



Crop Insurance Decisions in 2011

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2010 Illinois Farm Economics Summit

The Profitability of Illinois Agriculture: Managing in a Strong Ag Economy

Crop Insurance Decisions in 2011

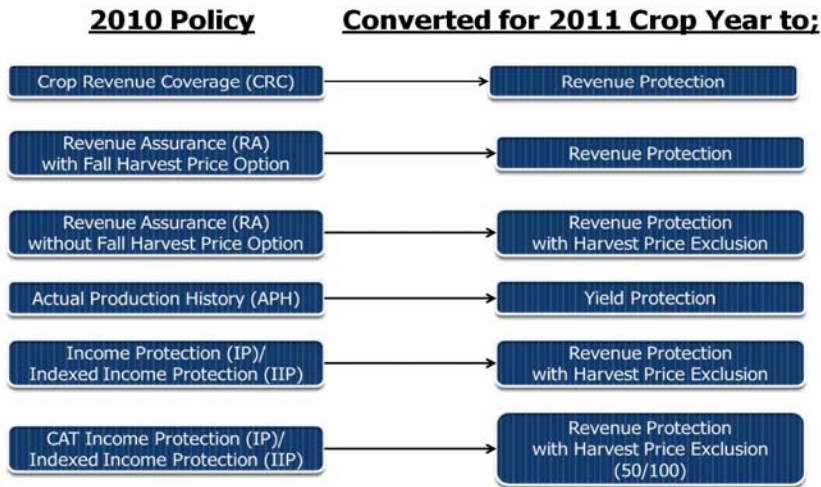


- **“COMBO” Policy replaces all farm-level policies**
 - Minor rate changes compared to Revenue insurance
 - Major commodity price changes
- **Higher Commodity Prices AND Volatility**
 - More revenue to protect, more important to do so
 - Traditional commodity programs less effective
- **Group Products not altered by COMBO**
 - ...but commodity price levels and E(Y) differences from previous years change relative attractiveness
- **Substantially higher premiums expected**
 - Substantially higher payments possible....

Combo conversions



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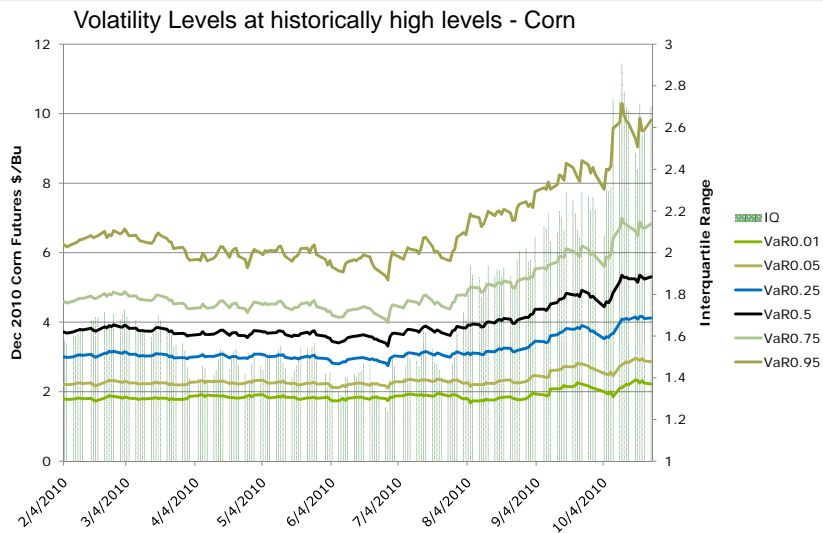


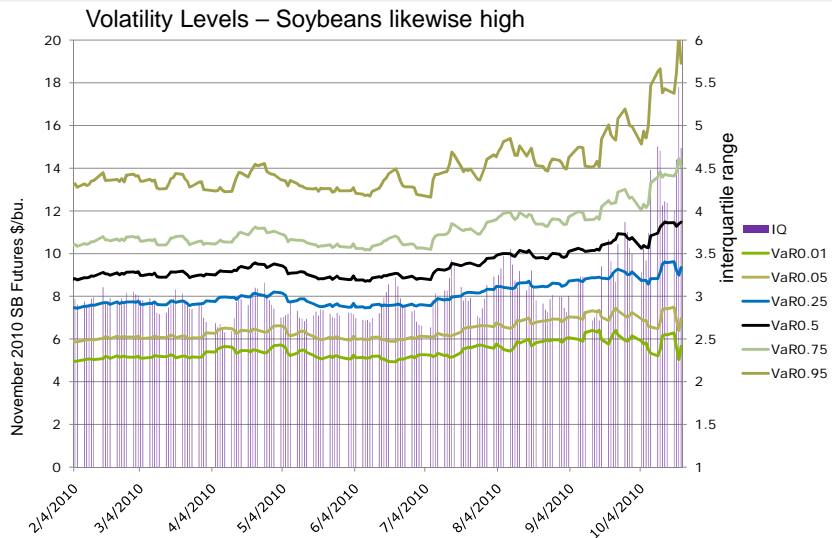
Source USDA - RMA

Commodity Markets..... (CZ10)



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Crop Insurance issues:

- Major SRA revisions – anxiety in system
- Crop insurance viewed as risk management “cornerstone” increased attention in policy debates. 2011 experience will be important.
- Product *subsidy* and selection issues of increased importance to producers.
- Indemnity Price determination, impact of interactions with marketing decisions, new limits, and divergence from *projected* prices becomes more important in selection.

1. Yield Protection (YP)

– YP pays based on the number of bushel shortfall (actual production – APH*coverage) times Projected Price (no longer different prices)

2. Revenue Protection with Harvest Price Exclusion (RP-HPE)

– Pays when revenue available from Actual Yield*Projected Price is below guaranteed revenue (APH*coverage*projected price). Note that the “election” is now to exclude HP option.

3. Revenue Protection

– Includes the option for guaranteed revenue to increase if Harvest Price is higher than Projected Price

1. Yield insurance

– Group Risk Plan (GRP) pays when county average yields are below elected fraction of expected yield or E(Y)

2. Revenue without guarantee increase

– Group Risk Income Plan (GRIP) pays percentage shortfall in county-based revenue index (average yield times average futures price) times “available revenue” level. The Maximum protection can be very high given 1.5 multiple.

