

Margins Under A Modified DSA2011

Dr. Scott Brown

University of Missouri

<http://web.missouri.edu/~browndo>

Discovering Prices and Managing Risk: Do We Need
a Better Way?

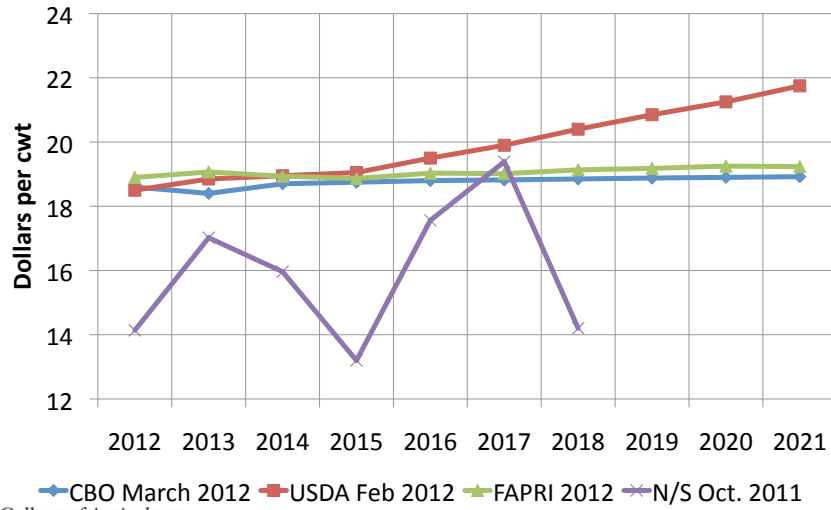
May 10 & 11, 2012

Salt Lake City, Utah

The Baseline Matters!

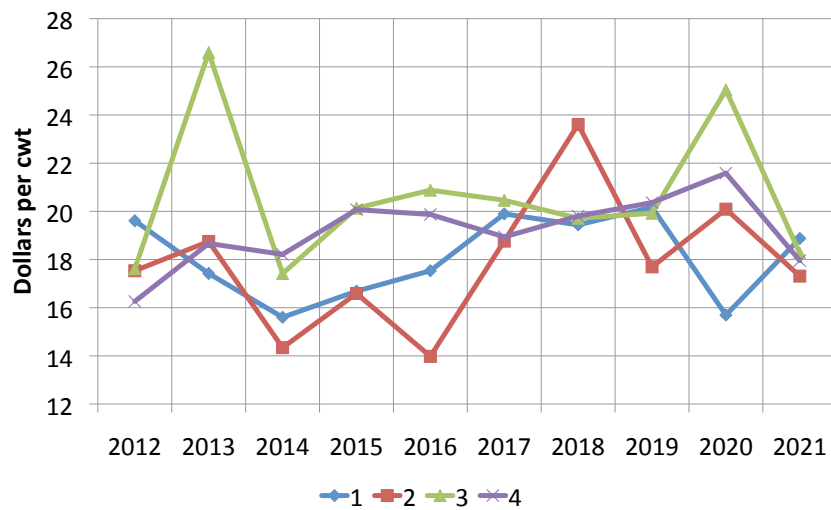
- This is the point of comparison when examining policy alternatives
- Baseline approaches are inherently becoming more complicated
- Protecting margins means baseline relationships among milk prices and feed costs are important
- EVERYONE'S baseline will be wrong!

U.S. All Milk Prices



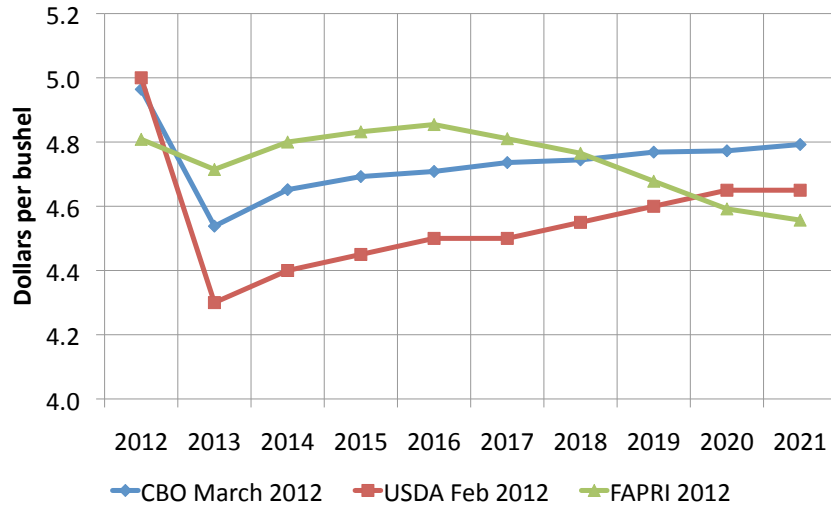
 College of Agriculture,
Food and Natural Resources

