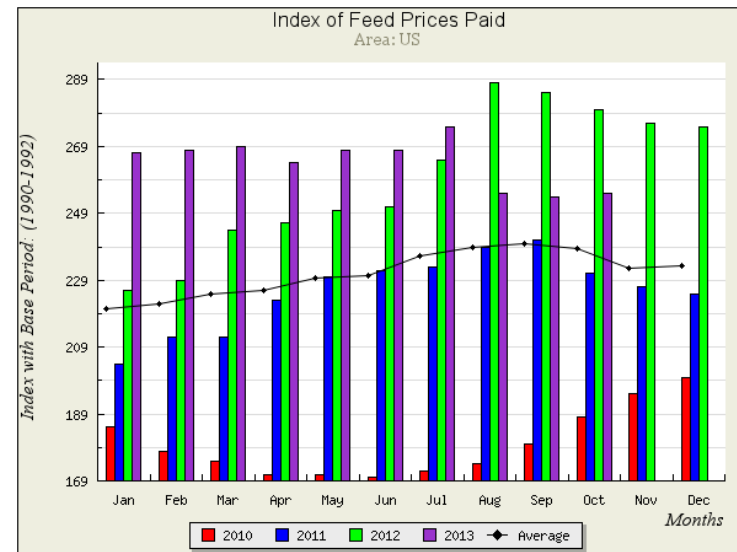
- Milk Cow Replacement Cost
- Feed Grain Prices
- Hay / Forage Prices
- Feed Supplement Prices
- Fertilizer Prices
- Fuel Prices
- Diesel Price (bulk)

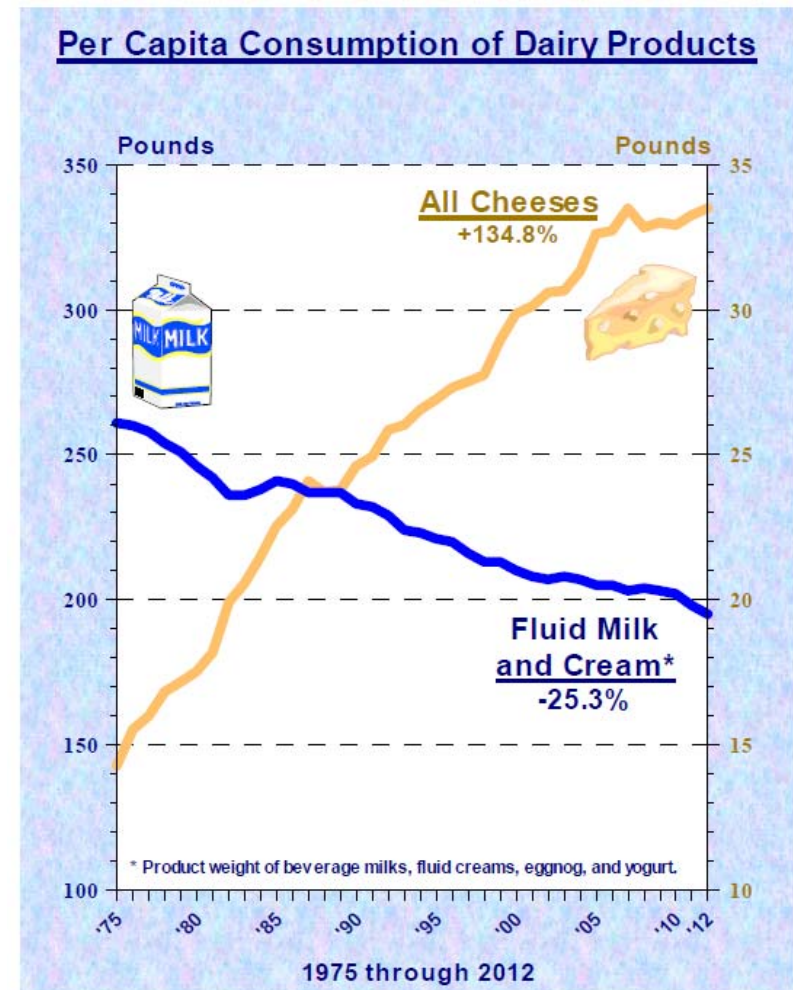
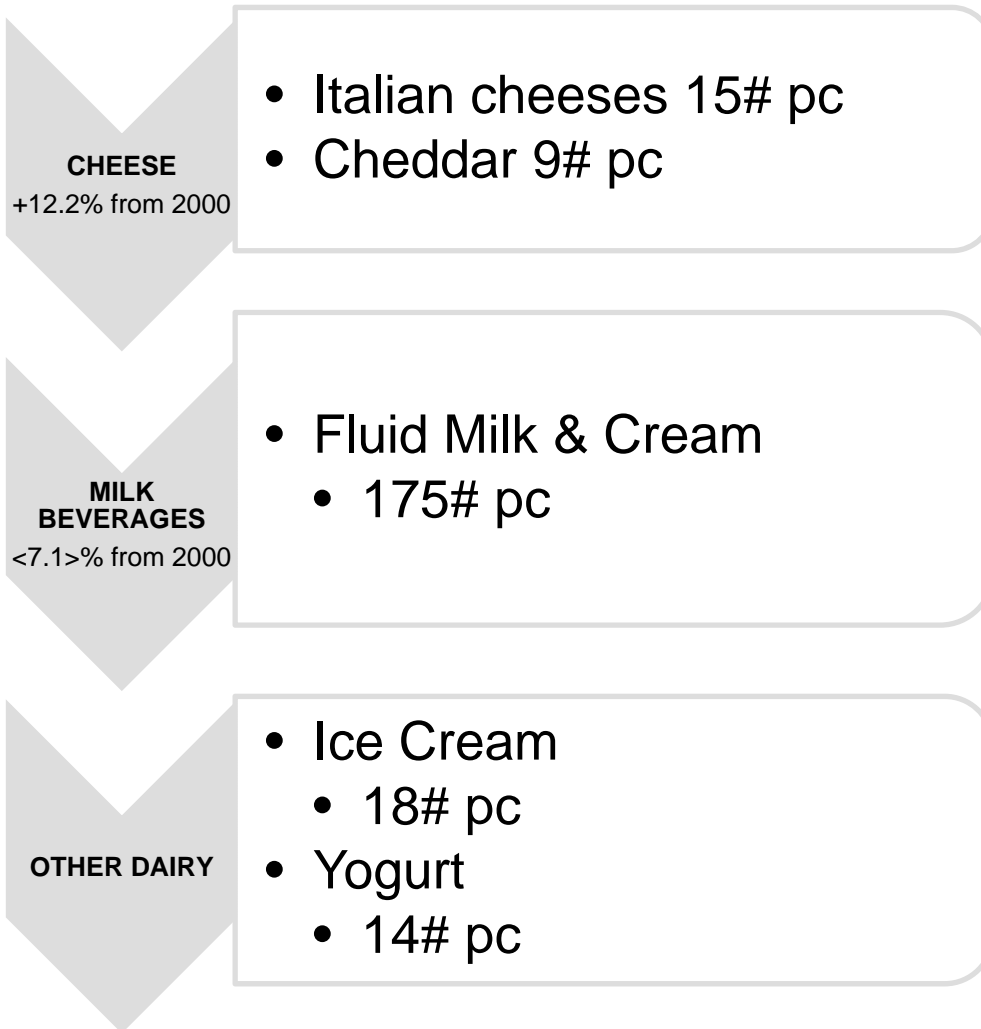
## What's Neutral