3. Revenue with guarantee increase

– GRIP-HR, like GRIP but with additional feature that guaranteed revenue increases if prices increase.

"Projected Price":

Corn – Dec. Futures contract avg. in February

Soybeans – Nov. Futures contract avg. in Feb.

**Signup Period Futures Prices often differ – can have a substantial impact on optimal choice*

"Harvest Price":

Corn – Dec. Futures avg. in October

Soybeans – Nov. Futures contract avg. in October

- Revenue insurance pays when "available" revenue is below guaranteed level – not your actual revenue. Marketing gains/losses against springtime fall futures need to be considered. Marketing activities can affect actual revenue. Often "sold" in conjunction with marketing plans.
- Increase in guaranteed revenue if Harvest Price is greater than Projected Price (embedded call option*) has value, but can be offset by difference between actual futures and average Feb futures. Max HP is 2*Projected price.
- Increase in guarantee important for "aggressive" users of forward contracts or futures contracts

Group Plan features



- Indemnity based on county yields, not own farm yields
- Group Plans (GRP, GRIP, GRIP HR) – county insurance products may work well if yields are highly correlated with county's. Does NOT matter if your yields are higher or not.
- Easy to administer, often works well for farms spread over large regions.
- Not settled until county yields are final in following year.
- Payments can be very large due to 1.5 factor in maximum liability, high resulting “leverage” in protection.
- High prices, low yields, average revenue often results in high payments under GRP and GRIP-HR, but not GRIP; High yields, low prices, both GRIP and GRIP-HR can make high payments but not GRP. Less correlated with actual revenue.

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Farmer Premium Subsidies



Coverage	Non-Ent.	Enterprise	GRIP	GRP
50%	0.67	0.80		
55%	0.64	0.80		
60%	0.64	0.80		
65%	0.59	0.80		
70%	0.59	0.80	0.59	0.59
75%	0.55	0.77	0.55	0.59
80%	0.48	0.68	0.55	0.55
85%	0.38	0.53	0.49	0.55
90%			0.44	0.51

Farmer Premiums are $(1 - \text{subsidy rate}) \times \text{total premium}$. For example, if the total premium on 70% Enterprise Insurance is \$60/acre, the farmer-paid premium is \$12 and the federal government pays \$48. If accurately rated, farmers should make more than they pay for insurance over time, at the rate of subsidy.

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Typical BE Discount (IL - Champaign)

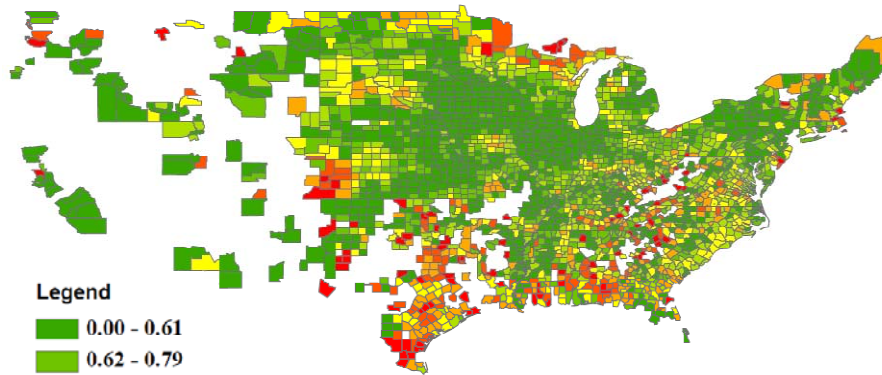


Coverage	BE % Discount
50%	42.8%
55%	37.6%
60%	32.3%
65%	27.1%
70%	21.8%
75%	16.6%
80%	11.4%
85%	6.1%

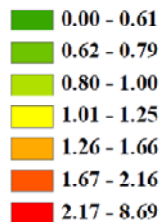
BE scheduled to expire after 2011 crop year. There will be pressure for continuation in some form, but there are arguments that the "Base" yield now reflects "best" practices with biotech varieties everywhere, and that the base rates could be changed rather than discount certain varieties....NSR offered now instead in many cases.

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Cumulative Corn Loss Ratios (1995-2009)



Legend



Loss Ratio = Indemnities / Premiums

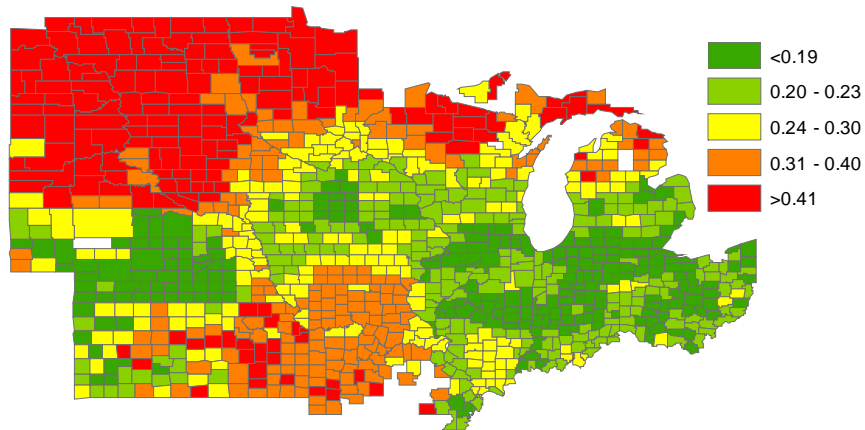
Source: RMA Summary of Business

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Corn Yield Risk (st. dev./mean)



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Source: National Ag. Statistics Service (NASS)

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SRA Changes and Impacts



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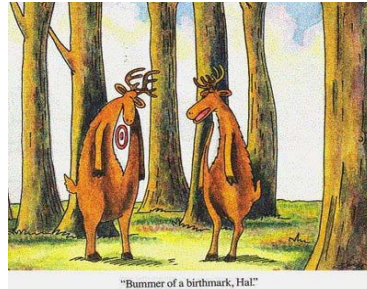
- **New SRA terms developed under mandate to remove \$6B over 10 years from estimates of aggregate cost, concern by agents that:**
- **A&O Subsidy on new capped scale**
 - Hard max limit on dollars, lower soft limit, Combo and successor policies.
 - 18.5% net premium, except if greater than: “product of (i) Total Liability; (ii) EPR; (iii) Ave A&O rate; (iv) 1; and (v) .615” then prorated down to product of factors
 - Likely binding at current prices/estimates

