

10. The Farm Bill and Crop Insurance

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Abstract/Summary

In August of 2012, some analysts were forecasting crop insurance claims of nearly \$40 billion. Those overstated insurance claim forecasts set the stage for a "no ad hoc" disaster aid policy in 2012". The press ran with the story and made it appear that most farmers had record profits and received "big" insurance checks. Citing national aggregated profit and crop insurance data provided a very incomplete picture. Individual farmers with record profits had good yields, but no crop insurance claims! Farmers receiving insurance checks may have had an "average" year, but most farmers still needed a 20% yield loss or more to collect insurance payments. Some had a 19% yield loss and collected nothing. The only exception would have been those farmers with the county based GRIP or GRIPH coverage that does not require a farm level loss. Crop insurance critics claim that elimination of the harvest price would provide all of the coverage farmers "need" and reduce the taxpayer cost for crop insurance. It is true lowering the coverage in crop insurance by eliminating the harvest price will lower taxpayer costs. An alternative of eliminating 85% and 80% coverage and retaining the harvest price would also lower the coverage and lower taxpayers' costs. However, eliminating the 85% and 80% coverage would have very little impact on Great Plains dryland farmers because very few dryland farmers buy 85% or 80% coverage. The impact of this cut would be on the irrigated and Corn Belt farmers where they do buy higher coverages. On average Iowa farmers buy coverage that is 13 points higher than in Kansas, but the average premium rate in Kansas is two to two and half times more than in Iowa.

Eliminating the harvest price would have a greater effect on Corn Belt farmers because of the stronger negative price yield correlation on corn. Without the harvest price, Iowa farmers would have received reduced or in many cases no indemnity payments for the 2012 drought. What is the point in having insurance, even cheap insurance, if does not pay when the insured has a loss? Is it believable that policy makers would have retained a "no ad hoc disaster policy", without those Iowa corn farmers collecting crop insurance payments in an election year? All farmer marketing plans, including cash sales and selling grain out of storage, assume production. The harvest price replaces indemnity bushels at their current market value and maintains the hedge or provides replacement bushels for cash sales. If an uninsured hedged farmer has a crop failure, what is the difference between this farmer and a short Chicago spec trader? The answer is nothing. How much would be saved by elimination of the harvest price is a hotly debated topic. In order for the elimination of the harvest price to reduce taxpayer's costs, it requires a significant price increase combined with a significant yield loss. There have been 2 out of the last 21 years that met both conditions on corn and 2012 was one of those years. Reduction in harvest price subsidy is only one of many ways to reduce the taxpayers' costs. This presentation will cover alternatives and consequences caused by reduced taxpayer support for crop insurance.

The Farm Bill and Crop Insurance

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Alternative Methods to Reduce Taxpayer Cost for Crop Insurance

1. Headlines claim 2012 crop insurance will cost taxpayers \$30 to \$40 billion! Laughing all the way to the bank with over paid claims!
2. Replace crop insurance with a "free" disaster program:
3. Or "Free Market"; eliminate all safety net programs and layoff all FSA and RMA employees.
4. Farm Bill interest groups include farmers, ag. lenders, Farm Credit (agent), Grain Companies, RMA employees, FSA employees, crop insurance agents, AIPs, EWG, RMA consultants, food stamp supporters, Land Grant Universities, others, and taxpayers.
5. Many analysts doubt that current institutional constraints would allow either policy extreme.

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Farm Bill Changes to Crop Insurance

1. Catastrophic Risk Protection (CAT) premium reduction that is 100% subsidy to "reduce" Farm Bill cost
2. Enterprise units for irrigated and non-irrigated crops in the same county
3. Secretary shall use county data collected by the Risk Management Agency or the National Agricultural Statistics Service, or both for area plans
4. If the Farm Service Agency determines any producer's average adjusted gross income is over \$750,000; the producer's share of the crop insurance premium will increase 15 percentage points. Does not apply to CAT. \$250K AGI limit voted down in the House.
5. Increase the yield plug from 60% to 70% of T yield.

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FSA Free "Puts", Price loss coverage payments if price is less than reference price (House)

Strike Prices

1. Wheat, \$5.50 per bushel
2. Corn, \$3.70 per bushel
3. Grain sorghum, \$3.95 per bushel
4. Soybeans, \$8.40 per bushel
5. Other oilseeds, \$20.15 per hundred weight
6. Barley, \$4.95 per bushel
7. Oats, \$2.40 per bushel
8. Long grain rice, \$14.00 per hundred weight
9. Medium grain rice, \$14.00 per hundred weight
10. Peanuts \$535.00 per ton
11. Dry peas, \$11.00 per hundredweight
12. Lentils, \$19.97 per hundredweight
13. Small chickpeas, \$19.04 per hundred weight
14. Large chickpeas, \$21.54 per hundred weight

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Nonrecourse Marketing Loan Rates (House)

Strike Prices

1. Wheat, \$2.94 per bushel
2. Corn, \$1.95 per bushel
3. Grain sorghum, \$1.95 per bushel
4. Soybeans, \$5.00 per bushel
5. Other oilseeds, \$10.09 per hundredweight
6. Barley, \$1.95 per bushel
7. Oats, \$1.39 per bushel
8. Upland cotton, simple average world price, s.t. Min 47 cent; max 52 cents/lb
9. Extra long staple cotton, \$0.7977 per pound
10. Long grain rice, \$6.50 per hundred weight
11. Medium grain rice, \$6.50 per hundred weight
12. Dry peas, \$5.40 per hundred weight
13. Lentils, \$11.28 per hundred weight
14. Small chickpeas, \$7.43 per hundredweight
15. Large chickpeas, \$11.28 per hundredweight
16. Graded wool, \$1.15 per pound
17. Case of non-graded wool, \$0.40 per pound
18. Case of mohair, \$4.20 per pound
19. Honey, \$0.69 per pound
20. Peanuts, \$355 per ton

FSA Free "Puts", Price Loss Coverage Payments if price is less than reference price (House)

What do you do with this out of the money put?

This new Loss Coverage Payment is effectively an out of the money put that farmers may want to sell.

Expected to cover 85% of the base acres but only on the crop planted.

Payment limits, number of acres covered, strike price relative to market and also crop insurance strike prices will determine if it makes sense to sell options covered by FSA and crop insurance.

If one has not lost money trading options, then one is not ready to sell covered puts. RAM-MAST will give one the tools to start.

2013 West-Central Kansas Irrigated Corn Premiums 180 APH/185 Trend Yield, 500 Acres Enterprise Unit

| | APH Corn | | 185 | \$5.65 Price Election | | | 0.20 Volatility | |
|-----------------------------------|----------|---------|---------|-----------------------|---------|----------------|-----------------|--------------|
| % Coverage | 50% | 55% | 60% | 65% | 70% | 75% | 80% | 85% |
| Coverage | 523 | 575 | 627 | 680 | 732 | 784 | 836 | 889 |
| Farmer Paid | | | | | | | | |
| YP | 1.97 | 2.61 | 3.39 | 4.49 | 5.93 | 8.59 | 14.69 | 26.92 |
| RP-HPE | 1.60 | 2.10 | 2.74 | 3.81 | 5.40 | 8.56 | 15.88 | 29.72 |
| RP | 2.34 | 3.29 | 4.42 | 6.03 | 8.18 | 12.51 | 22.44 | 41.18 |
| % Increase Prem from YP to RP | 18.8% | 26.1% | 30.4% | 34.3% | 37.9% | <u>45.6%</u> | <u>52.8%</u> | <u>53.0%</u> |
| % Increase Prem from RP-HPE to RP | 46.3% | 56.7% | 61.3% | <u>58.3%</u> | 51.5% | 46.1% | 41.3% | <u>38.6%</u> |
| Yield/bu. | 0.021 | 0.026 | 0.031 | 0.037 | 0.046 | 0.062 | 0.099 | 0.171 |
| "Put"/Cents bu. | (0.004) | (0.005) | (0.006) | (0.006) | (0.004) | <u>(0.000)</u> | <u>0.008</u> | <u>0.018</u> |
| "Call"/Cents bu. | 0.008 | 0.012 | 0.015 | 0.018 | 0.021 | 0.028 | 0.044 | 0.073 |

