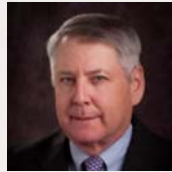


Proposed Commodity Program & Crop Insurance Changes



Dr. G.A. (Art) Barnaby

Department of Ag Economics-Kansas State University

2017 Crop Insurance Workshop, Making Risk Management Decisions in a Difficult Farm Economy

Dr. Art Barnaby was raised on a diversified farm, located in Elk County, Kansas. Art received his B.S. degree from Fort Hays State University, M.S. from New Mexico State University and a Ph.D. in Agricultural Economics from Texas A&M University. Art joined the Agricultural Economics faculty in 1979. He currently holds the rank of Professor. Art conducts national extension education programs on market risk, government commodity programs, crop insurance and public policy. He has authored several research projects on crop insurance issues and their impacts on farmers. His research work with the private sector was the basis for the first revenue insurance contract.

Email: barnaby@ksu.edu Phone: 785-532-1515

Check out our WEB page at <http://www.AgManager.info>

Commodity Policies Under Consideration

- Likely farmers will be able to chose between PLC & ARC
- Don't expect signup until Spring 2019.
- It will take 6 months to write regulations to implement a new Farm Bill
- General agreement on policy, but how to fund Title I changes without cutting crop insurance

Commodity Policies Under Consideration

- Add a fix to ARC so that guarantees are based on “expected” yield
- Add a fix to ARC for declining strike prices
- Add Cotton to the Title 1 commodity program
- Fix Dairy Margin program



ERS Forecasted Average Net Cash Income for Farm Business by Farm Specialization*

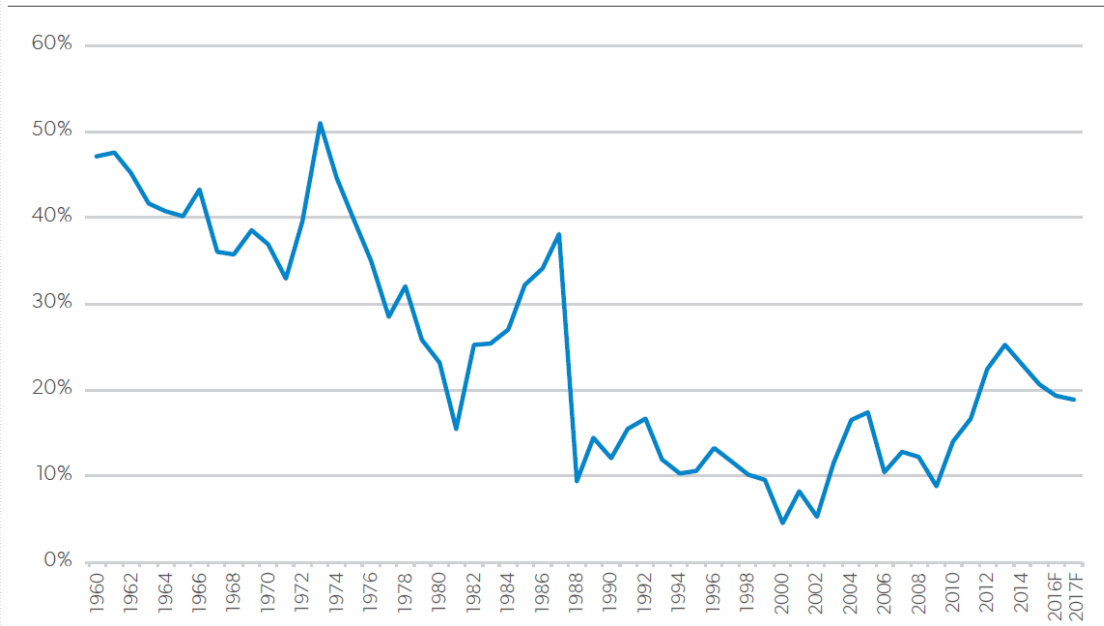
Farm Specialization*	Forecast Net Cash Income for 2017 Dollar per Farm Business	Change from 2016 Percentage
Wheat	\$61,600	13.4
Corn	\$167,600	2.8
Soybeans	\$133,500	2.6
Cotton	\$442,800	31.1
Specialty Crops	\$254,300	-14.8
Other Crops	\$87,200	3.0
Cattle and Calf	\$37,900	15.9
Hogs	\$297,700	37.6
Poultry	\$113,000	2.3
Dairy	\$281,400	42.2
Other Livestock	\$20,500	-0.5

Note: *Farm specialization is determined by a farm having more than 50 percent of its value of production from that commodity.
 Source: Economic Research Service, “Net Cash Farm Income for U.S. Farm Businesses Forecast up in 2017,” 2017, <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/farm-business-income/>.

*Source: Vincent H. Smith, Joseph W. Glauber, Barry K. Goodwin, Daniel A. Sumner, “Agricultural Policy in Disarray: Reforming the Farm Bill—An Overview”, American Enterprise Institute, October 13, 2017



Percentage of Total Household Income from Farm Enterprises Received by Households with Farm-Business Income: 1960-2017*



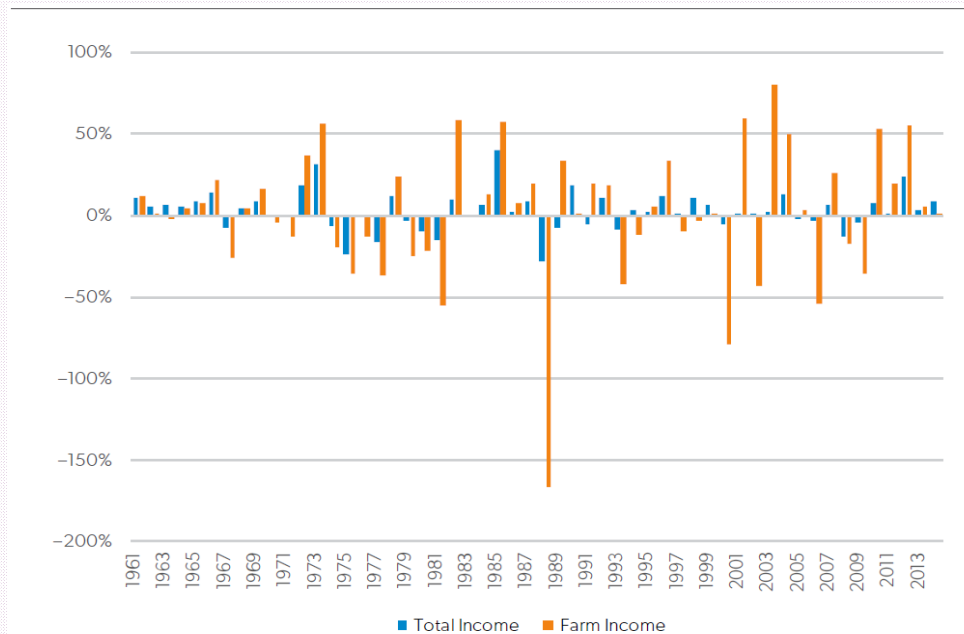
Source: Economic Research Service, "Farm Household Income and Characteristics," US Department of Agriculture, <https://www.ers.usda.gov/data-products/farm-household-income-and-characteristics/>.