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SRA Impacts on Agents



- **If Loss Ratio >1.2, then add 1.5% to A&O, unless 7 other paragraphs apply!**
- **Agent Commissions**
 - Easy Targets
 - Limit to <80% of A&O
 - Unless underwriting gain, then <100%
- **Profit Sharing “competition” will emerge.**
- **Incentives to sell non-Combo???**



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SRA Changes and Impacts



- **Major issue: State Groups have different underwriting gain/loss treatments.**
 - *Group 1: IL, IA, IN, MN, NE – most profitable underwriting areas*
 - *Group 2: Not group 1 – “underserved, less profitable”*
- **Implicit problem: if gains in Group 1 are more prevalent, then rates are too high relative to Group 2. Wrong solution to penalize safer areas through UG.**
- **“Gains Taxed” and losses capped more quickly in aggregate for Approved Insurance Providers.**

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Evaluating Choices:



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County: Champaign	Crop: Corn		Farm Yield	County Yield
			bu./acre	bu./acre
Farm Average Yield	182.6 bu./acre			
Farm St. Dev. of yield	26.44 bu./acre			
County Average Yield	180.6 bu./acre	30% of years yields below:	170.77	171.04
County St. Dev. of yield	22.07 bu./acre	20% of years yields below:	161.29	163.07
Average Futures Price	\$5.31 /bu	10% of years yields below:	147.19	151.09
St. Dev. of Price	\$1.63 /bu	5% of years yields below:	134.84	140.43
Local Cash Basis	\$0.33 /bu	Farm APH	181	bu./acre
		Average Gross Crop Rev.	\$894.46	/acre

Enterprise unit on 320 acres

VARs								Enter
% above =	90%	85%	80%	75%	70%	50%		95.00%
% below =	10%	15%	20%	25%	30%	50%		5.00%
Farm Yield	147.19	155.18	161.29	166.36	170.77	185.17		134.84
County Yield	151.09	157.90	163.07	167.34	171.04	182.99		140.43
Price	\$3.46	\$3.72	\$3.95	\$4.15	\$4.34	\$5.08		\$3.10
Crop Rev./acre	\$577.02	\$626.15	\$664.02	\$699.56	\$733.95	\$860.75		\$515.63

Evaluating Choices:



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Champaign Co. Premiums (\$/Acre)

Coverage	Revenue Protection (RP)			RP- Harvest Price Excl.			Yield Protection (YP)		
	Opt	Basic	Enterp.	Opt	Basic	Enterp.	Opt	Basic	Enterp.
50%	\$1.14	\$1.06	\$0.64	\$0.79	\$0.70	\$0.43	\$0.58	\$0.49	\$0.30
55%	\$2.12	\$1.99	\$1.11	\$1.31	\$1.18	\$0.65	\$1.04	\$0.91	\$0.51
60%	\$3.48	\$3.32	\$1.84	\$1.99	\$1.83	\$1.01	\$1.59	\$1.42	\$0.79
65%	\$6.23	\$6.00	\$2.92	\$3.55	\$3.31	\$1.62	\$2.63	\$2.40	\$1.17
70%	\$9.82	\$9.54	\$4.61	\$5.87	\$5.58	\$2.67	\$3.88	\$3.60	\$1.71
75%	\$16.02	\$15.65	\$7.85	\$9.68	\$9.32	\$4.61	\$6.08	\$5.72	\$2.77
80%	\$26.66	\$26.15	\$15.67	\$16.24	\$15.73	\$9.26	\$9.76	\$9.25	\$5.27
85%	\$43.60	\$42.86	\$31.41	\$26.68	\$25.95	\$18.59	\$15.79	\$15.05	\$10.33

Enterprise on 320 Acres in 3 Sections

Biotech Endorsement Included

Evaluating Choices:



Champaign Co. Premiums (\$/Acre)

Coverage	Area Coverage Products		
	GRP	GRIP	GRIPHPO
70%	\$6.55	\$8.60	\$23.51
75%	\$9.98	\$15.77	\$34.24
80%	\$17.68	\$24.62	\$45.93
85%	\$24.94	\$40.46	\$67.38
90%	\$36.14	\$62.00	\$94.52

Evaluating Choices:



Champaign Enterprise Units

Average Insurance Payments/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.08	0.47	0.55			
55%	0.21	1.41	1.61			
60%	0.45	3.27	3.71			
65%	0.94	6.64	7.53			
70%	1.93	12.09	13.84	2.96	24.00	26.44
75%	3.71	20.03	23.27	5.81	39.03	43.67
80%	6.92	31.04	36.80	10.85	59.00	67.07
85%	12.28	45.54	55.21	19.37	83.63	97.12
90%				33.04	112.32	133.92

Note: payments very sensitive to estimated volatility factors
 – these may change, especially for the group products

Evaluating Choices:



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Champaign Enterprise Units

Frequency of payment

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.2%	1.3%	1.4%			
55%	0.4%	2.9%	3.1%			
60%	0.7%	5.1%	5.6%			
65%	1.4%	9.1%	9.9%			
70%	2.7%	13.9%	15.5%	2.2%	13.7%	15.5%
75%	4.9%	19.5%	22.3%	4.3%	20.5%	23.6%
80%	8.6%	26.3%	30.9%	7.9%	28.4%	33.6%
85%	14.2%	34.2%	41.1%	13.8%	36.5%	45.2%
90%				23.0%	45.1%	58.2%

Evaluating Choices:



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Champaign Enterprise Units

Estimated Net Average Cost of Insurance

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.22	(0.04)	0.09			
55%	0.30	(0.76)	(0.50)			
60%	0.34	(2.26)	(1.87)			
65%	0.23	(5.02)	(4.61)			
70%	(0.22)	(9.42)	(9.23)	3.59	(15.40)	(2.93)
75%	(0.94)	(15.42)	(15.42)	4.17	(23.26)	(9.43)
80%	(1.65)	(21.78)	(21.13)	6.83	(34.38)	(21.14)
85%	(1.95)	(26.95)	(23.80)	5.57	(43.17)	(29.74)
90%				3.10	(50.32)	(39.40)