Stochastic Approach Introduces Variability



 College of Agriculture,
Food and Natural Resources

U.S. Corn Prices



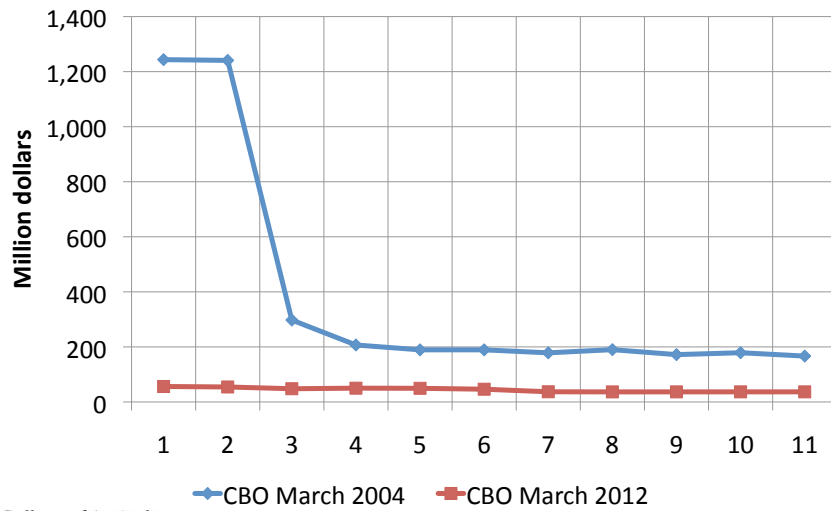
 College of Agriculture,
Food and Natural Resources


CBO Is The Official Scorekeeper Of The Cost of Farm Programs

- Their annual baseline changes matter!
- It affects how program alternatives are scored
- Remember, it is expected outlays not actual outlays that drives the development process

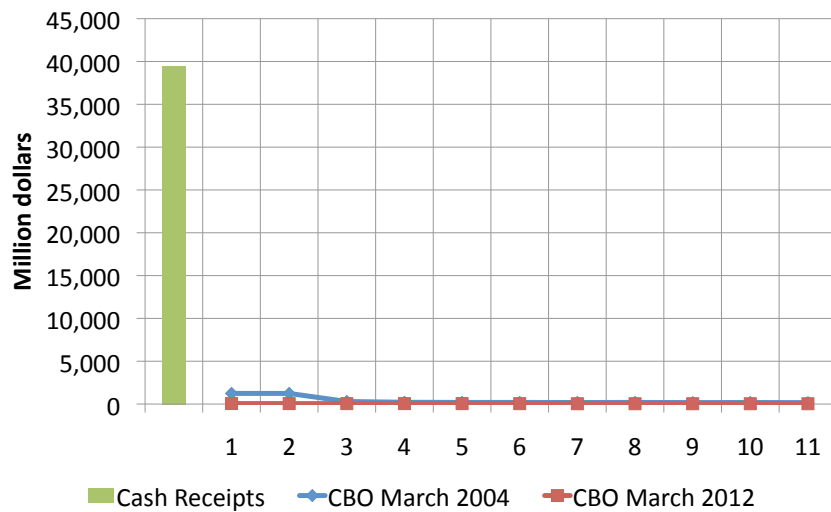
 College of Agriculture,
Food and Natural Resources

