Dairy Outlook and Issues Facing The Dairy Industry

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April 23, 2015

California
Grain & Feed
Association

91st Annual Convention

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2014 – It Was One For the Record Books

Feed costs \$4 to \$5 per hundredweight lower relative to the peak

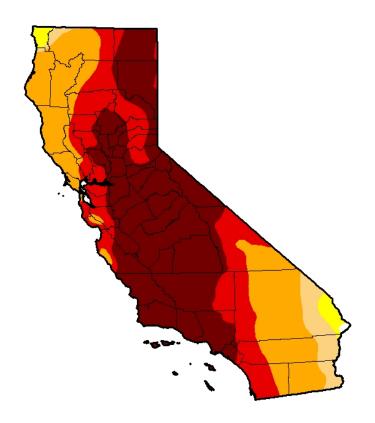
Increased export demand pushed U.S. milk prices to record levels

2014 helped to financially heal many operations

Today's Biggest Story For US Dairy Markets

U.S. Drought Monitor

California



April 14, 2015

(Released Thursday, Apr. 16, 2015) Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиггепт	0.14	99.86	98.11	93.44	66.60	44.32
Last Week 47/2015	0.15	99.85	98.11	93.44	66.60	44.32
3 Month's Ago 1/13/2015	0.00	100.00	98.12	94.34	77.52	39.15
Start of Calendar Year 12/3/02/01/4	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 930/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago	0.00	100.00	99.80	95.21	68.76	23.49

Intensity:

D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Michael Brewer

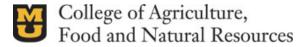




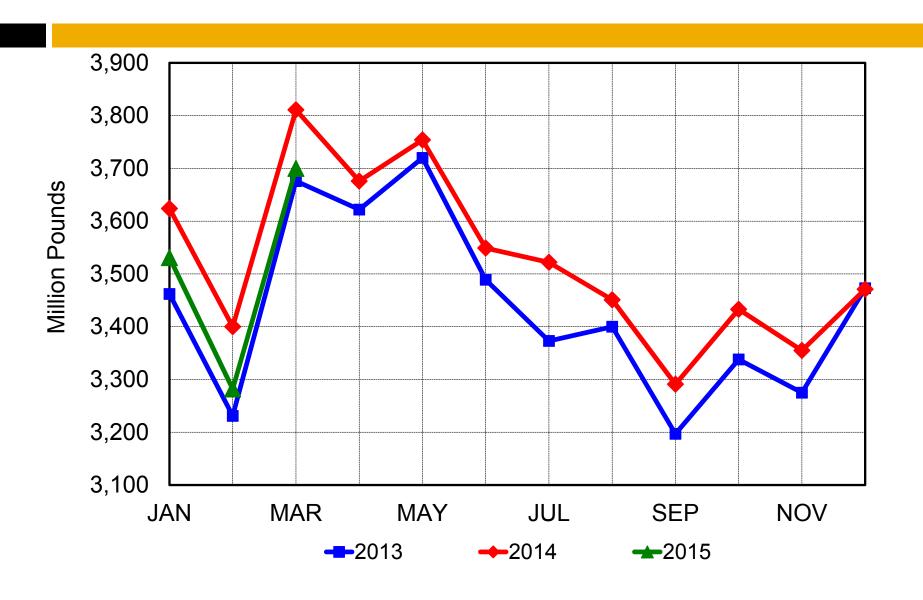




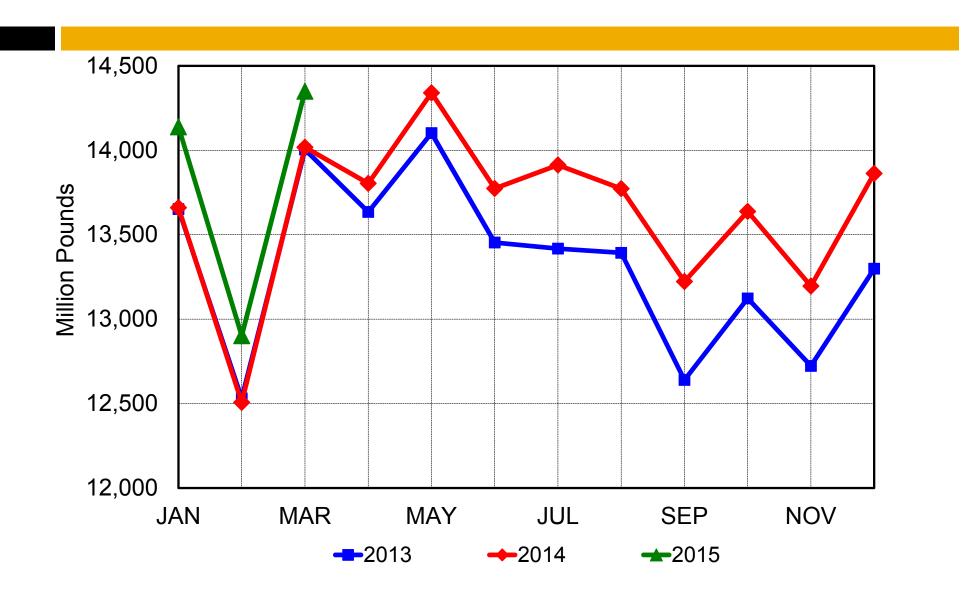
http://droughtmonitor.unl.edu/



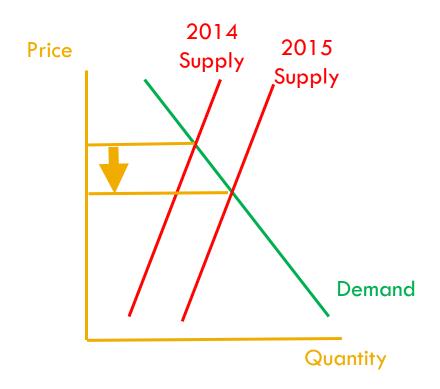
CA Milk Production: Brakes Applied



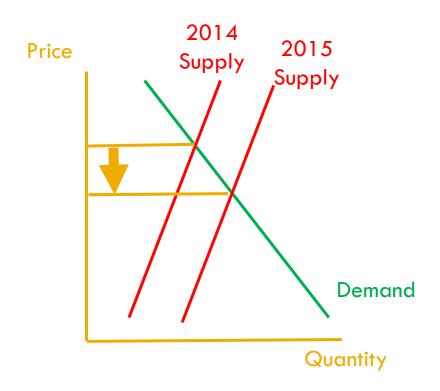
Rest of US Milk Production: Brakes Released