2013 West-Central Kansas Irrigated Corn Premiums 180 APH/185 Trend Yield, 500 Acres Enterprise Unit Change in Volatility

| | APH Corn | | 185 | \$5.65 Price Election | | | 0.20 Volatility | |
|---------------------------|---------------|----------------|----------------|-----------------------|----------------|----------------|-----------------|----------------|
| % Coverage | 50% | 55% | 60% | 65% | 70% | 75% | 80% | 85% |
| Coverage | 523 | 575 | 627 | 680 | 732 | 784 | 836 | 889 |
| Farmer Paid | | | | | | | | |
| RP 0.20 Volatility | 2.34 | 3.29 | 4.42 | 6.03 | 8.18 | 12.51 | 22.44 | 41.18 |
| RP 0.30 Volatility | 2.69 | 3.78 | 5.20 | 7.28 | 9.86 | 14.90 | 26.79 | 49.04 |
| % increase Prem | 15.0% | 14.9% | 17.6% | 20.7% | 20.5% | <u>19.1%</u> | <u>19.4%</u> | <u>19.1%</u> |
| RP 0.18 Volatility | 2.11 | 2.82 | 3.73 | 5.03 | 6.84 | 10.52 | 19.24 | 35.78 |
| % decrease Prem | <u>(9.8%)</u> | <u>(14.3%)</u> | <u>(15.6%)</u> | <u>(16.6%)</u> | <u>(16.4%)</u> | <u>(15.9%)</u> | <u>(14.3%)</u> | <u>(13.1%)</u> |

Cheap Puts

1. The Yield Adjusted Asian (YAA) put in RP is cheap.
2. 2012 & 2013 RP Premiums were lower because of base rate cuts, lower strike price, and a volatility decline from 0.29 to 0.23 and 0.20 for 2013.
4. Lower volatility lowers the return from selling covered puts.
5. Sell covered options on limit orders only because the out of the money market is thin.
6. Don't assume lower premium is the only objective. If one buys higher levels of coverage and trend yield they will have more low cost YAA puts and more guaranteed bushels at replacement values.

Volatility Effects on RP Premiums

CME December Corn

| Year | CCIP | | Volatility ³ | \$ Change ⁴ | Percent Price Change ⁵ |
|------|--------------------------|--------------------------|-------------------------|------------------------|-----------------------------------|
| | Plant Price ¹ | Harv. Price ² | | | |
| 2013 | 5.65 | | 0.20 | | |
| 2012 | 5.68 | 7.50 | 0.22 | 1.82 | 32.0% |
| 2011 | 6.01 | 6.32 | 0.29 | 0.31 | 5.2% |
| 2010 | 3.99 | 5.46 | 0.28 | 1.47 | 36.8% |
| 2009 | 4.04 | 3.72 | 0.37 | (0.32) | (7.9%) |
| 2008 | 5.40 | 4.13 | 0.30 | (1.27) | (23.5%) |
| 2007 | 4.06 | 3.58 | 0.26 | (0.48) | (11.8%) |
| 2006 | 2.59 | 3.03 | 0.23 | 0.44 | 17.0% |
| 2005 | 2.32 | 2.02 | 0.21 | (0.30) | (12.9%) |
| 2004 | 2.83 | 2.05 | 0.21 | (0.78) | (27.6%) |
| 2003 | 2.42 | 2.26 | 0.20 | (0.16) | (6.6%) |
| 2002 | 2.32 | 2.52 | 0.18 | 0.20 | 8.6% |
| 2001 | 2.46 | 2.08 | 0.20 | (0.38) | (15.3%) |
| 2000 | 2.51 | 2.04 | 0.21 | (0.47) | (18.7%) |

Percent Corn Price Change by State Loss Ratio by Year

| Year | % Price Change | IL | IN | IA | MN | MI | OH | MS | OK | KS | NE | TX |
|------|----------------|------|------|------|------|------|------|------|------|------|------|------|
| 2010 | 38.3% | .64 | .33 | .70 | .09 | .25 | .18 | 2.09 | .24 | .24 | .32 | .52 |
| 2006 | 37.5% | .10 | .20 | .21 | .30 | .15 | .18 | .97 | .78 | 1.07 | .47 | .84 |
| 2012 | 32.0% | 6.02 | 4.75 | 2.76 | .36 | 1.41 | 1.92 | .74 | 1.95 | 3.26 | 2.77 | .55 |
| 2008 | (30.7%) | .60 | 1.11 | 1.13 | .70 | .88 | 1.52 | .65 | .67 | .59 | .52 | 1.02 |
| 2004 | (29.7%) | .35 | .66 | .23 | .62 | 1.22 | .86 | .31 | .25 | .76 | .41 | .38 |
| 1995 | 27.7% | .85 | 1.13 | .98 | .21 | .10 | 1.07 | .67 | .28 | 1.09 | 1.08 | .99 |
| 1998 | (22.9%) | .51 | .91 | .58 | .11 | .62 | .39 | 1.45 | 1.60 | .15 | .27 | 3.62 |
| 1992 | (21.7%) | .22 | .40 | .17 | 1.05 | 3.25 | .42 | 1.54 | .31 | 2.23 | 1.59 | .90 |
| 1994 | (19.5%) | .07 | .19 | .05 | .09 | .58 | .22 | 1.05 | 2.03 | .50 | .35 | .59 |
| 1999 | (18.5%) | .43 | .80 | .32 | .15 | .23 | 1.23 | .70 | 3.58 | .49 | .32 | .63 |
| 2005 | (16.8%) | 1.13 | .33 | .31 | .20 | .19 | .71 | .29 | .37 | .55 | .32 | 1.40 |
| 2001 | (16.7%) | .27 | .17 | .67 | .77 | 1.40 | .54 | .22 | 1.46 | .80 | .36 | 1.44 |
| 2000 | (16.1%) | .27 | .35 | .35 | .16 | .57 | .35 | .88 | .49 | 1.20 | 1.31 | .70 |
| 1993 | 14.2% | .58 | .47 | 4.96 | 8.27 | .77 | 1.12 | 2.17 | 1.46 | 1.43 | 1.89 | .82 |
| 1996 | (13.1%) | .49 | 1.07 | .24 | .17 | .86 | 1.81 | .16 | .44 | .36 | .31 | 1.94 |
| 2007 | (5.9%) | .10 | .30 | .15 | .53 | .77 | .31 | .51 | .57 | .21 | .16 | .13 |
| 2011 | 5.2% | .42 | .57 | .24 | .40 | .32 | .56 | 2.61 | 3.91 | 1.70 | .36 | 3.15 |
| 2002 | 4.7% | .86 | 1.65 | .20 | .11 | .56 | 3.85 | .72 | .65 | 3.46 | 2.33 | 1.50 |
| 2009 | (3.5%) | .29 | .30 | .22 | .14 | .50 | .11 | 1.62 | .93 | .19 | .22 | 1.55 |
| 2003 | (2.1%) | .29 | .67 | .18 | .25 | .30 | .76 | .84 | 1.29 | 1.79 | .75 | 1.11 |
| 1997 | 1.2% | .26 | .86 | .09 | .13 | .28 | .47 | .31 | .23 | .23 | .30 | .48 |