- Machinery Prices Paid
- Insecticide Price

Source : USDA National Agricultural Statistics Service

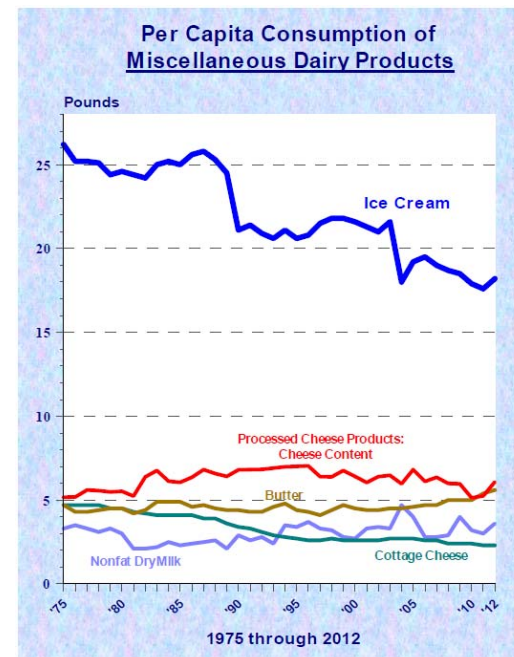
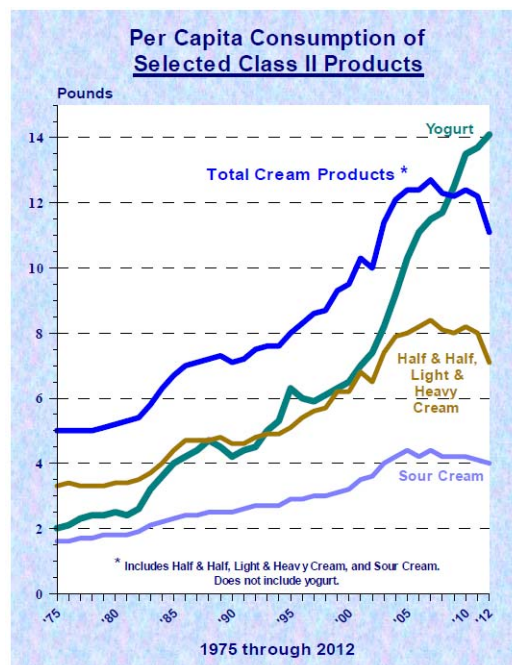
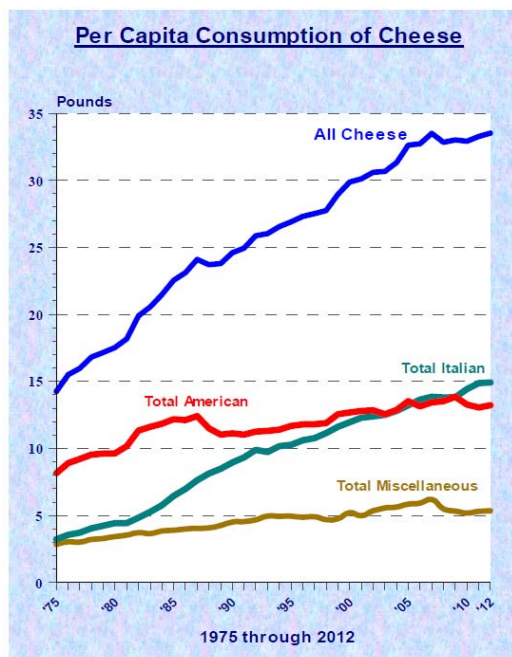
2013-2014 Agricultural Policy and Outlook Conference Series





Source : FMMO 32 Central Marketing Service Bulletin 10/13.