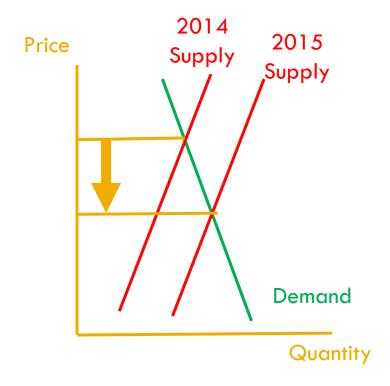


Dairy Markets Are Inelastic

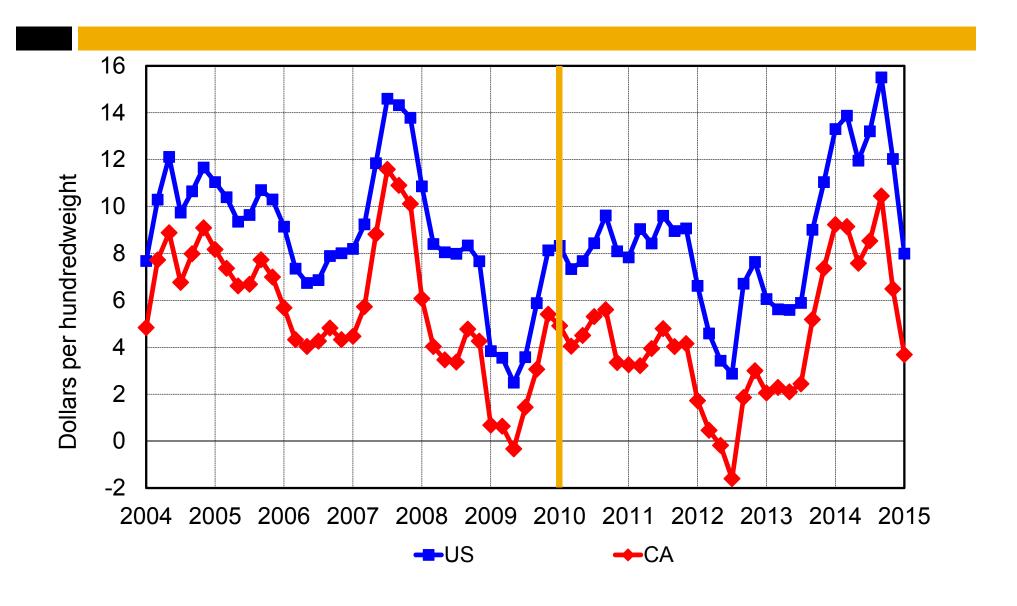


Dairy Markets Are Inelastic





Milk Less Feed Costs



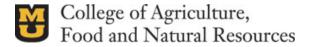
The Turndown In CA Milk Production

The US dairy industry was headed for MUCH lower milk prices in 2015

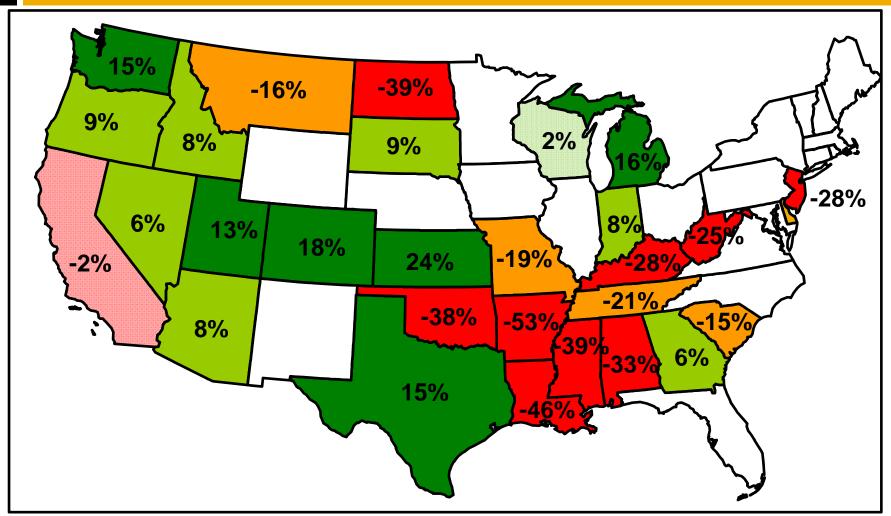
Milk supplies are generally plentiful across the US

- Even in the upper Midwest stories of \$5 below minimum pricing can be heard
- Tankers of milk not finding a home

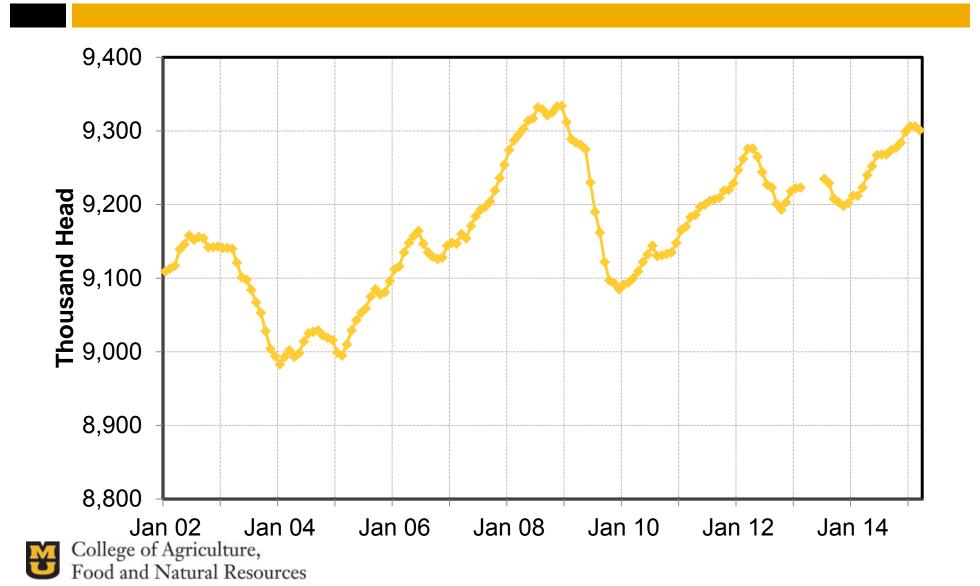
The turndown in CA milk production has muted lower milk prices



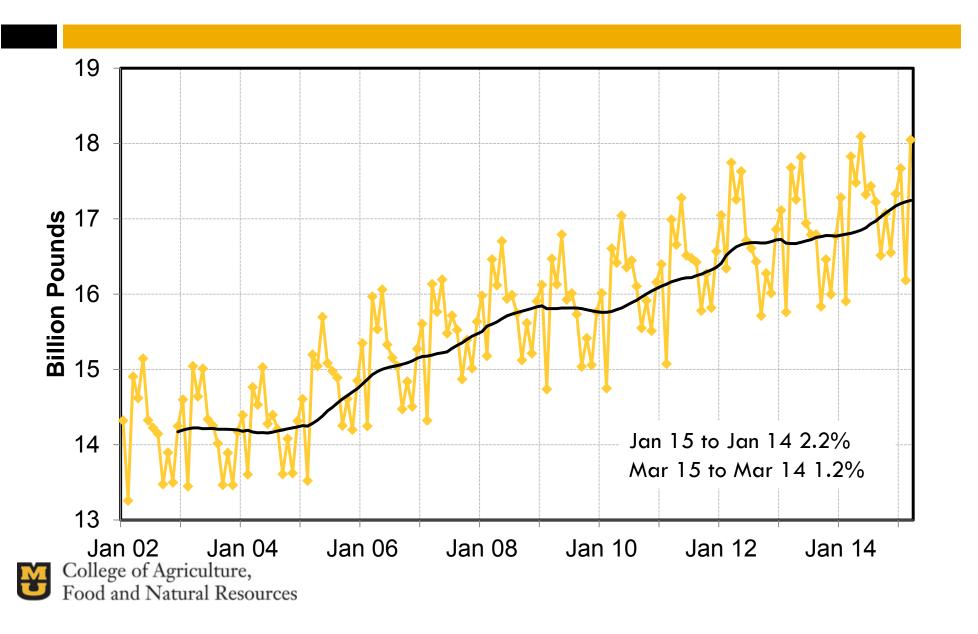
Change in Dairy Cow Inventory, Jan. 1, 2015 vs. 2007-09 average



Monthly U.S. Dairy Cows



Monthly U.S. Milk Production



My Biggest Risk Factor: Global Markets

How quickly can US dairy exports recover?

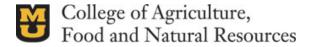
Predicting China's demand for US dairy products