Note: negative numbers indicate payments greater than premiums

Evaluating Choices:



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Champaign Enterprise Units

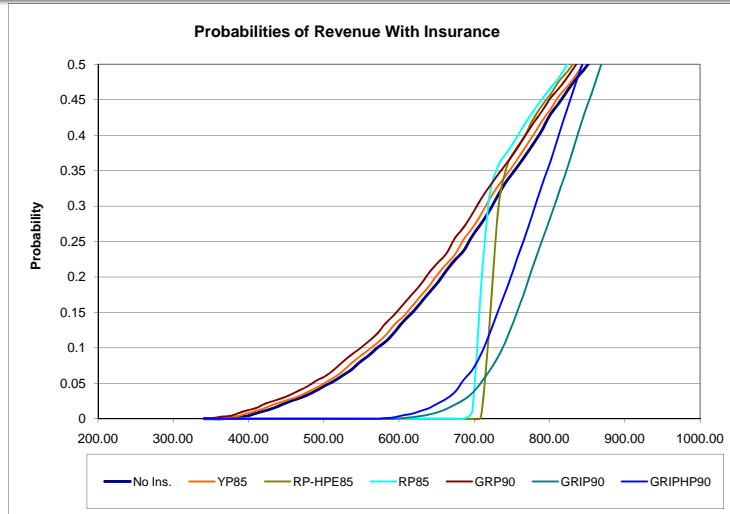
Average Gross Revenue/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	894.24	894.50	894.37			
55%	894.16	895.21	894.96			
60%	894.12	896.72	896.33			
65%	894.23	899.48	899.07			
70%	894.68	903.88	903.69	890.87	909.86	897.38
75%	895.40	909.88	909.88	890.29	917.71	903.88
80%	896.11	916.24	915.59	887.63	928.84	915.60
85%	896.41	921.41	918.26	888.89	937.62	924.20
90%				891.36	944.77	933.86
Average Gross Rev/Acre without insurance			\$894.46			

Risk Reduction Impacts:



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Evaluating Choices:



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Case Farm Information

County: DeKalb	Crop: Corn		Farm Yield	County Yield
			bu./acre	bu./acre
Farm Average Yield	181.6 bu./acre			
Farm St. Dev. of yield	19.52 bu./acre	30% of years yields below:	173.40	172.94
County Average Yield	179.6 bu./acre	20% of years yields below:	166.33	167.02
County St. Dev. of yield	16.29 bu./acre	10% of years yields below:	155.61	157.96
Average Futures Price	\$5.31 /bu	5% of years yields below:	145.98	149.74
St. Dev. of Price	\$1.63 /bu	Farm APH	180	bu./acre
Local Cash Basis	\$0.38 /bu	Average Gross Crop Rev.	\$884.99	/acre

Enterprise unit on 320 acres

VARs							Enter
% above =	90%	85%	80%	75%	70%	50%	95.00%
% below =	10%	15%	20%	25%	30%	50%	5.00%
Farm Yield	155.61	161.71	166.33	170.12	173.40	183.93	145.98
County Yield	157.96	163.13	167.02	170.20	172.94	181.68	149.74
Price	\$3.46	\$3.72	\$3.95	\$4.15	\$4.34	\$5.08	\$3.10
Crop Rev./acre	\$570.23	\$617.99	\$655.69	\$692.15	\$722.72	\$849.98	\$507.11

Evaluating Choices:



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DeKalb Co. Premiums (\$/Acre)

Coverage	Revenue Protection (RP)			RP- Harvest Price Excl.			Yield Protection (YP)		
	Opt	Basic	Enterp.	Opt	Basic	Enterp.	Opt	Basic	Enterp.
50%	\$1.45	\$1.33	\$0.81	\$0.88	\$0.77	\$0.47	\$0.77	\$0.65	\$0.40
55%	\$2.65	\$2.48	\$1.38	\$1.47	\$1.30	\$0.72	\$1.35	\$1.18	\$0.66
60%	\$4.14	\$3.93	\$2.18	\$2.18	\$1.97	\$1.09	\$2.04	\$1.83	\$1.01
65%	\$7.28	\$6.97	\$3.40	\$4.01	\$3.70	\$1.81	\$3.35	\$3.04	\$1.48
70%	\$11.18	\$10.82	\$5.22	\$6.54	\$6.17	\$2.95	\$4.91	\$4.54	\$2.15
75%	\$18.01	\$17.53	\$8.77	\$10.73	\$10.26	\$5.05	\$7.66	\$7.18	\$3.47
80%	\$29.50	\$28.84	\$17.22	\$17.92	\$17.26	\$10.09	\$12.25	\$11.59	\$6.60
85%	\$47.76	\$46.81	\$34.13	\$29.42	\$28.47	\$20.23	\$19.77	\$18.82	\$12.92

Enterprise on 320 Acres in 3 Sections
Biotech Endorsement Included

DeKalb Co. Premiums (\$/Acre)

Coverage	Area Coverage Products		
	GRP	GRIP	GRIPHPO
70%	\$5.63	\$6.09	\$11.60
75%	\$6.78	\$10.72	\$20.17
80%	\$9.40	\$17.46	\$29.44
85%	\$14.31	\$30.37	\$48.23
90%	\$24.44	\$48.56	\$73.75

DeKalb Enterprise Units

Average Insurance Payments/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.01	0.34	0.35			
55%	0.02	1.17	1.19			
60%	0.06	2.90	2.97			
65%	0.18	5.98	6.17			
70%	0.44	11.02	11.44	0.35	17.83	18.08
75%	1.05	18.56	19.56	0.90	29.13	29.84
80%	2.37	29.13	31.34	2.13	44.53	46.29
85%	5.17	43.21	47.74	4.80	64.03	67.94
90%				10.22	87.68	95.45

Note: payments very sensitive to estimated volatility factors – these may change, especially for the group products

Evaluating Choices:



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DeKalb Enterprise Units

Frequency of payment

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.0%	0.9%	0.9%			
55%	0.0%	2.6%	2.6%			
60%	0.1%	4.7%	4.8%			
65%	0.4%	8.2%	8.5%			
70%	0.8%	12.9%	13.4%	0.4%	10.7%	11.0%
75%	1.9%	18.6%	19.9%	0.9%	16.2%	16.9%
80%	4.0%	25.4%	28.0%	2.2%	23.0%	24.9%
85%	8.2%	33.6%	38.3%	4.9%	30.7%	34.4%
90%				10.3%	38.9%	46.1%