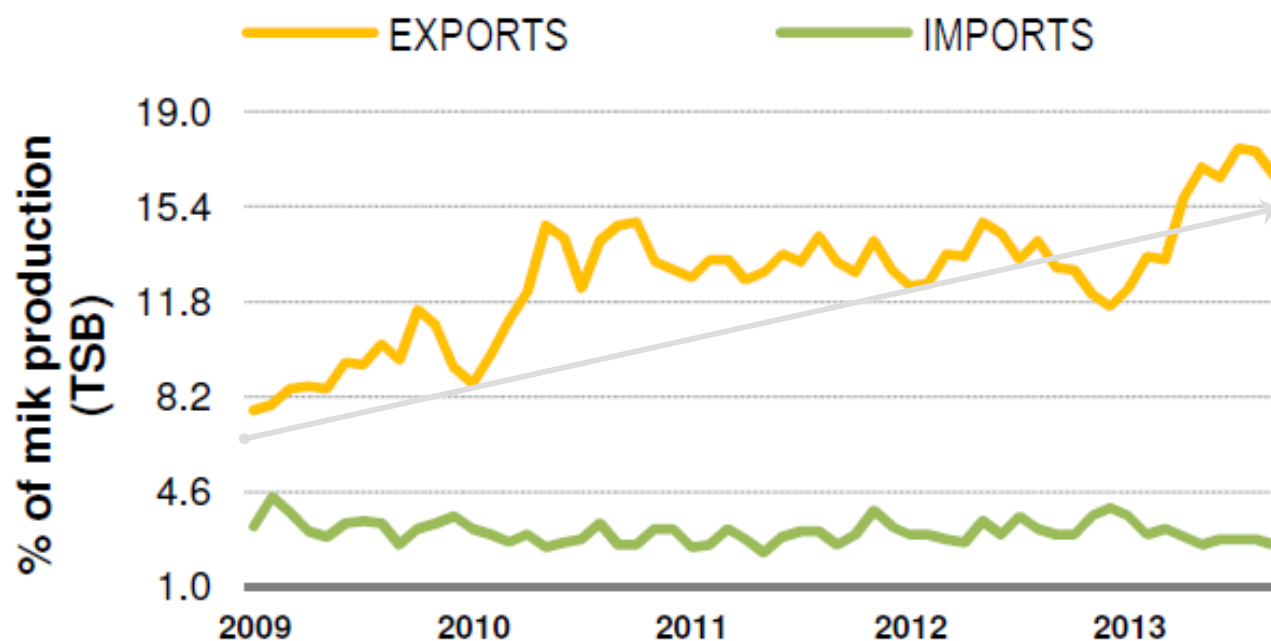


Per capita consumption of all milk products peaked in 1940's @ 800#'s.  
Today per capita use is estimated at 612 #'s.  
Consumer interest in dairy products lies with Cheese, primarily Cheddar and Mozzarella and with Yogurt. Beverage milk products continue a long downward slide.

USDA, ERS, Dairy Data Overview.<http://www.ers.usda.gov/data-products/dairy-data.aspx> )



## U.S. EXPORTS AND IMPORTS AS % OF PRODUCTION



Exports climb from less than 4% in 1996 to over 15% of U.S. milk production in 2013

Source: U.S. Dairy Export Council USDEC



# U.S. Dairy Trade 2013

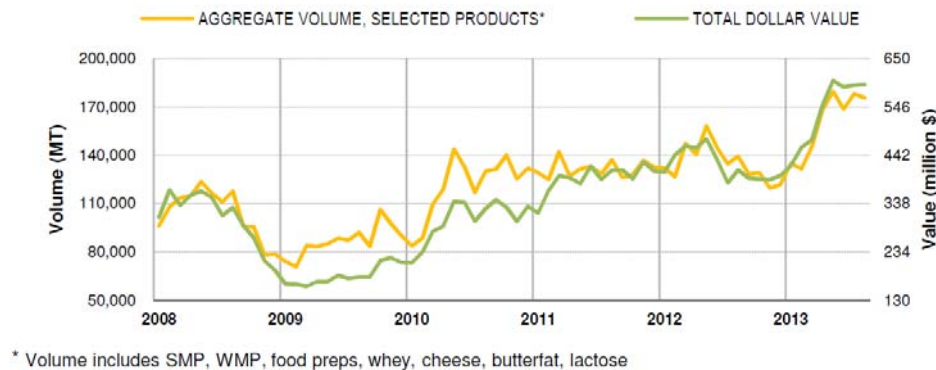
U.S. DAIRY EXPORTS, TOP 10 MARKETS

(JANUARY-SEPTEMBER AND % CHANGE VS. PRIOR YEAR)



U.S. EXPORTS

VOLUME AND VALUE



U.S. Dairy Export Council – Global Dairy Market Outlook 2013 <http://www.usdec.org>

2013-2014 Agricultural Policy and Outlook Conference Series



Product Category	% of U.S. Prod. 2013 / 2012	Top Exporter ( U.S. Rank)
Milk Powder	56 / 47	NZ (3)
Cheese	6.1 / 5.5	EU-27 (3)
Butterfat	9.5 / 5.7	NZ (3)
Whey	56 / 48	US (1)
Lactose	75 / 66	US (1)
Total Solids	15.5 / 13.5	

## Key Trade Issues Going Forward

- New Zealand milk production growth has occurred on the South Island, with 800k+ cows replacing 4m sheep.
- China's milk production is increasing after taking a hit in 2009, but is still only reaching 80b pounds.
- The OECD ten year forecast for imports by China show strong growth in WMP and SMP.



<b>Dairy Exports All Products</b>	<b>% of U.S. Production Used in Export</b>	<b>Days of U.S. Production Exported</b>	<b>Export Equivalent number of cows (000)</b>
1997	4.5	16.4	416
2003	5.7	20.8	518
2007	9.5	34.6	873
2013	15.4	56.4	1,437

U.S. milk production increased 33.066 billion pounds from 2003 – 2013. U.S. exports increased by 21.9 billion pounds absorbing 66% of the growth in U.S. milk production.



Market Supply	SUPPLY UP BY 1.2% TO 213 B#’S
Import to U.S.	IMPORTS DOWN @ 4 B#’S
Exports (fat) from U.S.	EXPORTS UP 5.4% @ 11.5 B#’S
Exports (skim) from U.S.	EXPORTS UP 18.3% @ 39.1 B#’S

Source: USDA WASDE Report Nov. 2013



Market Supply	SUPPLY UP BY 1.6% TO 216 B#’S
Import to U.S.	IMPORTS NC @ 4 B#’S
Exports (fat) from U.S.	EXPORTS DOWN 10% @ 10.6 B#’S
Exports (skim) from U.S.	EXPORTS DOWN .5% @ 37.8 B#’S

Source: USDA WASDE Report Nov. 2013



## USDA All Milk and Class 3 & 4 Prices with 2014 Forecast

Milk prices (dol./cwt) 1/	2012 Annual	2013 Annual(p)	2014 Annual(p)
All milk	18.53	19.85	<b>19.30</b> -20.20
Class III	17.44	17.95	<b>16.85</b> -17.75
Class IV	16.01	18.9	<b>18.60</b> -19.60
DSA Margin **	5.31	7.23	9.95

\*\* DSN Decision Tool

2014 planning  
price @  
milkcheck

2014 planning  
NIOFC margin

U.S. average corn / soybean meal / alfalfa hay based  
feed cost: 2012 = **\$13.22** and 2013(p) **\$12.62** per cwt.





