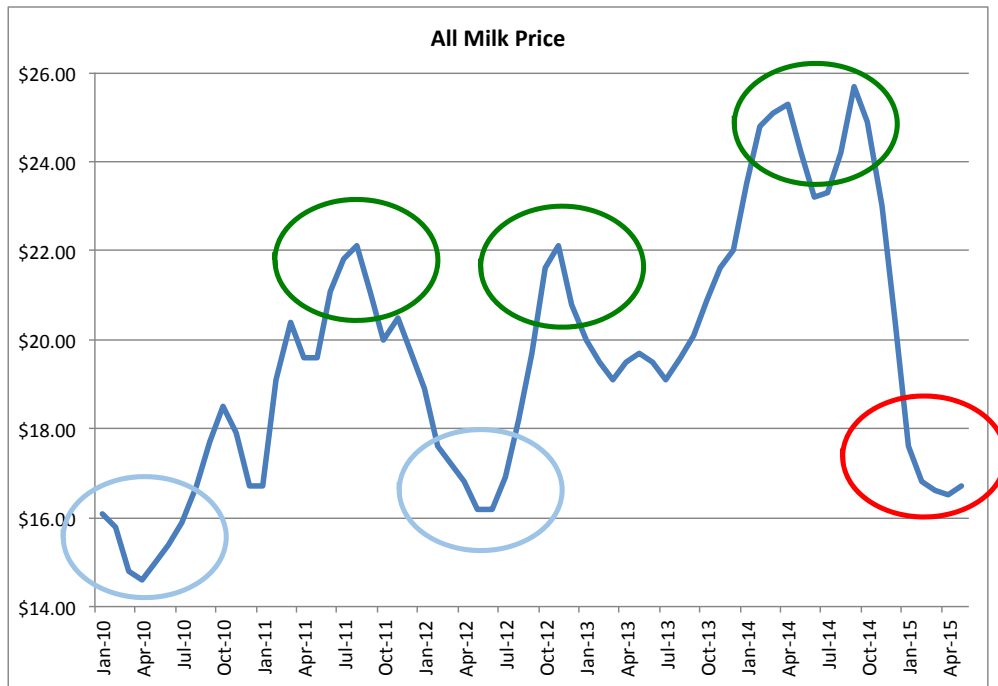
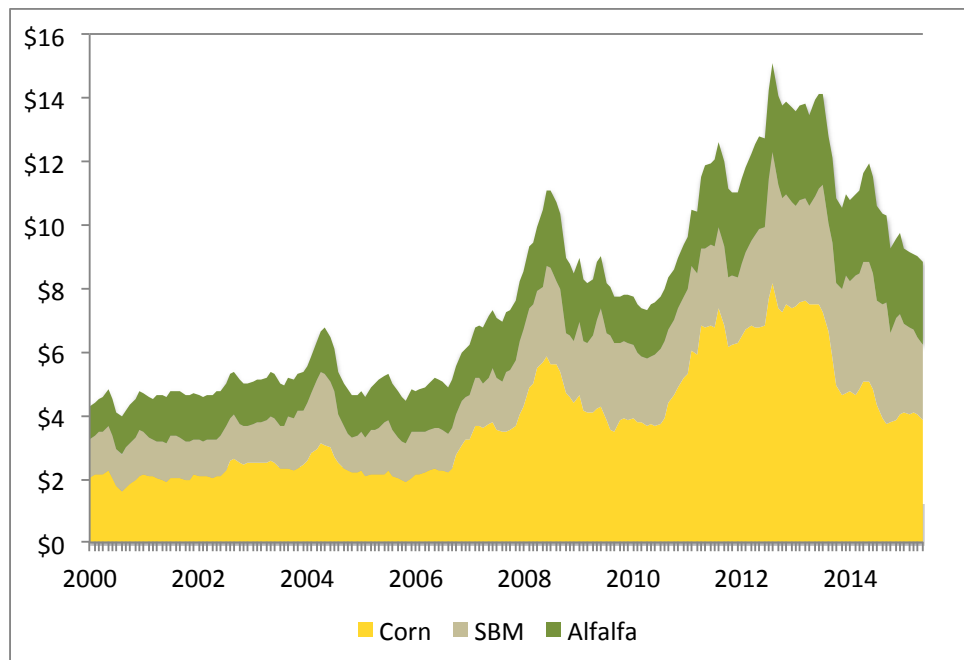




Remember When...



MPP Ration Value



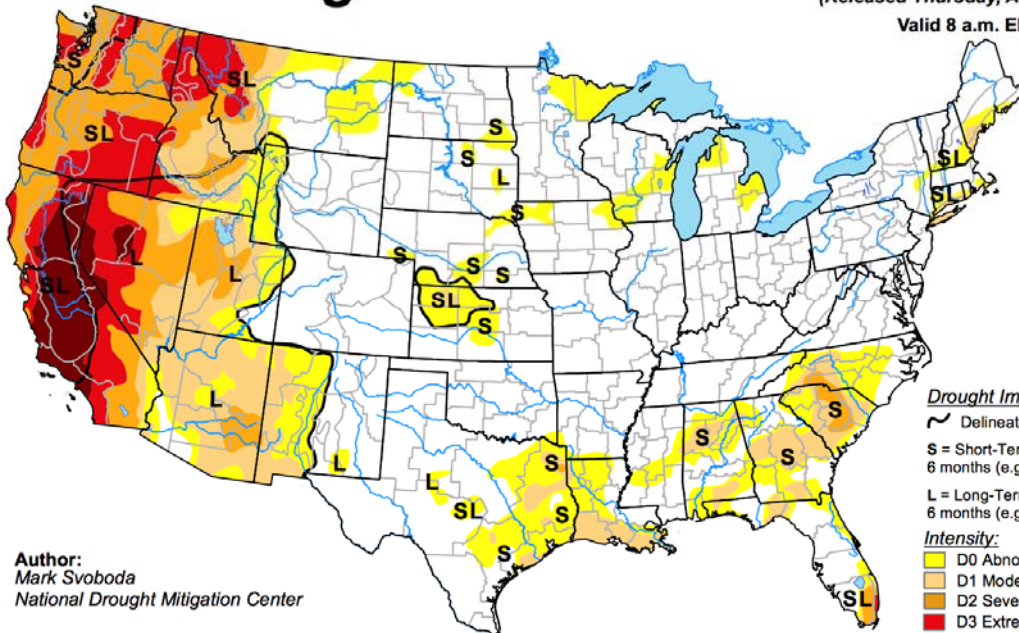


Worst CA Drought in 1200 Years

August 4, 2015

(Released Thursday, Aug. 6, 2015)