*Source: Vincent H. Smith, Joseph W. Glauber, Barry K. Goodwin, Daniel A. Sumner, "Agricultural Policy in Disarray: Reforming the Farm Bill—An Overview", American Enterprise Institute, October 13, 2017`

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 5



Percentage Annual Change in Household Income from Farming Enterprises Versus Total Household Income for Households with Farm Businesses: 1961-2014 (Incomes Adjusted for Inflation Effects to 2009 Dollars)*`



Source: Economic Research Service, "Farm Household Income and Characteristics," US Department of Agriculture, <https://www.ers.usda.gov/data-products/farm-household-income-and-characteristics/>.

*Source: Vincent H. Smith, Joseph W. Glauber, Barry K. Goodwin, Daniel A. Sumner, "Agricultural Policy in Disarray: Reforming the Farm Bill—An Overview", American Enterprise Institute, October 13, 2017`

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 6



Off Farm Income Eliminates Farm Risk?

- So if you compare farm household income with off farm income included there is far less variation in annual income therefore crop insurance is unnecessary.
- A large percentage of farms are part-time farms with off farm income, but on the larger commercial farms more likely there is no off farm income and they invest in their farm rather than the stock market.
- So commercial farms do have a lot of income risk.



Average Net Farm Income (NFI) of Participants in the Kansas Farm Management Association Accounting Record Program

Year	NFI	Bottom 1/4 NFI	Year	NFI	Bottom 1/4 NFI
2016	43,161	(105,241)	2009	107,024	26,872
2015	6,744	(168,864)	2008	124,617	(28,501)
2014	128,731	(54,510)	2007	115,212	(14,634)
2013	140,356	135,981	2006	46,930	(36,683)
2012	159,352	(15,826)	2005	56,131	(19,685)
2011	166,375	(12,947)	2004	66,659	(11,797)
2010	175,299	(11,152)			

2016 Average 1,681 crop acres, 1,020 pasture acres

2016 Bottom 25% of incomes; 1,967 crop acres, 1,082 pasture acres



Average Net Farm Income (NFI) by Farm Type of Participants in the Kansas Farm Management Association Accounting Record Program

	# Farms	2016	2015	2014	2013	2012	2011
All Farms	1,024	43,920	6,930	129,889	144,793	161,125	97,331
Crop Dryland	644	55,790	8,451	95,355	161,069	169,061	97,945
Crop >60% Irr.	50	(23,867)	76,515	138,078	125,628	347,315	132,734
Cowherd	24	26,226	63,847	185,114	92,539	94,840	92,513



Average Returns Over Variable Cost (VC) of Participants in the Kansas Farm Management Association Accounting Record Program*

	2016 Acres	2011-2015			2016		
		Gross	Returns over VC	Returns/ AC-Cow	Gross	Returns over VC	Returns/ AC-Cow
Corn	738	213,958	58,023	308.14	190,848	29,079	278.59
Wheat	893	179,383	56,100	80.17	123,622	202	0.29
Soybeans	498	139,377	52,338	127.05	170,493	94,368	232.30
Irr. Corn	747	426,572	157,048	328.05	326,001	20,425	34.36
Cow/Calf	158	123,422	21,513	153.99	111,898	(868.00)	(5.48)

*These returns are based on enterprise accounting records and individual farm may have more than one enterprise.



Commodity Program Education

- Produce maps that will show the difference between estimated 2016/17 ARC payments and final payments.
- Popup window will show the FSA, NASS, & RMA county yields, estimated ARC payments, and final ARC payments by county.
- FSA county yield equals total bushels harvested divided by harvested acres plus RMA failed acres.

Commodity Program Education

- By March 1, estimated PLC payments were near final payments. PLC is final when NASS announces MYA Price (6/29/17 wheat). FSA county yields for ARC are only released when payments are announced in October.
- FSA reports gross payment rate. $\text{ARC payment} = \text{Gross payment rate} \times \text{base acres} \times 85\% \times \text{crop share} \times (1 - 6.8\% \text{ sequestration cut})$
- FSA reports gross payment rate. $\text{PLC payment} = \text{Reference Price} - \text{MYA price} \times \text{farm's FSA program yield} \times \text{base acres} \times 85\% \times \text{crop share} \times (1 - 6.8\% \text{ sequestration cut})$

Commodity Program Education

- USDA Announced \$8 billion in Title I payments, DTN in a follow up story says \$7 billion.
- Likely DTN will be closer to final numbers because some of the base will be owned by farmers over the AGI limit, and even more acres will collect no payment because the farm entity exceeded the \$125,000 payment limit.

Wheat Farm ARC Maximum Payment Example

- A typical \$20.10 wheat ARC payment is a much smaller net payment.
- A typical wheat farmer that has only wheat base with about 10% of her acres without base would net the following amount:
- **100 base acres X \$20.10 X 85% X 100% crop share X (1-0.068 sequestration cut) = \$1,592 per base acre.**
- If the total acres are 111, then 10% of acres have no base, or an average payment across all acres is \$14.34 per Acre.
- A property tax rate of \$4.77 per acre will claim 1/3 of the ARC payment, even years when there is no ARC payment.

Political Rhetoric on Crop Insurance

- How is it possible to have record farm income and record crop insurance indemnity payments in the same year?
- Why are farmers paid more than the value of the crop when prices increase?
- Why are taxpayers sending money to foreign insurance companies?
- Why do “wealthy” farmers receive premium subsidies?
- Why are returns so high for crop agents and insurance companies?

With 2012 “Near Record” Net Cash Income, Why were Record Crop Insurance Indemnity Payments Needed?



Source: ERS-USDA, <https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-us-and-state-level-farm-income-and-wealth-statistics.aspx>

How is it possible to have record farm income and record crop insurance indemnity payments in the same year?

- Not all farmers had a crop failure in 2012.
- In 2012, farmers with good corn crops were able to sell some of their corn for over \$7.50 per bushel and generated some very “high” profits.
- All corn farmers collecting 2012 crop insurance payments had to suffer an insurable yield loss to collect any indemnity payment, with no exceptions.

How is it possible to have record farm income and record crop insurance indemnity payments in the same year?

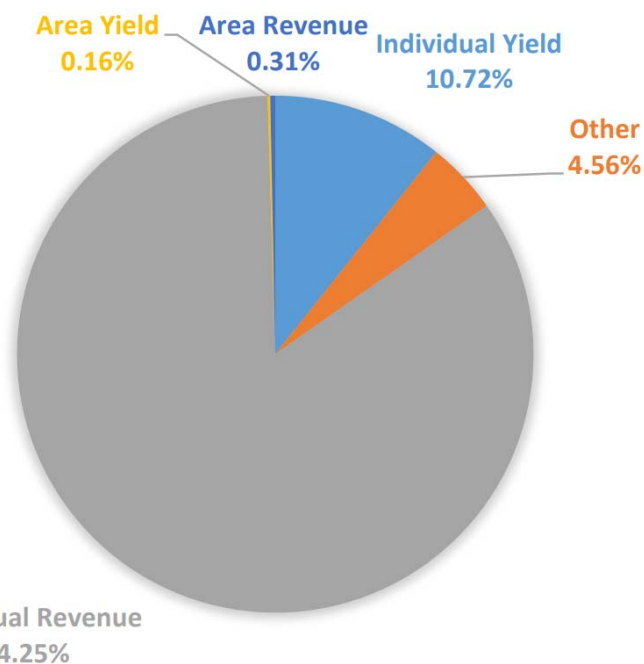
- For most farmers they needed a yield loss of 20% or more to collect any indemnity payments in 2012.
- 2012 yield losses needed to exceed their deductible to cover the farmer paid premiums before they net any indemnity payments.
- In the Great Plains that could add another 5% to the deductible because of farmer paid premiums, so farmers with 80% coverage would need a 25% yield loss to net any payment.

