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Premium Costs of Supplemental Coverage Option Compared to Enterprise Unit Premium

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February 3, 2015

***farmdoc daily* (5):19**

Recommended citation format: Schnitkey, G., and N. Paulson. "Premium Costs of Supplemental Coverage Option Compared to Enterprise Unit Premium." *farmdoc daily* (5):19, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 3, 2015.

Permalink http://farmdocdaily.illinois.edu/2015/02/premium-costs-of-sco-vs-enterprise-unit-premium.html

Supplemental Coverage Option (SCO) is a new crop insurance product available this year when producers do not choose to receive 2014 Farm Bill payments through Agricultural Risk Coverage (ARC). We compare Revenue Protection (RP) farmer-paid premiums to RP+SCO premiums. In northern and central Illinois, RP+SCO premiums often exceed RP premiums at the 80% coverage level. Sometimes, RP+SCO premiums are lower than 80% RP premiums in southern Illinois. Overall, use of SCO as a means to reduce farmer-paid premium costs is questionable, particularly in northern and central Illinois. Furthermore, additional protection offered by SCO is limited when 85% coverage level products are available in the COMBO product. These factors suggest that commodity program decisions between ARC and Price Loss Coverage (PLC) should be based on the merits of those commodity programs rather than on the availability of SCO.

SCO Description

SCO is a crop insurance product that provides protection from an 86% coverage level down to the coverage level of the underlying COMBO product. In most cases, farmers use the Revenue Protection (RP) plan associated with the COMBO product. If a farmer purchases RP at an 80% level, SCO provides protection in a band from 86% down to 80%. Unlike the underlying RP product, losses within the 86% to 80% band will not be triggered by farm losses but will be triggered by county revenue losses. In essence, SCO offers county level coverage above the underlying COMBO product. More discussion of SCO is available at *farmdoc daily* April 24, 2014.

SCO Premium Costs

Premium costs for RP and SCO are illustrated for corn in Logan County, Illinois in Table 1 (see the footnote for parameters used to generate premium). These quotes were generated using the *2015 Crop Insurance Decision Tool*, a Microsoft Excel spreadsheet available for download in the FAST section of *farmdoc*. RP premiums range from $.69 per acre for a 50% coverage level up to an $18.96 per acre premium for an 85% coverage level.

Table 1. Revenue Protection (RP) and Supplemental Coverage Option (SCO) Premiums for Corn in Logan County, Illinois.

Coverage Level	Revenue Protection (RP)	Supplemental Coverage Option (SCO)	RP + SCO
50%	0.69	19.82	20.51
55%	1.02	18.84	19.86
60%	1.37	17.29	18.66
65%	1.87	15.27	17.14
70%	2.73	13.18	15.91
75%	4.98	10.80	15.78
80%	9.60	7.05	16.65
85%	18.96	1.40	20.36

Premiums were generated with the *2015 Crop insurnace Decision Tool* using a 100 acre enterprise unit, a $4.62 projected price, .19 volatility, 173 Actual Proejction History Yield, and a 184 bushel Trend-Adusted APH yield.

SCO premium costs range from $19.82 per acre at the 50% coverage level down to $1.40 for the 85% coverage level. SCO premiums increase with lower coverage levels because the SCO band increases. At the 50% coverage level, SCO provides coverage from 86% to 50%. At an 85% coverage level, SCO is providing coverage from 86% to 85%. The larger the SCO band the greater the potential losses under SCO and the higher the premium.

The final column of Table 1 shows RP+SCO premium, representing the premium for SCO alternatives. A farmer can purchase a 50% RP policy for $.69 per acre (see Table 1). At a 50% RP coverage level, SCO provides protection from 86% to 50% and has a cost of $19.82 per acre. The total cost of RP+SCO then is $20.51 per acre.

All the SCO alternatives will have an 86% coverage level. What will vary is the composition of farm-level and county-level coverage. A 50% RP purchase with SCO results in farm coverage from 50% downward and county-level coverage from 86% to 50%. An 85% RP purchase with SCO results in farm-level coverage from 85% downward and county-level coverage from 86% to 85%. County coverage introduces the possibility of the farm having a loss and the county not having a loss and vice versa. For this reason, higher levels of RP coverage level are preferred for matching insurance payments to losses.