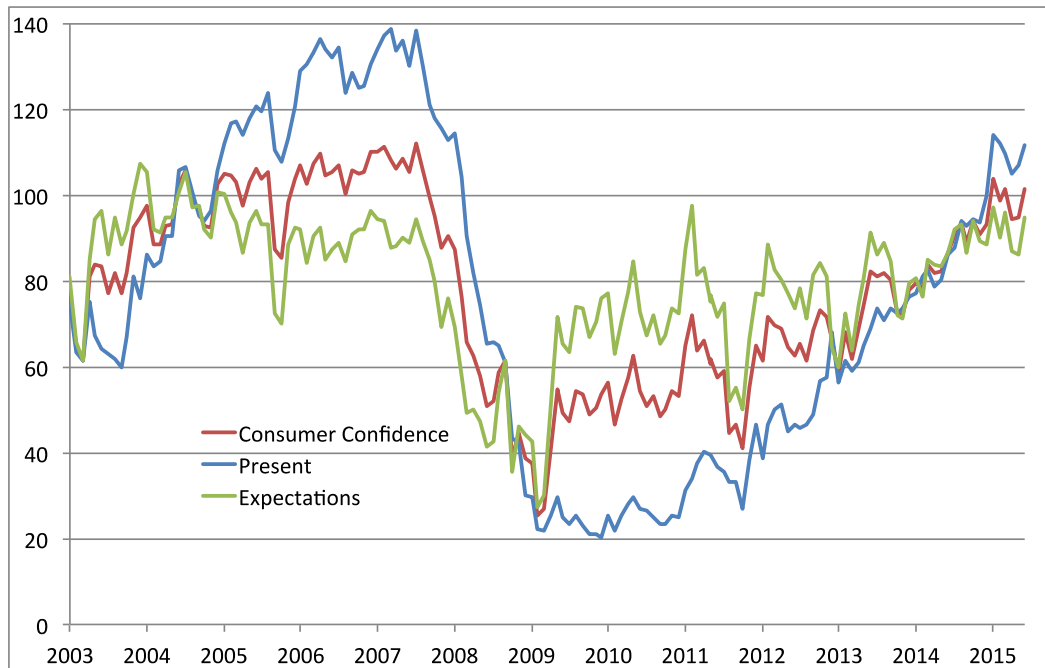
Valid 8 a.m. EDT



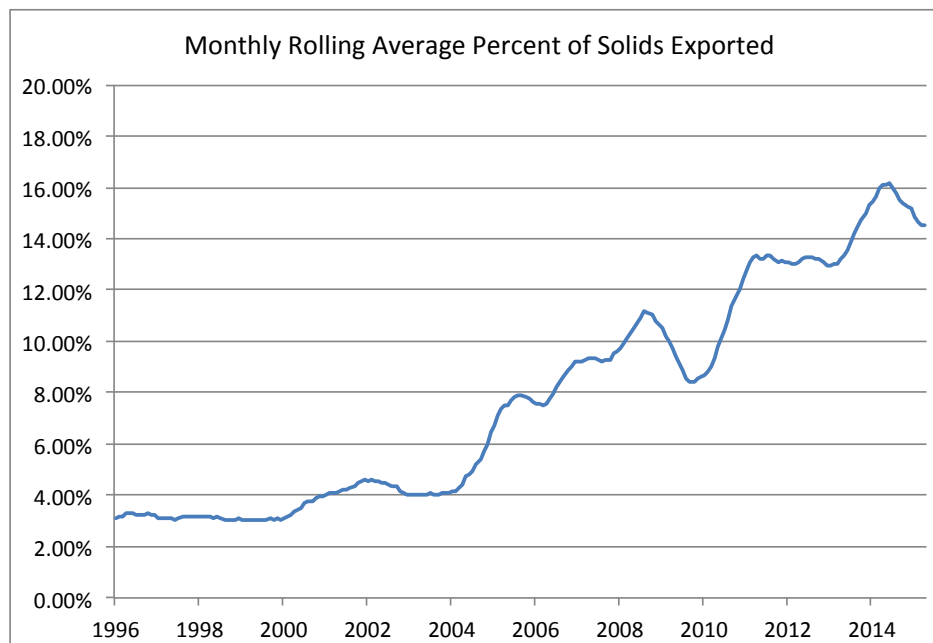
Author:
Mark Svoboda
National Drought Mitigation Center



Consumer Confidence

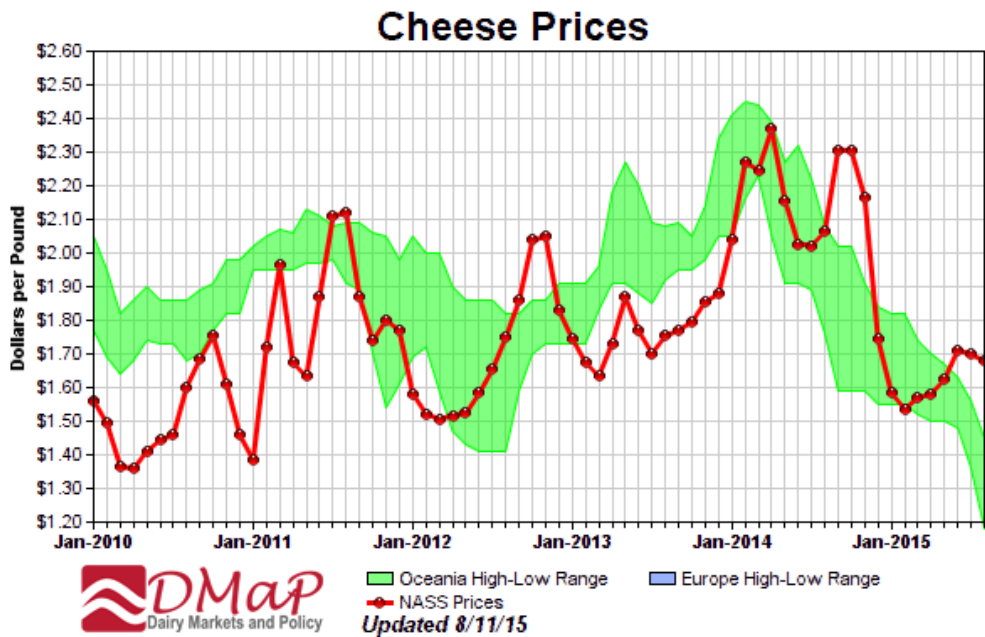


We Need Exports!

