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Review of ARC-IC Farm Program Decision

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Farmers who had low yields or prevent plant acres in 2019 may have enrolled in Agricultural Risk Coverage at the Individual level (ARC-IC) on select farms for the 2019 and 2020 program years. Farm program payments for the 2019 crop year began after October 1, 2020. Although payments for other program options – ARC at the County level (ARC-CO) and Price Loss Coverage (PLC) – were issued quickly, payments for ARC-IC are still being processed. In this article we provide information on calculating 2019 ARC-IC payments for farms enrolled in ARC-IC and examples to show how actual payments may vary from estimates made prior to sign-up.

Background

Commodity title selections for 2019 and 2020 had to be completed by March 15, 2020, with the same commodity title choice applying to both years. Farmers had the unique advantage of knowing 2019 acreage and yields prior to the sign-up deadline, an advantage that will not exist in future years. Because ARC-IC only pays on 65% of base acres while ARC-CO and PLC pay on 85% of base acres, a farmer would not normally select ARC-IC except under very specific situations. However, excessive rainfall and flooding in 2019 resulted in record prevent plant acres and lower than normal yields, situations in which ARC-IC could be an optimal selection (*farmdoc daily*, February 11, 2020), making the individual farm-based ARC-IC coverage a more attractive option than it would be in a normal situation for some farms.

At the time of sign-up, farmers could use 2019 NASS county yields as a reference for what FSA yields may be (*farmdoc daily*, October 20, 2020). The expected marketing year average (MYA) price at the time was an estimate based on actual prices for the first half of the marketing year and predications for price for the other half of the marketing year. MYA prices were not expected to be low enough to trigger PLC payments on corn or soybean base acres. Based on both county yields and MYA prices, payments from ARC-CO were possible for soybeans and not likely for corn, except in select counties where yields were

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very low. Across the United States, 75.5% of corn base acres were enrolled in PLC and 79.7% of soybean base acres were enrolled in ARC-CO (*farmdoc daily* April 30, 2020). Corn and soybeans were the only two commodities which more than 2% of base acres were enrolled in ARC-IC, with 5.9% of corn base acres and 6.2% of soybean base acres. This is due to a combination of record prevent plant acreage for these crops and the fact that base acreage on a Midwest farm is commonly split between the two commodities.

Although the program selection was for both the 2019 and 2020 program years, Midwestern farmers likely made selections based on which option would result in the largest payments for 2019. This is because at the time of sign-up 2019 payments could be estimated with some degree of certainty and the outlook did not suggest large probabilities of 2020 program year payments for any program option. Farms where ARC-IC had a clear advantage for 2019 were likely enrolled in ARC-IC expecting no payment for 2020. If farms enrolled in ARC-IC experienced low yields in 2020 and final 2020 MYA prices are low enough, ARC-IC payments for 2020 could potentially be triggered in certain situations though it would take a precise set of circumstances.

Calculating ARC-IC Payments

The Farm Service Agency (FSA) began issuing farm program payments for the 2019 program year after October 1, 2020. Although payments for ARC-CO and PLC were quickly issued in early October, payments for ARC-IC are being processed separately, and those payments are currently being processed on an individual basis. Timing will vary by county. Farmers who enrolled farms in ARC-IC based on estimates earlier in the year can calculate actual 2019 payments using the 2018 Farm Bill What If Tool found in the *farmdoc* Farm Bill ToolBox. Knowing what the payment will be can aid farmers in cash flow planning as year-end approaches.

For 2019, ARC-IC makes payments when 2019 farm revenue is below a farm guarantee (see *farmdoc daily*, February 4, 2020, January 7, 2020, and October 29, 2019 for more information on ARC-IC). The farm guarantee was known prior to the farm program selection deadline because it is based on farm yields and prices from 2013 through 2017. MYA prices for these years are already entered into the Farm Bill What If Tool. Actual FSA farm yields as turned in to FSA on form CCC-863 when enrolling in the ARC-IC program can be entered into the tool for each crop on each farm enrolled in the program.

Farm revenue equals 2019 farm yields times 2019 market year average (MYA) prices. Again, farm yields are the yield as reported to FSA for each crop on each individual FSA farm. This was also turned in to FSA on form CCC-863. Actual farm yields for 2019 were known at the time of sign-up and could be used in estimating payments. Only 2019 MYA prices were unknown at the time. In a February 11, 2020 *farmdoc daily* article presenting strategies for ARC-IC, 2019 MYA prices were expected to be $3.85 per bushel for corn and $8.75 per bushel for soybeans. As is now known, prices were negatively influenced by the coronavirus pandemic and control measures in the last half of the marketing year and actual MYA prices were lower than projected in February. The MYA prices for the 2019 marketing year were finalized and released in September at $3.56 per bushel for corn and $8.57 per bushel for soybeans. Farmers should now use these actual MYA prices to calculate ARC-IC payments for 2019.

ARC-IC Examples

The decline in MYA prices will widen the difference between actual 2019 revenue and the benchmark revenue. In some situations, this will result in an increase in the payment amount, but not in situations where the maximum payments had already been reached. ARC-IC payments are limited to a maximum payment of 10% of benchmark revenue (see *farmdoc daily*, February 4, 2020).