# Navigating Dairy Policy



U.S. Senate Bill S. 954 Agricultural Reform, Food and Jobs Act of 2013  
Dairy Security Act

U.S. House Bill H.R. 2642 Federal Agriculture Reform and Risk Management Act of 2013  
Dairy Freedom Act

AEDE/OSU Newton-Thraen Proposal  
MILC-Insurance (Milk and Honey) aka *The common sense compromise act of 2013.*

AEDE/OARDC Research Project: Cameron Thraen, Research Advisor  
*An Economic Evaluation of the Effectiveness of Future/Options and Insurance Markets as Price Risk Management Tools.*

John C. Newton, Ph.D. Candidate

“Policy Options for Managing Risk in a Modern Dairy Economy”

Website at AEDE/OSU:

<http://aede.ag.ohio-state.edu/programs/OhioDairy/>



**Goal: Understand what's in the Dairy Title of the Farm Bill. Keep farmers financially productive by preventing over-insurance during times of profitable margins, or under-insurance during times of low margins.**

» The extension education team:

- **The Ohio State University**
- The University of Wisconsin
- The University of Minnesota
- Michigan State University

We will conduct workshops, provide written education materials, and host an internet-based tool that will assist farms in the insurance decision.

The Dairy Safety-net Decision Aid Education (DSDAE) will be hosted on centralized dedicated website located at the Ohio State University / FAES / AEDE (and other university websites)

Website @ AEDE/OSU: <http://aede.osu.edu>



John Boehner  
R-Ohio, House Speaker

**“we have a Soviet-style dairy program  
in America today, and one of the  
proposals in the Farm Bill would  
actually make it worse.”**

"The thing that's a point of contention is this stabilization fund." "John hates the dairy program... He was on the (House Ag) Committee for 16 years, and his main focus then was to get rid of the dairy program." "Speaker Boehner is never going to be happy unless we get rid of the whole program."

Collin Peterson  
D-Minn, House Ag. Cmt.





“Despite a lot of rhetoric from our dairy processor friends, this type of stabilization is not supply management; it's not a Canadian quota system; it's not the government forcing you not to produce. It is a simple, voluntary device to encourage a faster rebound in healthy margins and . . . reduce the cost of this new dairy program.”

Randy Mooney, NMPF  
Board Chair



“The House-passed version of the Farm Bill will allow our industry to continue to grow and create thousands more jobs.

The Senate-passed version of the Farm Bill, however, continues to include the divisive milk supply management policy that is opposed by national consumer groups, supermarket chains, restaurants, taxpayers, the Teamsters union and many dairy producers, including the second-largest dairy cooperative.”

“We are pleased to hear that Chairman Lucas has indicated his opposition to this controversial new program that is designed to artificially raise milk prices,”

Jerry Slominski, IDFA senior vice  
president of legislative affairs and  
economic policy.



The 2012-2013 Farm Bill will include the most significant shift in Federal dairy income support policy in the past two decades. (The Dairy Security Act)

The big changes include a **Dairy Producer Margin Protection Program** and a **Dairy Market Stabilization Program** (supply management).

## **The Dairy Producer Margin Protection Program:**

- Coverage available from \$4.00 to \$8.00 per cwt in \$0.50 increments

- Insured pounds are based on a farms production history

- Insurance payments are triggered when the USDA calculated margins fall below the insured coverage level

- To participate farms must pay administrative fees and insurance premiums

## **The Dairy Market Stabilization Program**

- When margins fall below certain thresholds farmers are not paid for milk deliveries greater than their production base