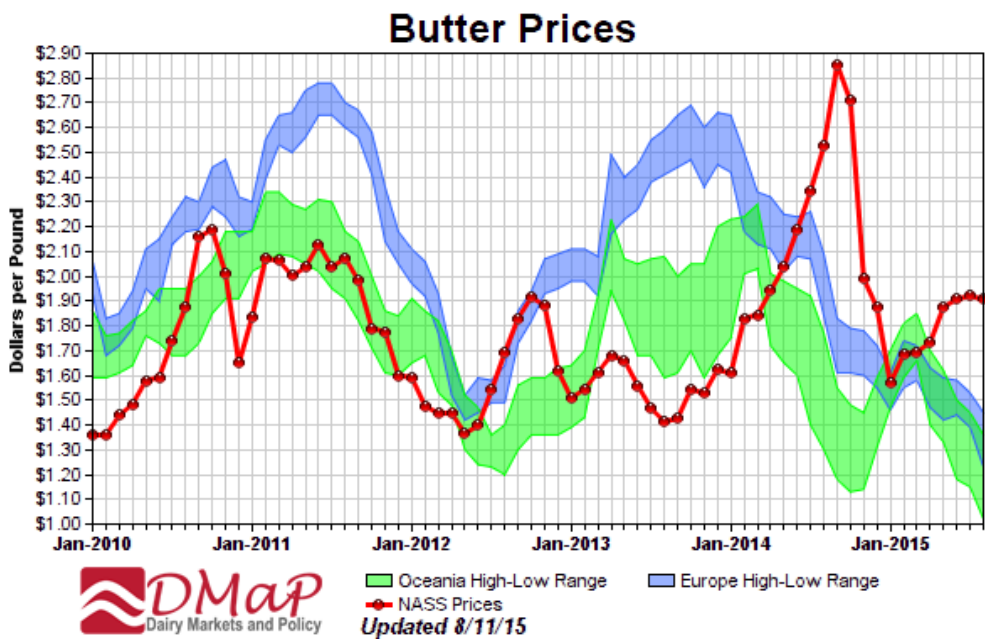




U.S. Versus International Prices

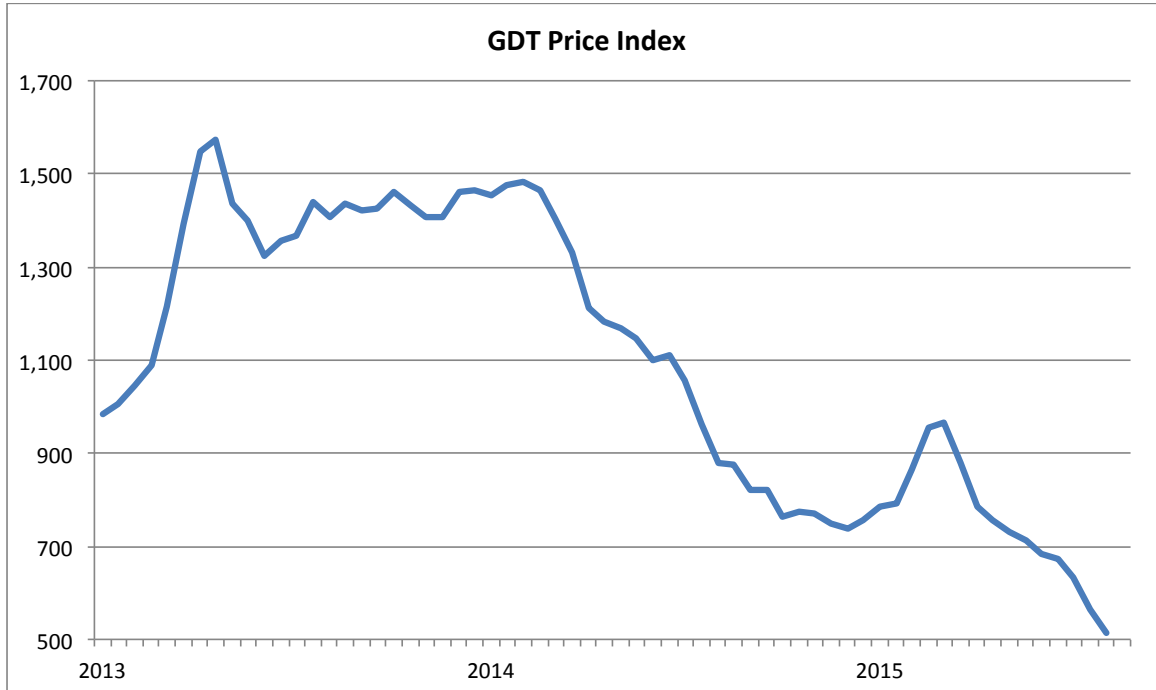


U.S. Versus International Prices

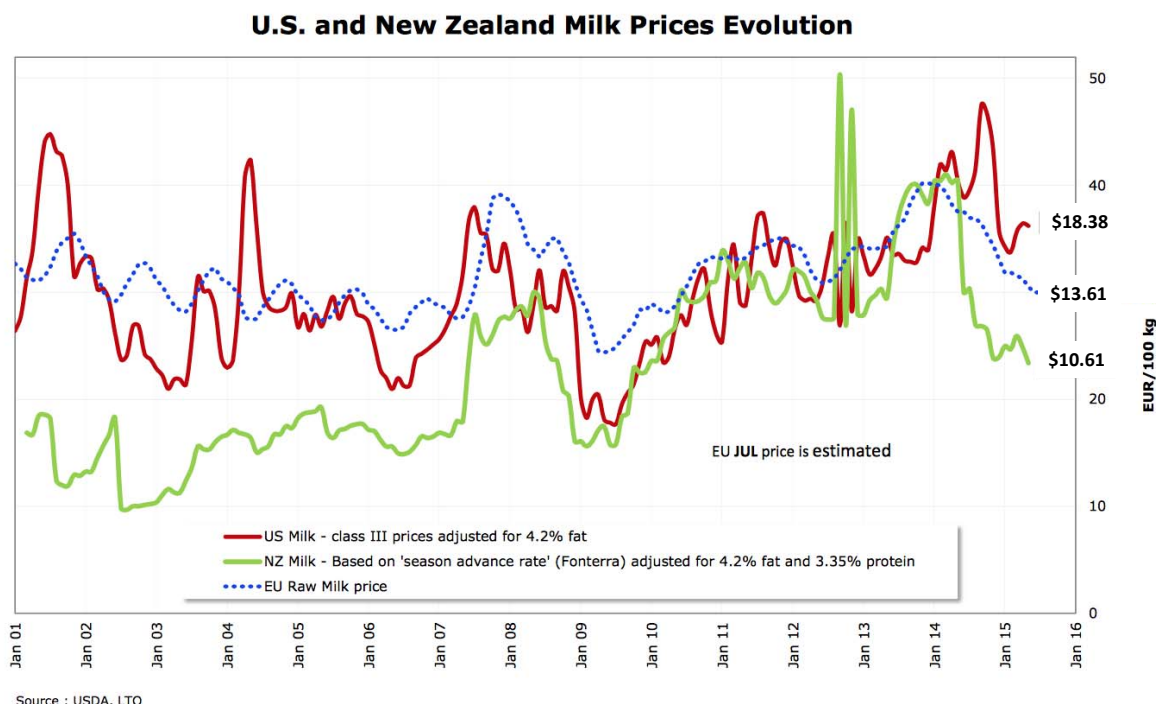




Global Dairy Trade Index

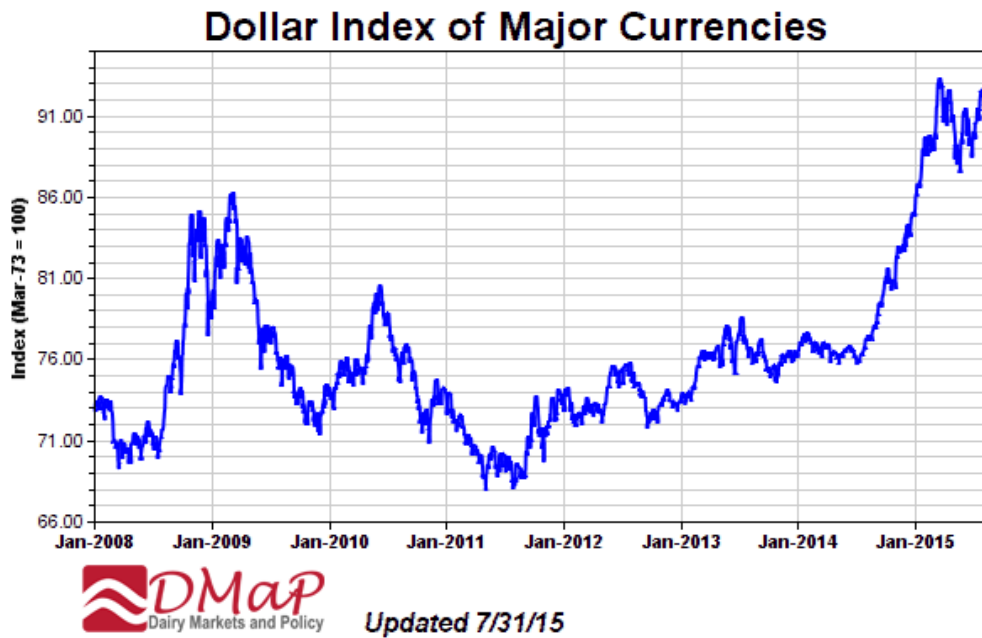


U.S. Farm Milk Prices are Holding Up Better than Most

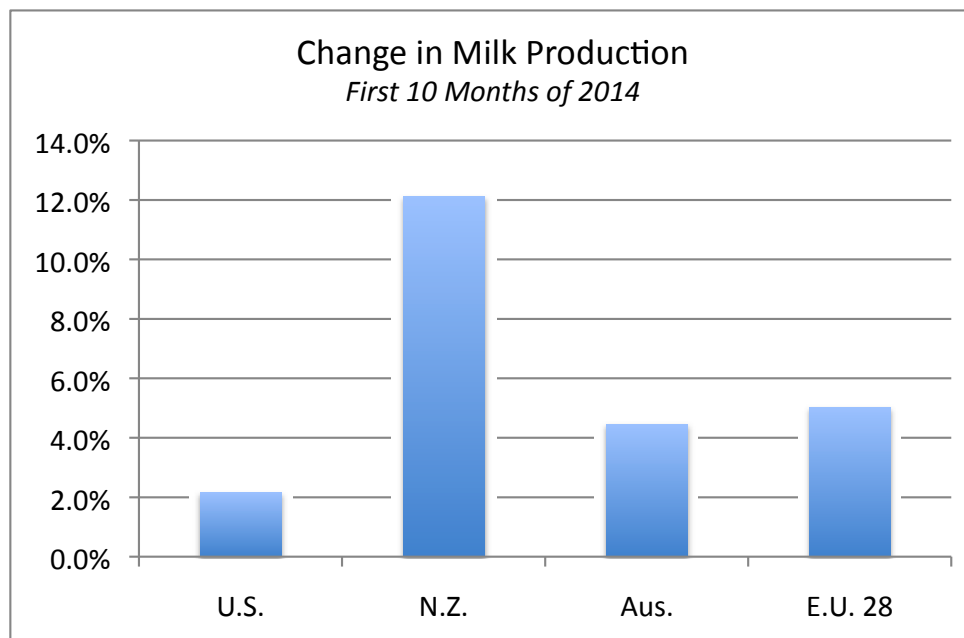




Other Factors

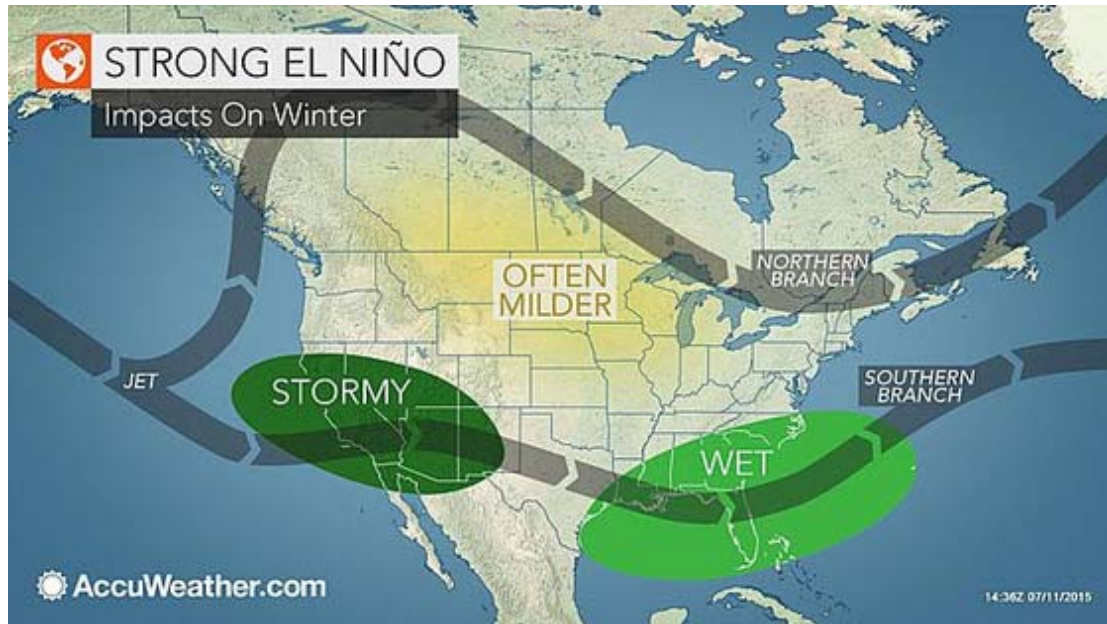


Around the World





Can We Tap on the Brakes? Strongest El Niño in 50 Years!



My Forecast...

- Our strong U.S. economy is helping consume dairy products
- Dairy exports will become more of an issue in the next few months
- I think that the MPP margin will be worse than futures forecasts now suggest through the first half of 2016



OLD APPROACH TO DAIRY RISK MANAGEMENT

I KNOW WHERE PRICES ARE GOING! – You selectively hedge only when you disagree with the market consensus. Let's be frank, you're speculating. 😊

DAIRY POLICY AS A PROFIT OPPORTUNITY – If subsidies are high, sign up, otherwise skip it.

"LEARN RISK MANAGEMENT!" – Extension, DMAP, brokers and policy makers all shoving risk management down your throat.