"The insurance products offered are approved by the Federal Crop Insurance Corporation but are sold and serviced through **private insurance companies who are paid an administrative operating subsidy.**"

Source: Risk Management Agency, "The Risk Management Safety Net: Market Penetration and Market Potential Analysis of the Federal Crop Insurance Portfolio", September 2017
<https://www.rma.usda.gov/pubs/2017/portfolio/portfolio.pdf>



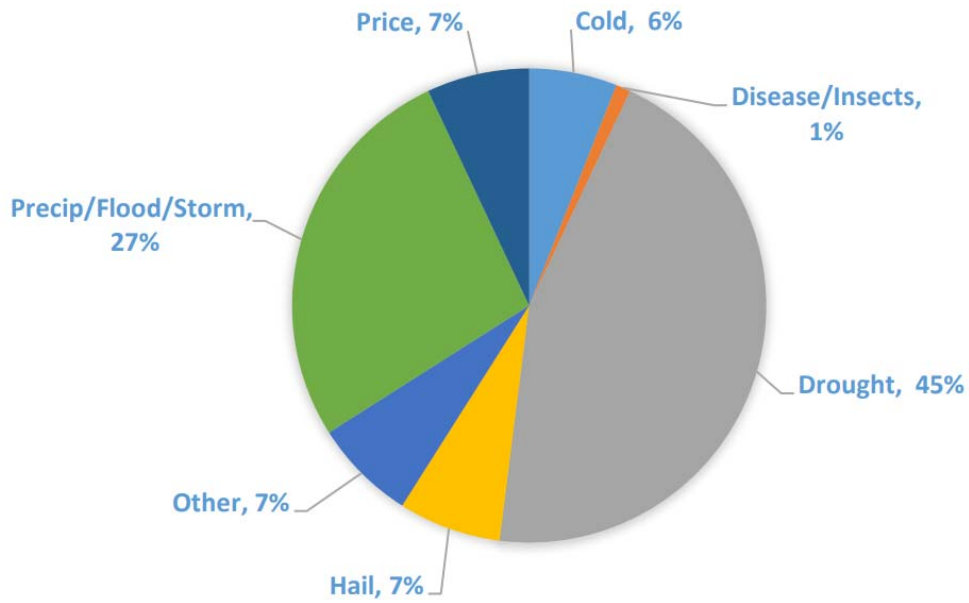
2016 CROP INSURANCE PREMIUM BY POLICY TYPES



Source: Risk Management Agency, "The Risk Management Safety Net: Market Penetration and Market Potential Analysis of the Federal Crop Insurance Portfolio", September 2017
<https://www.rma.usda.gov/pubs/2017/portfolio/portfolio.pdf>



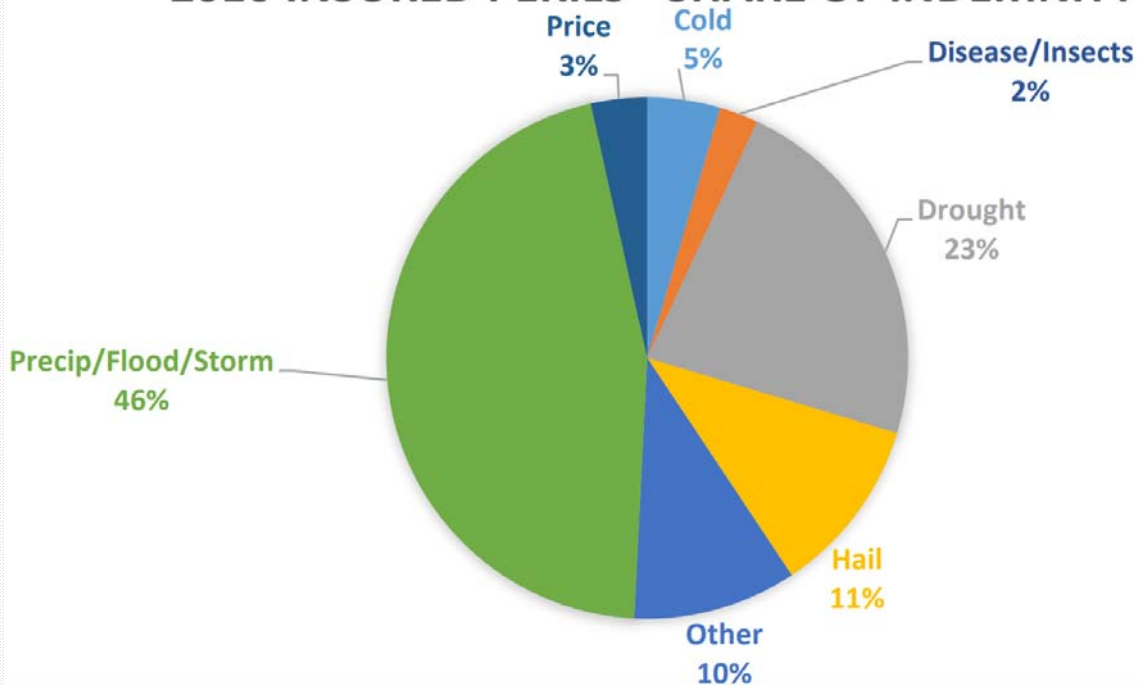
2001-2015 INSURED PERILS - SHARE OF INDEMNITY



Source: Risk Management Agency, "The Risk Management Safety Net: Market Penetration and Market Potential Analysis of the Federal Crop Insurance Portfolio", September 2017
<https://www.rma.usda.gov/pubs/2017/portfolio/portfolio.pdf>



2016 INSURED PERILS - SHARE OF INDEMNITY



Source: Risk Management Agency, "The Risk Management Safety Net: Market Penetration and Market Potential Analysis of the Federal Crop Insurance Portfolio", September 2017
<https://www.rma.usda.gov/pubs/2017/portfolio/portfolio.pdf>



Other issues

- Farmers & other shorts can't deliver on a futures contract and arbitrage the futures contract. Farmers don't have the leverage of delivery.
- Only a few multi-national grain companies can deliver on futures because they must provide storage to the long taking delivery.
- A 2012 shortage of storage caused non-convergence in wheat, futures markets causing a reduction in indemnity payments for price losses, because futures don't fall to meet cash.
- Indemnity payments for yield loss are over the market with non-convergence.

