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Group Risk Income Plans Likely to Pay in Many Counties for 2004 Crops

Some people have asked whether group products will make payments for the 2004 cropping year. Group products base insurance payments on county yields calculated by the National Agricultural Statistical Service (NASS), an agency of the U.S. Department of Agriculture. NASS will not release 2004 county yields until March or April of 2005. Hence, payments from group products will not be known until March or April.

While not certain, it is highly likely that the revenue-based Group Risk Income Plans (GRIPs) will pay in many Illinois counties because prices fell dramatically between the spring and the fall, causing county revenues to be less than guaranteed revenues (also called trigger revenues). On the other hand, yield-based Group Risk Plans (GRPs) likely will not pay in any Illinois counties because yields in most counties will be above average.

Payment Triggers on Group Policies

There are three group plans: Group Risk Plan is yield insurance, Group Risk Income Plan without the harvest revenue (GRIP-NoHR) is revenue insurance, and Group Risk Income Plan with a harvest revenue option (GRIP-HR) is revenue insurance. GRIP-NoHR does not have a revenue guarantee increase while GRIP-HR does have an increase provision. More detail on these products is provided in "Group Crop Insurance Plans", a paper in the crop insurance section of *farmdoc*.

Group Risk Plan (GRP) is a yield insurance that pays when county yield falls below trigger yield. The trigger yield is expected yield (a yield set for each county in Illinois by the Risk Management Agency) times the coverage level (set by the person purchasing the insurance product and can be 70%, 75%, 80%, 85%, or 90%). Yields for most counties will be well above average, causing GRP not to make payments.

GRIP-NoHR pays when county revenue is below trigger revenue. Trigger revenue is the expected yield times the expected price times the coverage level. The expected price is based on settlement prices on Chicago Board of Trade (CBOT) contracts during the last five days of February. County revenue is based on the county yield times the harvest price. The harvest price is based on settlement price of CBOT contracts during the month of October for soybeans and the month of November for corn.

Expected and harvest prices for the 2004 crop are already known and are shown in Table 1. For both corn and soybeans, harvest prices are considerably below expected prices. For corn, the harvest price is 68% of the expected price. For soybeans, the harvest price is 72% of the expected price.

Table 1. Expected and Harvest Prices, 2004.

Crop	Expected Price	Harvest Price
Corn	\$2.93	\$1.99
Soybeans	\$7.27	\$5.26

GRIP-HR also makes payments when county revenue is below trigger revenue. County revenue under GRIP-HR is the same as GRIP-NoHR. Trigger revenue may be different. Under GRIP-HR, trigger revenue equals expect yield times the higher of expected price or harvest price times coverage level. GRIP-HR has different trigger revenue from GRIP-NoHR when harvest price is above expected price. When harvest price is below expected price, trigger revenue is the same under both GRIP-NoHR and GRIP-HR. In 2004, harvest prices for both corn and soybeans are below expected prices. Hence, GRIP-NoHR and GRIP-HR have the same trigger revenue for a given coverage level. Given that coverage and protection level choices are the same, GRIP-NoHR and GRIP-HR will make the same payments in 2004.

Likely Areas in Illinois Receiving Payments

The only items that are not known yet to calculate GRIP payments are county yields. NASS has not released county yields. However, NASS has released Crop Reporting District (CRD) yields. These yields will be used to calculate the following equation for each CRD in Illinois:

$$(\text{Trigger revenue} - \text{CRD revenue}) / \text{trigger revenue} \quad (1)$$

Equation (1) gives percent revenue shortfalls. Positive numbers indicate that a CRD would get a payment if GRIP payments were based on CRD yields. If positive, some or all of the counties within the CRD will receive GRIP payments. Negative numbers indicate that most, if not all, counties within that CRD will not receive payments.

NASS estimated yields by CRD for 2004 are shown in Table 2. Also shown are “expected CRD yields”. Expected yields are

Table 2. Expected and 2004 Crop Yields by Illinois Crop Reporting District.

	Corn		Soybeans	
	Expected CRD Yield	2004 Yield	Expected CRD Yield	2004 Yield
	Bushels per Acre			
Northwest	148	182	48	52
Northeast	146	177	45	50
West	148	188	46	53
Central	155	185	49	53
East	149	181	47	52
West Southwest	152	192	45	51
East Southeast	141	170	42	47
Southwest	120	181	38	45
Southeast	121	158	37	44

estimated using a methodology similar to that used by the Risk Management Agency in calculating expected county yields.

Table 3. Percent Revenue Shortfalls for Illinois CRDs, Corn, 2004

	Coverage Level	
	90%	85%
Northwest	0.07	0.02
Northeast	0.09	0.03
West	0.04	-0.01
Central	0.10	0.05
East	0.08	0.03
West Southwest	0.05	-0.01
East Southeast	0.09	0.04
Southwest	-0.14	-0.21
Southeast	0.01	-0.04

Equation (1) is estimated for corn using the \$2.93 expected price, \$1.93 harvest price, and yields from Table 2. Results for corn are reported in Table 3. At a 90% coverage level, all CRDs have positive values, except for the Southwest CRD. Five of the CRDs have positive values at an 85% coverage level. This indicates that many counties will have GRIP payments for corn in 2004.

Equation 1 values for soybeans are shown in Table 4 based on a \$7.27 expected price, \$5.26 harvest price, and yields from Table 2. At a 90% coverage level, all CRDs have positive values. This indicates that some counties in all CRDs will receive payments. At an 85% coverage level, values are positive for all CRDs except the southwest and southeast CRDs.

Values in Table 3 and 4 do not represent payments from the insurance product. The formula for calculating payments equals percent revenue shortfall times protection level. Protection levels are chosen by the individual purchasing the GRIP product. Maximum protection levels vary by county. For corn, maximum levels range from a low \$410 per acre up to the \$735 per acre. At maximum protection levels, corn payments will be up to \$60 and \$70 per acre for some counties. Some counties will receive considerably less than that. Maximum protection levels for soybeans range from \$325 up to \$610 per acre. At maximum protection levels, soybean payments will be around \$70 per acre.

Table 4. Percent Revenue Shortfalls for Illinois CRDs, Soybeans, 2004

	Coverage Level	
	90%	85%
Northwest	0.13	0.08
Northeast	0.11	0.05
West	0.07	0.02
Central	0.13	0.08
East	0.11	0.06
West Southwest	0.09	0.04
East Southeast	0.10	0.05
Southwest	0.05	-0.01
Southeast	0.04	-0.01

Summary

Payments from GRIP-NoHR and GRIP-HR are likely to be widespread in Illinois for 2004. More counties will likely receive soybean payments than corn payments. More counties in the northern and central portions of the state will receive payments than in southern Illinois.

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