NEW APPROACH TO DAIRY RISK MANAGEMENT

FRAGILE – If your farm would have serious problems surviving a major downturn in profit margins.

ROBUST – If your financial position and cost of production allow you to withstand a very large and prolonged unexpected downturn in profit margins.

ANTIFRAGILE – If your farm benefits from milk and feed price volatility. For example, if you have very strong financial position, low cost of production, *and* have protected against downside in margins. Then as your competitors go out of business, you will have an opportunity to buy their farm at a great price.



NEW APPROACH TO DAIRY RISK MANAGEMENT

Our goal today, is to give you a tool to answer one key question:

Is my farm fragile, robust, or antifragile?

To answer that question, you need to:

- 1) Know your farm (costs of production, financials)
- 2) Execute a ruthless stress-test analysis



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To answer that question, you need to:

- 1) Know your farm (costs of production, financials)
- 2) Execute a ruthless stress-test analysis



KNOW YOUR FARM: PLANS, COSTS AND FINANCIALS

Production & Prices		MPP-Dairy		Profitability	Liquidity	Solvency
		Premium Costs		Net Income	Working Capital/Cow	Debt/Asset Ratio
		Total \$	\$/cwt	\$/cwt	\$/cow	%
Cows	2,000	No MPP		-\$2.01	\$98	56.9%
Milk Per Cow (lbs/yr)	25,000	\$4.00	\$100	-\$2.01	\$98	56.9%
Expenses, Other than Feed (\$/cwt)	\$9.00	\$4.50	\$7,800	-\$2.03	\$93	57.0%
Worst-Case IOFC Basis over MPP (\$/cwt)	\$1.00	\$5.00	\$15,700	-\$1.89	\$127	56.7%
Other Revenue (beef, crops, etc.) (\$/cwt)	\$1.00	\$5.50	\$38,200	-\$1.67	\$182	56.2%
		\$6.00	\$58,875	-\$1.31	\$273	55.4%
		\$6.50	\$109,550	-\$1.00	\$349	54.7%
		\$7.00	\$311,730	-\$1.00	\$350	54.7%
		\$7.50	\$399,000	-\$0.77	\$406	54.2%
		\$8.00	\$515,500	-\$0.60	\$450	53.8%

Risk Management	
MPP-Dairy: Production History	45,000,000
MPP-Dairy: Coverage Percentage	90%
CME & Other: % of 2016 Milk and Feed Hedged	0%
CME & Other: Average Hedged IOFC	\$0.00

Financials	
Working Capital Per Cow	\$600
Assets Per Cow	\$7,000
Debt-to-Asset Ratio (At Market Value)	50%
Effect of Crisis on Assets Value	-5%