40 Year Historical Corn & Soybean 75% Revenue Protection Prices (March 15 Sales Closing)

| CME December Corn | | | | | CME November Soybeans | | | | | | |
|-------------------|--------------------|--------------------|-----------------------------------|------|-----------------------|--------------------|-----------------------------------|------|--------------------|--------------------|-----------------------------------|
| Year | Base Harv. | | Percent Price Change ⁵ | Year | Base Harv. | | Percent Price Change ⁵ | Year | Base Harv. | | Percent Price Change ⁵ |
| | Price ¹ | Price ² | | | Price ¹ | Price ² | | | Price ¹ | Price ² | |
| 2012 | 5.68 | 7.50 | 32.0% | 1992 | 2.70 | 2.09 | (22.7%) | 2012 | 12.55 | 15.39 | 22.6% |
| 2011 | 6.01 | 6.32 | 5.2% | 1991 | 2.59 | 2.51 | (3.1%) | 2011 | 13.49 | 12.14 | (10.0%) |
| 2010 | 3.99 | 5.46 | 36.8% | 1990 | 2.47 | 2.30 | (7.1%) | 2010 | 9.23 | 11.63 | 26.0% |
| 2009 | 4.04 | 3.72 | (7.9%) | 1989 | 2.71 | 2.39 | (11.7%) | 2009 | 8.80 | 9.66 | 9.8% |
| 2008 | 5.40 | 4.13 | (23.5%) | 1988 | 2.17 | 2.89 | 33.3% | 2008 | 13.36 | 9.22 | (31.0%) |
| 2007 | 4.06 | 3.58 | (11.8%) | 1987 | 1.69 | 1.83 | 8.3% | 2007 | 8.09 | 9.75 | 20.5% |
| 2006 | 2.59 | 3.03 | 17.0% | 1986 | 2.11 | 1.69 | (19.5%) | 2006 | 6.18 | 5.93 | (4.0%) |
| 2005 | 2.32 | 2.02 | (12.9%) | 1985 | 2.66 | 2.23 | (16.1%) | 1986 | 5.15 | 4.82 | (6.6%) |
| 2004 | 2.83 | 2.05 | (27.6%) | 1984 | 2.86 | 2.78 | (2.6%) | 2005 | 5.53 | 5.75 | 4.0% |
| 2003 | 2.42 | 2.26 | (6.6%) | 1983 | 2.88 | 3.48 | 20.6% | 1985 | 6.06 | 5.05 | (16.7%) |
| 2002 | 2.32 | 2.52 | 8.6% | 1982 | 3.00 | 2.20 | (26.8%) | 2004 | 6.72 | 5.26 | (21.7%) |
| 2001 | 2.46 | 2.08 | (15.3%) | 1981 | 3.77 | 2.91 | (22.8%) | 2003 | 5.26 | 7.32 | 39.2% |
| 2000 | 2.51 | 2.04 | (18.7%) | 1980 | 3.12 | 3.61 | 15.6% | 2002 | 4.50 | 5.45 | 21.1% |
| 1999 | 2.40 | 2.01 | (16.1%) | 1979 | 2.59 | 2.78 | 7.4% | 2001 | 4.67 | 4.37 | (6.4%) |
| 1998 | 2.84 | 2.19 | (23.0%) | 1978 | 2.27 | 2.31 | 1.6% | 1981 | 8.26 | 6.56 | (20.6%) |
| 1997 | 2.73 | 2.81 | 3.1% | 1977 | 2.73 | 2.09 | (23.7%) | 1980 | 7.29 | 8.57 | 17.6% |
| 1996 | 3.08 | 2.84 | (7.9%) | 1976 | 2.72 | 2.65 | (2.4%) | 1979 | 5.11 | 4.85 | (5.1%) |
| 1995 | 2.57 | 3.23 | 25.7% | 1975 | 2.72 | 2.91 | 7.0% | 1978 | 6.64 | 5.46 | (17.7%) |
| 1994 | 2.68 | 2.16 | (19.5%) | 1974 | 2.89 | 3.80 | 31.5% | 1977 | 6.97 | 6.82 | (2.1%) |
| 1993 | 2.40 | 2.49 | 3.7% | 1973 | 1.38 | 2.46 | 77.7% | 1976 | 7.23 | 7.07 | (2.2%) |
| | | | | | | | | 1975 | 5.85 | 6.56 | 12.2% |
| | | | | | | | | 1974 | 6.48 | 5.41 | (16.5%) |
| | | | | | | | | 1973 | 5.86 | 6.15 | 4.9% |

¹The monthly average price of new crop futures sets the RP and YP coverages.

²The monthly average price of nearby futures settles the RP and RP-HPE claims. If price is higher the harvest price is also used to set the coverage in RP.

³Percent price change is based on Revenue Protection strike and settlement prices.

Selling Out of the Money Options Covered with Revenue Protection

1. RP's major advantage is at a minimum it replaces loss production at current market value. This allows farmers to maintain a hedged position selling up to 2 years ahead of harvest.
2. Recent RP premiums have significantly increased because of higher commodity prices and volatility, but are expected to be lower in 2014.
3. Because of higher CME option premiums, farmers can sell off part of their RP coverage by selling out of the money puts, a "bear spread" and lower their costs.
4. Only Farmers who have "lost money trading options" should consider selling out of the money puts covered with RP.

RP Yield Adjusted "Options" vs. Exchange Traded Options

Revenue Protection

- Higher prices cause negative "put" values in RP-HPE. RP will prevent negative values.
- No time Value
- No Exercise Rights
- Settle on monthly average price
- Single Strike Price
- Price limit on "call" (harvest Price)
- Payment adjusted for yield

CME Traded Option

- No negative Option values
- Zero time value @ Expiration
- Right to Exercise
- Settle on a spot price
- Multiple Strike prices
- No limit on price
- No yield adjustment, 5,000 bu. Fixed.

Were 2012 Crop Insurance Losses Higher than Expected?

1. Even with about \$17 billion in 2012 claims the long run national loss ratio will remain below 1.0, the targeted loss ratio.
2. During the past 19 years, only 2 underwriting losses over 5%, 2002 & 2012.
3. Government accounting does not recognize RMA underwriting gains (under spent subsidy), but does include underwriting losses.
4. Net RMA cost including net gains have averaged about \$4 billion per year. Including A&O total under \$5.2B average.