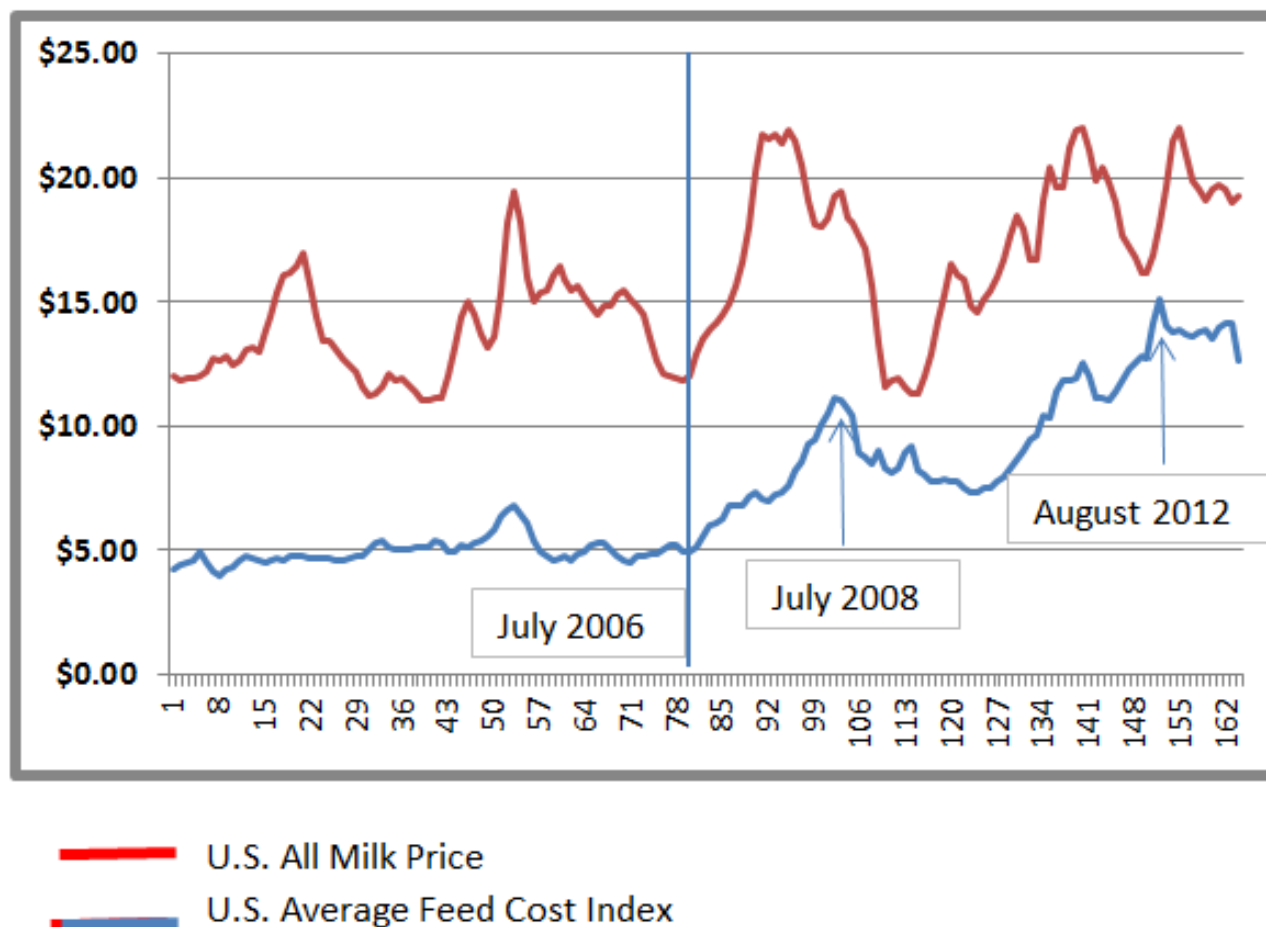
- Payment penalties can be as high at 8% of milk receipts

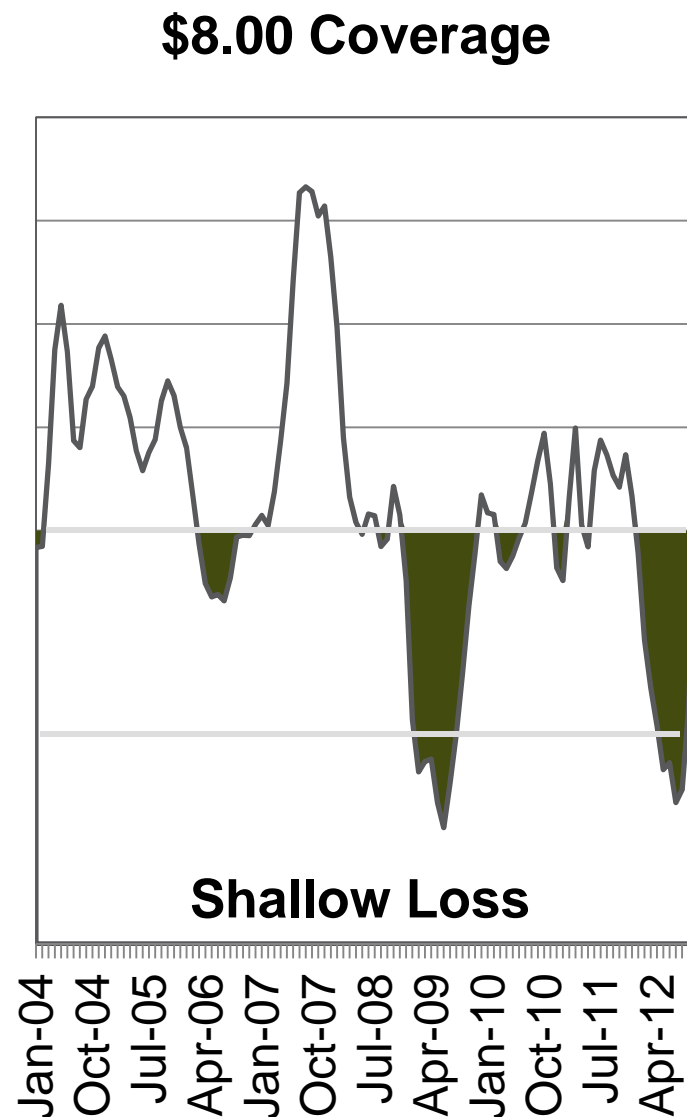
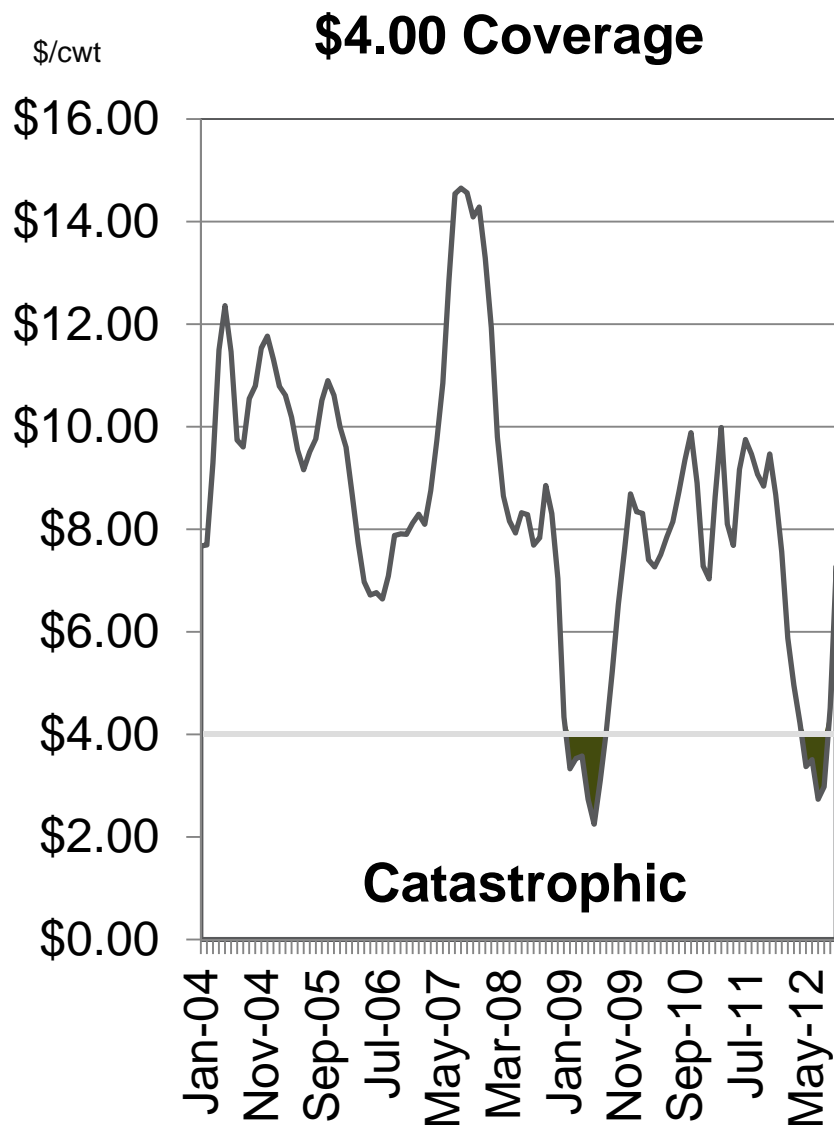
- Production base can be a 3-month rolling average or production from the prior year