Diagnostics	
Expected 2016 Milk Production	50,000,000
Cash-Flow Breakeven MPP-Dairy Margin	\$7.00

Scenario: Average MPP-Dairy Margin in 2016



FARM-SPECIFIC DASHBOARD: PRODUCTION & PRICES

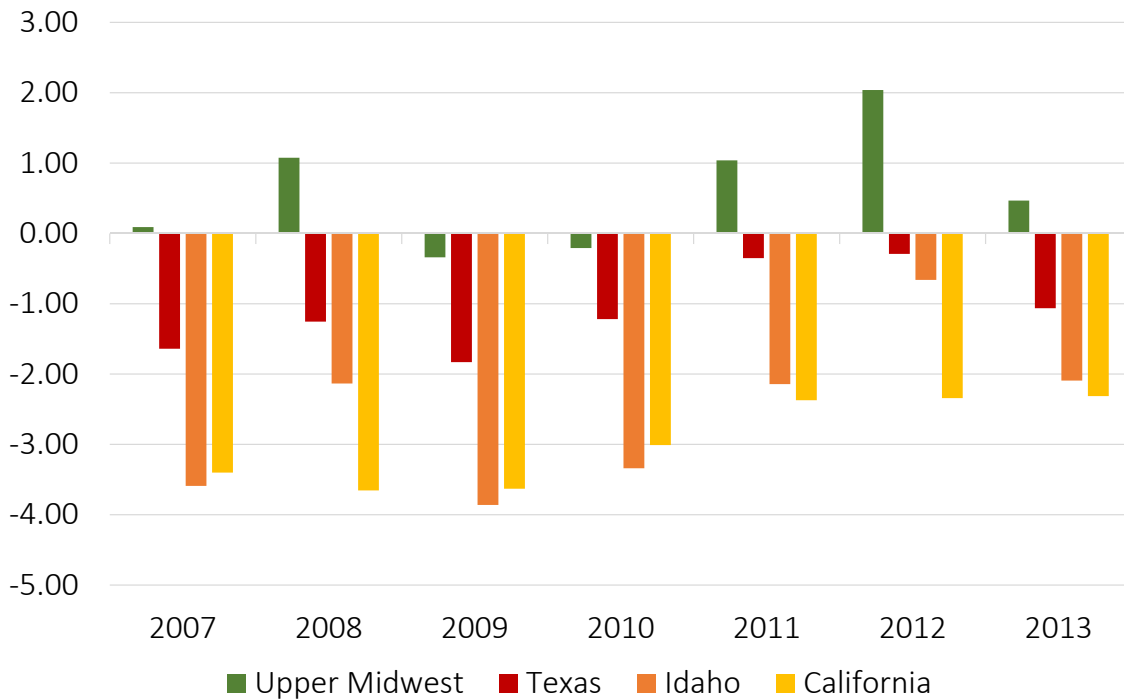
Production & Prices	
Cows	<input type="text" value="2,000"/>
Milk Per Cow (lbs/yr)	<input type="text" value="25,000"/>
Expenses, Other than Feed (\$/cwt)	<input type="text" value="\$9.00"/>
Worst-Case IOFC Basis over MPP (\$/cwt)	<input type="text" value="\$1.00"/>
Other Revenue (beef, crops, etc.) (\$/cwt)	<input type="text" value="\$1.00"/>

Diagnostics	
Expected 2016 Milk Production	<input type="text" value="50,000,000"/>
Cash-Flow Breakeven MPP-Dairy Margin	<input type="text" value="\$7.00"/>

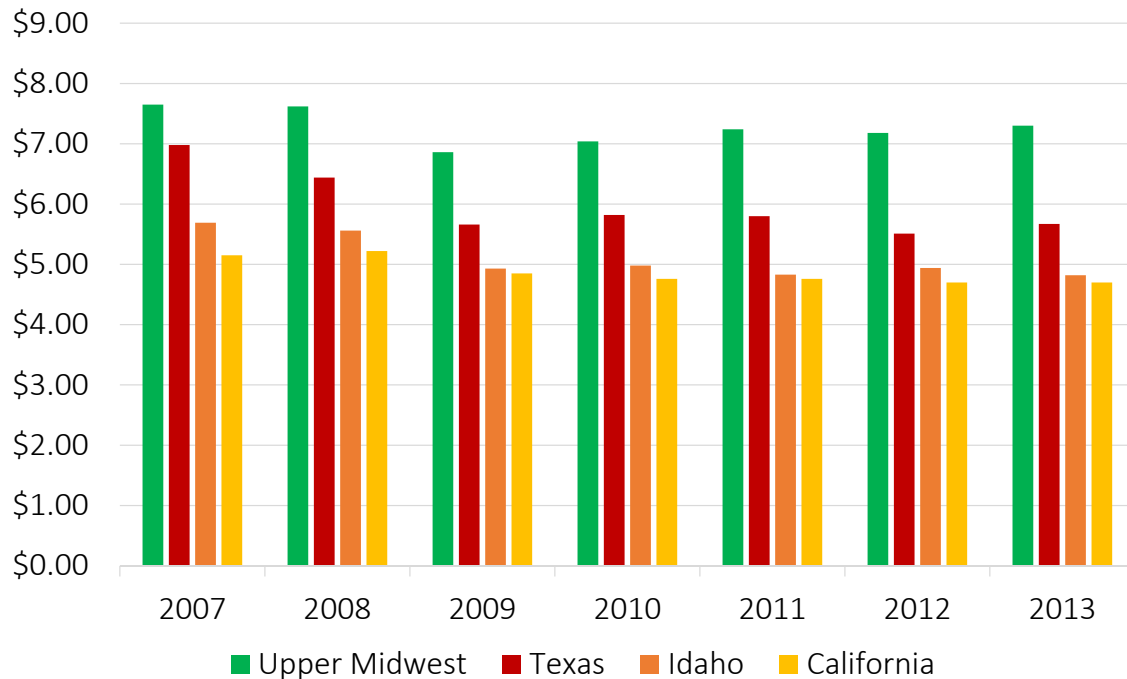
✓ Basis tends to be lower in regions where costs of production are lower.