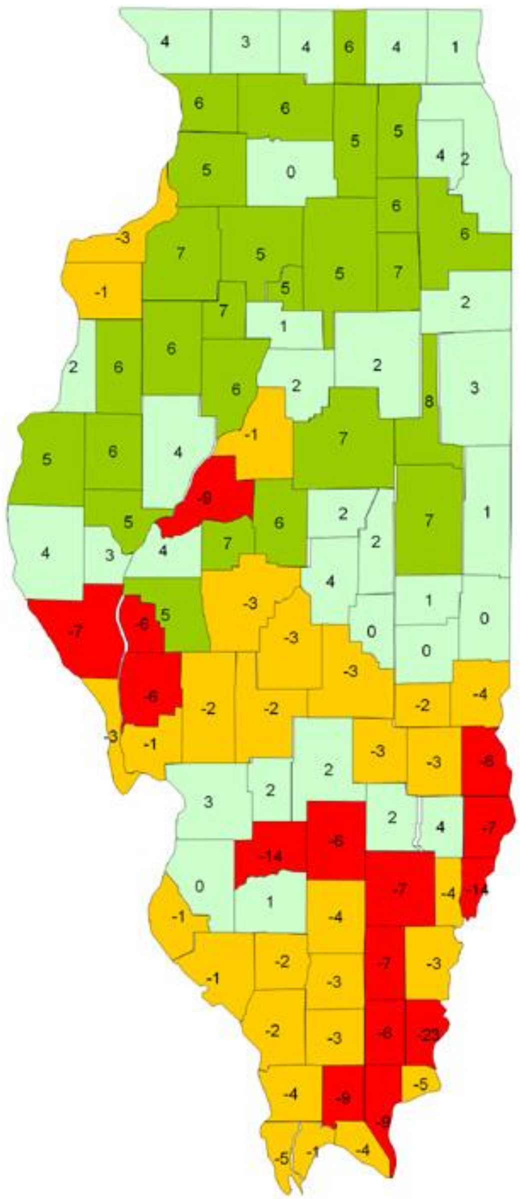
In Table 1, the lowest cost RP+SCO policy is $15.78 per acre at the 75% coverage level. There is not a cost incentive to use SCO at lower coverage levels. Furthermore, the possibility of the farm having a loss and not receiving an SCO payment increases with lower coverage levels further reduces any incentive to lower coverage level below 75%.

Also note that 75% RP+SCO premium alternative has a higher cost than the RP policy at an 80% coverage level. The 75% RP+SCO has $15.78 premium per acre versus a $9.60 per acre premium for 85% RP.

SCO for Corn in Other Counties

Figure 1 shows the minimum RP+SCO premium minus the 80% premium for all counties in Illinois. Premiums were generated for example farms whose yields were based on average county yields.

Figure 1. Minimum RP+SCO Premium Minus 80% RP Premium, Corn, Enterprise Units.



As can be seen in Figure 1, most counties in northern and central Illinois have RP+SCO premium higher than the 80% RP policy. The reverse is true in southern Illinois. The widest difference in southern Illinois occurs in Gallatin County where the RP+SCO premium has a $23 per acre lower cost than 80% RP.

Many of the counties in southern Illinois have risks that are idiosyncratic to farms. These idiosyncratic risks include being located near rivers that flood and farmland with low water-holding capacity resulting in very low yields in low rainfall years. Because of this, some farms in a county will have low yields while other do not, resulting in high RP premiums.

SCO and Soybeans

Figure 2 shows premium differences for soybeans. Northern and central Illinois have minimum RP+SCO premiums above 80% RP. Southern Illinois counties have the opposite.

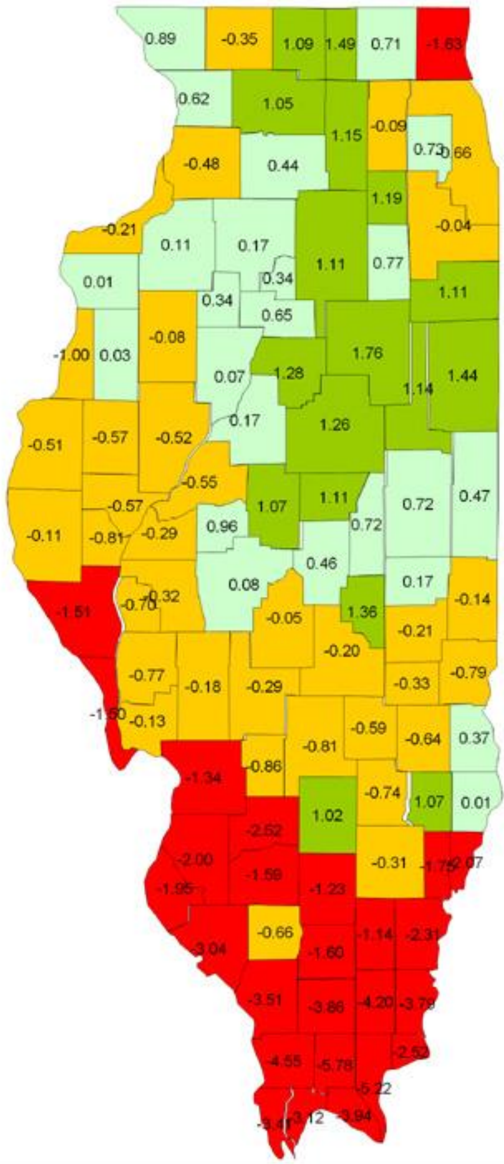
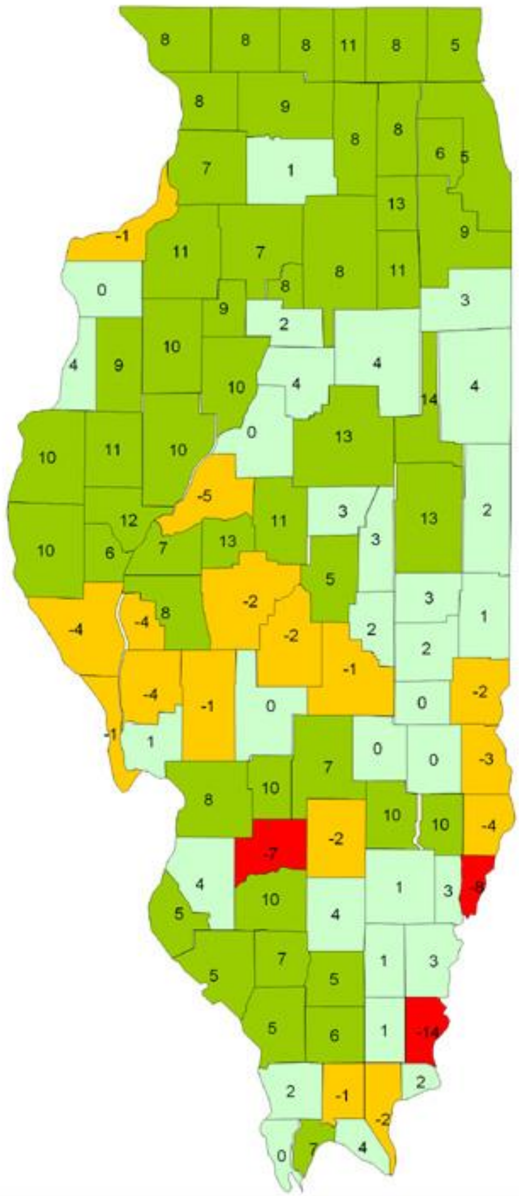