Evaluating Choices:



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DeKalb Enterprise Units

Estimated Net Average Cost of Insurance

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.39	0.13	0.46			
55%	0.64	(0.45)	0.19			
60%	0.95	(1.81)	(0.79)			
65%	1.30	(4.17)	(2.77)			
70%	1.71	(8.07)	(6.22)	5.28	(11.74)	(6.48)
75%	2.42	(13.51)	(10.79)	5.88	(18.41)	(9.67)
80%	4.23	(19.04)	(14.12)	7.27	(27.07)	(16.85)
85%	7.75	(22.98)	(13.61)	9.51	(33.66)	(19.71)
90%				14.22	(39.12)	(21.70)

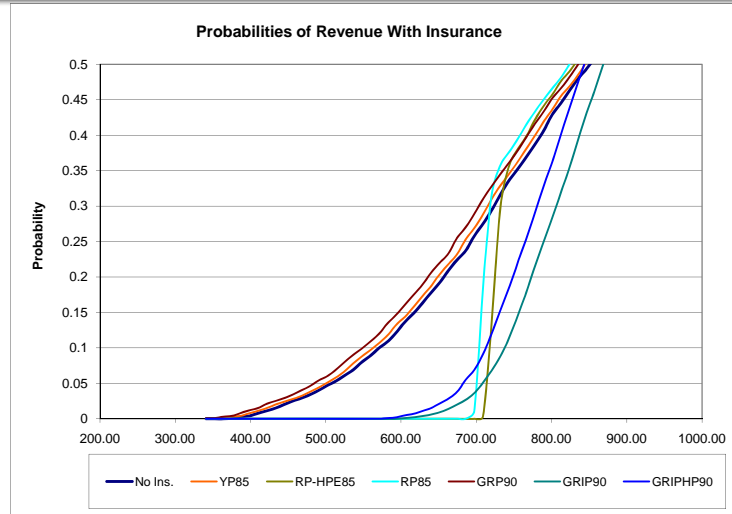
Note: negative numbers indicate payments greater than premiums

Evaluating Choices:

DeKalb Enterprise Units
Average Gross Revenue/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	884.60	884.87	884.53			
55%	884.35	885.44	884.80			
60%	884.05	886.80	885.78			
65%	883.69	889.16	887.76			
70%	883.28	893.06	891.21	879.71	896.73	891.48
75%	882.57	898.50	895.78	879.11	903.40	894.67
80%	880.77	904.03	899.11	877.73	912.06	901.84
85%	877.24	907.97	898.60	875.48	918.65	904.70
90%				870.77	924.11	906.69
Average Gross Rev/Acre without insurance			\$884.99			

Risk Reduction Impacts:



Evaluating Choices:



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Case Farm Information

County: Knox	Crop: Corn		Farm Yield <i>bu./acre</i>	County Yield <i>bu./acre</i>
Farm Average Yield	177.8 <i>bu./acre</i>			
Farm St. Dev. of yield	26.19 <i>bu./acre</i>	30% of years yields below:	166.08	166.33
County Average Yield	175.8 <i>bu./acre</i>	20% of years yields below:	156.69	158.45
County St. Dev. of yield	21.85 <i>bu./acre</i>	10% of years yields below:	142.77	146.60
Average Futures Price	\$5.31 <i>/bu</i>	5% of years yields below:	130.57	136.07
St. Dev. of Price	\$1.63 <i>/bu</i>	Farm APH	176	<i>bu./acre</i>
Local Cash Basis	\$0.36 <i>/bu</i>	Average Gross Crop Rev.	\$865.49	<i>/acre</i>

Enterprise unit on 320 acres

VARs							Enter
% above =	90%	85%	80%	75%	70%	50%	95.00%
% below =	10%	15%	20%	25%	30%	50%	5.00%
Farm Yield	142.77	150.65	156.69	161.71	166.08	180.34	130.57
County Yield	146.60	153.33	158.45	162.67	166.33	178.17	136.07
Price	\$3.46	\$3.72	\$3.95	\$4.15	\$4.34	\$5.08	\$3.10
Crop Rev./acre	\$556.08	\$604.08	\$640.78	\$675.15	\$708.82	\$832.07	\$496.69

Evaluating Choices:



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Knox Co. Premiums (\$/Acre)

Coverage	Revenue Protection (RP)			RP- Harvest Price Excl.			Yield Protection (YP)		
	Opt	Basic	Enterp.	Opt	Basic	Enterp.	Opt	Basic	Enterp.
50%	\$1.72	\$1.59	\$0.96	\$0.92	\$0.78	\$0.47	\$0.91	\$0.77	\$0.47
55%	\$3.11	\$2.90	\$1.61	\$1.57	\$1.36	\$0.76	\$1.64	\$1.43	\$0.80
60%	\$4.76	\$4.49	\$2.49	\$2.43	\$2.16	\$1.20	\$2.49	\$2.22	\$1.23
65%	\$8.06	\$7.69	\$3.75	\$4.37	\$4.00	\$1.95	\$3.89	\$3.53	\$1.72
70%	\$11.97	\$11.54	\$5.56	\$6.82	\$6.40	\$3.06	\$5.50	\$5.07	\$2.41
75%	\$19.03	\$18.49	\$9.23	\$11.05	\$10.52	\$5.16	\$8.49	\$7.95	\$3.85
80%	\$30.74	\$30.01	\$17.88	\$18.36	\$17.62	\$10.26	\$13.46	\$12.72	\$7.25
85%	\$48.76	\$47.72	\$34.74	\$29.64	\$28.61	\$20.25	\$21.07	\$20.03	\$13.75

Enterprise on 320 Acres in 3 Sections
Biotech Endorsement Included

Evaluating Choices:



Knox Co. Premiums (\$/Acre)

Coverage	Area Coverage Products		
	GRP	GRIP	GRIPHPO
70%	\$4.27	\$8.48	\$10.28
75%	\$5.65	\$14.25	\$18.08
80%	\$8.64	\$20.98	\$27.78
85%	\$12.14	\$35.82	\$45.92
90%	\$18.83	\$55.76	\$72.42

Evaluating Choices:



Knox Enterprise Units

Average Insurance Payments/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.09	0.46	0.55			
55%	0.22	1.37	1.59			
60%	0.47	3.18	3.64			
65%	0.98	6.45	7.38			
70%	1.99	11.74	13.53	4.13	29.13	32.52
75%	3.79	19.43	22.72	8.00	46.59	52.75
80%	7.00	30.09	35.88	14.72	69.24	79.78
85%	12.31	44.13	53.77	25.86	96.44	113.86
90%				43.32	127.55	154.68

Note: payments very sensitive to estimated volatility factors
 – these may change, especially for the group products

Evaluating Choices:



Harness the Power of the Internet

Knox Enterprise Units

Frequency of payment

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.2%	1.2%	1.4%			
55%	0.4%	2.8%	3.1%			
60%	0.7%	5.1%	5.6%			
65%	1.6%	9.1%	10.0%			
70%	2.8%	13.9%	15.6%	3.0%	16.2%	18.6%
75%	5.0%	19.3%	22.1%	5.7%	23.7%	27.6%
80%	8.8%	26.4%	31.0%	10.4%	32.1%	38.9%
85%	14.3%	33.9%	40.9%	18.0%	40.7%	51.5%
90%				29.1%	48.6%	64.1%

Evaluating Choices:



Harness the Power of the Internet

Knox Enterprise Units

Estimated Net Average Cost of Insurance

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.38	0.01	0.41			
55%	0.58	(0.61)	0.02			
60%	0.76	(1.98)	(1.15)			
65%	0.74	(4.50)	(3.63)			
70%	0.42	(8.68)	(7.97)	0.14	(20.65)	(22.24)
75%	0.06	(14.27)	(13.49)	(2.35)	(32.34)	(34.67)
80%	0.25	(19.83)	(18.00)	(6.08)	(48.26)	(52.00)
85%	1.44	(23.88)	(19.03)	(13.72)	(60.62)	(67.94)
90%				(24.49)	(71.79)	(82.26)

Note: negative numbers indicate payments greater than premiums

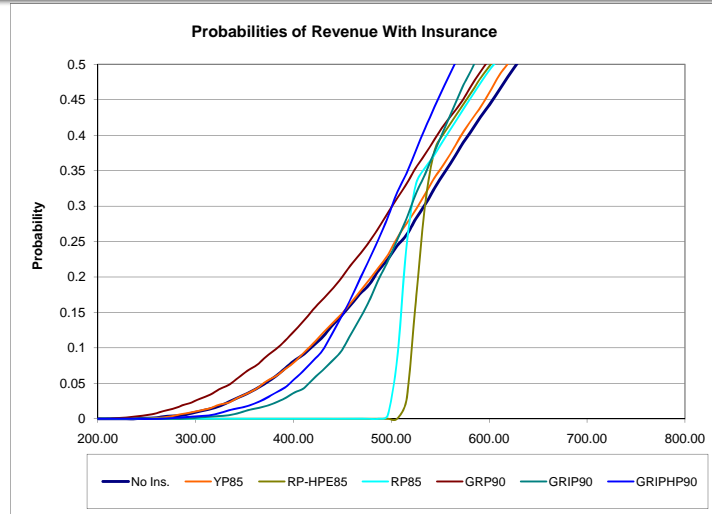
Evaluating Choices:



Knox Enterprise Units
Average Gross Revenue/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	865.11	865.48	865.08			
55%	864.91	866.10	865.47			
60%	864.73	867.47	866.64			
65%	864.75	869.99	869.12			
70%	865.07	874.17	873.46	865.35	886.14	887.73
75%	865.43	879.76	878.98	867.84	897.83	900.16
80%	865.24	885.32	883.49	871.57	913.75	917.49
85%	864.05	889.37	884.52	879.21	926.11	933.43
90%				889.98	937.28	947.75
Average Gross Rev/Acre without insurance			\$865.49			

Risk Reduction Impacts:



Evaluating Choices:



Harness the Power of the Internet



Case Farm Information

County: McLean	Crop: Corn		Farm Yield bu./acre	County Yield bu./acre
Farm Average Yield	182.5 bu./acre			
Farm St. Dev. of yield	26.50 bu./acre	30% of years yields below:	170.71	170.99
County Average Yield	180.5 bu./acre	20% of years yields below:	161.21	163.00
County St. Dev. of yield	22.12 bu./acre	10% of years yields below:	147.09	151.00
Average Futures Price	\$5.31 /bu	5% of years yields below:	134.71	140.32
St. Dev. of Price	\$1.63 /bu	Farm APH	181	bu./acre
Local Cash Basis	\$0.33 /bu	Average Gross Crop Rev.	\$894.30	/acre

Enterprise unit on 320 acres

VARs							Enter
% above =	90%	85%	80%	75%	70%	50%	95.00%
% below =	10%	15%	20%	25%	30%	50%	5.00%
Farm Yield	147.09	155.09	161.21	166.29	170.71	185.14	134.71
County Yield	151.00	157.82	163.00	167.28	170.99	182.97	140.32
Price	\$3.46	\$3.72	\$3.95	\$4.15	\$4.34	\$5.08	\$3.10
Crop Rev./acre	\$576.70	\$626.06	\$663.93	\$699.37	\$733.86	\$860.46	\$515.80

Evaluating Choices:



Harness the Power of the Internet

McLean Co. Premiums (\$/Acre)

Coverage	Revenue Protection (RP)			RP- Harvest Price Excl.			Yield Protection (YP)		
	Opt	Basic	Enterp.	Opt	Basic	Enterp.	Opt	Basic	Enterp.
50%	\$1.32	\$1.22	\$0.74	\$0.84	\$0.74	\$0.45	\$0.69	\$0.58	\$0.35
55%	\$2.45	\$2.30	\$1.28	\$1.41	\$1.26	\$0.70	\$1.23	\$1.08	\$0.60
60%	\$3.90	\$3.71	\$2.06	\$2.11	\$1.91	\$1.06	\$1.87	\$1.67	\$0.93
65%	\$6.90	\$6.63	\$3.23	\$3.84	\$3.57	\$1.74	\$3.09	\$2.81	\$1.37
70%	\$10.72	\$10.38	\$5.01	\$6.31	\$5.97	\$2.86	\$4.55	\$4.21	\$2.00
75%	\$17.35	\$16.92	\$8.47	\$10.40	\$9.97	\$4.92	\$7.12	\$6.68	\$3.23
80%	\$28.59	\$27.99	\$16.73	\$17.42	\$16.82	\$9.85	\$11.42	\$10.82	\$6.16
85%	\$46.47	\$45.60	\$33.31	\$28.59	\$27.72	\$19.75	\$18.47	\$17.59	\$12.07