USA Crop Insurance Performance, All Contracts

| Year | Pol Earn Prem (000) | Net Acres (000) | Liabilities (000) | Total Premium (000) | Subsidy (000) | Indemnity (000) | Loss/Gain (000) | Loss Ratio (000) | Premium Paid by Farmers | Farm-er Loss Ratio (000) |
|--------------------|---------------------|-----------------|-------------------|---------------------|---------------|-----------------|-----------------|------------------|-------------------------|--------------------------|
| 1988 ² | 333 | 45,475 | 4,423,961 | 294,957 | 74,723 | 797,178 | (502,221) | 2.70 | 74.7% | 3.62 |
| 1989 | 949 | 101,632 | 13,535,807 | 814,302 | 204,965 | 1,212,235 | (397,933) | 1.49 | 74.8% | 1.99 |
| 1990 | 895 | 101,361 | 12,828,368 | 836,468 | 215,308 | 973,032 | (136,563) | 1.16 | 74.3% | 1.57 |
| 1991 | 707 | 82,357 | 11,215,994 | 737,049 | 190,066 | 955,289 | (218,240) | 1.30 | 74.2% | 1.75 |
| 1992 | 663 | 83,107 | 11,334,059 | 758,789 | 196,721 | 918,215 | (159,426) | 1.21 | 74.1% | 1.63 |
| 1993 | 679 | 83,725 | 11,353,421 | 755,739 | 200,009 | 1,655,479 | (899,740) | 2.19 | 73.5% | 2.98 |
| 1994 | 801 | 99,640 | 13,608,387 | 949,396 | 254,876 | 601,146 | 348,250 | 0.63 | 73.2% | 0.87 |
| 1995 | 2,034 | 220,511 | 23,728,454 | 1,543,350 | 889,372 | 1,567,732 | (24,382) | 1.02 | 42.4% | 2.40 |
| 1996 | 1,615 | 204,864 | 26,876,813 | 1,838,559 | 982,063 | 1,492,663 | 345,896 | 0.81 | 46.6% | 1.74 |
| 1997 | 1,320 | 182,189 | 25,458,851 | 1,775,368 | 902,794 | 993,551 | 781,817 | 0.56 | 49.1% | 1.14 |
| 1998 | 1,243 | 181,835 | 27,921,436 | 1,875,927 | 946,312 | 1,677,542 | 198,385 | 0.89 | 49.6% | 1.80 |
| 1999 | 1,289 | 196,918 | 30,939,450 | 2,310,133 | 954,872 | 2,434,715 | (124,582) | 1.05 | 58.7% | 1.80 |
| 2000 | 1,323 | 206,467 | 34,443,753 | 2,540,164 | 951,192 | 2,594,834 | (54,671) | 1.02 | 62.6% | 1.63 |
| 2001 | 1,298 | 211,329 | 36,728,587 | 2,961,848 | 1,771,322 | 2,960,125 | 1,723 | 1.00 | 40.2% | 2.49 |
| 2002 | 1,259 | 214,865 | 37,299,303 | 2,915,944 | 1,741,028 | 4,066,732 | (1,150,788) | 1.39 | 40.3% | 3.46 |
| 2003 | 1,241 | 217,409 | 40,620,507 | 3,431,359 | 2,041,658 | 3,260,806 | 170,553 | 0.95 | 40.5% | 2.35 |
| 2004 | 1,229 | 221,020 | 46,602,280 | 4,186,133 | 2,472,282 | 3,209,723 | 976,409 | 0.77 | 40.9% | 1.87 |
| 2005 | 1,191 | 245,856 | 44,258,915 | 3,949,230 | 2,337,101 | 2,367,323 | 1,581,907 | 0.60 | 40.8% | 1.47 |
| 2006 | 1,148 | 242,082 | 49,919,480 | 4,579,539 | 2,682,006 | 3,503,536 | 1,076,003 | 0.77 | 41.4% | 1.85 |
| 2007 | 1,138 | 271,634 | 67,339,911 | 6,562,118 | 3,823,353 | 3,547,569 | 3,014,549 | 0.54 | 41.7% | 1.30 |
| 2008 | 1,149 | 272,250 | 89,892,360 | 9,850,879 | 5,690,668 | 8,677,910 | 1,172,969 | 0.88 | 42.2% | 2.09 |
| 2009 | 1,172 | 264,776 | 79,575,187 | 8,950,746 | 5,426,886 | 5,228,924 | 3,721,822 | 0.58 | 39.4% | 1.48 |
| 2010 | 1,141 | 256,268 | 78,104,325 | 7,594,397 | 4,711,271 | 4,251,436 | 3,342,960 | 0.56 | 38.0% | 1.47 |
| 2011 | 1,152 | 265,609 | 114,112,377 | 11,955,219 | 7,452,814 | 10,826,308 | 1,128,911 | 0.91 | 37.7% | 2.40 |
| 2012 ³ | 1,173 | 282,503 | 116,938,299 | 11,087,372 | 6,960,499 | 17,316,100 | (6,228,728) | 1.56 | 37.2% | 4.20 |
| 1988 to 2011 | | 4,473,177 | 932,121,987 | 83,967,611 | 47,113,662 | 69,774,003 | 14,193,608 | 0.83 | 43.9% | 1.89 |
| Est 2012 + History | | 4,755,680 | 1,049,060,285 | 95,054,983 | 54,074,162 | 87,090,103 | 7,964,880 | 0.92 | 43.1% | 2.13 |

12 Yr Avg Cost of Crop Insurance Post 2000 ARPA Act

| Net Corn | | | | | | | | | | | | | |
|-------------------|-------|--------|---------|--------|-------|--------|-------|--------------|--------------|---------|---------|--------|------------------|
| Year | (000) | Price | evage | Prem | paid | Indem | ratio | Underwriting | Gains/Losses | Net | | | |
| Year | (000) | Price | evage | Prem | paid | Indem | ratio | Gross | AIP | RMA | Subsidy | RMA | A&O ¹ |
| 2001 | 211 | \$2.46 | 36,729 | 2,978 | 1,206 | 2,965 | 1.00 | 12 | 346 | (334) | 1,772 | 2,106 | 636 |
| 2002 | 215 | \$2.32 | 37,299 | 2,909 | 1,168 | 4,058 | 1.39 | (1,149) | (48) | (1,101) | 1,741 | 2,842 | 626 |
| 2003 | 217 | \$2.42 | 40,621 | 3,434 | 1,392 | 3,259 | 0.95 | 176 | 377 | (201) | 2,042 | 2,243 | 734 |
| 2004 | 221 | \$2.83 | 46,602 | 4,186 | 1,709 | 3,291 | 0.79 | 895 | 691 | 203 | 2,477 | 2,274 | 888 |
| 2005 | 246 | \$2.32 | 44,259 | 3,945 | 1,601 | 2,341 | 0.59 | 1,604 | 915 | 689 | 2,344 | 1,655 | 829 |
| 2006 | 242 | \$2.59 | 49,919 | 4,709 | 2,027 | 3,551 | 0.75 | 1,158 | 822 | 336 | 2,682 | 2,346 | 959 |
| 2007 | 272 | \$4.06 | 67,340 | 6,547 | 2,724 | 3,465 | 0.53 | 3,082 | 1,572 | 1,510 | 3,823 | 2,313 | 1,333 |
| 2008 | 272 | \$5.40 | 89,892 | 9,832 | 4,141 | 8,719 | 0.89 | 1,113 | 1,095 | 18 | 5,691 | 5,673 | 2,009 |
| 2009 | 265 | \$4.04 | 79,575 | 8,949 | 3,522 | 5,216 | 0.58 | 3,733 | 2,298 | 1,435 | 5,427 | 3,992 | 1,619 |
| 2010 | 256 | \$3.99 | 78,104 | 7,592 | 2,882 | 4,235 | 0.56 | 3,357 | 1,919 | 1,438 | 4,710 | 3,272 | 1,368 |
| 2011 | 266 | \$6.01 | 114,112 | 11,959 | 4,506 | 10,807 | 0.90 | 1,152 | 1,666 | (514) | 7,453 | 7,967 | 1,330 |
| 2012 ² | 282 | \$5.68 | 116,880 | 11,080 | 4,124 | 17,256 | 1.56 | (6,175) | (1,302) | (4,873) | 6,956 | 11,829 | 1,316 |

Average Net Government Cost for Crop Insurance over 12 Years..... **4,043** 1,137

Avg. Farmer Cost for Crop Insurance **2,584**

Average Insurance Companies (AIPs) Gains..... **863**

Average Indemnity Payments..... **5,764**

Average A&O Cost for Crop Insurance..... **1,137**

¹Source: United States Government Accountability Office, "Crop Insurance: Savings Would Result from Program Changes and Greater Use of Data Mining", GAO-12-256, a report to the Ranking Member, Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, U.S. Senate, March 2012. The A&O costs were capped in the 2013 Standard Reinsurance Agreement (SRA) at about \$1.3 billion; mostly paid to agents for commissions. The A&O cap reduced the A&O payment by about a \$800 to \$900 million. There are about \$77-80 million in RMA employee and government operating expenses, in addition to the other costs.

²2012 data is not complete and the reinsurance data lags behind the RMA reported gross indemnity payments.

