

5. Farm Bill Programs and Crop Insurance: Part 1

Troy Dumler

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Troy Dumler is a K-State Extension Agricultural Economist in southwest Kansas. A native of Kansas with B.S. and M.S. degrees in agricultural economics from Kansas State University, Troy has developed an Extension program centered on farm management and agricultural policy. In addition to continued work in cropping systems profitability, since the passage of the 2008 Farm Bill, he has focused much of his attention on analyzing how new commodity programs in the bill will impact farmers and ranchers.

Abstract/Summary

The debate over the next Farm Bill has intensified in 2012. While opinions have differed among commodity groups and Members of Congress regarding future commodity programs, two things are certain regarding the next Farm Bill: 1) direct payments will be eliminated, and 2) crop insurance will be the backbone of U.S. farm policy. This 2-part session will review recent Farm Bill activity in detail. Part 1 will focus on new commodity program alternatives while Part 2 will discuss current crop insurance proposals.

Farm Bill Programs and Crop Insurance: Part 1

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Introduction

- Part 1: Commodity Programs
 - Senate Farm Bill Overview
 - Impact of Senate commodity program changes for Kansas
 - Difference between House and Senate Farm Bills
- Part 2: Crop Insurance



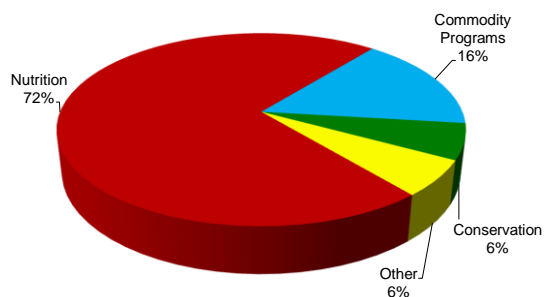
The 2012 Senate and House Farm Bills

More than Just the Farm

- Title I: Commodities**
- Title II: Conservation
- Title III: Trade
- Title IV: Nutrition**
- Title V: Credit
- Title VI: Rural Development
- Title VII: Research
- Title VIII: Forestry
- Title IX: Energy
- Title X: Specialty Crops & Horticulture
- Title XI: Crop Insurance**
- Title XII: Miscellaneous



USDA Outlays, FY2013



Total Outlays FY2013 = \$155 billion



Senate and House Bills

- Senate Bill passed in June on 64-35 vote
- House Bill passed Committee on July 12 on 35-11 vote



2012 Senate Farm Bill Estimated Spending

- Total spending estimated at \$969 billion over 2013-2022 period
- 2012 Bill would save approximately \$23 billion over 2008 Farm Bill
- Individual Title spending changes
 - Commodities: \$-19.8 billion
 - Conservation: \$-6.4 billion
 - Nutrition: \$-3.9 billion
 - Crop Insurance: \$5.1 billion



2012 Senate Farm Bill

Agriculture Reform, Food and Jobs Act of 2012

- Title I: Commodities
 - Eliminates Direct Payments, Counter-Cyclical Payments, ACRE, and SURE
 - Establishes Ag Risk Coverage (ARC)
 - Maintains Marketing Loan Program at Current Loan Rates
 - Tightens adjusted gross income eligibility requirements and payment limitations
 - Maintains some Supplemental Disaster Assistance Programs



Supplement Disaster Assistance

- Livestock Indemnity Payments (LIP)
 - Provides payments for livestock death loss due to adverse weather
- Livestock Forage Payments (LFP)
 - Provides payments in the event of drought or fire
 - Eligible coverage includes native or improved pasture
 - Coverage also includes crops planted to provide grazing



Livestock Forage Disaster Program (LFP)

- LFP covers grazing losses due to drought, as determined by the intensity level of the U.S. Drought Monitor
 - Payments are calculated at 1, 2, or 3 monthly payments depending on the Drought Monitor intensity rating
- Monthly Payment Rate = 60% of the lesser of
 - The monthly feed grain equivalent (15.7 lbs/day for adult beef cow)
 - Corn price = higher of 12 or 24 month national average price
 - The monthly feed cost based on normal carrying capacity for the grazing land



Livestock Forage Disaster Program (LFP)