Enterprise on 320 Acres in 3 Sections

Biotech Endorsement Included

McLean Co. Premiums (\$/Acre)

Coverage	Area Coverage Products		
	GRP	GRIP	GRIPHPO
70%	\$9.82	\$12.33	\$24.30
75%	\$13.29	\$19.25	\$35.68
80%	\$18.92	\$27.86	\$47.56
85%	\$26.02	\$43.41	\$69.47
90%	\$37.63	\$65.00	\$97.70

McLean Enterprise Units
Average Insurance Payments/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.08	0.47	0.56			
55%	0.21	1.41	1.62			
60%	0.45	3.28	3.72			
65%	0.95	6.66	7.56			
70%	1.95	12.12	13.88	2.86	23.17	25.51
75%	3.75	20.07	23.33	5.60	37.78	42.26
80%	6.98	31.09	36.89	10.45	57.27	65.06
85%	12.37	45.60	55.33	18.64	81.39	94.41
90%				31.78	109.55	130.43

Note: payments very sensitive to estimated volatility factors
– these may change, especially for the group products

Evaluating Choices:



Harness the Power of the Internet

McLean Enterprise Units

Frequency of payment

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.2%	1.3%	1.4%			
55%	0.4%	2.9%	3.1%			
60%	0.7%	5.1%	5.6%			
65%	1.5%	9.1%	10.0%			
70%	2.7%	14.0%	15.5%	2.1%	13.3%	15.1%
75%	4.9%	19.5%	22.3%	4.1%	20.0%	23.0%
80%	8.7%	26.4%	31.0%	7.6%	27.9%	33.0%
85%	14.3%	34.2%	41.2%	13.3%	36.0%	44.5%
90%				22.2%	44.5%	57.4%

Evaluating Choices:



Harness the Power of the Internet

McLean Enterprise Units

Estimated Net Average Cost of Insurance

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.27	(0.02)	0.18			
55%	0.39	(0.71)	(0.34)			
60%	0.48	(2.22)	(1.66)			
65%	0.42	(4.92)	(4.33)			
70%	0.05	(9.26)	(8.87)	6.96	(10.84)	(1.21)
75%	(0.52)	(15.15)	(14.86)	7.69	(18.53)	(6.58)
80%	(0.82)	(21.24)	(20.16)	8.47	(29.41)	(17.50)
85%	(0.30)	(25.85)	(22.02)	7.38	(37.98)	(24.94)
90%				5.85	(44.55)	(32.73)

Note: negative numbers indicate payments greater than premiums

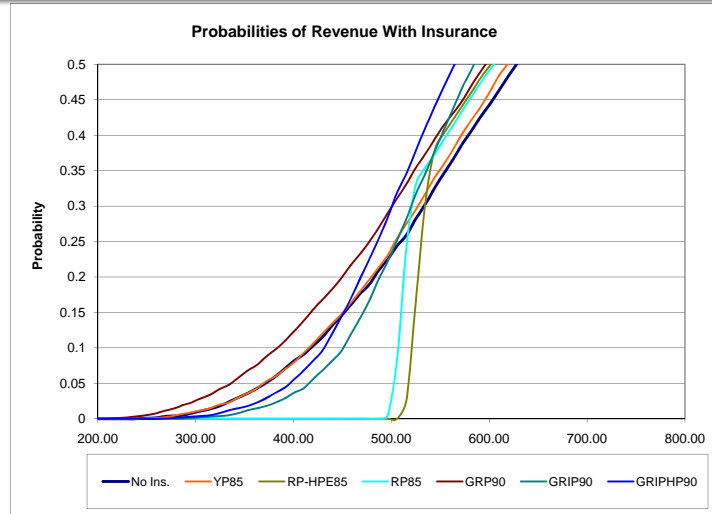
Evaluating Choices:



McLean Enterprise Units
Average Gross Revenue/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	894.03	894.32	894.11			
55%	893.91	895.01	894.64			
60%	893.82	896.52	895.96			
65%	893.88	899.21	898.62			
70%	894.24	903.55	903.17	887.33	905.13	895.51
75%	894.82	909.44	909.16	886.60	912.82	900.88
80%	895.11	915.53	914.45	885.83	923.70	911.80
85%	894.59	920.15	916.31	886.91	932.27	919.24
90%				888.45	938.84	927.02
Average Gross Rev/Acre without insurance			\$894.30			

Risk Reduction Impacts:



Evaluating Choices:



Harness the Power of the Internet



Case Farm Information

County: Jefferson	Crop: Corn		Farm Yield	County Yield
			bu./acre	bu./acre
Farm Average Yield	133.1 bu./acre			
Farm St. Dev. of yield	24.57 bu./acre	30% of years yields below:	121.57	121.84
County Average Yield	131.1 bu./acre	20% of years yields below:	112.89	114.52
County St. Dev. of yield	20.50 bu./acre	10% of years yields below:	100.26	103.70
Average Futures Price	\$5.31 /bu	5% of years yields below:	89.48	94.29
St. Dev. of Price	\$1.63 /bu	Farm APH	131	bu./acre
Local Cash Basis	\$0.30 /bu	Average Gross Crop Rev.	\$652.99	/acre

Enterprise unit on 320 acres

VARs								Enter
% above =	90%	85%	80%	75%	70%	50%		95.00%
% below =	10%	15%	20%	25%	30%	50%		5.00%
Farm Yield	100.26	107.37	112.89	117.51	121.57	135.04		89.48
County Yield	103.70	109.81	114.52	118.43	121.84	133.03		94.29
Price	\$3.46	\$3.72	\$3.95	\$4.15	\$4.34	\$5.08		\$3.10
Crop Rev./acre	\$416.44	\$451.10	\$482.87	\$508.33	\$532.86	\$628.56		\$370.44

Evaluating Choices:



Harness the Power of the Internet

Jefferson Co. Premiums (\$/Acre)