CBO Dairy Government Outlays



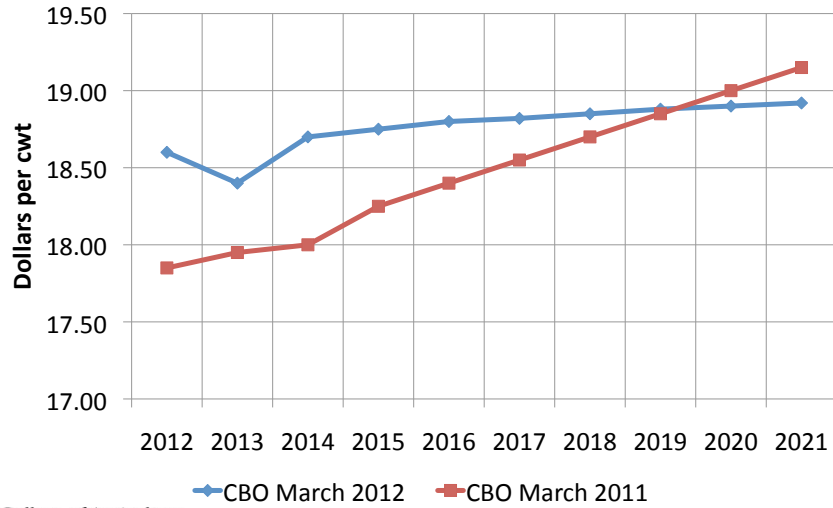
 College of Agriculture,
Food and Natural Resources


CBO Dairy Government Outlays



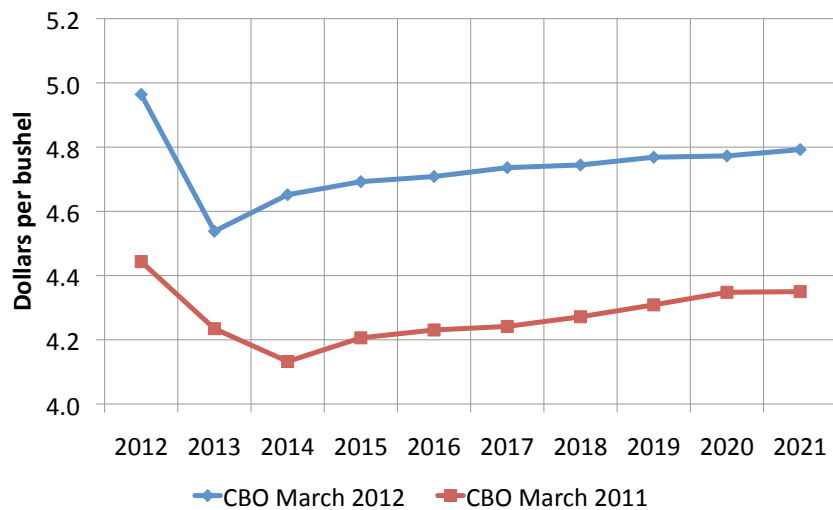
 College of Agriculture,
Food and Natural Resources

U.S. All Milk Prices



 College of Agriculture,
Food and Natural Resources

U.S. Corn Prices



 College of Agriculture,
Food and Natural Resources

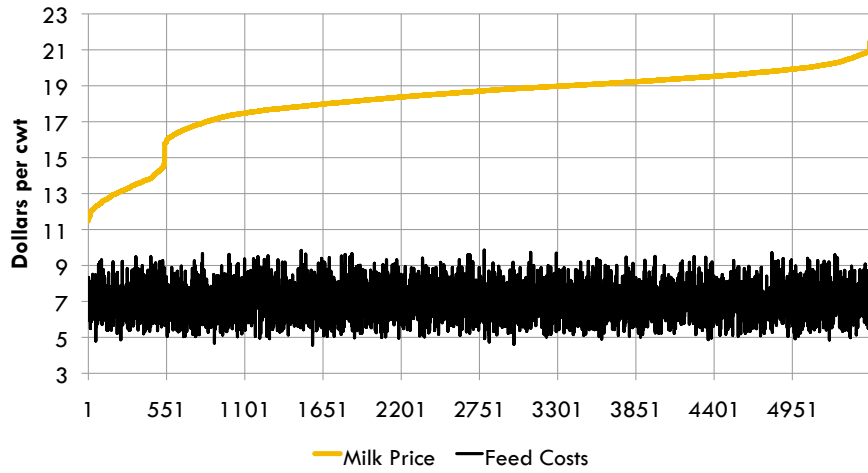
“Correct” Milk/Feed Correlation in the Baseline Important

- Basic concept: The higher the correlation between milk price and feed costs implies less times a program triggered on the margin of the two operates
- This is NOT whether the model adjusts the supply side to changes in input and output prices correctly. That is a given for the models out there.
- What correlation does the baseline have between milk prices and feed costs?