Other issues

- CME changed to a VSR and a shipping certificate.
- VSR may not cause convergence at harvest time, but as the storage rate is increased it is expected to cause convergence in a deferred month, but farmers would need to own the grain to benefit.
- Crop insurance rating assumes an efficient market and convergence.

Crop Insurance Policies Under Consideration

- Adjusted Gross Income limits for participation in Crop Insurance
 - \$250,000 (AFFIRM Act) and 500,000 (Administration's budget) AGI limits are both on the table
- Harvest Price Option
 - Eliminate HPO option or HPO subsidy
- Capping crop insurance premium cost-shares (subsidies)
 - Limit a farm to receiving \$40,000 in cost-share, all crop insurance purchases above that point are unsubsidized

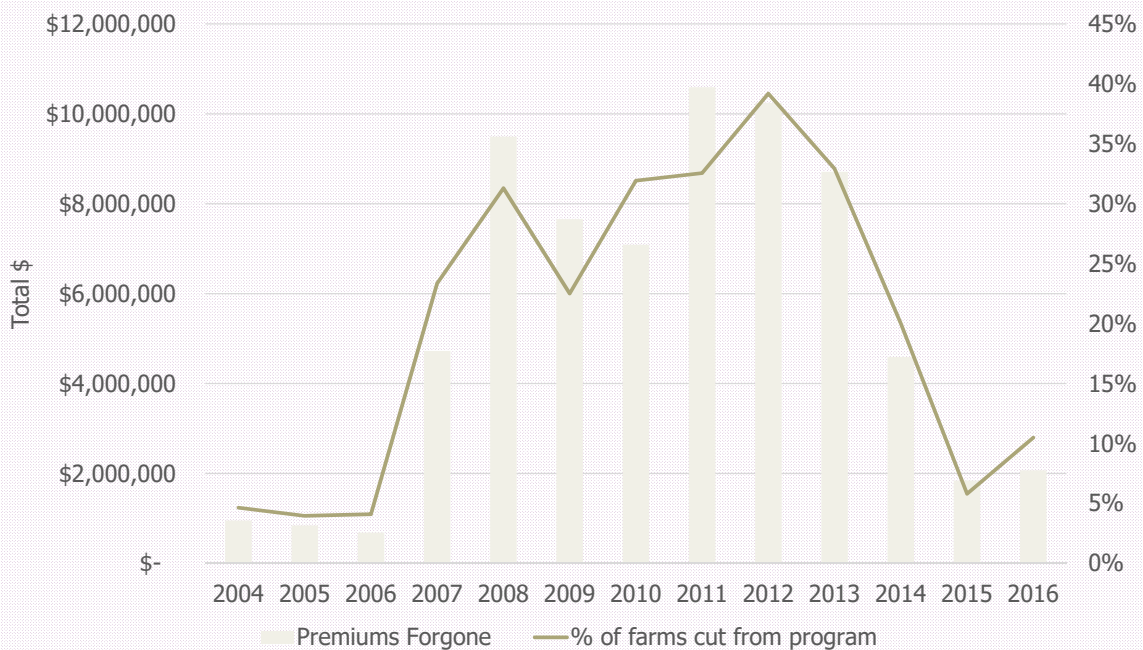
Crop Insurance Policies Under Consideration

- Administration's budget aims to cut \$3 billion per year over 10 years
 - This is nearly half of the government's premium share and will require big declines in participation to achieve budget cuts estimated by the Administration.
 - Unlikely any savings would be this large because farmers will make changes to avoid the limits.
 - Savings this large would likely require a large number of farmers to drop their crop insurance coverage.

Crop Insurance Policies Under Consideration: \$250K Adjusted Gross Income Cap

- Impact on Kansas farms depends on the profitability.
- In the good years, we could have as many as 30-40% of farms affected.
- In the bad years, that drops to 5-10%.
- Loss of customers will also affect crop insurance industry sales and agent commissions.

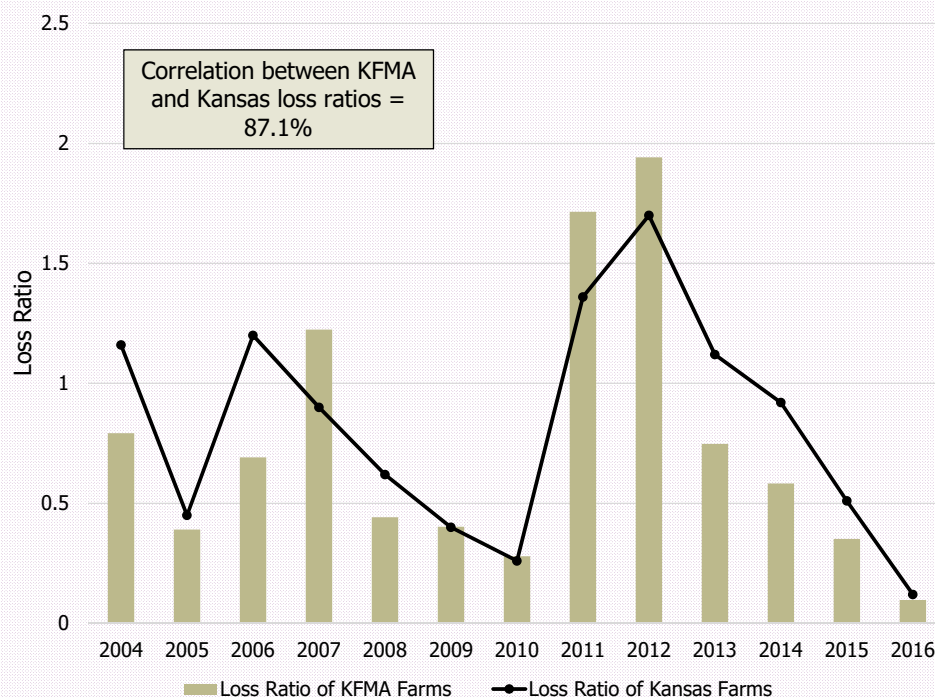
Crop Insurance Policies Under Consideration: \$250K Adjusted Gross Income Cap