- Base option selection is important

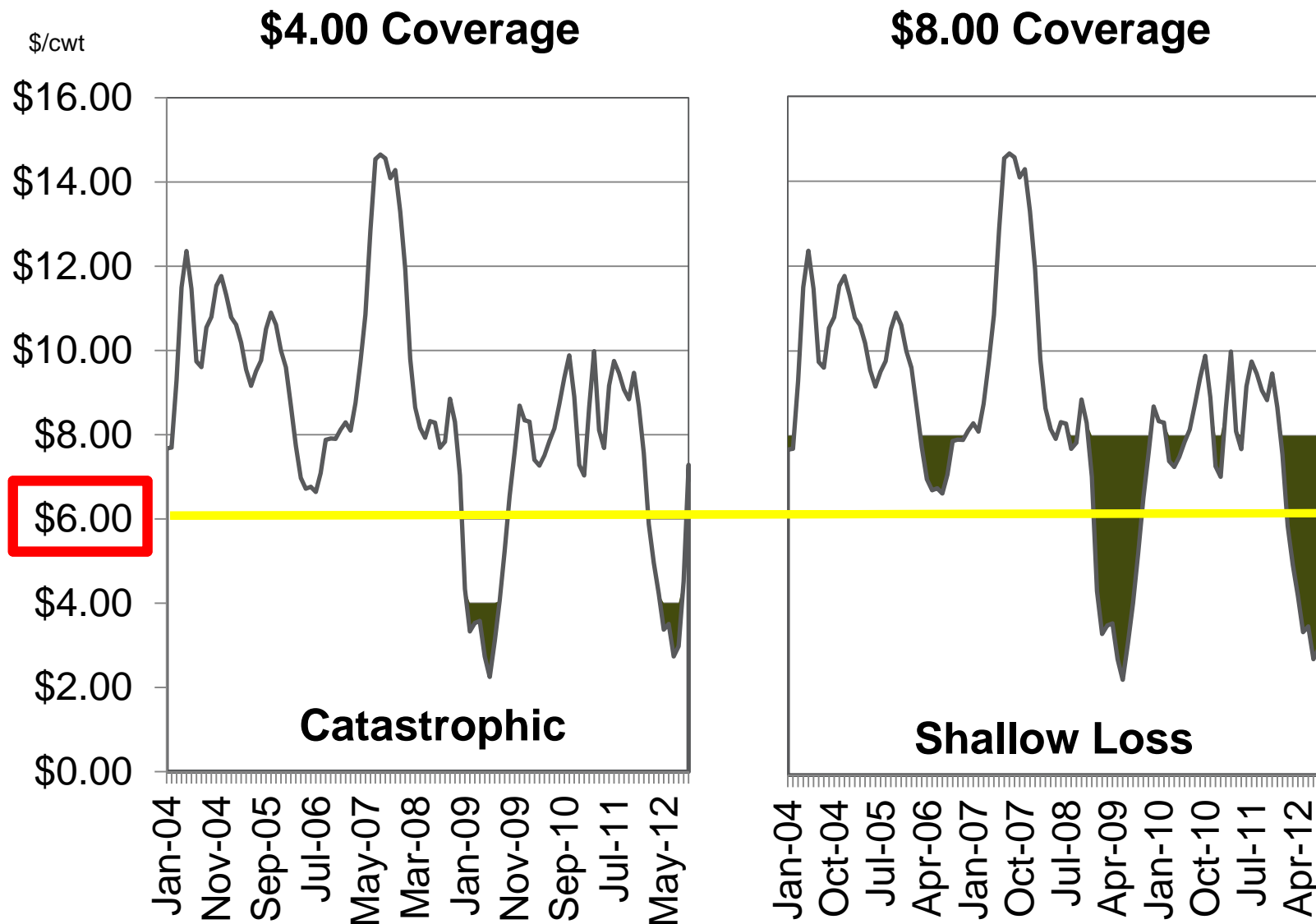


U.S. All Milk Price and U.S. Average Feed Cost Index 2000 - 2013.