Coverage	Revenue Protection (RP)			RP- Harvest Price Excl.			Yield Protection (YP)		
	Opt	Basic	Enterp.	Opt	Basic	Enterp.	Opt	Basic	Enterp.
50%	\$5.34	\$4.74	\$2.87	\$3.17	\$2.58	\$1.56	\$3.68	\$3.08	\$1.87
55%	\$7.72	\$6.88	\$3.83	\$4.68	\$3.84	\$2.13	\$5.28	\$4.45	\$2.47
60%	\$10.16	\$9.18	\$5.10	\$6.18	\$5.20	\$2.89	\$6.79	\$5.81	\$3.23
65%	\$15.05	\$13.78	\$6.72	\$9.23	\$7.96	\$3.88	\$9.74	\$8.46	\$4.13
70%	\$19.88	\$18.46	\$8.85	\$12.66	\$11.24	\$5.32	\$12.71	\$11.29	\$5.35
75%	\$28.20	\$26.53	\$13.11	\$18.43	\$16.77	\$8.12	\$17.89	\$16.23	\$7.84
80%	\$41.36	\$39.25	\$23.02	\$27.72	\$25.62	\$14.64	\$26.12	\$24.02	\$13.65
85%	\$61.47	\$58.77	\$41.90	\$42.28	\$39.57	\$27.34	\$38.83	\$36.12	\$24.73

Enterprise on 320 Acres in 3 Sections

Biotech Endorsement Included

Evaluating Choices:



Jefferson Co. Premiums (\$/Acre)

Coverage	Area Coverage Products		
	GRP	GRIP	GRIPHPO
70%	\$13.96	\$18.84	\$27.21
75%	\$18.06	\$28.80	\$41.99
80%	\$25.31	\$39.91	\$53.10
85%	\$31.78	\$55.55	\$70.54
90%	\$42.85	\$70.63	\$90.27

Evaluating Choices:



Jefferson Enterprise Units
Average Insurance Payments/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.28	0.55	0.83			
55%	0.56	1.40	1.91			
60%	1.09	3.02	3.97			
65%	1.99	5.76	7.45			
70%	3.50	9.93	12.81	2.16	6.28	8.00
75%	5.95	15.98	20.68	3.63	11.10	13.94
80%	9.67	24.07	31.34	5.89	18.05	22.41
85%	15.12	34.61	45.50	9.24	27.41	33.79
90%				14.07	39.19	48.48

Note: payments very sensitive to estimated volatility factors
– these may change, especially for the group products

Evaluating Choices:



Harness the Power of the Internet

Jefferson Enterprise Units

Frequency of payment

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	0.5%	1.6%	1.9%			
55%	1.1%	3.4%	4.0%			
60%	2.0%	6.3%	7.4%			
65%	3.3%	9.7%	11.4%			
70%	5.4%	14.6%	17.5%	2.0%	6.3%	7.9%
75%	8.7%	20.3%	24.5%	3.3%	10.4%	12.7%
80%	13.0%	26.5%	32.4%	5.3%	15.6%	19.0%
85%	18.6%	34.3%	42.5%	8.2%	21.9%	26.9%
90%				12.4%	28.8%	36.2%

Evaluating Choices:



Harness the Power of the Internet

Jefferson Enterprise Units

Estimated Net Average Cost of Insurance

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	1.59	1.01	2.04			
55%	1.91	0.73	1.92			
60%	2.14	(0.13)	1.13			
65%	2.14	(1.88)	(0.73)			
70%	1.85	(4.61)	(3.96)	11.80	12.56	19.21
75%	1.89	(7.86)	(7.57)	14.43	17.70	28.05
80%	3.98	(9.43)	(8.32)	19.42	21.86	30.69
85%	9.61	(7.27)	(3.60)	22.54	28.14	36.75
90%				28.78	31.44	41.79

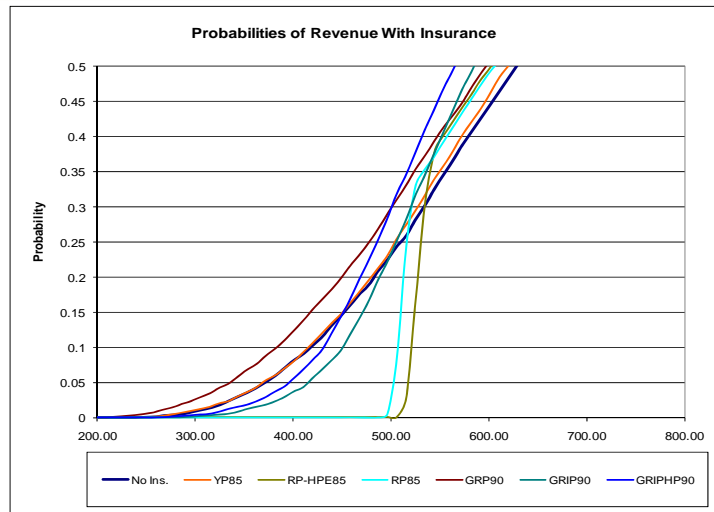
Note: negative numbers indicate payments greater than premiums

Evaluating Choices:

Jefferson Enterprise Units
Average Gross Revenue/Acre

Coverage Election	YP	RP-HPE	RP	GRP	GRIP	GRIP-HPO
50%	651.40	651.98	650.95			
55%	651.07	652.25	651.07			
60%	650.85	653.12	651.86			
65%	650.85	654.86	653.72			
70%	651.14	657.60	656.95	641.19	640.42	633.78
75%	651.10	660.84	660.56	638.56	635.29	624.94
80%	649.01	662.42	661.31	633.57	631.13	622.29
85%	643.38	660.26	656.59	630.45	624.84	616.24
90%				624.21	621.55	611.20
Average Gross Rev/Acre without insurance			\$652.99			

Risk Reduction Impacts:



- Crop Insurance decisions especially important in light of higher revenue potential – compare all in terms of cost and risk reduction. Possible to keep it “all green”
- Interactions with marketing decisions more pronounced.
- Look for pressure for changes in programs and with Farm Bill debate to link to other programs (inc. ACRE?)

Thanks!

farmdoc Crop Insurance main page:
<http://www.farmdoc.illinois.edu/cropins/index.asp>

questions or comments welcomed:
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