challenging

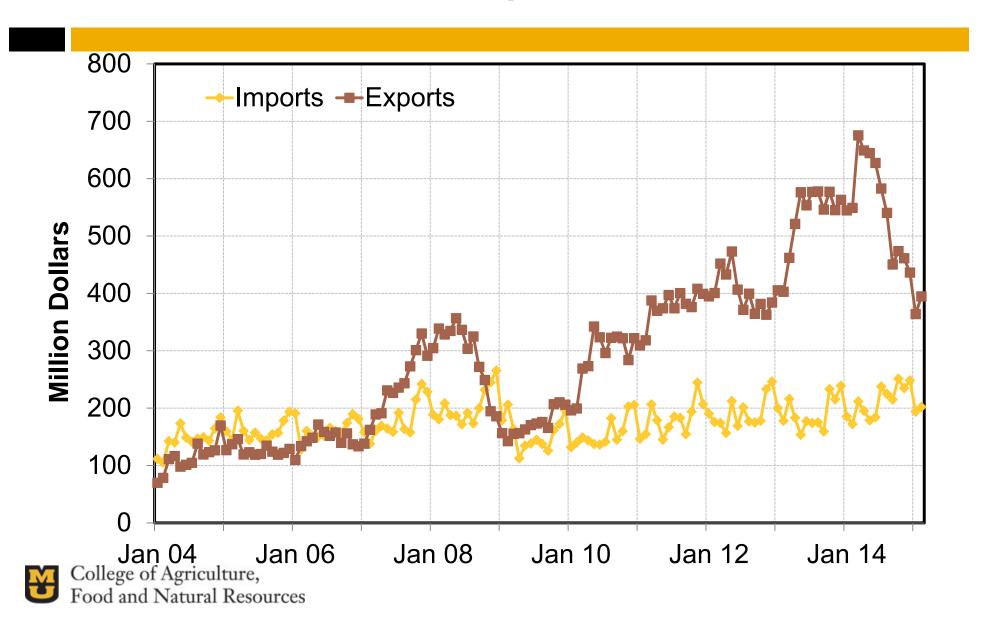
Global milk supplies

- Oceania
- Europe

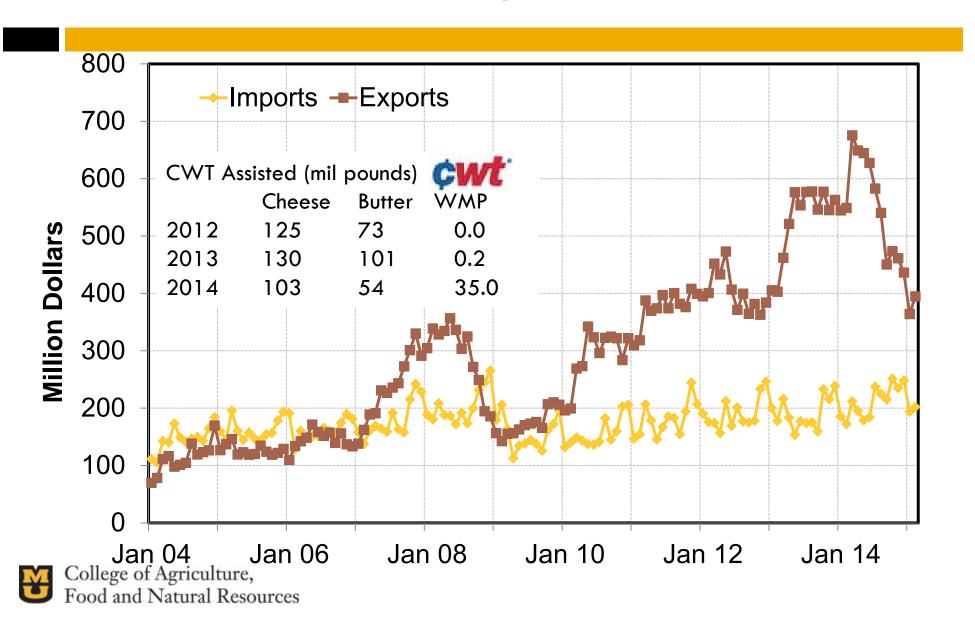
Stronger dollar hampering trade



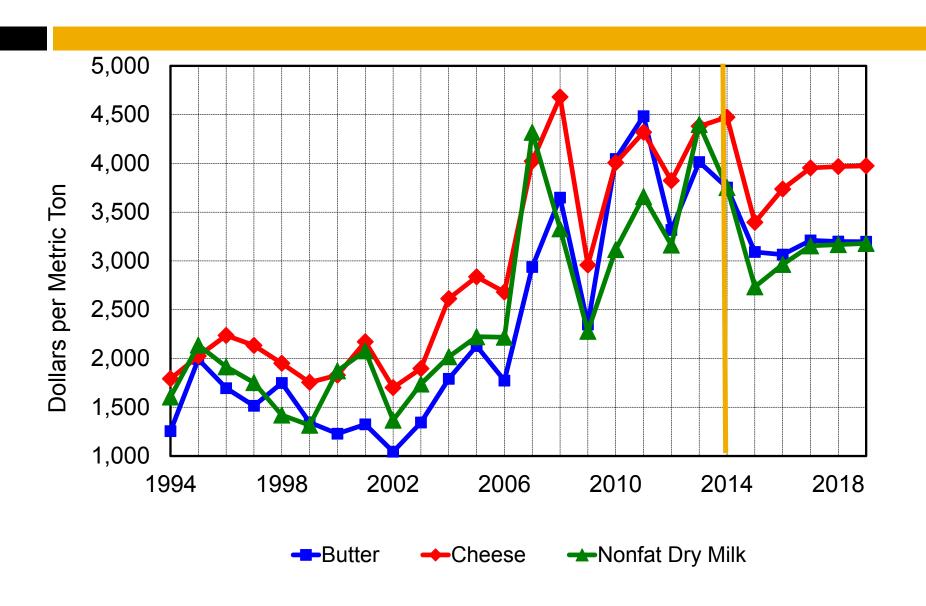
Value of U.S. Dairy Trade



Value of U.S. Dairy Trade

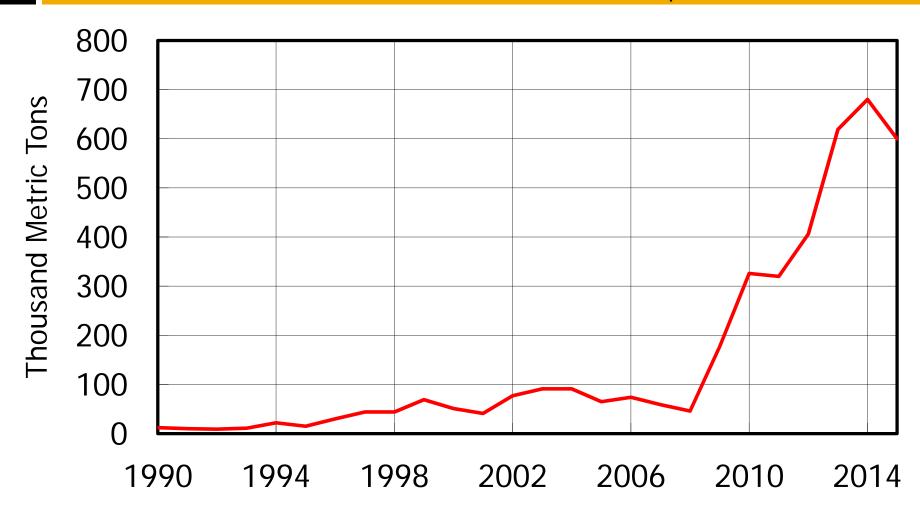


Global Dairy Product Prices



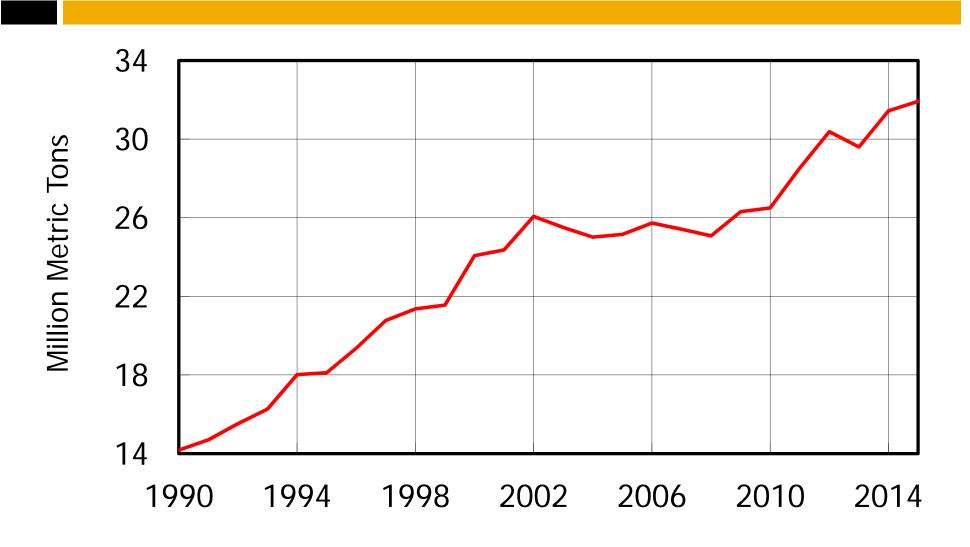
China WMP Imports

In 2014, USDA estimated 1 mmt of imports for 2014



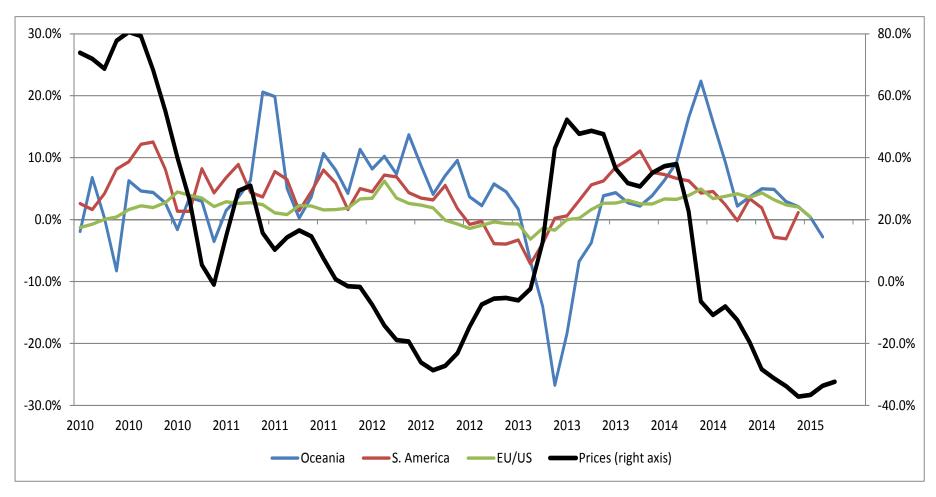
Source: USDA

Australia + New Zealand Milk Production



Source: USDA

Global Dairy Situation



2015 - Lower Returns Ahead

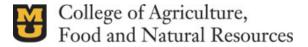
Milk prices have moved significantly lower