- Grazing losses due to drought will be determined using the intensity levels of the U.S. Drought Monitor as follows
 - D2 (severe drought): 8 consecutive weeks in any area of the county during the normal grazing period = 1 monthly payment
 - D3 (extreme drought): any area of county at any time during the normal grazing period = 2 monthly payments



Livestock Forage Disaster Program (LFP)

- Grazing losses due to drought (cont.)
 - D3 (extreme drought): 4 weeks in any area of the county during the normal grazing period = 3 monthly payments
 - D4 (exceptional drought): any area of county at any time during the normal grazing period = 3 monthly payments



2012 Senate Farm Bill

Agriculture Reform, Food and Jobs Act of 2012

- Title II: Conservation
 - Consolidates 23 existing conservation programs into four functions
 - Maintains EQIP and CSP
 - Reduces CRP acreage cap from 32 to 25 million acres by 2017
 - Reduces conservation spending by \$6 billion



2012 Senate Farm Bill

Agriculture Reform, Food and Jobs Act of 2012

- Title XI: Crop Insurance
 - Creates the Supplemental Coverage Option (SCO) to provide supplemental area coverage to individual insurance policies
 - Makes enterprise units permanent
 - Establishes separate enterprise units for irrigated and non-irrigated crops
 - Creates stand-alone Stacked Income Protection Plan (STAX) revenue program for cotton growers



Agriculture Risk Coverage (ARC)

- ARC is a “shallow loss” program that would provide payments if actual revenue is less than 89% of benchmark revenue
- One time choice to select individual farm or county coverage
- ARC Guarantee
 - $\text{Benchmark Revenue} = \text{Benchmark Yield} \times \text{Benchmark Price}$
 - $\text{Benchmark Yield} = 5\text{-year Olympic Average Yield}$
 - $\text{Benchmark Price} = 5\text{-year Olympic US Market Year Average Price}$
 - $\text{ARC Guarantee} = \text{Benchmark Revenue} \times 89\%$



Agriculture Risk Coverage (ARC)

- Actual Revenue and Payment
 - $\text{Actual Revenue} = \text{Farm or County Planted Yield} \times 1^{\text{st}} 5 \text{ months US Market Year Average Price}$
 - $\text{Maximum Payment} = 10\% \text{ of Benchmark Revenue}$
 - $\text{Payment} = \text{Min} [(\text{ARC Guarantee} - \text{Actual Revenue}) \text{ or } 10\% \text{ of Benchmark Revenue}] \times (65\% \text{ for individual coverage or } 80\% \text{ for county coverage})$



Senate Payment Limitations

- ARC has a \$50,000 limitation per person or legal entity
- Marketing loan program has a \$75,000 limit
- Tightens requirements to qualify as “actively engaged” to receive payments
- Tightens AGI eligibility requirements
 - Prohibits payments to person or entity with AGI over \$750,000
 - Deletes farm/nonfarm distinction



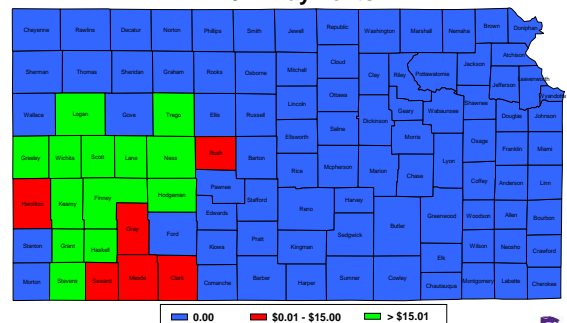
Estimated ARC Payments for Wheat in Kansas (2011)

CRD	Benchmark Price	Benchmark Yield	ARC Guarantee	Actual Yield	Actual Price	Actual Revenue	Payment	Payment/Planted Ac
NW	\$5.68	42.0	\$212.32	41.9	\$7.39	\$309.64	\$0.00	\$0.00
WC	\$5.68	39.3	\$198.67	21.7	\$7.39	\$160.36	\$22.32	\$17.86
SW	\$5.68	37.2	\$188.06	21.7	\$7.39	\$160.36	\$21.13	\$16.90
NC	\$5.68	41.4	\$209.28	38.5	\$7.39	\$284.52	\$0.00	\$0.00
C	\$5.68	40.1	\$202.72	36.9	\$7.39	\$272.69	\$0.00	\$0.00
SC	\$5.68	33.4	\$168.84	29.6	\$7.39	\$218.74	\$0.00	\$0.00
NE	\$5.68	39.3	\$198.67	37.6	\$7.39	\$277.86	\$0.00	\$0.00
EC	\$5.68	31.2	\$157.73	38.1	\$7.39	\$281.56	\$0.00	\$0.00
SE	\$5.68	29.7	\$150.14	34.9	\$7.39	\$257.91	\$0.00	\$0.00