Since 2001, insured acres have increased by 71 million acres and provided \$80 billion more in coverage

Minnesota Corn Loss Ratio by Year

| Year | Pol Earn Prem (000) | Net Acres (000) | Liabilities (000) | Total Premium (000) | Subsidy (000) | Farmer Paid (000) | Indemnity (000) | Loss/Gain (000) | Loss Ratio (000) | % of Premium Paid by Farmers | Farmer Loss Ratio (000) |
|---|---------------------|-----------------|-------------------|---------------------|---------------|-------------------|-----------------|-----------------|------------------|------------------------------|-------------------------|
| 1992 | 17 | 2,225 | 353,439 | 20,647 | 5,870 | 14,776 | 21,309 | (662) | 1.03 | 71.6% | 1.44 |
| 1993 | 20 | 2,471 | 353,164 | 20,360 | 5,828 | 14,532 | 170,082 | (149,722) | 8.35 | 71.4% | 11.70 |
| 1994 | 33 | 4,313 | 619,863 | 38,253 | 10,920 | 27,332 | 3,337 | 34,916 | 0.09 | 71.5% | 0.12 |
| 1995 | 50 | 6,590 | 802,080 | 49,890 | 19,813 | 30,077 | 4,842 | 45,048 | 0.10 | 60.3% | 0.16 |
| 1996 | 27 | 4,080 | 788,733 | 50,656 | 20,992 | 29,663 | 9,508 | 41,148 | 0.19 | 58.6% | 0.32 |
| 1997 | 56 | 8,433 | 1,439,022 | 90,325 | 41,614 | 48,711 | 14,449 | 75,877 | 0.16 | 53.9% | 0.30 |
| 1998 | 85 | 12,968 | 2,201,598 | 135,965 | 64,799 | 71,166 | 18,518 | 117,447 | 0.14 | 52.3% | 0.26 |
| 1999 | 96 | 15,104 | 2,609,267 | 168,440 | 74,127 | 94,314 | 24,335 | 144,105 | 0.14 | 56.0% | 0.26 |
| 2000 | 21 | 3,338 | 483,462 | 30,065 | 12,528 | 17,537 | 3,502 | 26,564 | 0.12 | 58.3% | 0.20 |
| 2001 | 38 | 5,844 | 864,301 | 53,717 | 27,470 | 26,247 | 18,688 | 35,029 | 0.35 | 48.9% | 0.71 |
| 2002 | 52 | 7,856 | 1,162,586 | 71,865 | 39,101 | 32,764 | 20,382 | 51,483 | 0.28 | 45.6% | 0.62 |
| 2003 | 64 | 9,784 | 1,479,771 | 91,079 | 51,423 | 39,655 | 27,679 | 63,999 | 0.30 | 43.5% | 0.70 |
| 2004 | 75 | 11,462 | 1,788,698 | 109,267 | 63,208 | 46,059 | 34,166 | 75,101 | 0.31 | 42.2% | 0.74 |
| 2005 | 13 | 2,734 | 654,707 | 57,665 | 31,794 | 25,871 | 11,421 | 46,244 | 0.20 | 44.9% | 0.44 |
| 2006 | 12 | 2,728 | 748,085 | 64,587 | 35,468 | 29,119 | 19,904 | 44,682 | 0.31 | 45.1% | 0.68 |
| 2007 | 14 | 3,595 | 1,615,085 | 157,734 | 85,629 | 72,105 | 78,693 | 79,041 | 0.50 | 45.7% | 1.09 |
| 2008 | 14 | 3,302 | 1,982,257 | 192,617 | 106,195 | 86,422 | 131,315 | 61,302 | 0.68 | 44.9% | 1.52 |
| 2009 | 16 | 3,641 | 1,690,139 | 164,838 | 102,670 | 62,169 | 22,257 | 142,582 | 0.14 | 37.7% | 0.36 |
| 2010 | 16 | 3,565 | 1,669,288 | 128,818 | 81,252 | 47,565 | 10,081 | 118,737 | 0.08 | 36.9% | 0.21 |
| 2011 | 2 | 353 | 231,312 | 13,460 | 8,273 | 5,188 | 5,410 | 8,050 | 0.40 | 38.5% | 1.04 |
| 2012 | 32 | 7,473 | 5,416,868 | 402,579 | 259,859 | 142,720 | 136,957 | 265,622 | 0.34 | 35.5% | 0.96 |
| 21 Yr Total | 121,860 | 28,953,724 | 2,112,825 | 1,148,833 | 963,992 | 786,831 | 1,325,994 | 0.37 | 45.6% | 0.82 | |
| One Year Stress Loss Equal to 1.00 loss Ratio = 2,112,825 | | | | | | | | | 5.25 | | |
| Aggregate Loss Ratio With a 2013 Catastrophic Loss Year | | | | | | | | | 1.00 | | |

Illinois Corn Crop Insurance History

| Year | Pol Earn Prem (000) | Net Acres (000) | Liabilities (000) | Total Premium (000) | Subsidy (000) | Farmer Paid (000) | Indemnity (000) | Loss/Gain (000) | Loss Ratio (000) | % of Premium Paid by Farmers | Farmer Loss Ratio (000) |
|--------------|---------------------|-----------------|-------------------|---------------------|---------------|-------------------|-----------------|-----------------|------------------|------------------------------|-------------------------|
| 1992 | 33 | 3,548 | 677,302 | 29,782 | 6,158 | 23,624 | 6,476 | 23,306 | 0.22 | 79.3% | 0.27 |
| 1993 | 32 | 3,247 | 635,423 | 27,596 | 5,703 | 21,893 | 15,956 | 11,640 | 0.58 | 79.3% | 0.73 |
| 1994 | 32 | 3,672 | 737,609 | 36,000 | 7,607 | 28,393 | 2,657 | 33,343 | 0.07 | 78.9% | 0.09 |
| 1995 | 92 | 8,727 | 1,152,122 | 48,050 | 24,345 | 23,705 | 41,031 | 7,019 | 0.85 | 49.3% | 1.73 |
| 1996 | 66 | 7,370 | 1,253,366 | 58,458 | 26,772 | 31,687 | 28,425 | 30,034 | 0.49 | 54.2% | 0.90 |
| 1997 | 57 | 6,483 | 1,111,147 | 53,838 | 22,693 | 31,145 | 14,117 | 39,721 | 0.26 | 57.8% | 0.45 |
| 1998 | 55 | 6,318 | 1,227,417 | 61,084 | 24,026 | 37,059 | 31,249 | 29,835 | 0.51 | 60.7% | 0.84 |
| 1999 | 57 | 6,934 | 1,302,777 | 79,773 | 21,650 | 58,123 | 33,931 | 45,842 | 0.43 | 72.9% | 0.58 |
| 2000 | 61 | 7,526 | 1,628,708 | 103,782 | 20,564 | 83,219 | 28,274 | 75,508 | 0.27 | 80.2% | 0.34 |
| 2001 | 57 | 7,343 | 1,653,373 | 113,188 | 60,311 | 52,877 | 30,015 | 83,173 | 0.27 | 46.7% | 0.57 |
| 2002 | 55 | 7,539 | 1,749,769 | 115,409 | 60,482 | 54,927 | 99,762 | 15,647 | 0.86 | 47.6% | 1.82 |
| 2003 | 55 | 7,826 | 1,960,088 | 136,961 | 71,642 | 65,318 | 40,242 | 96,719 | 0.29 | 47.7% | 0.62 |
| 2004 | 53 | 8,118 | 2,431,995 | 173,049 | 92,456 | 80,594 | 60,542 | 112,508 | 0.35 | 46.6% | 0.75 |
| 2005 | 53 | 8,616 | 2,375,234 | 168,968 | 89,933 | 79,036 | 191,314 | (22,346) | 1.13 | 46.8% | 2.42 |
| 2006 | 55 | 8,940 | 3,535,050 | 277,198 | 147,847 | 129,350 | 26,412 | 250,786 | 0.10 | 46.7% | 0.20 |
| 2007 | 55 | 10,233 | 5,960,600 | 487,173 | 258,310 | 228,863 | 47,362 | 439,811 | 0.10 | 47.0% | 0.21 |
| 2008 | 52 | 9,416 | 6,717,206 | 547,433 | 274,457 | 272,976 | 325,840 | 221,593 | 0.60 | 49.9% | 1.19 |
| 2009 | 53 | 9,681 | 5,350,848 | 465,003 | 249,958 | 215,045 | 135,268 | 329,735 | 0.29 | 46.2% | 0.63 |
| 2010 | 53 | 9,915 | 5,496,266 | 376,807 | 207,384 | 169,423 | 239,412 | 137,395 | 0.64 | 45.0% | 1.41 |
| 2011 | 54 | 10,164 | 8,567,572 | 629,172 | 346,410 | 282,762 | 263,399 | 365,773 | 0.42 | 44.9% | 0.93 |
| 2012 | 55 | 10,316 | 8,401,865 | 522,118 | 293,346 | 228,772 | 3,194,521 | (2,672,403) | 6.12 | 43.8% | 13.96 |
| 1992 to 2011 | 151,618 | 55,523,875 | 3,988,726 | 2,018,708 | 1,970,018 | 1,661,686 | 2,327,040 | 0.42 | 49.4% | 0.84 | |
| 21 Yr Total | 161,933 | 63,925,740 | 4,510,844 | 2,312,054 | 2,198,790 | 4,856,207 | (345,364) | 1.08 | 48.7% | 2.21 | |

