

5 (

Agricultural, Consumer & Environmental Sciences | University of Illinois Urbana-Champaign

A New Area-Based Crop Insurance Product: MCO (Margin Coverage Option)

Henrique Monaco, Gary Schnitkey, and Nick Paulson

Department of Agricultural and Consumer Economics
University of Illinois

Carl Zulauf

Department of Agricultural, Environmental and Development Economics
Ohio State University

September 16, 2025

farmdoc daily (15): 169

Weekly Farm Economics

Recommended citation format: Monaco, H., G. Schnitkey, N. Paulson, and C. Zulauf. "A New Area-Based Crop Insurance Product: MCO (Margin Coverage Option)." *farmdoc daily* (15): 169, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, September 16, 2025.

Permalink: https://farmdocdaily.illinois.edu/2025/09/a-new-area-based-crop-insurance-product-mco-margin-coverage-option.html

For the 2026 crop year, a new crop insurance endorsement called Margin Coverage Option (MCO) is available. MCO is an area-based product protecting against operating margin declines driven by falling output prices, rising input costs, or both. In Illinois, corn and soybeans are eligible crops to purchase MCO. The sales closing date for MCO coverage for the 2026 crop year is September 30th 2025. This article provides an overview of this new policy and discusses considerations in assessing its purchase.

Program Description

The Margin Coverage Option (MCO) offers coverage of expected operating margin based on futures prices, county yields, and the dollar cost of predetermined input quantities. County yields are the same as used for other county products, such as the Supplemental Coverage Option (SCO) or Enhanced Coverage Option (ECO), see *farmdoc daily* November 24, 2020, February 27, 2014, and April 24, 2014. Futures prices are used for both crop and input prices.

MCO's coverage band is from 90% or 95% down to 86% and it must be purchased as an endorsement to an underlying policy that provides individual farm coverage (Yield Protection (YP), Revenue Protection (RP), Revenue Protection with Harvest Price Exclusion (RP-HPE) or Actual Production History (APH)). The eligibility for MCO is independent of Title I programs, so it can be used to insure acres enrolled in Price Loss Coverage (PLC) or Agriculture Risk Coverage (ARC). MCO can be paired with SCO, but not with ECO. From an insurance product perspective, MCO and ECO are alternatives.

We request all readers, electronic media and others follow our citation guidelines when re-posting articles from farmdoc daily. Guidelines are available on our citation policy page. The farmdoc daily website falls under University of Illinois copyright and intellectual property rights. For a detailed statement, please see the University of Illinois Copyright Information and Policies.

For crop year 2026, the sales ending period for purchase in Illinois is September 30th of 2025. Therefore, farmers need to make this decision prior to choosing their underlying policy, though final MCO premiums and payments will depend on underlying policy choices that will not be made until March of 2026.

Projected Margin Calculation

For corn and soybeans, MCO yields are area-based – the same as those used for SCO and ECO. For costs, MCO uses futures prices for diesel, urea (for corn, but not for soybeans), DAP (diammonium phosphate), and natural gas (for irrigated crops only). Potash is included in the cost calculations, but its price is based on an index of natural gas, urea and DAP prices. Quantities of inputs are calculated using area expected yields (same as SCO/ECO yields) (see Table 1). Since urea is not included in soybean MCO, the weights for other soybean inputs are higher.

Input	Corn	Soybeans		
	Non-Irrigated	Non-Irrigated		
Urea (lbs/ac)	$(ExpY \times .53)/.46$			
DAP (lbs/ac)	$(ExpY \times .35)/.46$	$(ExpY \times .73)/.46$		
Potash (lbs/ac)	$(ExpY \times .25)/.6$	$(ExpY \times 1.2)/.6$		
Diesel (gal/ac)	(ExpY ×.04)+2.5	(ExpY × .10)+2.5		

irrigated crops. Corn: (ExpY \times .04) and Soybeans: (ExpY \times .14)

farmdocDAILY

Similar to existing federal products, projected prices and margin are set during a projected price discovery period while harvest, or final, prices and margin are set during a later final price discovery period. The projected price discovery period for MCO is August 15th to September 14th. The final price discovery period for MCO differs by input and crop. For inputs, the final price discovery period is April 1st to April 30th. For crops the final price discovery period is October 1 to October 31, the same as for other insurance products. The futures contracts used for corn and soybeans are the same as for other products - December for corn and November for soybeans. All inputs use May futures contract prices (or previous if May futures are not trading). Table 2 summarizes the contract months and price discovery periods. Table values are estimates. RMA has not vet released official projected prices by the time of this publication.