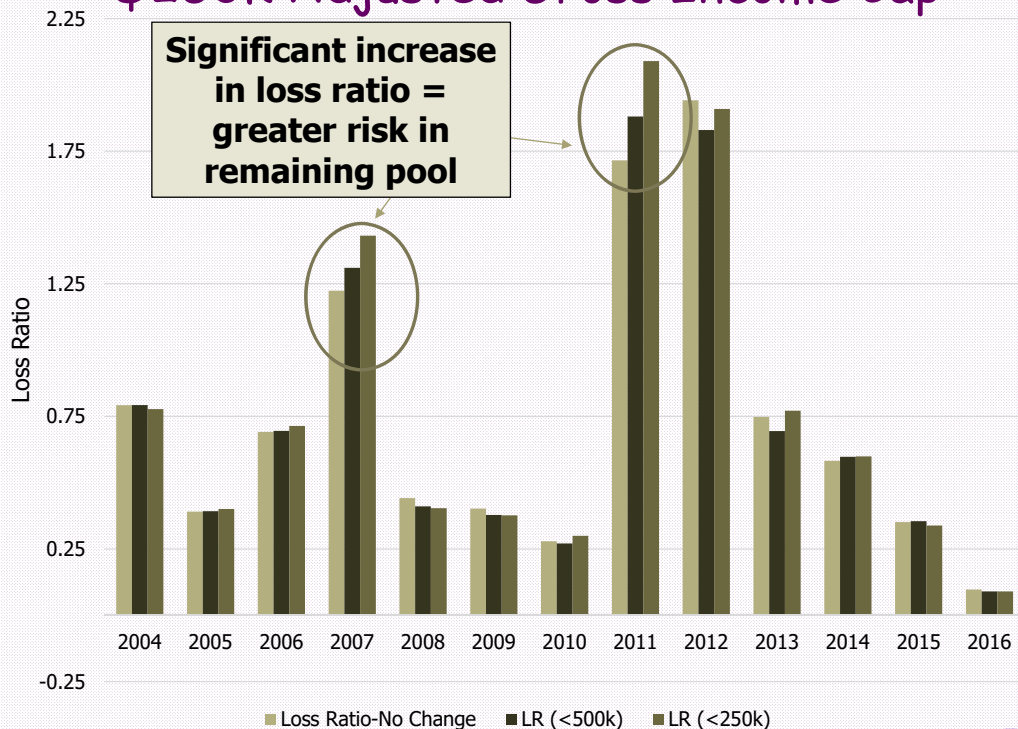
Crop Insurance Policies Under Consideration: \$250K Adjusted Gross Income Cap

- What are the implications beyond the farm gate?
 - Consider the impacts to the insured pool caused by the loss of the 'biggest' farms
- Used KFMA data to simulate which farms would hit AGI cap and how the loss ratio is affected

Crop Insurance Policies Under Consideration: \$250K Adjusted Gross Income Cap



Crop Insurance Policies Under Consideration: \$250K Adjusted Gross Income Cap



10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 31



Crop Insurance Policies Under Consideration: \$250K Adjusted Gross Income Cap

- \$500,000 versus \$250,000 cap
 - Lower limit will affect more farms
- Likely to be some "work-around" that people will use including creating "paper farms" and adding spouse as an operator
- Landowners who crop share and hit cap
 - Trusts, investor entities
 - May change their lease to cash or get out completely.

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 32



Crop Insurance Policies Under Consideration: Eliminate Harvest Price Option (HPO)

- Elimination of the HPO completely
or
- Elimination of the cost-share for HPO
- Popular for Revenue Protection policies in the Corn Belt
 - Could create some savings in the RMA budget because corn and soybean producers likely to switch to Yield Protection policy or drop their coverage
 - Affects all RP insured farmers, regardless of their AGI or farm size



IL Crop Insurance History, Corn

Year	Liability (000 000)	Premium (000 000)	Subsidy (000 000)	Farmer Paid (000 000)	Indemnity (000 000)	Loss Ratio	% Of Prem / Farmer	Prem / Indem- nity
1998	1,227	61.084	24.026	37.059	31.249	0.512	60.67%	\$0.84
1999	1,303	79.773	21.650	58.123	33.931	0.425	72.86%	\$0.58
2000	1,629	103.782	20.564	83.219	28.274	0.272	80.19%	\$0.34
2001	1,653	113.188	60.311	52.877	30.015	0.265	46.72%	\$0.57
2002	1,750	115.409	60.482	54.927	99.762	0.864	47.59%	\$1.82
2003	1,960	136.961	71.642	65.318	40.242	0.294	47.69%	\$0.62
2004	2,432	173.049	92.456	80.594	60.542	0.350	46.57%	\$0.75
2005	2,375	168.968	89.933	79.036	191.314	1.132	46.78%	\$2.42
2006	3,535	277.198	147.847	129.350	26.412	0.095	46.66%	\$0.20
2007	5,961	487.173	258.310	228.863	47.362	0.097	46.98%	\$0.21
2008	6,717	547.433	274.457	272.976	325.840	0.595	49.86%	\$1.19
2009	5,351	465.003	249.958	215.045	135.268	0.291	46.25%	\$0.63
2010	5,495	376.845	207.425	169.420	239.436	0.635	44.96%	\$1.41
2011	8,591	631.038	347.487	283.551	264.191	0.419	44.93%	\$0.93
2012	8,402	522.229	293.435	228.794	3,208.537	6.144	43.81%	\$14.02
2013	8,671	530.468	286.568	243.901	572.946	1.080	45.98%	\$2.35
2014	6,855	450.455	243.142	207.313	192.186	0.427	46.02%	\$0.93
2015	6,318	482.771	267.239	215.533	321.432	0.666	44.64%	\$1.49
2016	5,961	439.713	244.999	194.714	65.600	0.149	44.28%	\$0.34
2017	5,938	443.390	247.264	196.126	46.695	0.105	44.23%	\$0.24

92,125 6,605.9 3,509.2 3,096.7 5,961.2 0.902 \$1.93



CO Crop Insurance History, Wheat

Year	Liability (000 000)	Premium (000 000)	Subsidy (000 000)	Farmer Paid (000 000)	Indemnity (000 000)	Loss Ratio	% Of Prem Farmer	Prem / Indem- nity
1998	122	15.545	7.940	7.605	7.873	0.506	48.92%	\$1.04
1999	118	16.063	6.888	9.175	8.688	0.541	57.12%	\$0.95
2000	114	14.020	5.835	8.185	12.674	0.904	58.38%	\$1.55
2001	138	22.041	12.989	9.052	24.784	1.124	41.07%	\$2.74
2002	139	22.355	13.184	9.172	56.560	2.530	41.03%	\$6.17
2003	194	36.263	20.196	16.067	45.068	1.243	44.31%	\$2.81
2004	155	32.549	18.359	14.190	58.760	1.805	43.60%	\$4.14
2005	180	41.276	23.653	17.623	58.197	1.410	42.70%	\$3.30
2006	150	37.043	21.121	15.922	63.689	1.719	42.98%	\$4.00
2007	220	58.550	33.676	24.874	15.164	0.259	42.48%	\$0.61
2008	251	66.372	38.681	27.691	60.030	0.904	41.72%	\$2.17
2009	413	119.979	70.694	49.284	53.289	0.444	41.08%	\$1.08
2010	229	60.055	35.985	24.070	9.595	0.160	40.08%	\$0.40
2011	334	81.114	48.600	32.514	50.522	0.623	40.08%	\$1.55
2012	412	95.605	57.290	38.316	45.233	0.473	40.08%	\$1.18
2013	425	98.924	60.382	38.542	206.028	2.083	38.96%	\$5.35
2014	373	79.587	49.404	30.183	83.180	1.045	37.92%	\$2.76
2015	318	61.454	37.487	23.967	46.159	0.751	39.00%	\$1.93
2016	272	56.341	34.430	21.911	22.033	0.391	38.89%	\$1.01
2017	223	43.047	26.413	16.634	28.387	0.659	38.64%	\$1.71
	4,781	1,058.2	623.2	435.0	955.9	0.903		\$2.20