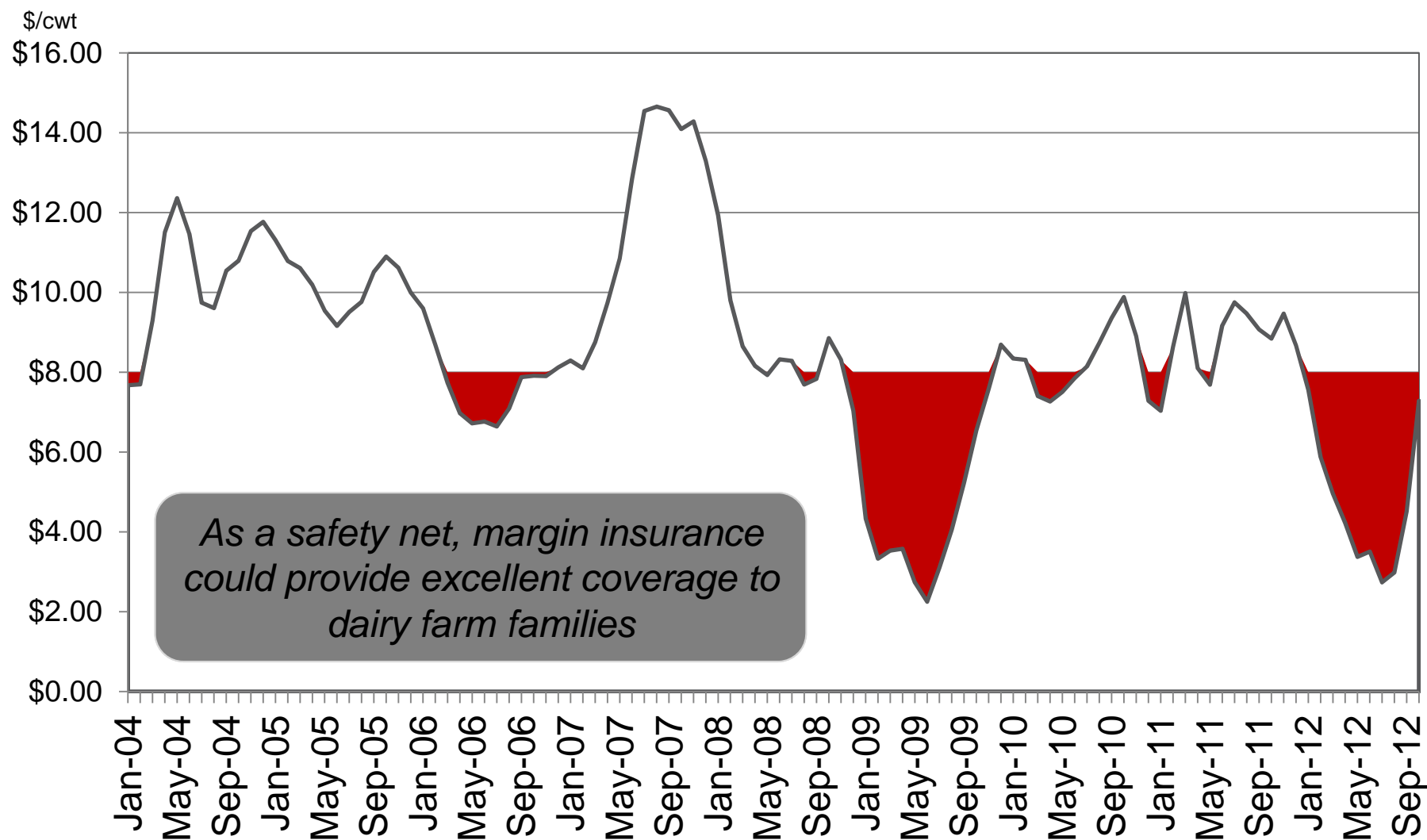
“The devil is in the *absence* of detail.”

Cam Thraen and John Newton



“The potential for many of the **information asymmetry incentives** to go unnoticed in the absence of this research is concerning. We hope that policy makers exercise restraint, and heed to the old adage “*less is more*.” Offering heavily subsidized margin insurance that is rife with information asymmetry incentives may lead to sizeable government outlays and other structural problems.”

John C. Newton

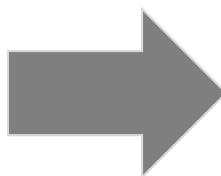





When selecting margin insurance coverage levels each year farms may choose based on anticipated margins

*Fixed insurance premiums combined with the ability to buy insurance on an annual basis creates an **Adverse Gaming** incentive*

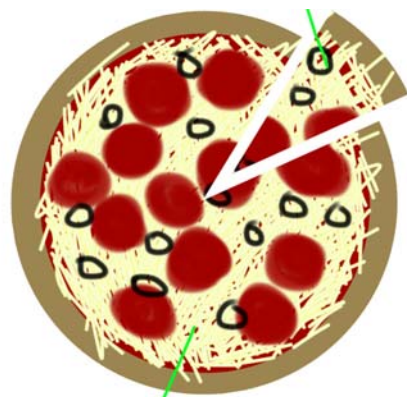
*Similar to buying dairy margin insurance **only** when the house is on fire*



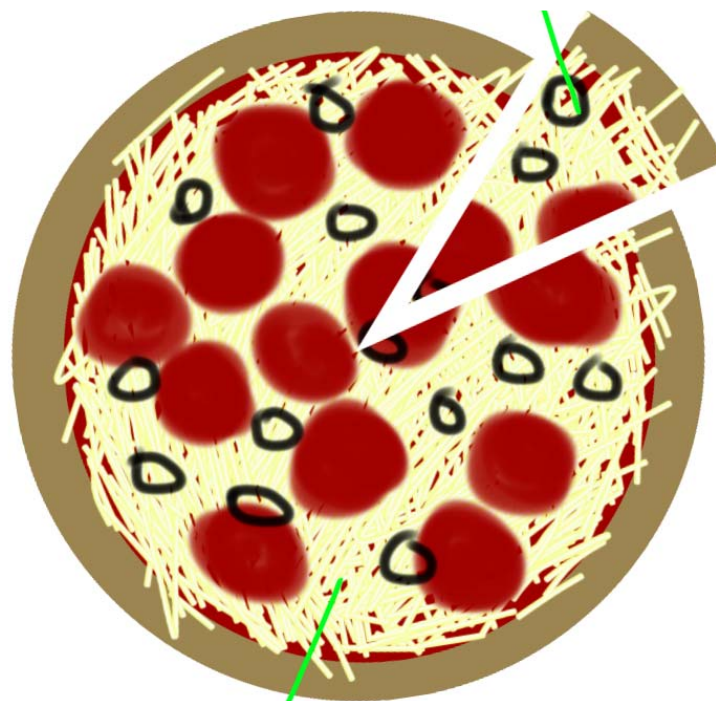
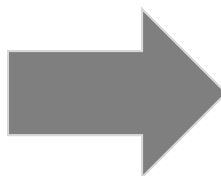
GREAT MARGIN	AVERAGE MARGIN	BAD MARGIN
\$4.00		
	\$6.00	
		\$8.00



