Margin Protection Insurance: Introduction and Considerations for the 2023 Crop Year

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September 6, 2022

What is Margin Protection Insurance?

Margin Protection Insurance (MP) is an area-based insurance product that has been available to soybean and corn producers in several Kansas counties since 2018. MP makes payments when the actual or harvest-time county-level profit margin drops below the insured margin or "trigger margin". Trigger margins are based on county-level yields, the higher of Aug/Sept (2022)[1] prices or harvest prices (harvest price option), futures prices for select inputs, and a producer-selected deductible. The deadline for MP is September 30 for the 2023 crop year.

Who uses Margin Protection Insurance?

Since 2018, MP policies have been purchased every year but on a small number of acres. Less than 10,000 acres of corn and 5,000 acres of soybeans were insured using MP in 2022 in Kansas.

Does it pay?

MP paid out indemnities for some Kansas policies at the 90-95% coverage level from 2018-20. These indemnities were largely triggered by yield losses. Due to a premium subsidy of 44-59%, over time, a producer that consistently uses MP is likely to receive more in indemnities than they pay in premiums. However, it is not uncommon to experience a few years in a row when indemnities are not paid out, due to a combination of high crop prices and yields.

How is the margin calculated?

MP is not calculated based on farm level data. It can be used as standalone insurance coverage but using it with an underlying Revenue Protection (RP) is the most common practice. Below is brief outline of how the trigger margin is calculated for a MP policy.

1. Expected revenue = Expected County Yield X National Price (August-September 2022 price discovery). This calculation is the similar to RP but with county yields and earlier price discovery.
2. Expected costs = ("Costs Subject to Price Change" + "Costs Not Subject to Price Change") + Interest costs. Input quantities per acre are calculated using expected county yields and a national formula, as well as national fixed per-acre amount of "costs not subject to price change". Input prices are based on futures markets (national prices), with projected price discovery in August-September (2022) and final price discovery in April 2023. Final price discovery for interest rates is in October 2023.
3. Expected Margin = Expected revenue – Expected Costs

[1] Years/timing of price discovery in this article correspond to crop year 2023.

4. Trigger Margin = Expected Margin – a producer-selected deductible. Any actual/harvest margin below the trigger margin will receive an indemnity. The deductible is based on a producer selected coverage level of 70-95%.

What input costs are covered?

While an estimate of total input costs is included in calculation of the expected margin, only those that are "subject to price change" are relevant for whether an indemnity is triggered. These include Urea (corn only), DAP, Diesel, and short-term interest rates.[2] These prices *only* account for changes to retail price that are caused by underlying changes to the cost of raw materials that are trade in futures markets.

What is important to know about Margin Protection Insurance?

1. Price discovery is halfway completed for MP; final margins and premiums will not be available until after September 15. Given current commodities prices, in most Kansas counties **the 2023 Margin Protection guarantee (or expected margin) will likely be the *highest* it has been since 2018 for corn and soybeans.** For example, based on current 2023 harvest corn futures over $6.00 per bushel, the estimated expected margin for non-irrigated corn for the 2023 crop year for Nemaha county is $489.12 per acre, compared to $384 per acre for the 2022 crop year. Prices for RP and high coverage options (SCO, ECO) have a price discovery period of February (2023) for the corresponding (2023) crop year. Producers that want to buy a crop insurance policy that uses ***today's*** 2023 harvest prices instead of the February 2023 price may want to consider MP.
2. In most years MP indemnities (if paid out) will be triggered by yield or price declines, although changing input prices may play a role in some years. While input prices and timing used in MP calculation may not match individual farms' cost management strategies, this may reflect general inflation in farm input costs.
3. Margin Protection is typically used as a high coverage policy – coverage that provides additional protection beyond the underlying RP policy. Having the underlying RP policy provides protection against farm-level yield losses; MP coverage is based on county-level yields. This means that MP costs more and pays outs more often, because it insures a large share of expected profits above those commonly protected by RP coverage (i.e., above commonly selected 70%-75% RP coverage levels). When MP is used with RP, there is a premium discount for the RP policy, although the exact premium discount will not be known until closer the RP/spring crop insurance deadline of March 15. Otherwise, the underlying RP policy will not be different than a policy purchased without MP. If both a RP and MP policy are triggered, the RP policy will pay out first. If the RP indemnity is smaller than the MP indemnity, MP will pay out the difference between the MP indemnity and the RP indemnity. If the RP indemnity is larger than the MP indemnity, MP will not pay out. This aspect of MP merits careful analysis and discussion with a crop insurance agent.

This brief provides a basic introduction to Margin Protection. For more information, see the resources below or contact a local crop insurance agent.

[2] Potash is included in costs "subject to price change", but uses a fixed price set during August-September 2022 price discovery.

Resources

https://www.marginprotection.com/
https://agmanager.info/news/do-you-need-margin-protection-insurance
https://agmanager.info/events/risk-and-profit-conference/previous-conference-proceedings/2022-risk-and-profit-conference-18
https://agmanager.info/events/risk-and-profit-conference/previous-conference-proceedings/2017-risk-and-profit-conference/14
https://agmanager.info/news/margin-protection-insurance
https://agmanager.info/crop-insurance/crop-insurance-papers-and-information/margin-protection-crop-insurance-coverage-comes
https://agmanager.info/crop-insurance/crop-insurance-papers-and-information/margin-protection-crop-insurance-premiums-and
https://farmdocdaily.illinois.edu/2017/09/combining-margin-and-revenue-protection.html
https://blogs.extension.iastate.edu/agdm/2022/08/11/margin-protection-crop-insurance-faq/
https://www.rma.usda.gov/en/Policy-and-Procedure/Insurance-Plans/Margin-Protection-for-Corn-Rice-Soybeans-and-Wheat