MPP-DAIRY: INCOME OVER FEED COSTS MARGIN BASIS



OTHER OPERATING COSTS (EXCLUDING FEED, HERD REPLACEMENT, DEPRECIATION)





DASHBOARD: PRODUCTION & PRICES – KEY POINTS

- ✓ Historical average MPP-Dairy margin is approx. \$8.50/cwt.
- ✓ Basis tends to be lower in western United States.
- ✓ Basis tends to be lower in regions where costs of production are lower.
- ✓ Most dairies, across the entire country, will have MPP-Dairy cash-flow break-even point below \$8.50/cwt.



KNOW YOUR FARM: PLANS, COSTS AND FINANCIALS

Production & Prices		MPP-Dairy			Profitability	Liquidity	Solvency
Cows	2,000	Premium Costs		Net Income	Working Capital/Cow	Debt/Asset Ratio	
Milk Per Cow (lbs/yr)	25,000	Total \$	\$/cwt	\$/cwt	\$/cow	%	
Expenses, Other than Feed (\$/cwt)	\$9.00						
Worst-Case IOFC Basis over MPP (\$/cwt)	\$1.00						
Other Revenue (beef, crops, etc.) (\$/cwt)	\$1.00						
Risk Management		No MPP					
MPP-Dairy: Production History	45,000,000	\$4.00	\$100	\$0.00	-\$2.01	\$98	56.9%
MPP-Dairy: Coverage Percentage	90%				-\$2.01	\$98	56.9%
CME & Other: % of 2016 Milk and Feed Hedged	0%	\$4.50	\$7,800	\$0.02	-\$2.03	\$93	57.0%
CME & Other: Average Hedged IOFC	\$0.00	\$5.00	\$15,700	\$0.03	-\$1.89	\$127	56.7%
Financials		\$5.50	\$38,200	\$0.08	-\$1.67	\$182	56.2%
Working Capital Per Cow	\$600	\$6.00	\$58,875	\$0.12	-\$1.31	\$273	55.4%
Assets Per Cow	\$7,000	\$6.50	\$109,550	\$0.22	-\$1.00	\$349	54.7%
Debt-to-Asset Ratio (At Market Value)	50%	\$7.00	\$311,730	\$0.62	-\$1.00	\$350	54.7%
Effect of Crisis on Assets Value	-5%	\$7.50	\$399,000	\$0.80	-\$0.77	\$406	54.2%
Scenario: Average MPP-Dairy Margin in 2016	\$4.99	\$8.00	\$515,500	\$1.03	-\$0.60	\$450	53.8%
Diagnostics							
Expected 2016 Milk Production	50,000,000						
Cash-Flow Breakeven MPP-Dairy Margin	\$7.00						