- Increased U.S. milk supplies
- Decreased export demand for U.S. dairy products

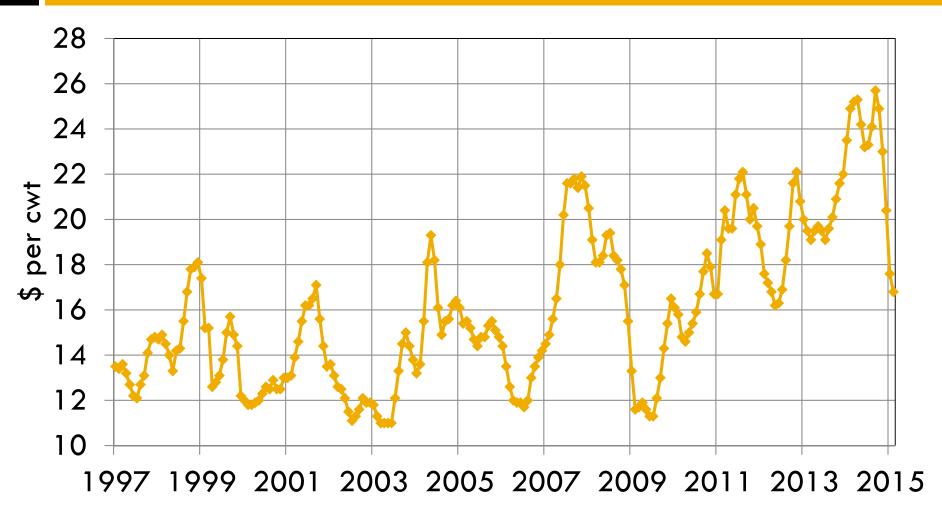
Conventional wisdom suggests the 2nd half of 2015 will be better