Estimated ARC Wheat Payments

2011 Payments



0.00 \$0.01 - \$15.00 > \$15.01

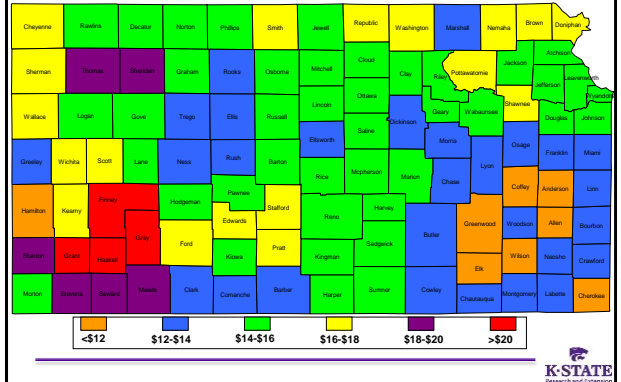


Estimated ARC Payments for Wheat in Kansas (1980-2011)

CRD	Average Payment	Avg Pmt/ Planted Acre	Frequency of Payment	Avg Claim Payment	Frequency of Max Pmt
NW	\$3.45	\$2.76	34.4%	\$8.03	63.6%
WC	\$3.65	\$2.92	34.4%	\$8.50	72.7%
SW	\$3.83	\$3.06	34.4%	\$8.90	81.8%
NC	\$2.74	\$2.19	28.1%	\$7.80	55.6%
C	\$2.87	\$2.30	34.4%	\$6.68	45.5%
SC	\$2.14	\$1.71	25.0%	\$6.86	62.5%
NE	\$2.73	\$2.18	31.3%	\$6.98	60.0%
EC	\$3.05	\$2.44	28.1%	\$8.67	66.7%
SE	\$2.73	\$2.18	31.3%	\$6.98	70.0%



Kansas Direct Payments Per Acre By County



Estimated ARC Payments for Non-Irrigated Corn in Kansas (2011)

CRD	Benchmark Price	Benchmark Yield	ARC Guarantee	Actual Yield	Actual Price	Actual Revenue	Payment	Payment/ Planted Ac
NW	\$3.94	72.5	\$254.23	73.7	\$5.97	\$439.99	\$0.00	\$0.00
WC	\$3.94	59.8	\$209.69	51.8	\$5.97	\$309.25	\$0.00	\$0.00
SW	\$3.94	39.4	\$138.16	10.3	\$5.97	\$61.49	\$15.52	\$12.42
NC	\$3.94	98.8	\$346.45	96	\$5.97	\$573.12	\$0.00	\$0.00
C	\$3.94	78.9	\$276.67	17.2	\$5.97	\$102.68	\$31.09	\$24.87
SC	\$3.94	79.0	\$277.02	6.4	\$5.97	\$38.21	\$31.13	\$24.90
NE	\$3.94	118.7	\$416.24	126	\$5.97	\$752.22	\$0.00	\$0.00
EC	\$3.94	95.7	\$335.58	45.3	\$5.97	\$270.44	\$37.71	\$30.17
SE	\$3.94	96.8	\$339.44	24.4	\$5.97	\$145.67	\$38.14	\$30.51



Estimated ARC Payments for Non-irrigated Corn in Kansas (1980-2011)