¹Source: Risk Management Agency Website link, <http://www.rma.usda.gov/data/sob.html>

Kansas Corn Loss Ratio by Year

| Year | Pol Earn Prem (000) | Net Acres (000) | Liabilities (000) | Total Premium (000) | Subsidy (000) | Farmer Paid (000) | Indemnity (000) | Loss/Gain (000) | Loss Ratio (000) | % of Premium Paid by Farmers | Farmer Loss Ratio (000) |
|--------------|---------------------|-----------------|-------------------|---------------------|---------------|-------------------|-----------------|-----------------|------------------|------------------------------|-------------------------|
| 1992 | 6 | 557 | 83,554 | 4,513 | 1,280 | 3,233 | 10,045 | (5,532) | 2.23 | 71.6% | 3.11 |
| 1993 | 6 | 578 | 89,121 | 4,638 | 1,341 | 3,297 | 6,637 | (1,999) | 1.43 | 71.1% | 2.01 |
| 1994 | 7 | 731 | 109,933 | 6,664 | 1,930 | 4,734 | 3,357 | 3,307 | 0.50 | 71.0% | 0.71 |
| 1995 | 20 | 2,018 | 224,196 | 11,080 | 6,433 | 4,648 | 12,077 | (996) | 1.09 | 41.9% | 2.60 |
| 1996 | 18 | 2,010 | 309,138 | 16,148 | 8,434 | 7,714 | 5,756 | 10,392 | 0.36 | 47.8% | 0.75 |
| 1997 | 16 | 1,939 | 313,273 | 17,782 | 7,768 | 10,014 | 4,097 | 13,686 | 0.23 | 56.3% | 0.41 |
| 1998 | 16 | 2,120 | 380,243 | 21,257 | 9,237 | 12,020 | 3,083 | 18,175 | 0.15 | 56.5% | 0.26 |
| 1999 | 17 | 2,355 | 370,621 | 23,691 | 8,489 | 15,202 | 11,567 | 12,124 | 0.49 | 64.2% | 0.76 |
| 2000 | 18 | 2,591 | 427,891 | 28,511 | 8,484 | 20,026 | 34,227 | (5,717) | 1.20 | 70.2% | 1.71 |
| 2001 | 20 | 2,746 | 499,593 | 40,953 | 23,606 | 17,347 | 32,570 | 8,383 | 0.80 | 42.4% | 1.88 |
| 2002 | 19 | 2,644 | 506,919 | 39,683 | 22,505 | 17,178 | 137,345 | (97,661) | 3.46 | 43.3% | 8.00 |
| 2003 | 18 | 2,359 | 493,548 | 43,265 | 24,384 | 18,881 | 77,585 | (34,320) | 1.79 | 43.6% | 4.11 |
| 2004 | 19 | 2,613 | 612,645 | 66,230 | 37,382 | 28,849 | 50,509 | 15,722 | 0.76 | 43.6% | 1.75 |
| 2005 | 21 | 3,089 | 580,844 | 68,427 | 39,131 | 29,296 | 37,786 | 30,641 | 0.55 | 42.8% | 1.29 |
| 2006 | 20 | 2,889 | 606,543 | 78,245 | 44,617 | 33,629 | 83,478 | (5,233) | 1.07 | 43.0% | 2.48 |
| 2007 | 21 | 3,367 | 1,114,354 | 150,746 | 86,920 | 63,826 | 122,042 | 118,704 | 0.21 | 42.3% | 0.50 |
| 2008 | 21 | 3,313 | 1,471,007 | 208,899 | 121,319 | 87,581 | 32,655 | 86,245 | 0.59 | 41.9% | 1.40 |
| 2009 | 22 | 3,593 | 1,247,319 | 193,492 | 117,076 | 76,416 | 37,317 | 156,175 | 0.19 | 39.5% | 0.49 |
| 2010 | 25 | 4,253 | 1,385,155 | 176,322 | 107,648 | 68,674 | 41,984 | 134,338 | 0.24 | 38.9% | 0.61 |
| 2011 | 25 | 4,261 | 2,164,914 | 262,850 | 161,851 | 100,999 | 447,917 | (185,067) | 1.70 | 38.4% | 4.43 |
| 2012 | 25 | 4,232 | 2,128,384 | 223,751 | 137,212 | 86,538 | 732,527 | (508,776) | 3.27 | 38.7% | 8.46 |
| 1992 to 2011 | 50,025 | 12,990,810 | 1,463,396 | 839,834 | 623,562 | 1,192,032 | 271,364 | 0.81 | 42.6% | 1.91 | |
| 21 Yr Total | | | | | | | | | | | |

State Loss Ratio

| Yr | NE | IL | IN | IA | MN | KS | TX | MI | OK | MS | OH |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 ¹ | 2.32 | 4.53 | 3.39 | 2.23 | .30 | 1.70 | 1.31 | 1.10 | .83 | .41 | 1.25 |
| 2011 | .35 | .44 | .58 | .29 | .53 | 1.36 | 2.36 | .28 | 2.15 | 1.00 | .41 |
| 2010 | .34 | .58 | .35 | .59 | .15 | .26 | .38 | .41 | .33 | .93 | .24 |
| 2009 | .28 | .30 | .25 | .23 | .24 | .40 | 1.36 | .61 | 1.65 | 1.24 | .18 |
| 2008 | .61 | .66 | 1.17 | 1.20 | .82 | .62 | 1.27 | 1.01 | .65 | .76 | 1.76 |
| 2007 | .19 | .21 | .37 | .15 | .45 | .90 | .38 | .62 | 1.80 | .66 | .35 |
| 2006 | .44 | .10 | .18 | .16 | .27 | 1.20 | 1.55 | .28 | 2.18 | 1.08 | .21 |
| 2005 | .32 | .77 | .24 | .23 | .47 | .45 | .54 | .27 | .45 | .45 | .46 |
| 2004 | .51 | .38 | .58 | .31 | 1.03 | 1.16 | .53 | 1.15 | .53 | .60 | .77 |
| 2003 | .79 | .65 | .89 | .94 | .61 | 1.34 | 1.36 | 1.05 | .64 | .87 | .79 |
| 2002 | 2.01 | .82 | 1.39 | .25 | .54 | 2.64 | 1.21 | .74 | 1.73 | .97 | 3.00 |
| 2001 | .40 | .26 | .17 | .66 | .91 | .95 | 1.53 | 1.55 | 1.53 | 1.79 | .54 |
| 2000 | 1.32 | .32 | .37 | .45 | .44 | 1.38 | 1.80 | .78 | 1.50 | 1.99 | .54 |
| 1999 | .43 | .42 | .84 | .36 | .67 | .62 | 1.25 | .36 | 1.71 | 1.20 | 1.26 |
| 1998 | .34 | .46 | .86 | .55 | .36 | .31 | 2.03 | .62 | .81 | .83 | .44 |
| 1997 | .40 | .23 | .71 | .10 | .45 | .21 | .61 | .33 | .59 | .38 | .45 |
| 1996 | .48 | .61 | 1.07 | .31 | .26 | 1.58 | 1.65 | 1.35 | 2.42 | .26 | 1.49 |
| 1995 | 1.05 | .69 | .91 | .80 | .60 | 1.09 | 1.26 | .25 | 1.84 | .99 | .75 |
| 1994 | .42 | .12 | .21 | .07 | .90 | .33 | .77 | 1.27 | 1.59 | .79 | .28 |
| 1993 | 1.88 | .63 | .55 | 4.65 | 6.10 | 1.40 | .91 | .96 | 2.27 | 1.87 | .91 |
| 1992 | 1.54 | .37 | .55 | .19 | .79 | 1.59 | 2.86 | 1.89 | 1.62 | 1.00 | .69 |
| MAX | 2.32 | 4.53 | 3.39 | 4.65 | 6.10 | 2.64 | 2.86 | 1.89 | 2.42 | 1.99 | 3.00 |
| Min | .19 | .10 | .17 | .07 | .15 | .21 | .38 | .25 | .33 | .26 | .18 |
| Avg | .78 | .64 | .74 | .70 | .81 | 1.02 | 1.28 | .80 | 1.37 | .96 | .80 |