Simple Example

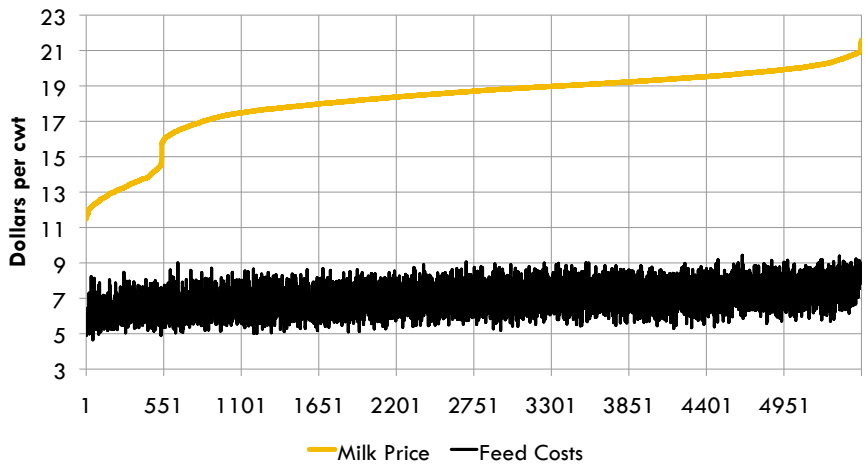
- This example is completely made up
- I want you to abstract from the issue at hand and think about the statistics
- Again, I am focused on the relationships between variables in their baseline outcomes

No Correlation Exists



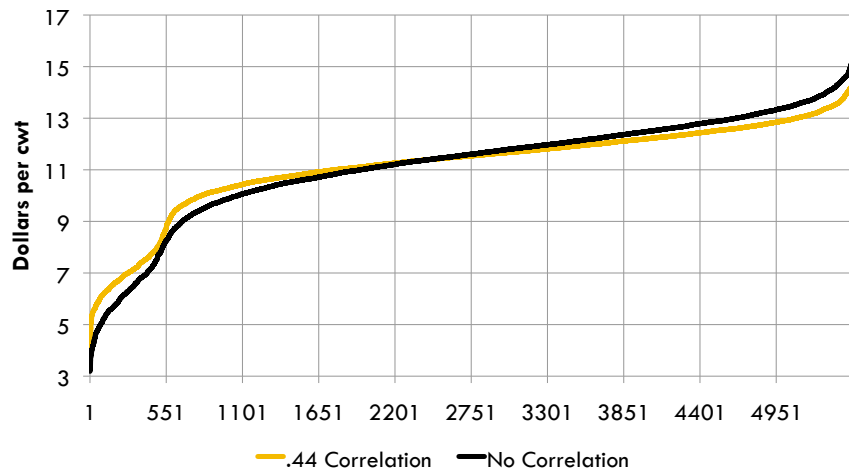
 College of Agriculture,
Food and Natural Resources


0.45 Correlation Exists



 College of Agriculture,
Food and Natural Resources


Correlation Reduces the Tails of the Margin Distribution



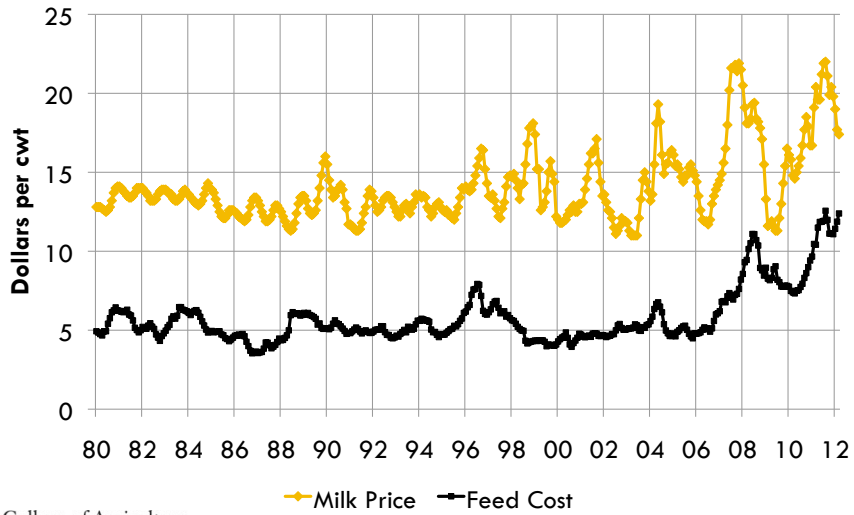
 College of Agriculture,
Food and Natural Resources