- Requires export recovery
- Another good crop this year

We have not seen the last time of below \$12 all milk prices

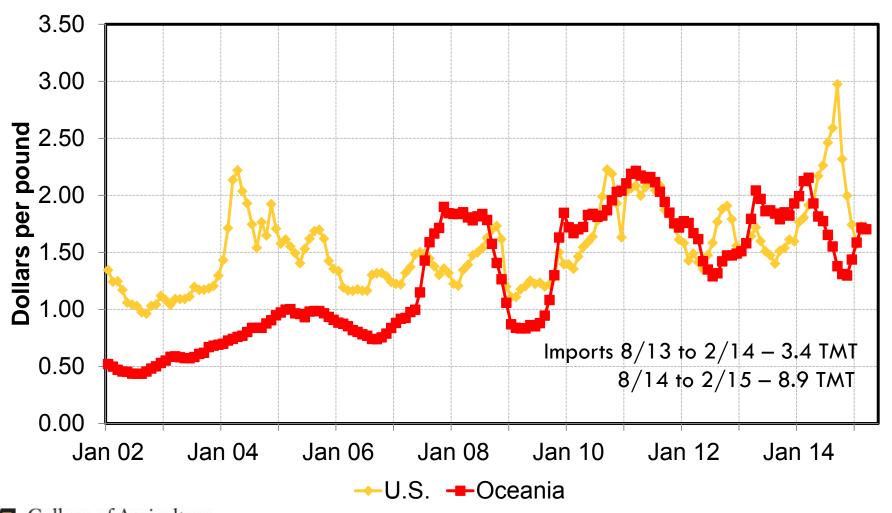


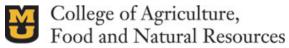
Monthly U.S. All Milk Prices



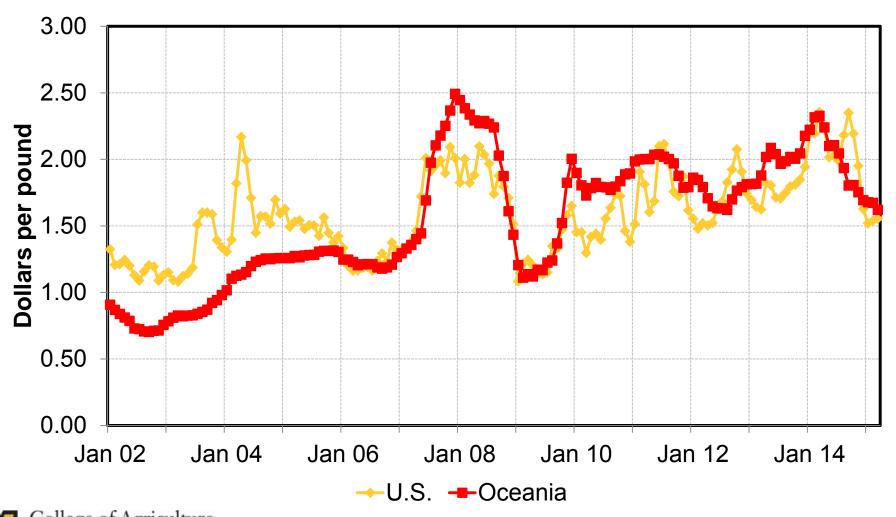


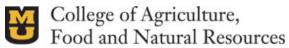
Butter Prices



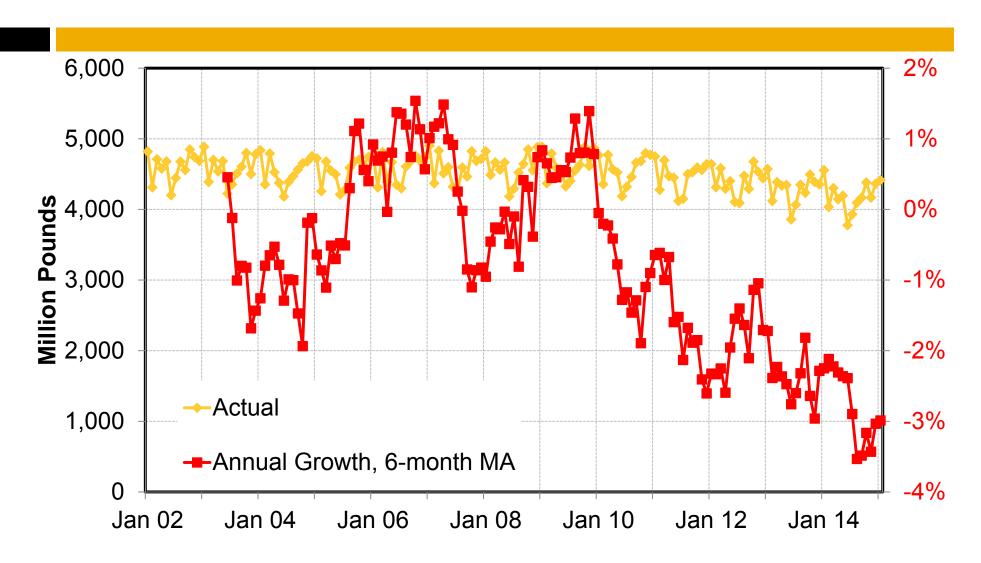


Cheese Prices

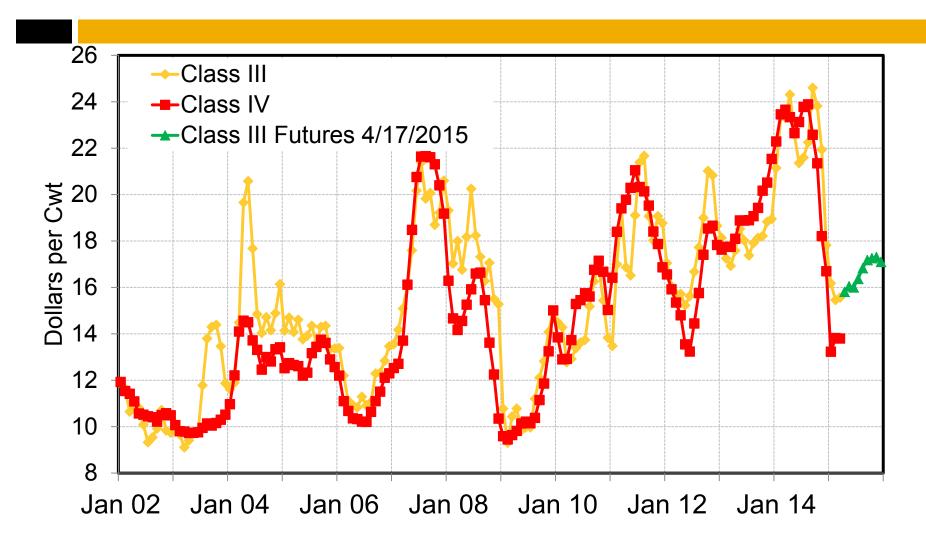


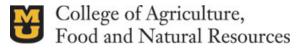


U.S. Fluid Milk Sales

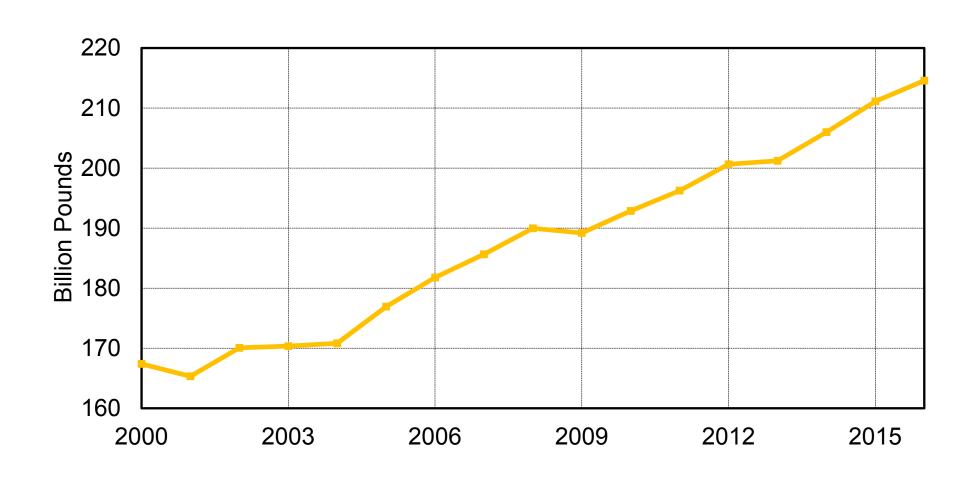


Federal Order Milk Prices

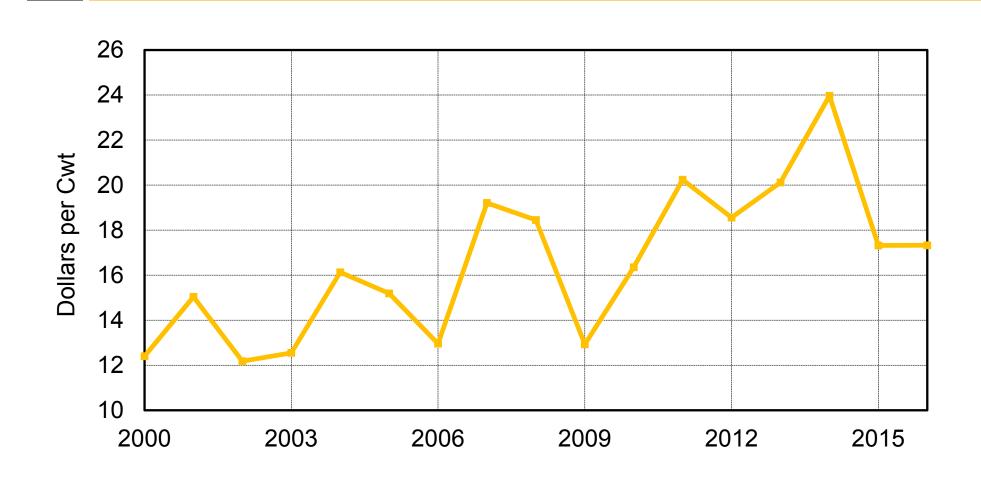




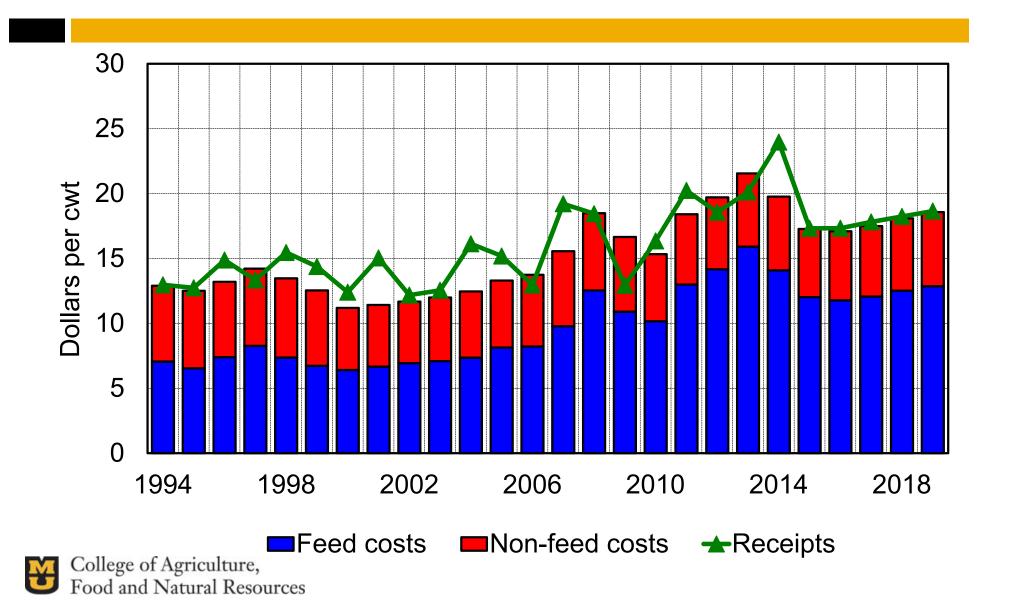
U.S. Milk Production



U.S. All Milk Price



US Milk Returns



Margin Protection Program (MPP)