Many Assumptions Must Hold for a Farmers' Crop Insurance Indemnities to Exceed "Expected Revenue"

1. Farmers are better off with a crop insurance check than a crop due to harvest price???????
2. Assumes no livestock that requires producers to replace their feed supply at higher prices.
3. Assumes a single enterprise corn farm. For example, wheat may have produced less than the "expected" revenue, so total farm revenue is below "expected".
4. Assumes APH equals expected yield.
5. Assumes quality loss adjustments equals market discounts.



Many Assumptions Must Hold for a Farmers' Crop Insurance Indemnities to Exceed "Expected Revenue"

6. Assumes zero basis.
7. Assumes no hedging or forward contracts.
8. All marketing plans assume production and the harvest price replaces bushels at current harvest market price.
9. Harvest price eliminates the negative price in the RP "put".
10. Farmers with a normal crop will generate about 30% more revenue with a crop than indemnity payments. Farmers are better off with a crop.



Consequences of Proposed Reduction of Subsidy on Harvest Price, or Elimination of Harvest Price

1. Without the Harvest Price, many Illinois, Iowa and Indiana corn farmers would have received no or reduced 2012 indemnity payments.
2. A 35% yield loss would have generated no payment for many farmers with coverage at 80% and 85%.
3. Would policy makers have provided an ad hoc disaster program for the 2012 Corn Belt drought, if those farmers had not been collecting crop insurance payments?



Excluding Harvest Price from RP Insured Iowa Corn Farmers would have Reduced Payments by over 50%; Assuming a 50% Yield Loss

| % of Acres | Cov Lvl | Liabilities | Average APH | Avg. Indemnity | \$ Reduction in Claim, | % Reduction in Claim, |
|------------|---------|-------------|-------------|----------------|------------------------|-----------------------|
|------------|---------|-------------|-------------|----------------|------------------------|-----------------------|

| | | | | | | |
|--------------|--------------|--------|--------|--------|--------|----------|
| 2.4% | 65 | 653.55 | 177.02 | 190.39 | 190.39 | (100.0%) |
| 10.2% | 70 | 701.92 | 176.54 | 264.81 | 224.50 | (84.8%) |
| 28.6% | 75 | 773.29 | 181.52 | 340.36 | 248.12 | (72.9%) |
| 33.4% | 80 | 841.99 | 185.30 | 416.92 | 270.83 | (65.0%) |
| 15.1% | 85 | 907.75 | 188.02 | 493.55 | 285.52 | (57.9%) |
| 89.7% | Total | | | | | |

Increased HP Premium for Illinois by Coverage level

| % Cov | Policy | Average APH | Average Rate | % increase HP prem | Loss Ratio | % Change HP L/R | % of Ac. Ins. |
|-------|--------|-------------|--------------|--------------------|------------|-----------------|---------------|
| 85 | YP | 182 | 4.22% | | 5.48 | | 0.52% |
| 85 | RPHPE | 184 | 3.43% | | 3.17 | | 3.47% |
| 85 | RP | 184 | 6.53% | 54.66% | 4.01 | (26.75%) | 30.81% |
| 80 | YP | 178 | 3.97% | | 5.25 | | 0.78% |
| 80 | RPHPE | 177 | 3.55% | | 3.89 | | 2.59% |
| 80 | RP | 177 | 6.26% | 57.95% | 4.41 | (15.95%) | 32.05% |
| 75 | YP | 173 | 3.72% | | 5.53 | | 1.18% |
| 75 | RPHPE | 172 | 3.47% | | 4.63 | | 1.44% |
| 75 | RP | 167 | 6.66% | 78.98% | 4.86 | (12.26%) | 16.46% |
| 70 | YP | 166 | 4.25% | | 5.29 | | 0.68% |
| 70 | RPHPE | 163 | 4.58% | | 4.85 | | 0.83% |
| 70 | RP | 156 | 8.28% | 95.0% | 5.16 | (2.43%) | 6.73% |
| 65 | YP | 162 | 3.28% | | 6.23 | | 0.63% |
| 65 | RPHPE | 159 | 3.35% | | 7.64 | | 0.28% |
| 65 | RP | 158 | 6.77% | 106.24% | 5.19 | (16.78%) | 1.54% |

Deductible Disappears for 75% RP Coverage

- When harvest price is 25% lower than base price.
- When harvest price increases by 33.4% and yield equals zero or sales with a zero basis on production plus indemnity. The yield deductible remains, only the dollar deductible is eliminated.
- After farmer paid premiums are deducted it would require a larger price change than reported to eliminate the deductible.

| Coverage | Price Increase | Price Decrease |
|----------|----------------|----------------|
| 75% | 33.4% | 25.0% |
| 65% | 54.0% | 35.0% |
| 80% | 25.1% | 20.0% |
| 85% | 17.6% | 15.0% |

Comparisons of Coverage and Premiums for Iowa vs. Kansas (all crops & coverages for 2012)

| | Total Acres | Liabilities (\$ 000 000) | Premium (\$ 000 000) | Coverage per Ac | Avg % Cover- age | Avg Prem Ceded Rate | Farm- er Avg Rate |
|----|-------------|--------------------------|----------------------|-----------------|------------------|---------------------|-------------------|
| IA | 21.7 | 14,939 | 902.3 | \$688 | 77 | 6% | 1.2% 2.6% |
| KS | 18.3 | 5,663 | 808.0 | \$310 | 64 | 14% | 19.8% 5.6% |

Require CAT Buyers to Pay a Share of Their Premium

1. Current Farm Bill will require RMA to reduce CAT premiums by the percentage equal to the difference between the average loss ratio for the crop and 100 percent, plus a reasonable reserve.
2. What is a "reasonable reserve"
3. This will make CAT premiums lower than 50/100 YP buyup that generate the same indemnity bushels, unless RMA does a similar rate cut on buyup.

Require CAT Buyers to Pay a Share of Their Premium

1. Require CAT buyers to pay a share of the premium, at the minimum buyup share rate of 33%.
2. This policy would reduce the CAT subsidy from 100% to 67%.
3. Or as a part of an cross-the-board 5 point increase in farmer paid premium share including CAT, would likely cause some of the large policyholders to drop CAT coverage.
4. This policy would reduce the CAT subsidy from 100% to 95%.