CRD	Average Payment	Avg Pmt/ Planted Acre	Frequency of Payment	Avg Claim Payment	Frequency of Max Pmt
NW	\$3.58	\$2.87	28.1%	\$10.19	88.9%
WC	\$3.04	\$2.43	28.1%	\$8.65	77.8%
SW	\$3.41	\$2.73	37.5%	\$7.27	75.0%
NC	\$3.93	\$3.14	31.3%	\$10.05	90.0%
C	\$2.82	\$2.25	28.1%	\$8.01	88.9%
SC	\$3.30	\$2.64	31.3%	\$8.44	80.0%
NE	\$4.60	\$3.68	31.3%	\$11.77	60.0%
EC	\$5.38	\$4.31	37.5%	\$11.49	66.7%
SE	\$3.40	\$2.72	25.0%	\$10.86	75.0%



Estimated ARC Payments for Irrigated Corn in Kansas (2011)

CRD	Benchmark Price	Benchmark Yield	ARC Guarantee	Actual Yield	Actual Price	Actual Revenue	Payment	Payment/ Planted Ac
NW	\$3.94	181.8	\$637.50	173.6	\$5.97	\$1,036.39	\$0.00	\$0.00
WC	\$3.94	170.9	\$599.28	163.7	\$5.97	\$977.29	\$0.00	\$0.00
SW	\$3.94	190.8	\$669.06	135.3	\$5.97	\$807.74	\$0.00	\$0.00
NC	\$3.94	168.3	\$590.16	162	\$5.97	\$967.14	\$0.00	\$0.00
C	\$3.94	169.0	\$592.62	136.9	\$5.97	\$817.29	\$0.00	\$0.00
SC	\$3.94	168.6	\$591.21	131.7	\$5.97	\$786.25	\$0.00	\$0.00
NE	\$3.94	165.7	\$581.05	163.6	\$5.97	\$976.69	\$0.00	\$0.00
EC	\$3.94	158.0	\$554.04	150	\$5.97	\$895.50	\$0.00	\$0.00
SE	\$3.94	132.8	\$465.67	92.2	\$5.97	\$550.43	\$0.00	\$0.00



Estimated ARC Payments for Irrigated Corn in Kansas (1980-2011)

CRD	Average Payment	Avg Pmt/ Planted Acre	Frequency of Payment	Avg Claim Payment	Frequency of Max Pmt
NW	\$4.04	\$3.24	15.6%	\$20.70	60.0%
WC	\$2.79	\$2.24	15.6%	\$14.31	20.0%
SW	\$4.99	\$4.00	18.8%	\$21.31	16.7%
NC	\$4.33	\$3.46	18.8%	\$18.46	16.7%
C	\$3.52	\$2.82	12.5%	\$22.55	75.0%
SC	\$4.42	\$3.54	15.6%	\$22.63	20.0%
NE	\$3.37	\$2.70	15.6%	\$17.28	40.0%
EC	\$3.60	\$2.88	21.9%	\$13.16	28.6%
SE	\$3.41	\$2.73	28.1%	\$9.69	33.3%



Estimated ARC Payments for Grain Sorghum in Kansas (2011)

CRD	Benchmark Price	Benchmark Yield	ARC Guarantee	Actual Yield	Actual Price	Actual Revenue	Payment	Payment/Planted Ac
NW	\$3.53	73.3	\$230.29	70.0	\$5.96	\$417.20	\$0.00	\$0.00
WC	\$3.53	69.1	\$217.09	38.1	\$5.96	\$227.08	\$0.00	\$0.00
SW	\$3.53	59.9	\$188.19	13.8	\$5.96	\$82.06	\$21.15	\$16.92
NC	\$3.53	90.2	\$283.38	92.3	\$5.96	\$550.26	\$0.00	\$0.00
C	\$3.53	80.5	\$252.91	43.1	\$5.96	\$257.15	\$0.00	\$0.00
SC	\$3.53	67.7	\$212.69	16.4	\$5.96	\$97.97	\$23.90	\$19.12
NE	\$3.53	90.1	\$283.06	88.0	\$5.96	\$524.48	\$0.00	\$0.00
EC	\$3.53	62.0	\$194.79	41.5	\$5.96	\$247.34	\$0.00	\$0.00
SE	\$3.53	67.2	\$211.13	23.8	\$5.96	\$141.96	\$23.72	\$18.98



Estimated ARC Payments for Grain Sorghum in Kansas (1980-2011)