Passing the 2014 farm bill was a monumental challenge

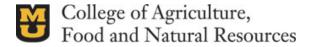
Dairy had its fair share of fights

- Soviet-style dairy policy
- Supply management

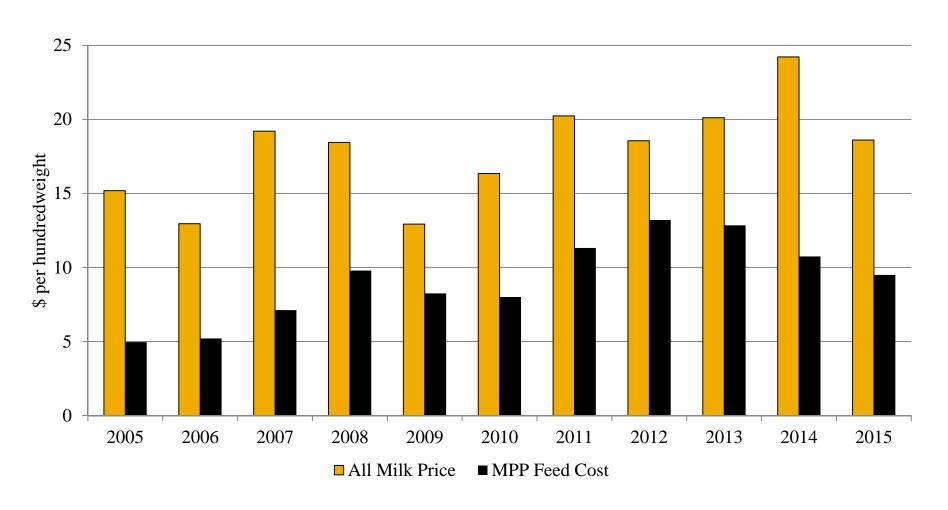
Dairy took a big swing at policy change

Too early to grade the program

Policy NEVER works under all market outcomes

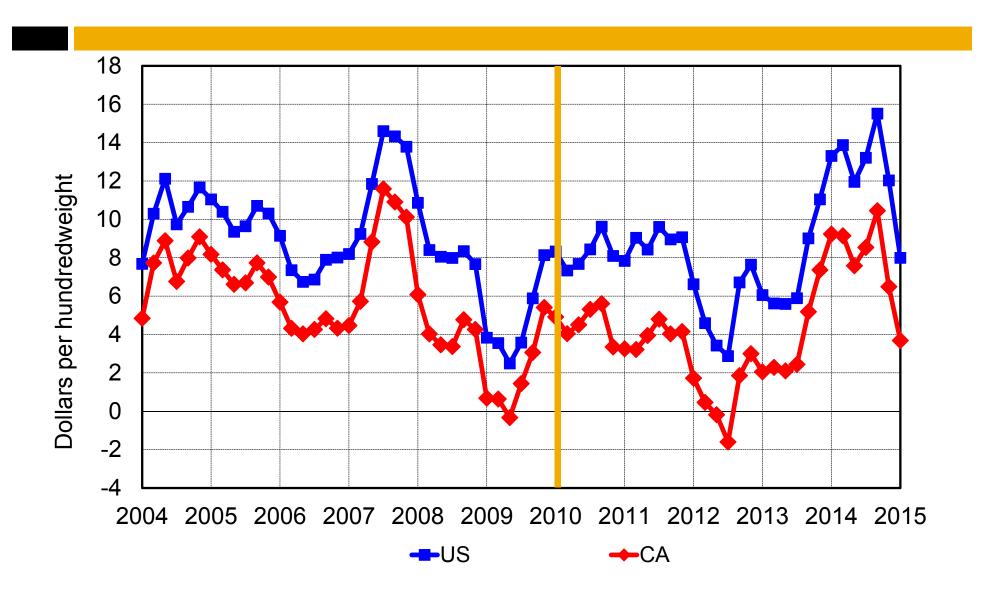


New Farm Program To Reduce Risk

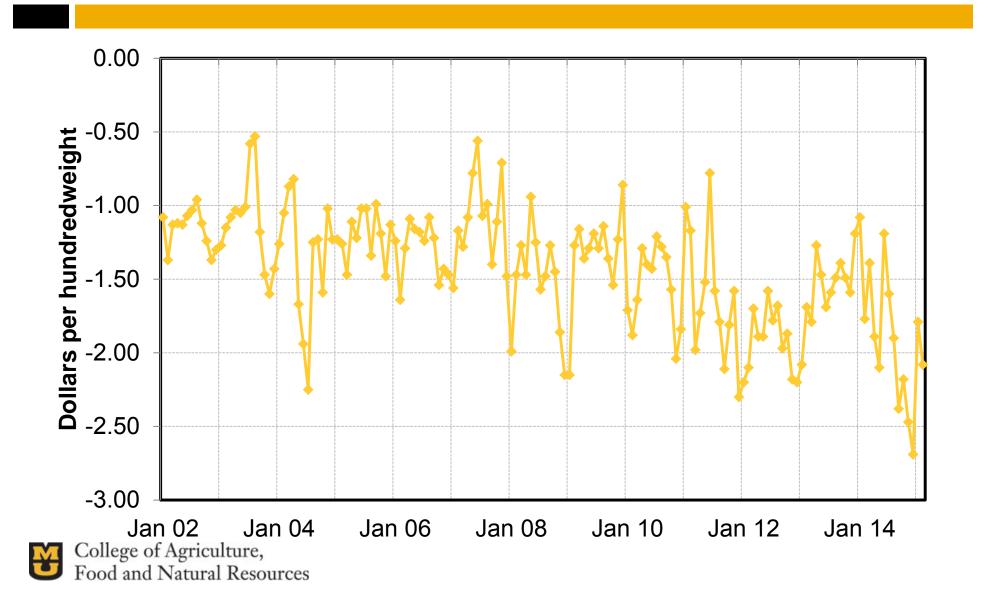




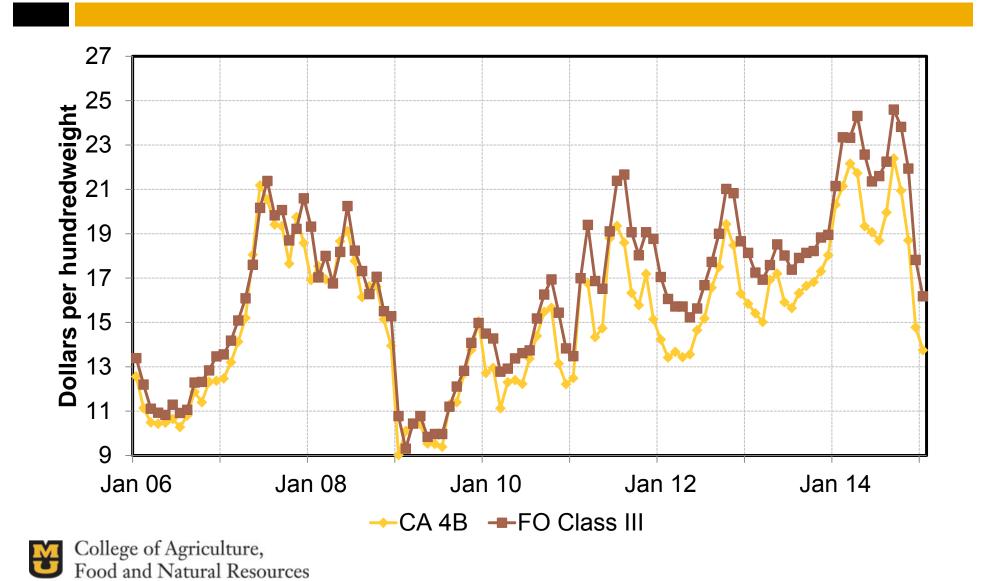
Milk Less Feed Costs (MPP Margin)



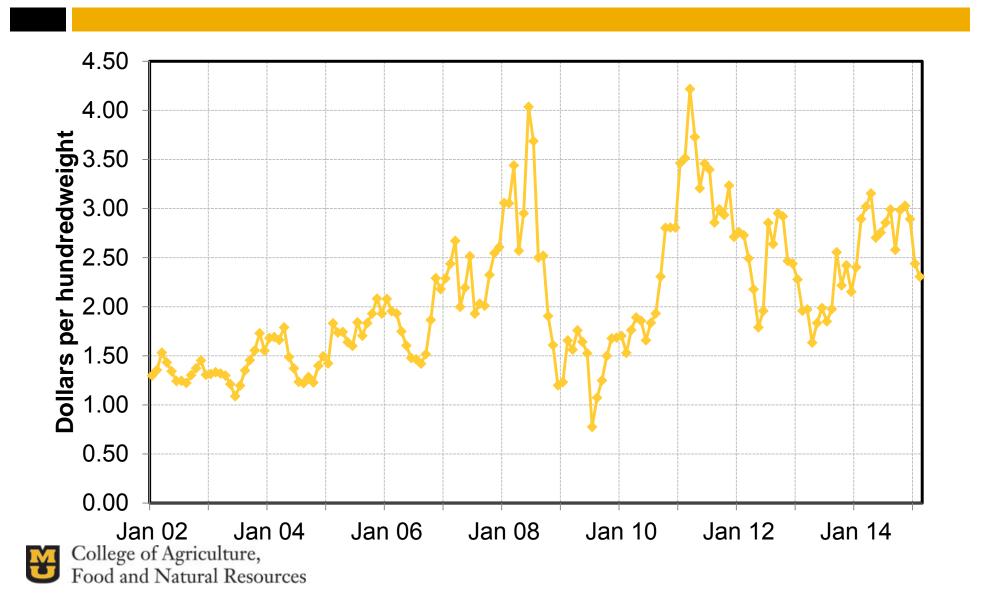
CA All Milk Price Less US All Milk Price