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 35



NE Crop Insurance History, Wheat

Year	Liability (000 000)	Premium (000 000)	Subsidy (000 000)	Farmer Paid (000 000)	Indemnity (000 000)	Loss Ratio	% Of Prem Farmer	Prem / Indem- nity
1998	105	9.798	4.117	5.681	4.367	0.446	57.98%	\$0.77
1999	97	9.368	3.482	5.886	6.274	0.670	62.83%	\$1.07
2000	104	9.771	3.367	6.404	10.021	1.026	65.54%	\$1.56
2001	123	15.222	8.608	6.614	11.797	0.775	43.45%	\$1.78
2002	120	14.732	8.356	6.376	17.556	1.192	43.28%	\$2.75
2003	159	20.723	11.570	9.153	7.763	0.375	44.17%	\$0.85
2004	149	19.920	11.214	8.706	24.616	1.236	43.70%	\$2.83
2005	155	21.120	11.972	9.148	15.285	0.724	43.32%	\$1.67
2006	148	20.282	11.501	8.782	25.912	1.278	43.30%	\$2.95
2007	224	33.355	18.740	14.615	16.930	0.508	43.82%	\$1.16
2008	246	39.152	22.135	17.017	21.220	0.542	43.46%	\$1.25
2009	369	61.784	35.248	26.536	48.285	0.782	42.95%	\$1.82
2010	219	32.614	18.786	13.828	21.073	0.646	42.40%	\$1.52
2011	286	43.487	25.064	18.422	19.531	0.449	42.36%	\$1.06
2012	314	45.250	26.112	19.138	14.146	0.313	42.29%	\$0.74
2013	366	52.414	29.640	22.774	118.082	2.253	43.45%	\$5.18
2014	307	41.175	23.383	17.791	35.967	0.874	43.21%	\$2.02
2015	278	35.153	19.954	15.199	72.507	2.063	43.24%	\$4.77
2016	208	30.024	17.045	12.979	12.893	0.429	43.23%	\$0.99
2017	152	20.177	11.507	8.670	10.265	0.509	42.97%	\$1.18
	4,128	575.5	321.8	253.7	514.5	0.894		\$2.03

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 36



KS Crop Insurance History, Wheat

Year	Liability (000 000)	Premium (000 000)	Subsidy (000 000)	Farmer Paid (000 000)	Indemnity (000 000)	Loss Ratio	% Of Prem Farmer	Prem / Indem- nity
1998	519	44.807	20.152	24.655	13.286	0.297	55.02%	\$0.54
1999	500	44.572	17.718	26.854	28.415	0.638	60.25%	\$1.06
2000	541	46.415	17.288	29.127	24.722	0.533	62.75%	\$0.85
2001	642	72.901	42.175	30.726	83.002	1.139	42.15%	\$2.70
2002	651	73.093	42.491	30.602	127.603	1.746	41.87%	\$4.17
2003	816	101.478	57.704	43.773	39.674	0.391	43.14%	\$0.91
2004	768	98.509	56.360	42.149	164.136	1.666	42.79%	\$3.89
2005	807	114.823	66.086	48.737	54.019	0.470	42.45%	\$1.11
2006	755	107.434	61.980	45.454	177.951	1.656	42.31%	\$3.91
2007	1,050	165.556	95.184	70.372	326.376	1.971	42.51%	\$4.64
2008	1,272	215.745	124.646	91.099	169.231	0.784	42.23%	\$1.86
2009	1,860	358.491	207.731	150.760	223.453	0.623	42.05%	\$1.48
2010	1,071	190.021	112.182	77.839	52.625	0.277	40.96%	\$0.68
2011	1,480	271.213	162.159	109.054	220.050	0.811	40.21%	\$2.02
2012	2,003	352.634	208.242	144.392	162.595	0.461	40.95%	\$1.13
2013	2,147	363.592	216.494	147.098	486.142	1.337	40.46%	\$3.30
2014	1,681	269.523	160.864	108.658	400.583	1.486	40.32%	\$3.69
2015	1,487	235.594	140.392	95.202	238.583	1.013	40.41%	\$2.51
2016	1,144	199.903	119.960	79.943	19.863	0.099	39.99%	\$0.25
2017	928	149.469	90.512	58.958	76.289	0.510	39.44%	\$1.29

22,122 3,475.8 2,020.3 1,455.5 3,088.6 0.889 \$2.12

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 37



OK Crop Insurance History, Wheat

Year	Liability (000 000)	Premium (000 000)	Subsidy (000 000)	Farmer Paid (000 000)	Indemnity (000 000)	Loss Ratio	% Of Prem Farmer	Prem / Indem- nity
1998	177	18.716	9.258	9.458	4.347	0.232	50.53%	\$0.46
1999	203	21.876	9.262	12.614	20.527	0.938	57.66%	\$1.63
2000	208	22.220	9.361	12.859	17.736	0.798	57.87%	\$1.38
2001	236	32.271	19.275	12.996	45.732	1.417	40.27%	\$3.52
2002	257	35.847	21.406	14.441	69.907	1.950	40.29%	\$4.84
2003	288	44.402	26.471	17.931	24.766	0.558	40.38%	\$1.38
2004	273	43.413	25.965	17.448	23.574	0.543	40.19%	\$1.35
2005	265	44.400	26.639	17.761	21.926	0.494	40.00%	\$1.23
2006	245	42.534	25.648	16.886	104.532	2.458	39.70%	\$6.19
2007	342	64.416	38.541	25.875	147.092	2.283	40.17%	\$5.68
2008	438	89.546	53.585	35.961	55.699	0.622	40.16%	\$1.55
2009	681	157.506	94.656	62.850	295.748	1.878	39.90%	\$4.71
2010	402	93.615	57.234	36.380	33.995	0.363	38.86%	\$0.93
2011	530	125.008	77.147	47.861	161.507	1.292	38.29%	\$3.37
2012	771	183.912	114.787	69.125	54.294	0.295	37.59%	\$0.79
2013	806	182.718	116.118	66.599	234.506	1.283	36.45%	\$3.52
2014	584	128.606	82.136	46.470	290.346	2.258	36.13%	\$6.25
2015	529	119.416	76.817	42.599	112.678	0.944	35.67%	\$2.65
2016	398	98.194	64.812	33.381	30.761	0.313	34.00%	\$0.92
2017	295	62.284	41.514	20.770	28.846	0.463	33.35%	\$1.39

7,929 1,610.9 990.6 620.3 1,778.5 1.104 \$2.87

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 38



2012 Iowa Example

Same Loss Calculated in Dollars¹

	YP	RP	RP-hpe
1 Average Iowa APH yield ²	185	185	185
2 Coverage level	80%	80%	80%
3 Bushel guarantee	148	148	148
4 Deducted bushels	37	37	37
5 Projected price	\$5.68	\$5.68	\$5.68
6 Insurance guarantee	\$840.64	\$840.64	\$840.64
6 Bushels per acre produced	92	92	92
7 Bushels lost below Expected	93	93	93
8 Bushels Indemnified			
9 Indemnity-Harvest Price ³	\$5.68	\$7.50	\$7.50
10 Gross indemnity			
11 Insurance guarantee	\$840.64	\$1,110.00	\$840.64
12 Value of production ⁴	\$522.56	\$690.00	\$690.00
13 Gross indemnity	\$318.08	\$420.00	\$150.64
14			
15 Avg. IA Farmer Paid Premium ⁵	\$15.97	\$20.18	\$14.29
16 Net Indemnity Payment	\$302.11	\$399.82	\$136.35
17 # Replaced Bu. Of 93 Bu. Lost	40.3	53.3	18.2