CRD	Average Payment	Avg Pmt/Planted Acre	Frequency of Payment	Avg Claim Payment	Frequency of Max Pmt
NW	\$2.41	\$1.93	21.9%	\$8.82	85.7%
WC	\$2.63	\$2.10	25.0%	\$8.41	62.5%
SW	\$3.36	\$2.69	34.4%	\$7.82	36.4%
NC	\$3.40	\$2.72	28.1%	\$9.68	88.9%
C	\$3.19	\$2.55	31.3%	\$8.16	60.0%
SC	\$3.09	\$2.47	21.9%	\$11.31	85.7%
NE	\$3.55	\$2.84	28.1%	\$10.09	55.6%
EC	\$2.84	\$2.27	28.1%	\$8.09	44.4%
SE	\$2.79	\$2.24	21.9%	\$10.22	71.4%



Estimated ARC Payments for Soybeans in Kansas (2011)

CRD	Benchmark Price	Benchmark Yield	ARC Guarantee	Actual Yield	Actual Price	Actual Revenue	Payment	Payment/Planted Ac
NW	\$9.89	41.0	\$360.89	36.9	\$11.80	\$435.98	\$0.00	\$0.00
WC	\$9.89	32.7	\$287.83	22.9	\$11.80	\$270.16	\$17.67	\$14.14
SW	\$9.89	50.3	\$442.75	40.4	\$11.80	\$476.47	\$0.00	\$0.00
NC	\$9.89	39.2	\$345.04	38.5	\$11.80	\$453.78	\$0.00	\$0.00
C	\$9.89	33.1	\$291.35	14.5	\$11.80	\$171.10	\$32.74	\$26.19
SC	\$9.89	37.2	\$327.44	18.5	\$11.80	\$218.84	\$36.79	\$29.43
NE	\$9.89	40.7	\$358.24	43.6	\$11.80	\$514.75	\$0.00	\$0.00
EC	\$9.89	29.2	\$257.02	18.6	\$11.80	\$219.12	\$28.88	\$23.10
SE	\$9.89	27.1	\$238.54	11.5	\$11.80	\$135.66	\$26.80	\$21.44



Estimated ARC Payments for Soybeans in Kansas (1980-2011)

CRD	Average Payment	Avg Pmt/Planted Acre	Frequency of Payment	Avg Claim Payment	Frequency of Max Pmt
NW	\$4.37	\$3.50	28.1%	\$12.43	22.2%
WC	\$5.40	\$4.32	31.3%	\$13.82	50.0%
SW	\$0.94	\$0.75	9.4%	\$8.03	0.0%
NC	\$3.67	\$2.94	28.1%	\$10.44	33.3%
C	\$4.12	\$3.29	21.9%	\$15.05	57.1%
SC	\$4.08	\$3.26	15.6%	\$20.87	80.0%
NE	\$4.85	\$3.88	28.1%	\$13.79	77.8%
EC	\$5.46	\$4.37	34.4%	\$12.70	81.8%
SE	\$4.45	\$3.56	37.5%	\$9.49	75.0%



Acres to Reach ARC Payment Limitation

District	Wheat	Non-irrigated Corn	Irrigated Corn	Grain Sorghum	Soybeans
NW	2,619	2,188	873	2,415	1,541
WC	2,800	2,653	928	2,563	1,933
SW	2,958	4,027	831	2,955	1,256
NC	2,657	1,605	943	1,963	1,612
C	2,744	2,010	939	2,199	1,909
SC	3,295	2,008	941	2,615	1,699
NE	2,800	1,336	957	1,965	1,553
EC	3,527	1,657	1,004	2,855	2,164
SE	3,705	1,639	1,195	2,635	2,332



Some implications if Senate Committee bill were adopted

- Based on still-unpublished preliminary FAPRI-MU estimates
 - Average payments under ARC and STAX would be less than programs they replace
 - Reductions are larger for some crops (e.g., rice) than others (e.g., corn), and soybeans payments could actually increase
 - ARC payments average about 2% of the value of production
 - ARC payments would be variable, much like crop insurance
 - ARC and crop insurance are imperfectly complementary

Source: Pat Westhoff, FAPRI



Supplemental Coverage Option (SCO)

- New coverage option based on individual yield and loss basis, supplemented with coverage based on an area yield and loss basis that covers part of the deductible under the individual policy
 - Triggers only if losses in the area exceed 10% of normal levels
 - Includes a deductible of 21% of the expected value of the crop under the underlying insurance policy for producers in ARC
 - Provides a 70% premium subsidy