The Margin Distribution Narrows As The Correlation Rises

	correlated at 0.45	uncorrelated
AVG	11.19	11.19
MIN	3.92	3.19
MAX	14.61	15.53
% times below 6	1.27%	3.96%
% times below 5	0.13%	1.38%
% times below 4	0.02%	0.24%

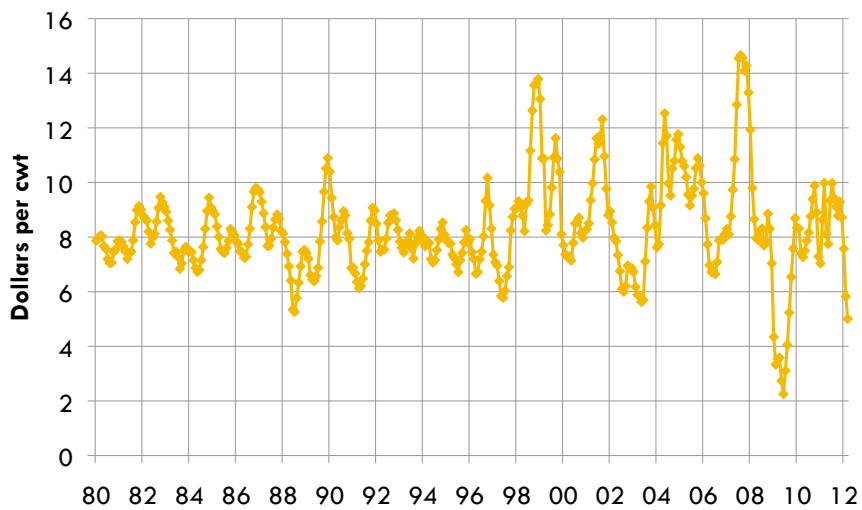
 College of Agriculture,
Food and Natural Resources

The Correlation Between Feed and Milk Prices is Important



 College of Agriculture,
Food and Natural Resources

Modified DSA2011 Margin



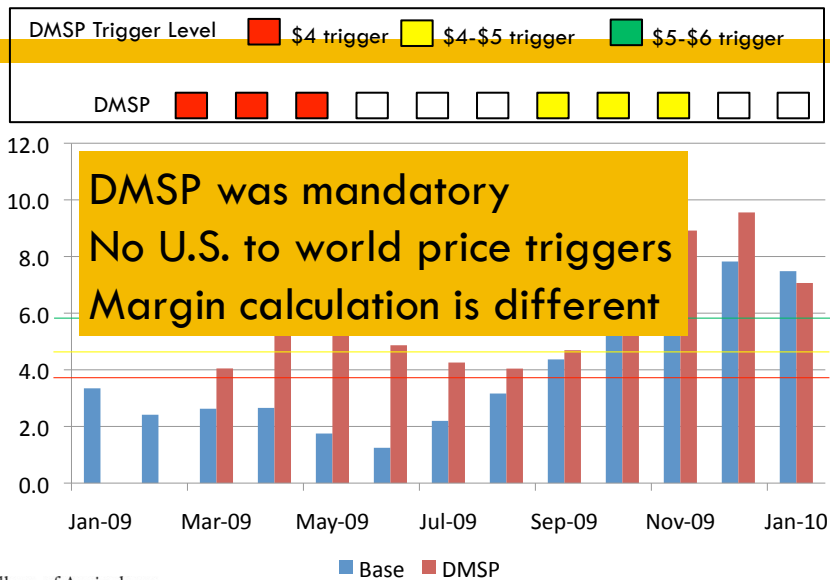
 College of Agriculture,
Food and Natural Resources

The Policy Continues To Change!