Figure 2. Minimum RP+SCO Premium Minus 80% RP Premium, Soybeans, Enterprise Units.

Basic and Optional Units

Basic and optional units will have higher RP premiums than enterprise units. At the same time, SCO premium will stay the same as those for enterprise units. Figures 3 and 4 show premium differences for optional units rather than enterprise units.

Figure 3. Minimum RP+SCO Premium Minus 80% RP Premium, Corn, Optional Units.



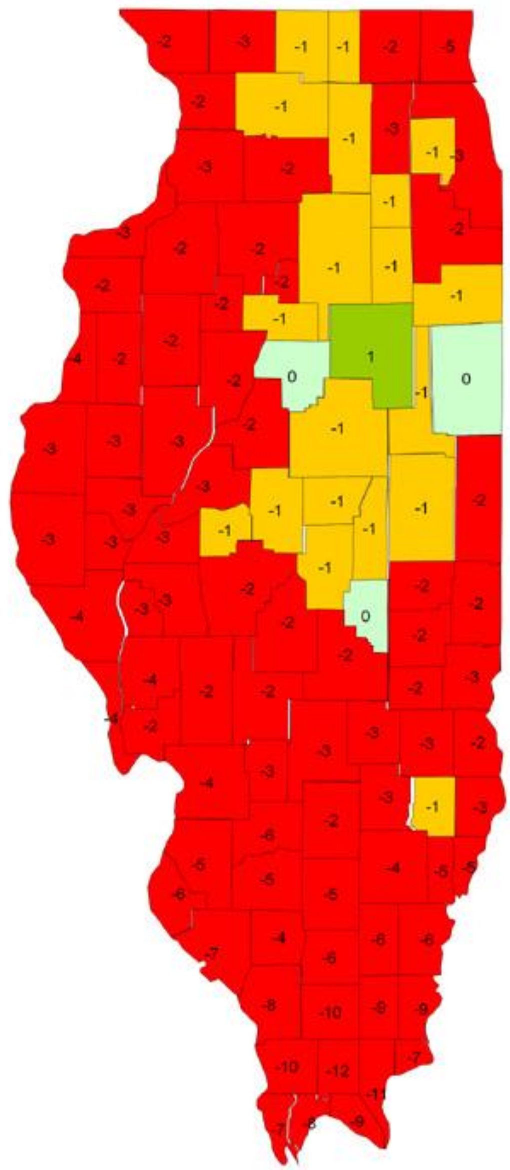


Figure 4. Minimum RP+SCO Premium Minus 80% RP Premium, Soybeans, Optional Units.

Summary

In northern and central Illinois, RP+SCO premiums will be above those for 80% RP for corn. This factor significantly reduces the incentives to use SCO. Furthermore, use of SCO will not greatly enhance risk protection as the introduction of SCO introduces a small band of coverage not available under RP. SCO introduces a band from 86% to 85%, with the caveat that this is county-level protection, not farm-level. In these regions, commodity program decisions likely should focus on relative differences between ARC and PLC, as those differences likely will be larger than gains from SCO.

There may be more incentives to use SCO to southern Illinois, as RP+SCO premiums will cost less than an 80% RP policy. However, southern Illinois has idiosyncratic risks where some farmers will face low yields in a county while others do not. This introduces the problem of the farm having a loss and the county not having a loss. On the other hand, if low coverage levels are in use, SCO will provide additional risk protection, particularly with that related to price losses.

References

Paulson, N., and J. Coppess. "Further Discussion of the Supplemental Coverage Option." *farmdoc daily* (4):75, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, April 24, 2014.