Require CAT buyers to pay a share of the premium

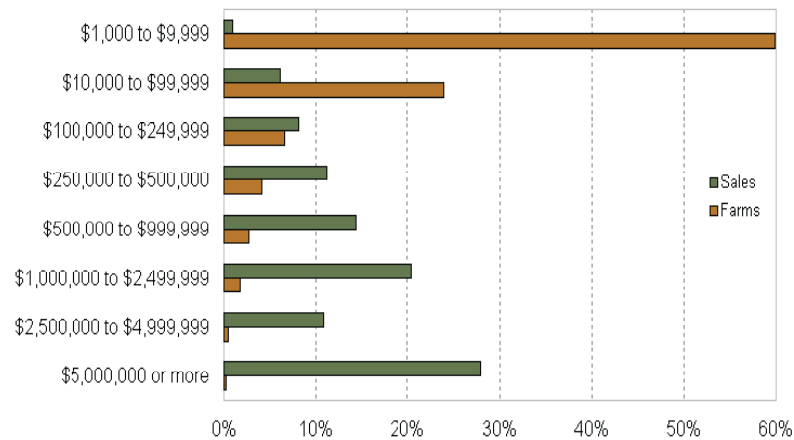
5. Many CAT buyers are not small farmers.
6. In 2011 the average buyup policy had \$432 of coverage vs. \$391 of coverage for the average CAT policy.
7. Senate proposed means testing would have no effect on CAT buyers because farmers pay no premium. Above the means tested farmers would pay an additional 15 point share of the buyup premium.
8. If means testing were Law, it would pay an over the means limit farmer to change to CAT from 50/100 buyup. One would pay 48% of 50/100 buyup vs. free 50/55 CAT, i.e. a 45% co-pay.

California Counties with Average CAT Premium Subsidy greater than \$30,000

| California Counties | # Pol- icies | Total acres | Premium- Subsidy/ Policy | Liability/ Policy | Expected Revenue/ Policy |
|---------------------|-----------------|----------------|--------------------------------|----------------------|--------------------------------|
| Tulare (107) | 3 | 0 | 124,857 | 15,256,102 | 55,476,736 |
| Kern (029) | 4 | 0 | 63,181 | 7,856,654 | 28,569,649 |
| Stanislaus (099) | 3 | 0 | 45,614 | 5,450,024 | 19,818,270 |
| San Joaquin (077) | 2 | 0 | 42,893 | 5,413,857 | 19,686,751 |
| Riverside (065) | 6 | 0 | 39,759 | 4,597,299 | 16,717,451 |
| Solano (095) | 2 | 0 | 33,100 | 4,076,436 | 14,823,404 |
| San Mateo (081) | <u>1</u> | 0 | <u>33,300</u> | <u>3,779,463</u> | 13,743,502 |
| San Luis Obispo | 4 | 0 | 30,247 | 3,140,891 | 11,421,420 |

The 2007 Census of Agriculture, USDA

Number of Farms and Sales 2007 Percent of Total



Consequences From Elimination of Crop Insurance and Replace it with a "Free" Disaster Program

1. Disaster aid is just crop insurance with a 100% premium subsidy.
2. The most common corn crop insurance coverage in Indiana is 80% & 85% RP vs. 70% & 75% RP in Kansas. If coverage were free farmers would want the maximum coverage.
3. Higher deductibles, e.g. 35% will benefit Great Plains farmers more than Corn Belt farmers.
4. Only 1 type of coverage

Consequences From Elimination of Crop Insurance and Replace it with a "Free" Disaster Program

5. Other ways to ration "free" coverage include limit payment acres to 85% of the base acres vs. planted acres.
6. Shift cost to farmers in the form of wait time at FSA to enroll.
7. Increase wait time for a loss adjuster and payment of claims.
8. Payment limits are nearly certain; creating more "paper farms"
9. Means testing is likely

Consequences From Elimination of Crop Insurance and Replace it with a "Free" Disaster Program

10. Disaster aid favors high risk farmers and high risk states because all farmers will have the same coverage but pay no premium, i.e. higher risk increases payments.
11. Free disaster aid would eliminate A&O, but increase the FSA administrative costs.
12. Over time, additional FSA employees will likely be added.
13. Because of the loss from cross selling, fewer, if any, insurance companies will remain selling private add on coverage

Reduce Margins going to AIPs & Agents

1. A&O cut from \$2 billion high in 2008 to \$1.3 billion in 2010 and capped it.
2. Capped A&O cut agent commissions to about 9% of unloaded premium.
3. Additional commissions up to full amount of the A&O can be paid, if the AIP has a national underwriting gain.
4. Change loss/gain in SRA cuts AIPs' margins.
5. Move sales and service to FSA and eliminate A&O, but increase FSA administrative costs.

Consequences from Reducing Margins Going to AIPs & Agents

1. Crop insurance industry will argue they have already taken a cut in margins.
2. Without an agent, would most farmers be willing to make an appointment with FSA to purchase crop insurance? FSA loss adjustment would likely cause additional delays in payment.
3. Unlikely sales and service will be moved to FSA.
4. Most of the A&O is paid to agents, so any additional cuts to A&O will be absorbed mostly by agents.
5. Current A&O rules prevent A&O dollars from crossing state lines.

Consequences from Reducing Margins Going to AIPs & Agents

6. A&O is capped so agent commissions have been prorated; about 9% of the unloaded premium (does not include any return from gain). Some Corn Belt agents were over 20%.
7. Agent commission cap does not apply to GRP and GRIP.
8. Agents selling non-revenue products (fruit & vegetables) argue the current A&O system is to their disadvantage.
9. Cuts to AIPs would be in the gain/loss share in the SRA.

Reduce RMA and FSA administrative costs

1. FSA administrative costs \$1.516 billion.
2. RMA administrative costs \$2.238 billion.
3. \$1.3B of the \$2.238B in RMA's administrative budget is paid to the AIPs to cover (some of) the AIPs administrative costs and agent commissions.
4. RMA's administrative budget also covers consultants and university based research, analysis and education programs.

Consequences from Reduced RMA and FSA Administrative funding

1. Fewer RMA employees to provide audits to prevent fraud in crop insurance.
2. Slower development of new products and re-rating of current contracts.
3. Longer wait time for FSA programs and greater distance between offices.

Improved Underwriting and Rating of the Assigned Risk Pool

1. In 2011, about 82% of the national crop insurance premium was placed in the Commercial Fund.
2. In 2011, about 18% of the national crop insurance premium was placed in the Assigned Risk Fund. Companies are required to retain 20% of the premium/risk in the Assigned Risk Fund.
3. The 2011 Commercial Fund generated a \$2.239B gain but Assigned Risk Fund suffered a -\$1.121B loss, for a net gain of \$1.117B gain.

Improved Underwriting and Rating of the Assigned Risk Pool

4. Historically most of the underwriting losses are in the Assigned Risk Fund. Last Commercial Fund loss was in 2002 (expected loss in 2012).
5. Fix the rates and underwriting rules for policies in the Assigned Risk Fund and lower taxpayer cost.
6. Effectively the Assigned Risk Fund is the social part of the crop insurance program. In a private market many of these farmers would be uninsurable.

SRA Affects AIPs' Losses

1. 8.27 MN Corn loss ratio; Average loss ratio for all crops was 6.10 in 1993 for MN.
2. 90% of the losses over 2.20 belong to RMA in the commercial pool in Group 1 States. RMA has all losses above 5.00.
3. The SRA triggered loss ratio is all crops by company by State by Commercial pool. RMA has a quota share in addition to the above stop losses.
4. About 5% of the Minnesota 2011 premium was placed in assigned risk and balance in commercial.

Crop Insurance Policy

1. FSA employees have lobbied to take over sales, loss adjusting, and production records for crop insurance.
2. FSA will have a program and employment will be maintained. But there appears to be little support for FSA to take over crop insurance.
3. CAT will remain "free" and no payment limit. Premium rates will be cut and counted as budget savings.
4. Means testing & subsidy limits will continue to be argued.
5. Disaster aid/free crop insurance will remain on the agenda serviced by FSA.

MAST & RAM

1. For More Information check out MAST and RAM
2. MAST participants will be comp'd to RAM and given priority on enrollment.

The Farm Bill and Crop Insurance

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