Consider a farm with an ARC-IC benchmark revenue of $810.02/acre. The farm is based in Sangamon County and had 2013 to 2017 corn yields ranging from 226 to 250 bushels per acre in years planted and soybean yields ranging from 72 to 78 bushels per acre in years planted. In 2019, the 100 planted acres were divided evenly between corn and soybeans and both crops produced considerably lower than normal yields at 180 bushels per acre for corn and 55 bushels per acre for soybeans. With the February MYA price estimates the farm revenue was $587.13 per base acre, falling $109.49 per base acre lower than the benchmark guarantee. The payment was limited to $52.65 per base acre due to the 10% payment limitation and ARC-IC only paying on 65% of base acres ($810.02*10%*65%). When MYA price

is lowered to the actual 2019 MYA prices, the farm revenue drops to $556.08 per acre, but the payment rate remains at $52.65 because the farm was already receiving the maximum payment.

2019 ARC-IC Payment (Payment Assumes One FSA Farm Enrolled in ARC)

	2019 Acres		2019				
Crop	Planted	Prevent Plant	Farm Yield	MYA Price	Loan Rate	Revenue[1]	Benchmark Revenue
	acres	acres					
Corn	50		180	3.85	2.20	693.00	912.89
Soybeans	50		55	8.75	6.20	481.25	707.14
Total	100	0					

Benchmark Revenue[2]	810.02	($ per base acre)
Guarantee[3]	696.62	($ per base acre)
Farm Revenue[4]	587.13	($ per base acre)
ARC-IC Payment[5]	**52.65**	($ per base acre)

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2019 ARC-IC Payment (Payment Assumes One FSA Farm Enrolled in ARC)

	2019 Acres		2019				
Crop	Planted	Prevent Plant	Farm Yield	MYA Price	Loan Rate	Revenue[1]	Benchmark Revenue
	acres	acres					
Corn	50		180	3.56	2.20	640.80	912.89
Soybeans	50		55	8.57	6.20	471.35	707.14
Total	100	0					

Benchmark Revenue[2]	810.02	($ per base acre)
Guarantee[3]	696.62	($ per base acre)
Farm Revenue[4]	556.08	($ per base acre)
ARC-IC Payment[5]	**52.65**	($ per base acre)

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Now consider a situation in which 2019 yields on this farm were not quite as low, at 200 bushels per acre for corn and 65 bushels per acre for soybeans. With these yields farm revenue is $669.38, falling $17.71 below the guarantee and resulting in a per base acre payment of the same amount. When the MYA estimates are update to actual MYA prices, the farm revenue drops to $634.53. This results in a $40.36 payment per base acre. In this situation, the decline to the actual MYA prices does improve payment rate because had not already met the maximum threshold.

2019 ARC-IC Payment (Payment Assumes One FSA Farm Enrolled in ARC)

Crop	2019 Acres Planted	2019 Acres Prevent Plant	2019 Farm Yield	2019 MYA Price	Loan Rate	Revenue[1]	Benchmark Revenue
	acres	acres					
Corn	50		200	3.85	2.20	770.00	912.89
Soybeans	50		65	8.75	6.20	568.75	707.14
Total	100	0					

Benchmark Revenue[2]	810.02	($ per base acre)
Guarantee[3]	696.62	($ per base acre)
Farm Revenue[4]	669.38	($ per base acre)
ARC-IC Payment[5]	**17.71**	($ per base acre)

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2019 ARC-IC Payment (Payment Assumes One FSA Farm Enrolled in ARC)

Crop	2019 Acres Planted	2019 Acres Prevent Plant	2019 Farm Yield	2019 MYA Price	Loan Rate	Revenue[1]	Benchmark Revenue
	acres	acres					
Corn	50		200	3.56	2.20	712.00	912.89
Soybeans	50		65	8.57	6.20	557.05	707.14
Total	100	0					

Benchmark Revenue[2]	810.02	($ per base acre)
Guarantee[3]	696.62	($ per base acre)
Farm Revenue[4]	634.53	($ per base acre)
ARC-IC Payment[5]	**40.36**	($ per base acre)

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In situations where the maximum payment would have been achieved with February MYA price estimates on a single FSA farm, strategies for enrolling multiple FSA farms may have been used to spread some of the excess payment over additional base acres (*farmdoc daily*, February 11, 2020). Farmers utilizing this method likely selected the optimal combination of farms based on the MYA estimates at the time. Any impact of lower 2019 MYA prices will vary based on situation depending on the select combination of farms enrolled.

Conclusion

Farmers enrolled in ARC-IC now have final 2019 MYA prices and can calculate ARC-IC payments using the 2018 Farm Bill What If Tool. The actual 2019 MYA prices for both corn and soybeans are lower than February price estimates used to calculate payment projections prior to the program enrollment decision. For some farms this will result in higher payments than estimated earlier in the year. For farms where the maximum payment rate was already triggered, the decline in MYA prices will not change the payment rate. When multiple FSA farms within a state were enrolled in ARC-IC, the impact will be situational depending on the combination of payment rates for the farms. With the longer processing time needed for ARC-IC payments in comparison to the other farm program payments, using the tool to calculate payment rates now can provide farmers with an expected value for cash flow planning for those who have not yet received a payment.

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