2012 House Farm Bill Estimated Spending

- 2012 Bill would save approximately \$35 billion over 2008 Farm Bill
- Individual Title spending changes
 - Commodities: \$-23.6 billion
 - Conservation: \$-6.1 billion
 - Nutrition: \$-16.1 billion
 - Crop Insurance: \$9.5 billion



House Commodity Programs

- Price Loss Coverage (PLC)
 - Optional program with fixed target (reference) prices
 - Allows producers opportunity to update yields (90% of 2008-2012 yields)
 - Payments on 85% of planted acres up to total farm base acres
- Revenue Loss Coverage (RLC)
 - Optional program similar to ARC in Senate Bill
 - Coverage only at county level
 - Payments on 85% of planted acres up to total farm base acres



Revenue Loss Coverage (RLC)

- RLC is a "shallow loss" program that would provide payments if actual revenue is less than 85% of benchmark revenue
- One time choice to select RLC or PLC
- Can make RLC or PLC choice by crop
- RLC Guarantee
 - Benchmark Revenue = Benchmark Yield x Benchmark Price
 - Benchmark Yield = 5-year Olympic Average Yield
 - Benchmark Price = Max [5-year Olympic US Market Year Average Price or PLC Reference Price]
 - ARC Guarantee = Benchmark Revenue x 85%



Revenue Loss Coverage (RLC)

- Actual Revenue and Payment
 - Actual Revenue = County Planted Yield x 1st 5 months US Market Year Average Price
 - Maximum Payment = 10% of Benchmark Revenue
 - Payment = Min [(ARC Guarantee – Actual Revenue) or 10% of Benchmark Revenue] x 85%

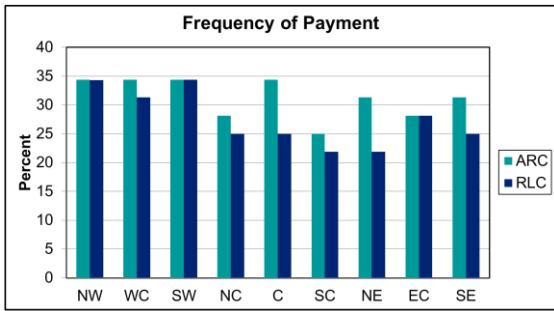


ARC vs. RLC for Wheat

CRD	2011		1980-2011	
	ARC (Senate)	RLC (House)	ARC (Senate)	RLC (House)
NW	\$0.00	\$0.00	\$3.45	\$2.77
WC	\$17.86	\$18.97	\$3.65	\$3.27
SW	\$16.90	\$16.36	\$3.83	\$3.44
NC	\$0.00	\$0.00	\$2.74	\$2.14
C	\$0.00	\$0.00	\$2.87	\$1.82
SC	\$0.00	\$0.00	\$2.14	\$1.74
NE	\$0.00	\$0.00	\$2.73	\$2.19
EC	\$0.00	\$0.00	\$3.05	\$2.65
SE	\$0.00	\$0.00	\$2.73	\$2.32



ARC vs. RLC for Kansas Wheat

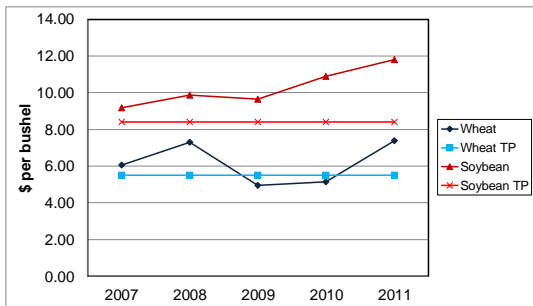


Price Loss Coverage (PLC) Target Prices

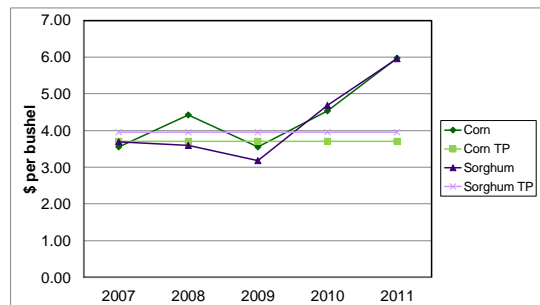
Crop	2008 Farm Bill Effective Target Price	2012 House Proposed Target Price	MYA Price 2007-2011
Wheat	\$3.65	\$5.50	\$6.22
Corn	\$2.35	\$3.70	\$4.62
Sorghum	\$2.28	\$3.95	\$4.30
Soybeans	\$5.56	\$8.40	\$10.65