- Originally “Foundation for the Future”
- Then “Dairy Security Act of 2011”
- And Now “Modified Dairy Security Act”
- There could be more changes before it is over

- Old analysis is no longer valid

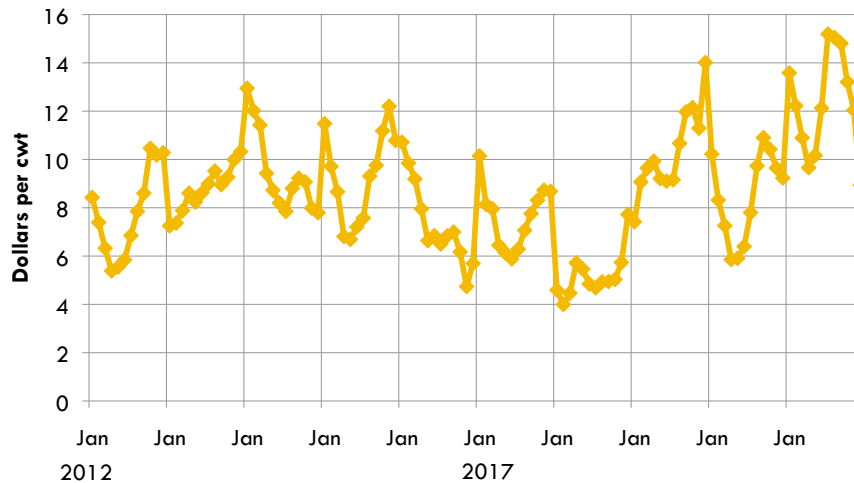
Margin Comparison With DMSP Operation



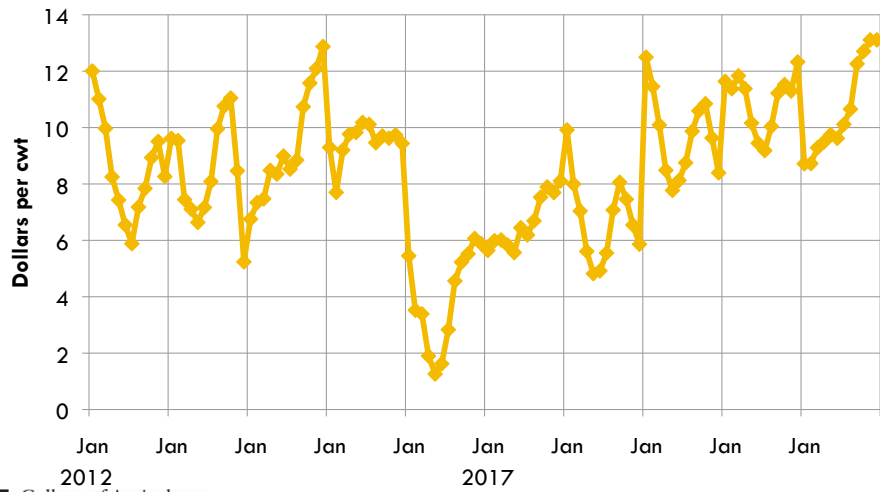
My Analysis of MDSA2011


- Many have formed impressions about the model I use
- There has been significant revisions to deal with analyzing this type of policy proposal
- Monthly margins are generated based on draws that relate monthly milk AND feed prices to annual outcomes
- I keep seeing that one problem with my results is they are annual only
- A model can't answer questions about MDSA2011 appropriately without the monthly component!