<u>Price</u> <u>Unit</u>		Contract Month Projected Prior		ected Price	<u>Harvest (final) Price</u> <u>Discovery Period</u>		
Corn	\$/bu	Dec-26	\$	4.56	10/1 - 10/31		
Soybean	\$/bu	Nov-26	\$	10.73	10/1 - 10/31		
Urea	\$/ton	May-26	\$	406.62	4/1 - 4/30		
DAP	\$/ton	May-26	\$	686.88	4/1 - 4/30		
Natural Gas	\$/MMBtu	May-26	\$	3.47	4/1 - 4/30		
Diesel	\$/gallon	May-26	\$	2.18	4/1 - 4/30		
Potash*	\$/ton	N/A	\$	588.05	4/1 - 4/30		

As an example, we show the expected margin calculation for non-irrigated corn and soybean for McLean county. Urea, DAP and Potash prices are divided by 2,000 to convert from tons to lbs.

		<u>Corn</u>						<u>Soybean</u>			
	Qty	Price		Q	ty x Price	Qty		Price		Qt	x Price
Yield	233.2	\$	4.56	\$	1,063.39	70.1	\$		10.73	\$	752.17
	1	Expected Reven	nue	\$	1,063.39		Expecte	ed Revenue		\$	752.17
Urea (lbs/ac)	269	\$	0.20	\$	54.63					\$	-
DAP (lbs/ac)	177	\$	0.34	\$	60.94	111	\$		0.34	\$	38.21
Diesel (gal/ac)	11.8	\$	2.18	\$	25.79	9.5	\$		2.18	\$	20.73
Potash (lbs/ac)	97	\$	0.29	\$	28.57	140	\$		0.29	\$	41.22
	I	Expected Costs		\$	169.92		Expecte	ed Costs		\$	100.16
		Expected Margin	n	\$	893.47		Expecte	ed Margin		\$	652.01

Payment Calculation

MCO payments are dependent on the underlying policy. Several steps go into the indemnity calculation. As an example, consider two scenarios for non-irrigated corn in McLean county, IL. We will compare MCO-95 (95% to 86% coverage) in addition to Revenue Protection (RP).

Calculations are shown in tables 4, and column "calculation" illustrates the math behind each step. Expected crop value and area revenue are different depending on the underlying policy in their treatment of prices. MCO protection represents the maximum payout that a farmer can get, which is a function of the MCO coverage selected and protection factor (ranging from 50% to 100%). The trigger margin is the value that the harvest area margin needs to achieve, to trigger a payment.

For both scenarios, expected yields are 233.2 bu/ac and approved yield is 180 bushels per acre for both. Projected crop prices are \$4.56/bu and projected costs are the same as in table 3.

In scenario A, harvest prices ended up to be 10% lower than projected, yields are the same as expected and input prices were 5% higher (for simplicity, we are increasing all inputs by 5%), resulting in a harvest, or final, cost of \$178.13/ac. The decrease in prices combined with the increase in input prices were sufficient to lower harvest margins below the trigger level. Based on this difference (Area Margin Loss) divided by the Coverage Value, a payment factor is calculated and applied to the MCO protection, resulting in a \$47.38/ac payment.

For scenario B, harvest prices are 5% higher than projected, yields are 10% lower and input prices are 15% higher than projected. With the increase in input prices, harvest cost was \$194.54/ac. Although expected area revenue was higher than scenario A, harvest area margin was also lower than trigger due to lower yields and higher costs, resulting in a payment of \$62.10/ac.

Tables 4. Payment Calculation for Two So	enarios, Non-Irrigated C	orn	in McLean Cοι	ınty	, IL		
			MCO-95 + RP				
_			Scenario A		Scenario B		
Calculation	Underlying Policy		RP		RP		
(a)	Approved Yield		180		180		
(b)	Expected Yield		233.2		233.2		
(c)	Projected Price	\$	4.56	\$	4.56		
(d)	Actual Yield		233.2		209.88		
(e)	Harvest Price	\$	4.10	\$	4.79		
(f) = (a) * max((c),(e)) for RP or (a) * (c) for RP-HPE or YP	Expected Crop Value	\$	820.80	\$	861.84		
(g) = (f) * (MCO Coverage -0.86) * MCO Prot. Factor	MCO Protection	\$	73.87	\$	77.57		
(h) = (b) * max((c),(e)) for RP or (b) * (c) for RP-HPE or YP	Expected Area Revenue	\$	1,063.39	\$	1,116.56		
(i) = (h) * (MCO Coverage -0.86)	Coverage Value	\$	95.71	\$	100.49		
(j)	Expected Costs	\$	169.92	\$	169.92		
(k) = (h) - (j)	Expected Area Margin	\$	893.47	\$	946.64		
(I) = (k) - (h) * (1-MCO Coverage)	Trigger Margin	\$	840.30	\$	890.81		
(m) = (d) * (e)	Harvest Area Revenue	\$	957.05	\$	1,004.91		
(o) _	Harvest Costs	\$	178.13	\$	194.54		
(n) = (o) - (m)	Harvest Area Margin	\$	778.93	\$	810.36		
(p) = max(0, (l) - (n))	Area Margin Loss	\$	61.38	\$	80.45		
$(q) = min(1, (p) / (i))_{}$	Payment Factor		0.6413		0.8006		
(r) = (g) * (q)	MCO indemnity	\$	47.38	\$	62.10		
					farmdocDAILY		

Discussion

MCO is another county-level product that farmers can use to supplement the coverage provided by their COMBO product. Like ECO, MCO protects either 90% or 95% down to 86%. In a way, MCO substitutes for ECO. Farmers who have considered ECO in the past may wish to consider MCO. The attractiveness of all county-level products will increase in 2026, as the premium subsidy level has been increased to 80%, reducing the costs to farmers relative to previous years.