## THE SIZE OF THE FARM PAYMENT PIE IS GETTING BIGGER



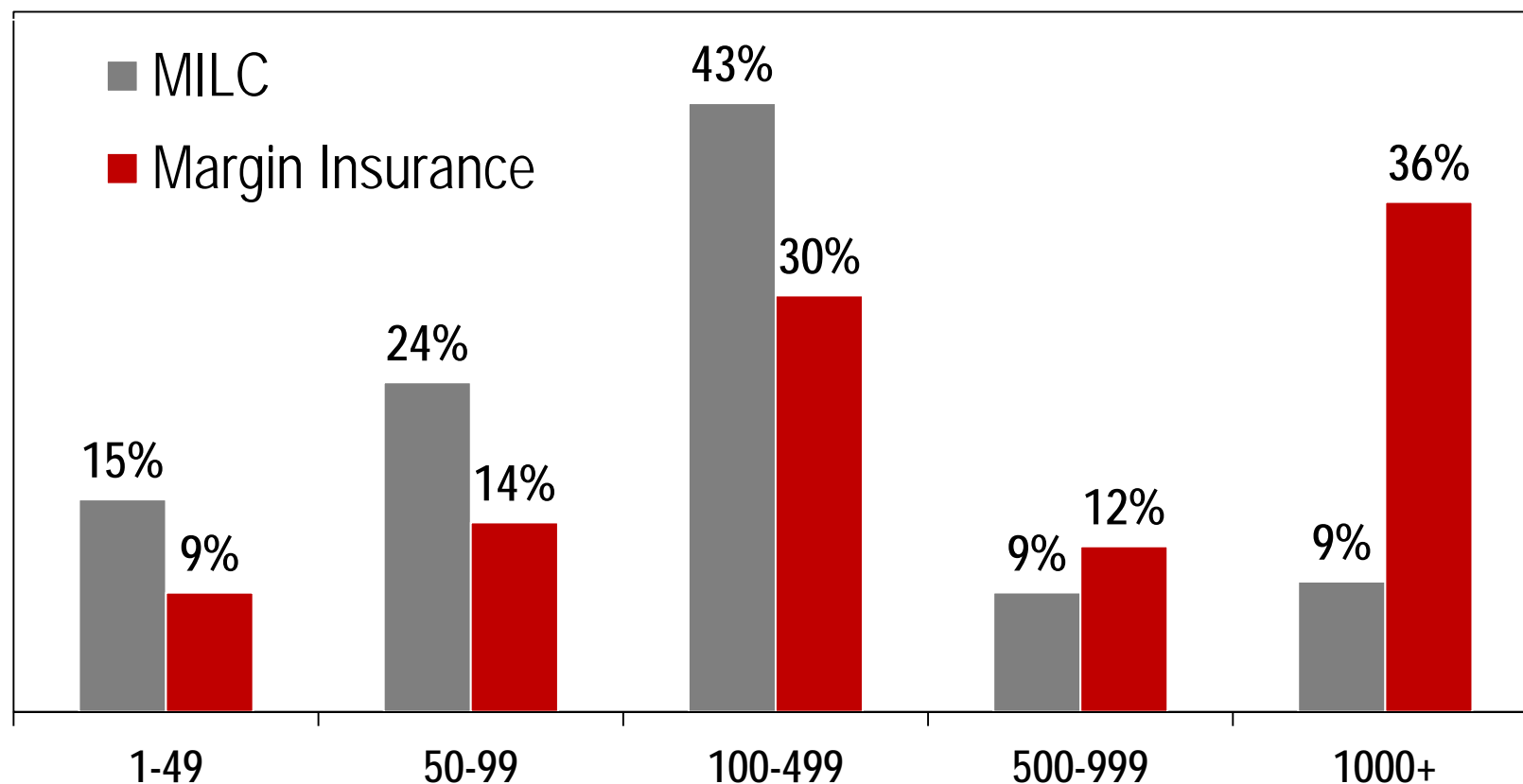
**Farm payments under  
existing dairy safety net  
programs (\$5B 10 YR)**



**Estimated farm payments under  
proposed dairy margin insurance  
(3x as high)**



Percent of total expected government outlays by farm size (2013 Prices)



Herd Size

*Benefits will accrue to the largest dairy farm households  
(USDA: top 6% of farms market 56% of milk)*



*Senate Ag. Committee*

*Common Sense  
Compromise Act of 2013*







Dairy producer margin insurance may cost several thousand to hundreds of thousands of dollars to participate annually.

The coverage decision, once made, cannot be changed during the production year.

Farms will receive an indemnity payment ONLY when margins fall below their selected coverage levels. All coverage levels will incur some expense.

Farms may be subject to payment limitations from supply management throughout the year.

Supply management penalties can occur even without margin insurance payments.

Payment reductions during a time of low margins

Especially likely with coverage levels below \$6.00

Making informed decisions will require complex forecasts on income-over-feed-cost margins into the future along with the determination of when supply management penalties will be in effect and what insurance coverage offers the best return. Where can the dairy farmer get this help? The answer....

**Dairy Safety-net Decision Aid Education Website**

Website @ AEDE/OSU: <http://aede.osu.edu>



“Give a man too many things to think  
about and he can't nary think about  
any one thing too much.”

Festus Hagggen, Deputy,  
Dodge City Kansas



# Discussion ?

Cam Thraen, OSU-AEDE Extension State Specialist  
Dairy Markets & Policy

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