Monthly Margin - #88 Dale Junior Draw

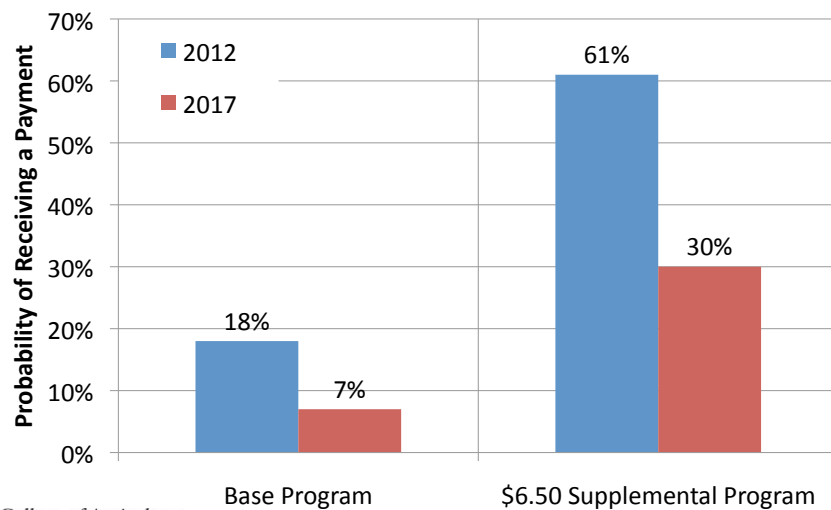


Monthly Margin - #99 Carl Edwards Draw



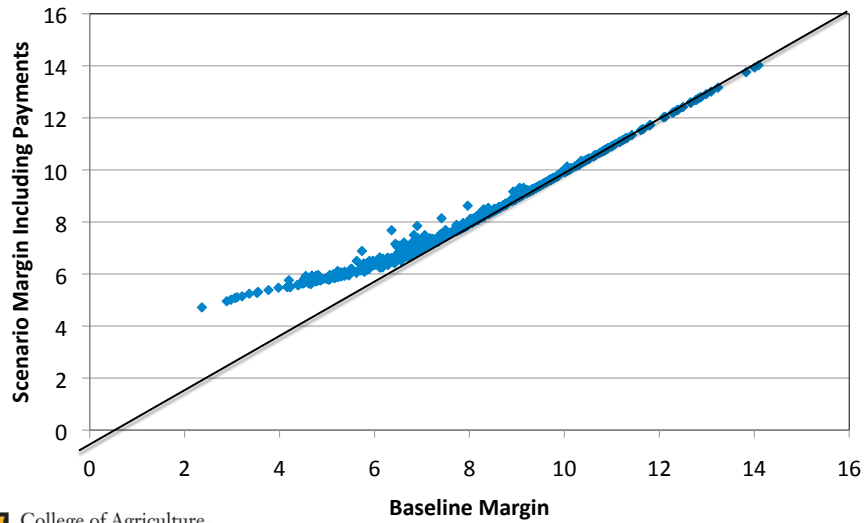
2012
 College of Agriculture,
 Food and Natural Resources


Probability of DPMPP Payments



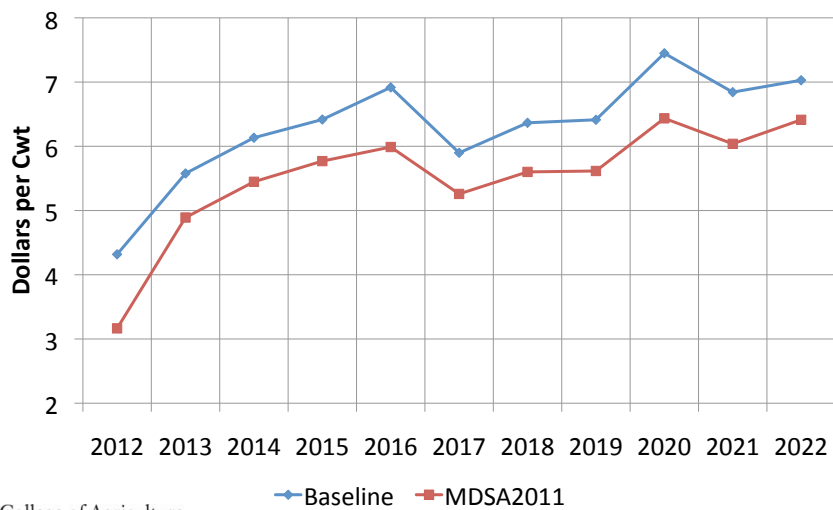
College of Agriculture,
 Food and Natural Resources

Low Margins Lifted Under the MDSA2011



 College of Agriculture,
Food and Natural Resources

Margin Variance Declines Under MDSA2011, Program Lifts Low Margins



 College of Agriculture,
Food and Natural Resources