FARM-SPECIFIC DASHBOARD: FARM FINANCIALS

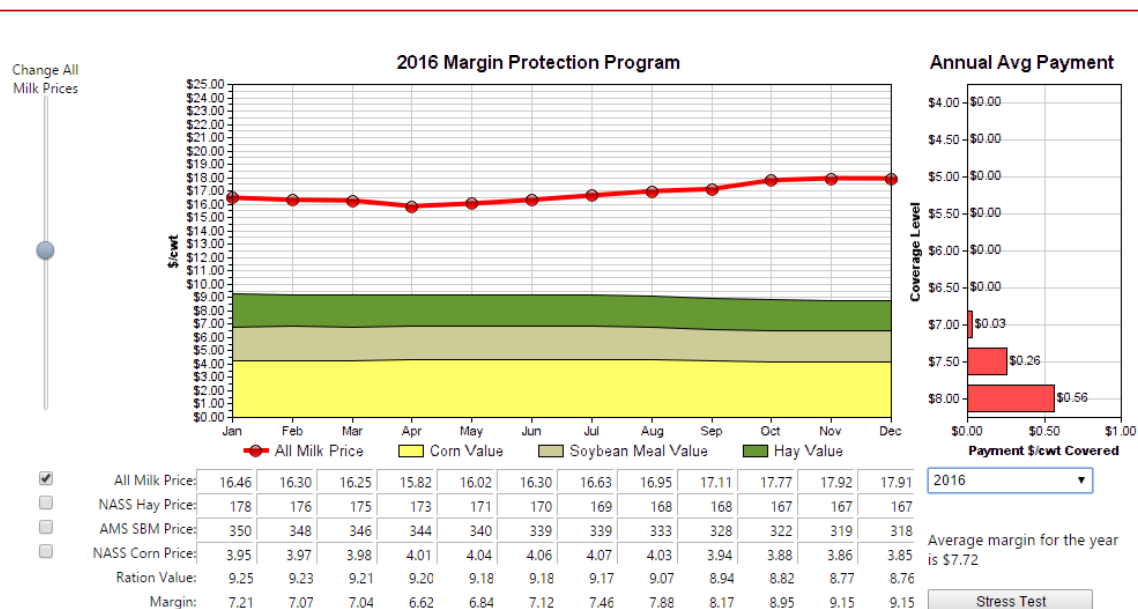
Financials

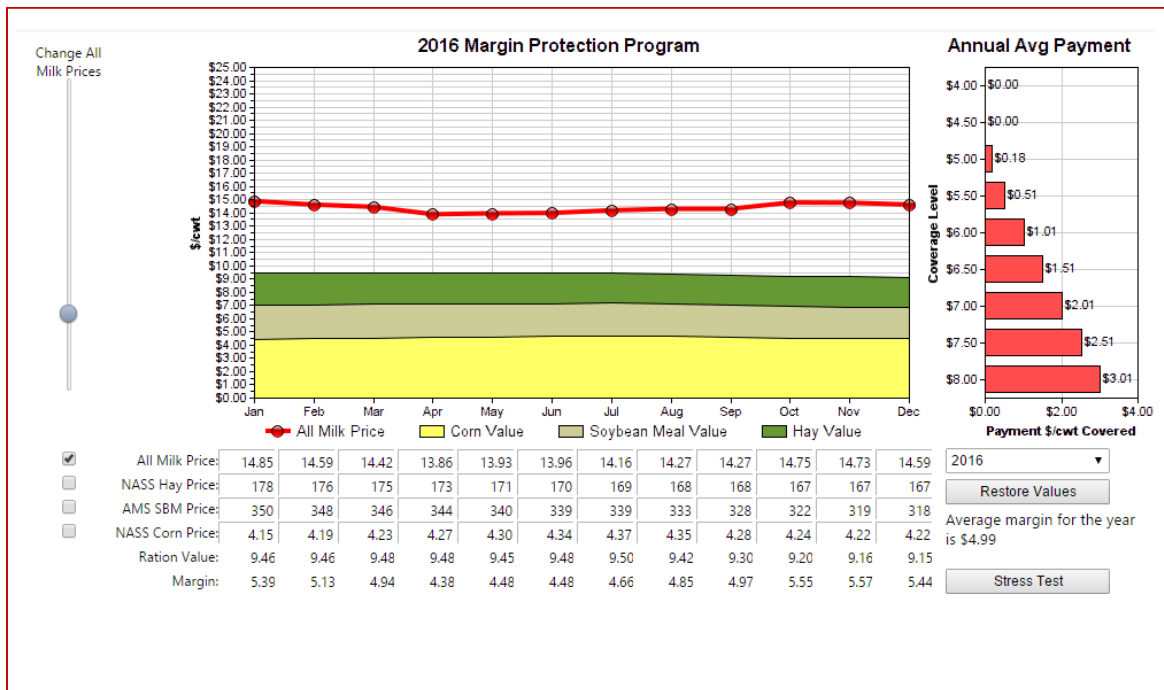
Working Capital Per Cow	\$600
Assets Per Cow	\$7,000
Debt-to-Asset Ratio (At Market Value)	50%
Effect of Crisis on Assets Value	-5%

- ✓ **Working capital per cow:** Any losses will first be absorbed by cash reserves or by utilizing operating lines of credit.
- ✓ **Debt-to-Asset Ratio:** If losses are deep and cannot be absorbed by working capital, long-term debt will be increased.
- ✓ **Assets Per Cow:** Farms with more land will be able to spread losses over more assets.



NAME YOUR OWN PRICE (BE RUTHLESS)





Production & Prices						
Cows	2,000					
Milk Per Cow (lbs/yr)	25,000					
Expenses, Other than Feed (\$/cwt)	\$9.00					
Worst-Case IOFC Basis over MPP (\$/cwt)	\$1.00					
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MPP-Dairy: Production History	45,000,000					
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Financials						
Working Capital Per Cow	\$600					
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Debt-to-Asset Ratio (At Market Value)	50%					
Effect of Crisis on Assets Value	-5%					
Scenario: Average MPP-Dairy Margin in 2016	\$4.99					
Diagnostics						
Expected 2016 Milk Production	50,000,000					
Cash-Flow Breakeven MPP-Dairy Margin	\$7.00					

	MPP-Dairy		Profitability	Liquidity	Solvency
	Premium Costs		Net Income	Working Capital/Cow	Debt/Asset Ratio
	Total \$	\$/cwt	\$/cwt	\$/cow	%
No MPP			-\$2.01	\$98	56.9%
\$4.00	\$100	\$0.00	-\$2.01	\$98	56.9%
\$4.50	\$7,800	\$0.02	-\$2.03	\$93	57.0%
\$5.00	\$15,700	\$0.03	-\$1.89	\$127	56.7%
\$5.50	\$38,200	\$0.08	-\$1.67	\$182	56.2%
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\$7.00	\$311,730	\$0.62	-\$1.00	\$350	54.7%
\$7.50	\$399,000	\$0.80	-\$0.77	\$406	54.2%
\$8.00	\$515,500	\$1.03	-\$0.60	\$450	53.8%



FARM-SPECIFIC DASHBOARD: RISK MANAGEMENT

Risk Management

MPP-Dairy: Production History	45,000,000
MPP-Dairy: Coverage Percentage	90%
CME & Other: % of 2016 Milk and Feed Hedged	0%
CME & Other: Average Hedged IOFC	\$0.00

Some common question include:

- Do I need to hedge if I use MPP-Dairy? How much?
- Should % hedged plus coverage percentage be lower than total milk production?
- When should I hedge?



FARM-SPECIFIC DASHBOARD: RISK MANAGEMENT

Risk Management

MPP-Dairy: Production History	45,000,000
MPP-Dairy: Coverage Percentage	90%
CME & Other: % of 2016 Milk and Feed Hedged	0%
CME & Other: Average Hedged IOFC	\$0.00

MPP-Dairy			Profitability	Liquidity	Solvency
Premium Costs			Net Income	Working Capital/Cow	Debt/Asset Ratio
Total \$	\$/cwt		\$/cwt	\$/cow	%
\$6.50	\$109,550	\$0.22	-\$1.00	\$349	54.7%



FARM-SPECIFIC DASHBOARD: RISK MANAGEMENT

Risk Management

MPP-Dairy: Production History	45,000,000
MPP-Dairy: Coverage Percentage	90%
CME & Other: % of 2016 Milk and Feed Hedged	40%
CME & Other: Average Hedged IOFC	\$8.00

MPP-Dairy			Profitability	Liquidity	Solvency
Premium Costs			Net Income	Working Capital/Cow	Debt/Asset Ratio
Total \$	\$/cwt		\$/cwt	\$/cow	%
\$6.50	\$109,550	\$0.22	-\$0.20	\$550	53.0%



DASHBOARD: RISK MANAGEMENT – KEY POINTS

Risk Management

MPP-Dairy: Production History	45,000,000
MPP-Dairy: Coverage Percentage	90%
CME & Other: % of 2016 Milk and Feed Hedged	40%
CME & Other: Average Hedged IOFC	\$8.00

MPP-Dairy			Profitability	Liquidity	Solvency
Premium Costs			Net Income	Working Capital/Cow	Debt/Asset Ratio
Total \$	\$/cwt		\$/cwt	\$/cow	%
\$6.50	\$109,550	\$0.22	-\$0.20	\$550	53.0%

- ✓ MPP-Dairy and private risk management tools may be combined to keep profitability, liquidity and solvency above desired thresholds at least hedging costs.