Minimum Prices For Cheese Milk



CA Feed Cost Less US Feed Cost



National Program Margin Calculation

All Milk Price less Feed Cost

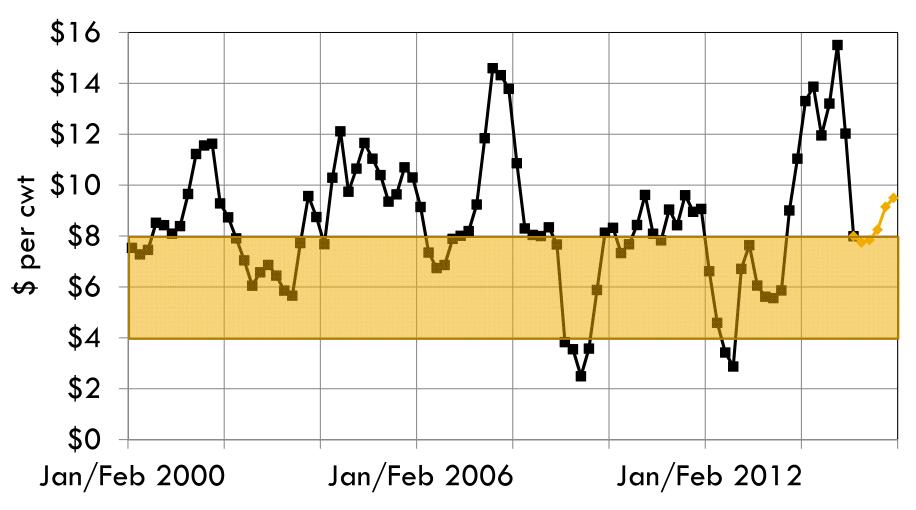
- The average cost of feed for a dairy operation required to produce a Cwt. of milk, determined in accordance with the following formula: [1.0728 x price of corn/bu.] + [0.00735 x price of soybean meal/ton] + [0.0137 x price of alfalfa hay/ton].
- Milk, corn and alfalfa prices reported in Agricultural
 Prices; soybean meal price is Central Illinois, USDA/AMS

MILC and the New Margin Program Compared

	New Margin Program	MILC
Coverage Level	Pick \$4 to \$8 in \$0.50 increments	Feed Adjusted \$16.94 minus Boston Class I
Coverage Quantity	Pick 25% to 90% in 5% increments	34% or 45% applied to price difference above
Payments	Production history adjusted by US milk production growth	Capped – 2.985 million pounds or 2.4 million pounds
Premiums	Depends on coverage level	None



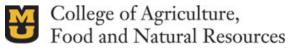
Bimonthly MPP-Dairy Margin — 2015 Current Futures Estimate





Higher Premiums At Higher Margin Coverage Levels

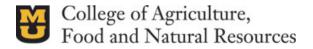
Coverage Level	Tier 1 Premium per cwt for 2016-2018 for covere production history at 4 mil lbs or less	
\$4.00	None	None
\$4.50	\$0.010	\$0.020
\$5.00	\$0.025 0.01	\$0.040
\$5.50	\$0.040 ^{0.01}	\$0.100
\$6.00	\$0.055	\$0.155
\$6.50	\$0.090	\$0.290
\$7.00	\$0.217	\$0.830
\$7.50	\$0.300	\$1.060
\$8.00	\$0.475 O.17	\$1.360 0.300



Hindsight Is 20/20

Looking backwards.....

- Small producers should have picked \$4 or \$8
- □ Larger producers should have picked \$4, \$6.5, \$8
- Looking forward.....
- Does not mean the same choices
- Premium cost versus safety net



My Observations After The First Signup

Did producers think through the risk mitigation opportunities under MPP?

More education needed on correlation of their margin to the MPP margin

Use of futures markets versus MPP for risk protection

- 2015 Class III futures near \$18 when 2015 signup started
- 2016 Class III futures near \$16.75 today

Producer tools focused too much on program maximization and not enough on risk management Tools need to compare risk reduction strategies



Work Needs To Start On 2016 Signup

Signup period 7/1/2015 - 9/30/2015

Choice must be made further from the period of coverage

This may highlight risk management versus program maximization or cause producers not to enroll

Compare futures market cost versus MPP cost

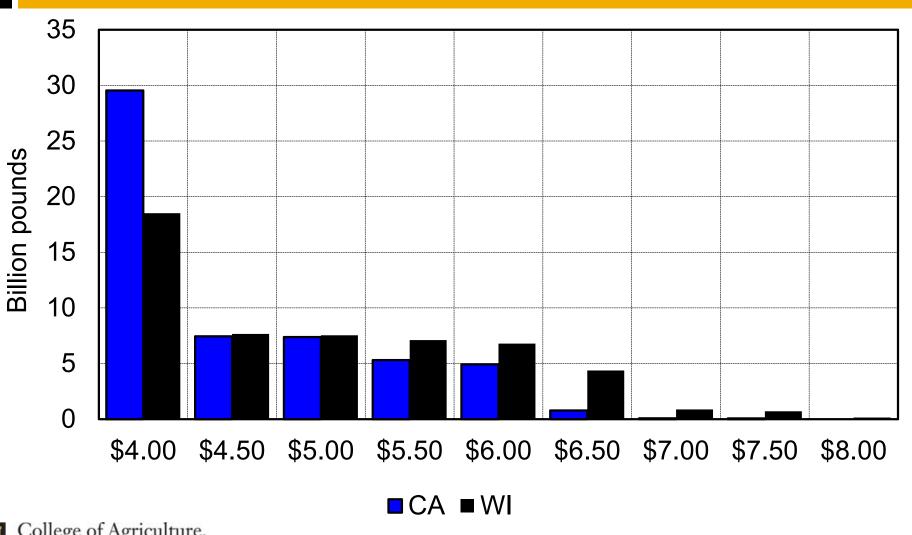
Producers need to think about what level of coverage they need to survive



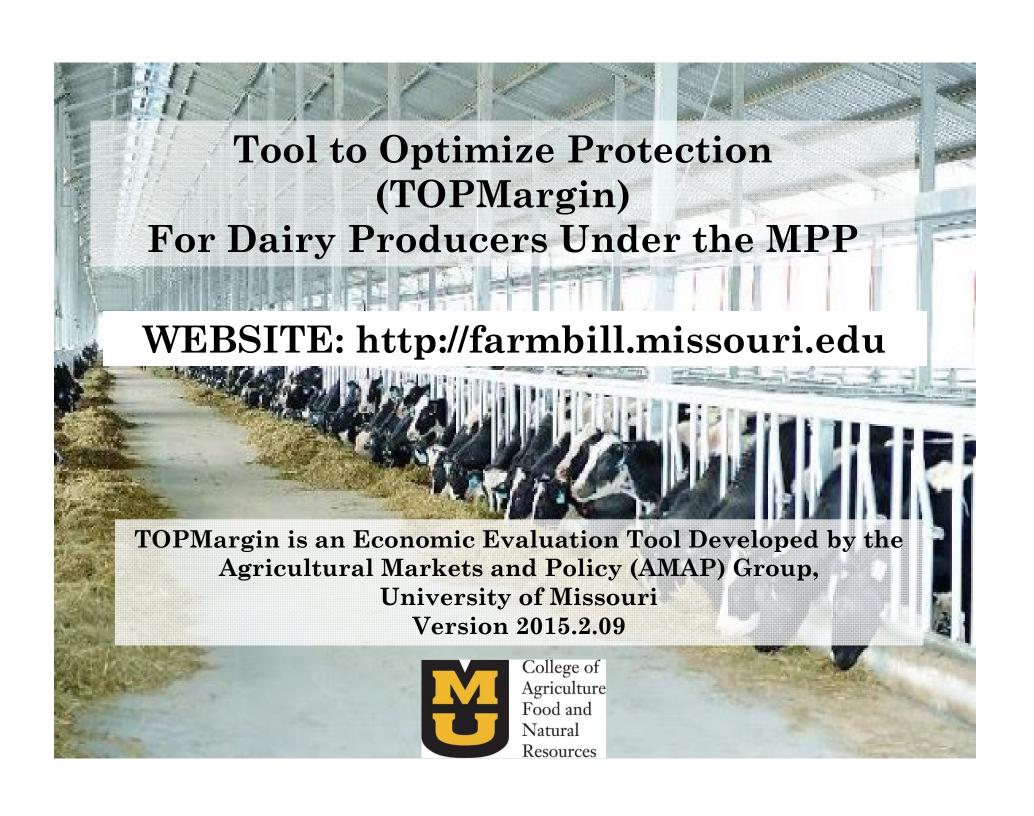
US Production History Signed Up For 2015 MPP Payments