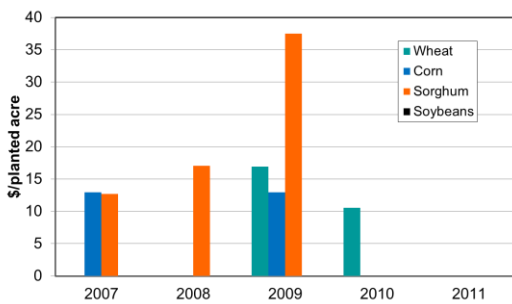
Wheat and Soybean Prices



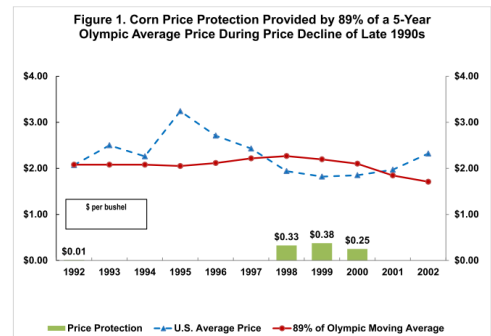
Corn and Sorghum Prices



Estimated Average Kansas PLC Payments (2007-2011)



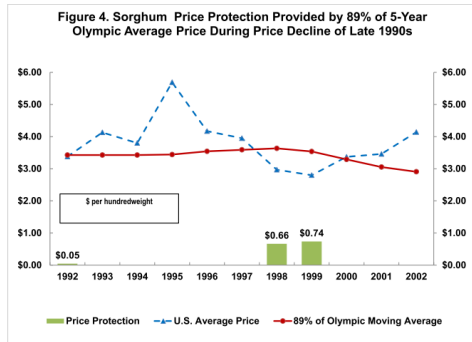
Olympic Average Price Protection



Source: Carl Zulauf, OSU



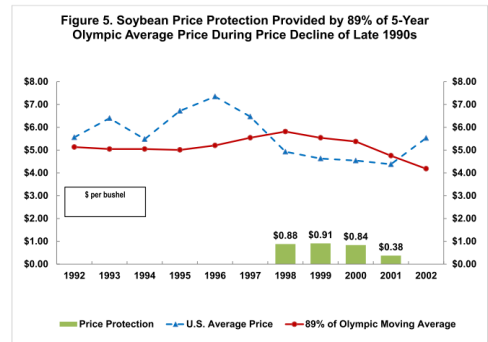
Olympic Average Price Protection



Source: Carl Zulauf, OSU



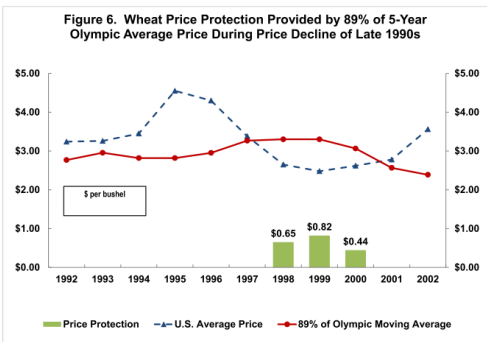
Olympic Average Price Protection



Source: Carl Zulauf, OSU



Olympic Average Price Protection



Source: Carl Zulauf, OSU



House Payment Limitations

- PLC/RLC has a \$125,000 limitation per person or legal entity
- Marketing loan program has no limit
- AGI eligibility requirements
 - Prohibits payments to person or entity with AGI over \$95,000
 - Deletes farm/nonfarm distinction



Summary

- Will there be a new Farm Bill? If so, when?
- What options will be included in the new bill?
 - Price and Revenue programs
 - Individual and area options for revenue programs
 - Supplemental insurance options with commodity programs
- Impact of payment limitations



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