Example from Iowa in 2012

- Corn price @ harvest=\$7.50
- Drought cut yield in half
- Coverage under RP with HPO is highest
- Coverage under RP with HPO excluded is lowest
- PLC not likely to have paid
- ARC not likely to have paid (yield low, but price high)

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 39



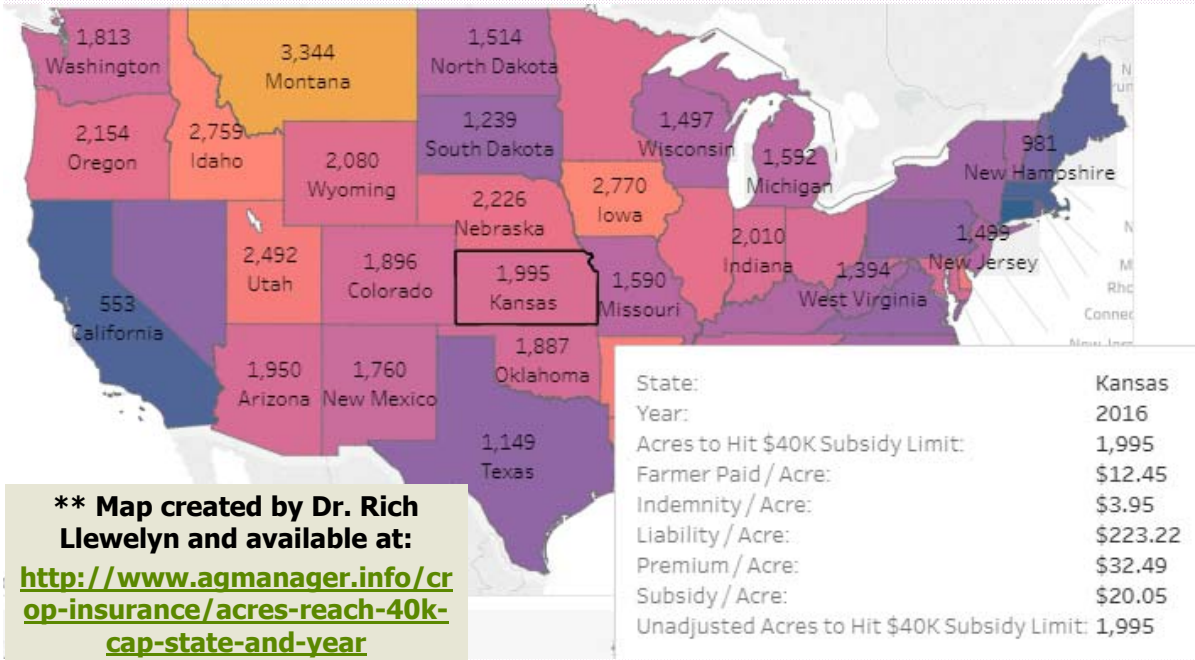
\$40,000 Limit on Premium Cost-Share

- Estimate the number of acres farmers could insure, on average, before hitting the limit
 - Function of premiums paid which vary by crop, commodity prices, and volatility
 - Results will vary by year and location

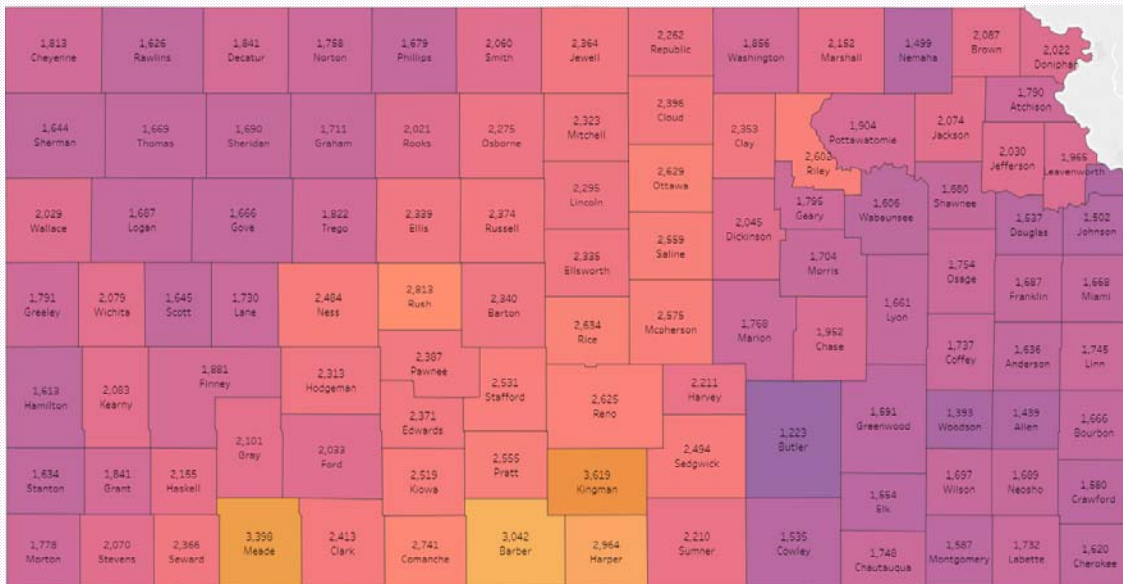
10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 40



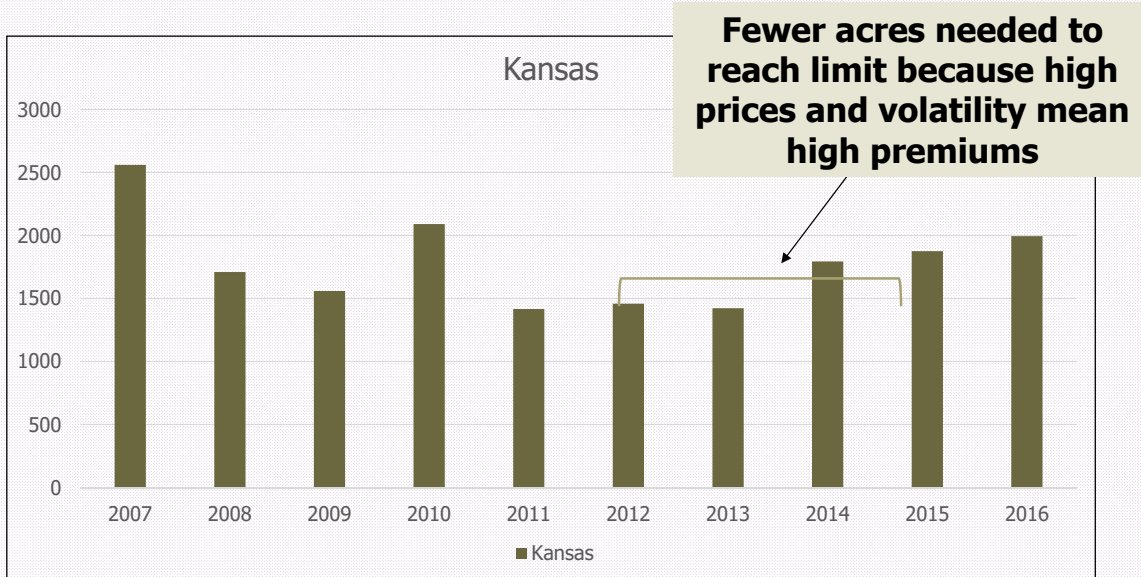
Estimated Number of Crop Acres Needed to Hit \$40,000 Cost-Share Limit