CA Versus WI Production History Signed Up For 2015 MPP Payments



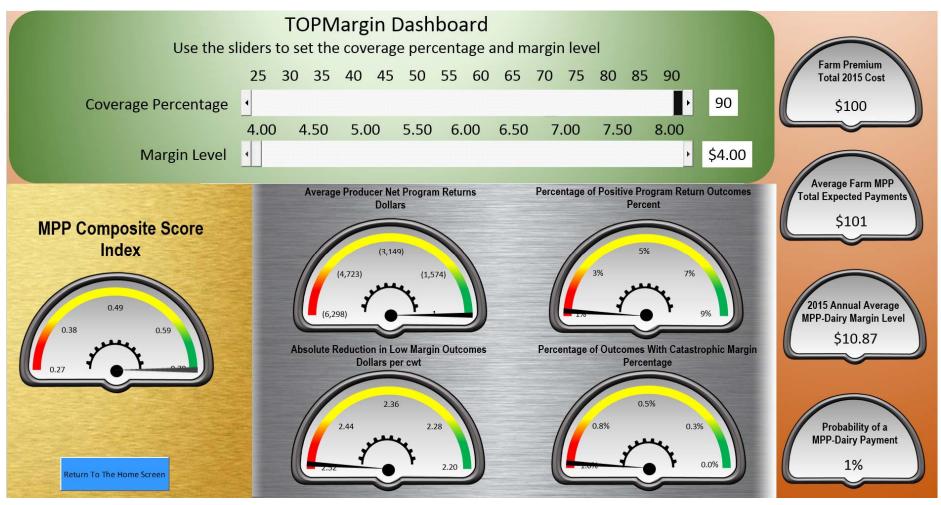




TOPMargin – Dairy Margin Risk Tool

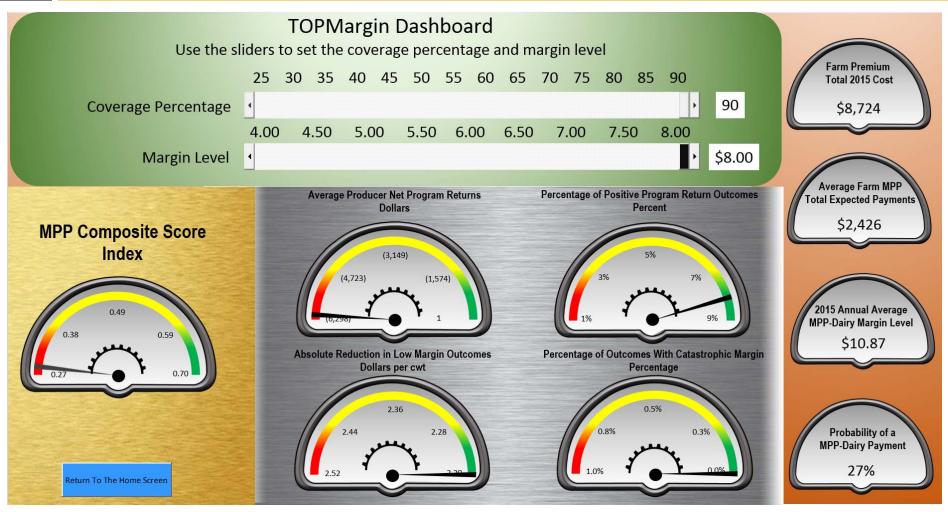
Based on historical volatility, TOPMargin puts risk around the expected average margin outcome Let's look at a 2,000,000 production history operation

The Corner Solutions for MPP-Dairy Coverage - $\frac{4}{90}$ - Average Margin $\frac{10.87}{20}$ - 2 Mil. Lbs.



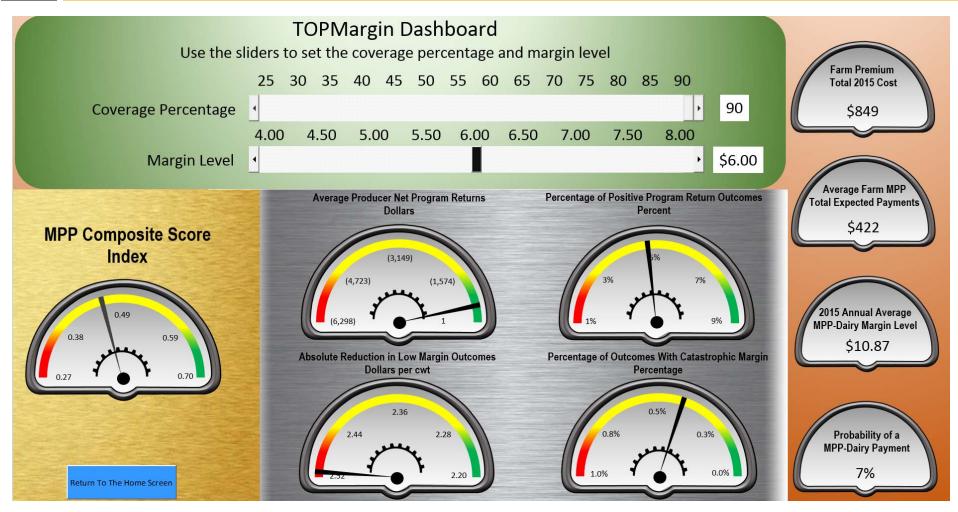


The Corner Solutions for MPP-Dairy Coverage - \$8/90 - Average Margin \$10.87 - 2 Mil. Lbs.



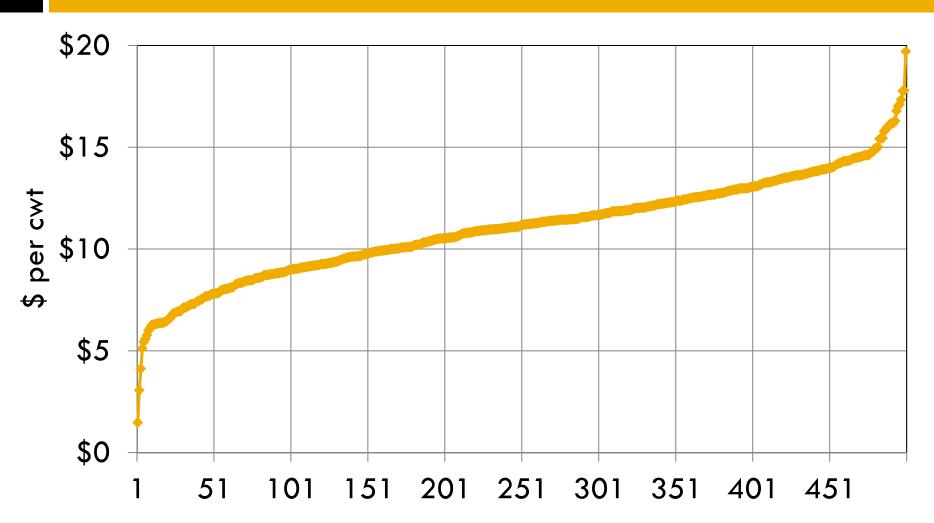


A Middle Solution for MPP-Dairy Coverage - \$6/90 - Average Margin \$10.87 - 2 Mil. Lbs.



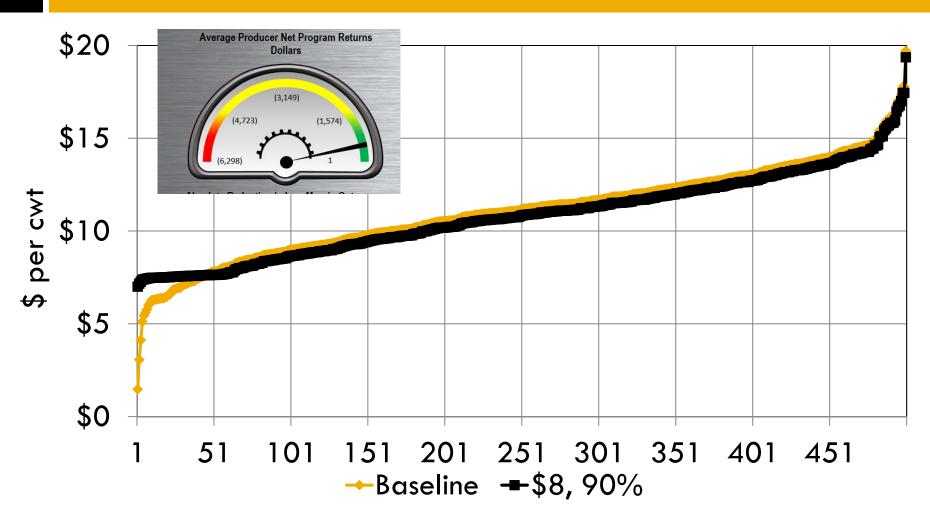


Bimonthly MPP-Dairy Margin — 2015 Example





Bimonthly MPP-Dairy Margin — 2015 Example





Summary

2015 will be a year of lower returns

- Export recovery necessary
- No drought in the Midwest

CA federal order will take time to resolve

Changes to financial/political landscape in CA could change relative position

Need producers to use MPP as risk management not program maximization

Download the tool to think through the alternatives

- http://farmbill.missouri.edu
- New web-based tool under development between University of Missouri and Texas A&M University