MCO will allow farmers to set the projected price for either corn or soybeans during the August 15 to September 14 period. This is significantly earlier than the month of February, which is used to calculate the projected price for Revenue Protection and other COMBO products, SCO, and ECO. Thus, relative price changes from MCO discovery period to COMBO/SCO/ECO discovery period will have a large impact on outcome. Some farmers may find that setting this price earlier has advantages. An important caveat to setting the price earlier is that it only applies to the margin portion offered by MCO. It does not apply to the underlying COMBO product. As a result, farmers will not have protection on most of their output price exposure between August 15 to September 14 and February.

MCO is a margin product, but it does not provide protection against all costs, only fertilizer and diesel fuel. Costs not include drying costs or application of additional pesticides. Moreover, the index calculations for MCO will not match fertilizer and fuel costs of many farmers. In short, considerable cash-futures basis risk exists, which reduce the insurance protection of the product. Basis risks include the following:

- 1. Urea is not used as a nitrogen fertilizer on many fields in Illinois. Urea prices do have a correlation with the more commonly used anhydrous ammonia and nitrogen solutions.
- Many Illinois farmers apply fertilizers in the fall. DAP and potash are often applied in the fall.
 Many farmers also apply nitrogen in the fall in the form of anhydrous ammonia. As a result, many
 farmers have purchased fertilizers well before the April period, when the final prices for those
 inputs for MCO are determined.
- 3. Diesel fuel is not necessarily purchased in April, and April is well before the harvest period when much fuel is used.
- 4. The quantities specified in the MCO contract may not match those of an individual farmer,

Prices used in calculating fertilizer costs can be problematic as well. In particular, the urea price is based on May contracts. As of September 15th, the May contract has no traded volume, thus, the March contract is used. This futures contract has limited trading – about 105 contracts so far. Those limited trades raise concerns about the representativeness of the changes in its prices.

Costs are also a smaller share of the margin than is crop revenue. Thus, a 1% change in input prices has much less of an impact on the MCO payments than does a 1% change in crop revenue and by extension a 1% change in crop prices and yields.

The impact and effectiveness of the cost side of MCO does raise questions. While some farmers may find the incorporation of costs into their insurance choices attractive, MCO payments will depend on relative changes and correlation between crop prices, crop yields, and costs, not just crop prices and yields.

One important consideration is eligibility constraints. MCO eligibility is not tied to farm program choice (ARC/PLC). It can be paired with SCO (for CY 2026). It cannot be paired with ECO. Farmers considering ECO must compare expected benefits with MCO before purchasing.

Finally, although both are area-based, MCO differs from MP in a few things. First, MCO is an endorsement policy that requires an underlying policy, whereas MP can be purchased on its own. Second, MCO covers from 90% or 95% down to 86%, and MP policies range from 70%-95%. Subsidy rate is 80% for MCO compared with 44%-59% for MP depending on coverage level. The input quantities are similar but not the same. MCO but not MP includes natural gas for irrigated acres, and potash is an index based on other prices. For MP, there are also fixed costs and interest rates on the calculation. Protection factors also differ, ranging from 80%-120% for MP vs. 50%-100% for MCO.

Summary

This article introduced the Margin Coverage Option (MCO) endorsement. As the sales ending period for corn and soybean in Illinois is getting closer, many farmers are considering adding it to their crop insurance mix. Rates and premiums should be released soon. Next week, we will evaluate these and discuss in more details trade-offs when considering the use of MCO by Illinois grain farmers.

References

Risk Management Agency, U.S. Department of Agriculture. (n.d.). *Margin Coverage Option*. https://www.rma.usda.gov/policy-procedure/general-policies/margin-coverage-option

Margin Coverage Option. (n.d.). *Margin Coverage Option – Premium Estimator and Price Discovery Tool.* Retrieved from https://www.margincoverageoption.com/

Paulson, N., G. Schnitkey, B. Zwilling and C. Zulauf. "2026 Illinois Crop Budgets." *farmdoc daily* (15):150, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 19, 2025.

Paulson, N. and J. Coppess. "2014 Farm Bill: The Supplemental Coverage Option." *farmdoc daily* (4):37, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 27, 2014.

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.

Paulson, N., G. Schnitkey, K. Swanson and C. Zulauf. "The New Enhanced Coverage Option (ECO) Crop Insurance Program." *farmdoc daily* (10):203, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, November 24, 2020.

Schnitkey, G., B. Sherrick, C. Zulauf, N. Paulson and J. Baltz. "Performance of SCO and ECO in the Midwest." *farmdoc daily* (14):136, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 23, 2024.

6 farmdoc daily September 16, 2025