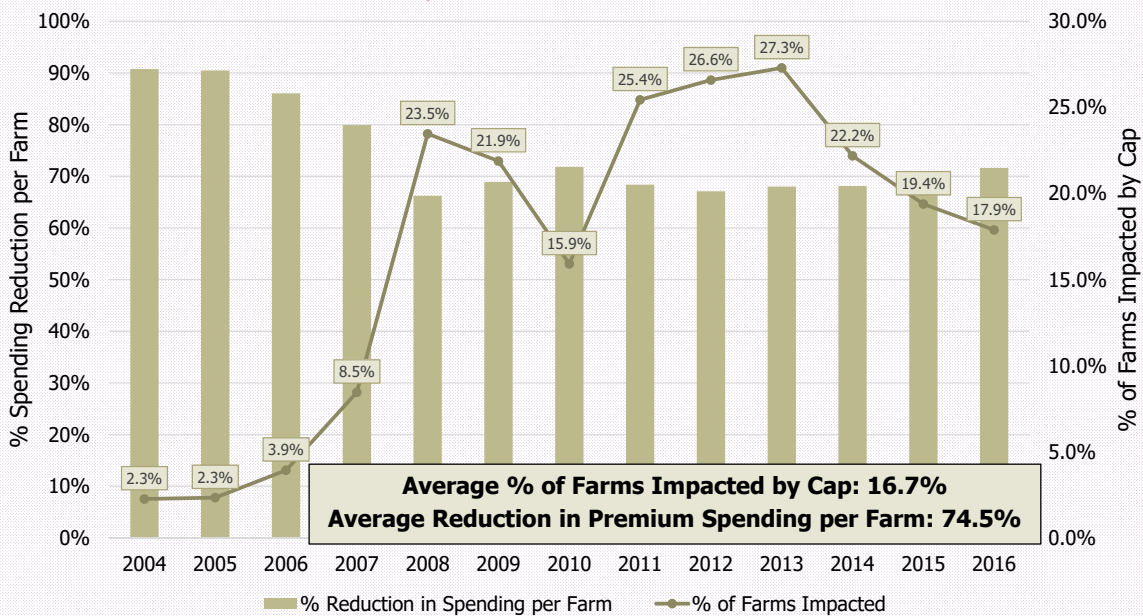
Estimated Number of Kansas Crop Acres Needed to Hit \$40,000 Cost-Share Limit



Estimated Number of Crop Acres Needed to Hit \$40,000 Cost-Share Limit



Impact on KS Farms of Cost-Share Cap (assumes no purchase above \$40k)



Premium Cost-Share Cap Implications

- Farmers are likely to hit the \$40,000 premium cost-share limit well before they hit the AGI limit
- Farmers will likely (try?) to create new “paper farms”
 - Will increase paper work for agents, AIPs, and RMA with no new premium.
 - Adding farms will add record keeping requirements for farmers.

Farms under AGI Cap, but Over \$40,000 limit

- Will farmers spend their \$40K budget limit on corn and not insure their soybeans and other crops?
- Will wheat only be insured after the higher costs crops are insured?
- If crops are selectively insured that will likely affect the actuarial results for the wheat insurance pool.

Premium Cost-Share Cap Implications

- Will farmers over the limit cut coverage levels?
- Will farmers over the limit drop their HPO?
- Would it affect actuarials if large farmers leave the insurance pool?
- Loss of large farms will affect delivery because of reduced A&O.
- Will Congress provide an ad hoc disaster program if a large number of farmers reduce their coverage?



www.agmanager.info

KANSAS STATE UNIVERSITY Agricultural Economics

Home About Contributors Events Farm Management Guides KFMA KSMRA News Programs Sponsors Tools Sign In Register

AgManager Land & Leasing Crop Insurance Grain Marketing Livestock & Meat Ag Policy

Crop Basis Maps
Basis Levels for Soybeans, Corn, Wheat, and Grain Sorghum
View Maps

KFMA

K-STATE
Research and Extension

Sign up for weekly email updates.

Your Favorites
Click the "Add to Favorites" to add that page to your favorites list.

Welcome to AgManager.info

Welcome to the newly redesigned AgManager.info! We hope you enjoy the new look and functionality. If you have any feedback or questions, please contact Rich Liewelyn at rvl@ksu.edu. Thanks!

Recent Updates

- Daily LDP Payment Estimate
September 12, 2016 - Barnaby - RISK MANAGEMENT STRATEGIES
- Cattle Feeding Returns
September 12, 2016 - Tonsor - CATTLE FINISHING RETURNS
- Weekly Grain Market Outlook - Dan O'Brien
September 9, 2016 - O'Brien - KSRV RADIO INTERVIEWS
- Interactive Crop Basis Tool
September 8, 2016 - GRAIN MARKETING
- Kansas Days Suitable for Fieldwork
September 8, 2016 - MACHINERY
- U.S. Ethanol and Biodiesel Market Situation
September 8, 2016 - O'Brien - GRAIN MARKET OUTLOOK
- Avoid Being Caught in the Payment Limit
September 8, 2016 - Barnaby - RISK MANAGEMENT STRATEGIES

Upcoming Events

- Kansas State University/Washburn Law School Inaugural Agribusiness Symposium
September 20, 2016
Manhattan
- Ag Lenders Conferences
October 4, 2016
Garden City
- Ag Lenders Conferences
October 5, 2016
Manhattan
- ...view more

10/24/2017 4B Ag Consultants & Kansas State University, Copyright 2017, All Rights Reserved 48

Some of the Slides were prepared by Dr. Taylor



Dr. Mykel Taylor

Department of Ag Economics-Kansas State University

Mykel Taylor is an Associate Professor in the Department of Agricultural Economics at Kansas State University. Dr. Taylor's research and extension programs are focused in the area of farm management. She attended Montana State University majoring in Agribusiness Management. Her PhD in Economics is from North Carolina State University. She has worked in extension positions at both Kansas State University and Washington State University. Some of her current research areas include measuring basis risk for commodity grains, and analyzing trends in Kansas agricultural land values, rental rates and evaluation of Farm Bill commodity programs and crop insurance.

Email: barnaby@ksu.edu Phone: 785-532-1515

Check out our WEB page at <http://www.AgManager.info>