GENERIC BASE ACRE REALLOCAITON: INCORPORATING RISK MANAGEMENT STRATEGIES INTO FARM DECSISION TOOLS

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Abstract

The decision whether to convert generic base acres to seed cotton base or reallocate those generic acres to proportional shares of planted, commodity crops (including seed cotton) can be complex. This decision applies not only to CY 2018 but to subsequent crop years as well. Producers are encouraged to evaluate their future farming intentions and answer the following: (1) *Do I want to reallocate my farm's generic base so as to maximize farm program payments?* or (2) *Do I want to reallocate my generic base to reflect my farm's future planting intentions?* Irrespective of which farming strategy is adopted, future commodity prices and parish yield trends are fundamental components that need to be considered when making a generic base conversion decision. The use of farm management decision support tools allow producers to estimate future potential program payment rates under each base acre reallocation option.

Introduction

Strategy 1-Maximizing Farm Program Payments

1. Collect FSA production records for each farming enterprise number

2. Evaluate potential generic base conversion/reallocation acreage breakdowns under Options 1 and 2 of the Seed Cotton program using FSA production records

Tool*: *Generic Base Decision Tool for the Seed Cotton Program*

Consider the farm's existing base acreage and ask the question: *Does my farm have existing grain and oilseed base?* If the farm does, then converting generic base to seed cotton base could serve as a risk mitigation strategy in terms of base diversification. If the farm does not have existing grain and/or oilseed base the decision to convert or reallocate those acres then becomes more complex. The *Generic Base Decision Tool* will calculate the amount of base acres under each option. From this breakdown, the producer will then need to formulate their own set of futuristic price (for ARC-CO and PLC) and yield estimates (for ARC-CO) relative to the amount of covered commodity base on their farm.

3. Formulate ARC-CO/PLC payment projections for the 2018 and subsequent crop years.

Tools*: *Seed Cotton PLC Payment Projection Matrix* and *2018 PLC Payment Estimator* for corn, rice, sorghum, soybeans and wheat and the *ARC-CO 2018 Payment Tracker* tool

In 2014, producers made an irrevocable decision between ARC-CO and PLC for each covered commodity. The only program election that needs to be made for CY 2018 pertains to seed cotton program participation. Since seed cotton consists of both cotton lint and cottonseed, prices for both lint and seed need to be estimated, relative to their weighted shares of total production which, historically have been 42% for lint and 58% for seed. Producers will therefore need to evaluate the tenants of the seed cotton PLC and ARC-CO programs. The option also exists for producers to update their seed cotton program yield in the case of PLC program selection.

Tool*: *Seed Cotton Program Yield Update*

Producers would need 2018 national MYA prices and their farm's program yield so as to estimate CY 2018 PLC program payment(s) for enrolled crop(s). To obtain covered commodity MYA price(s) producers can consult *Program Year 2018 Data* (updated monthly). Producers would need to know 2018 MYA prices and 2018 parish level yields so as to estimate CY 2018 ARC-CO program payment(s) for enrolled crop(s). While these economic decision tools seek to project PLC and/or ARC-CO program payments, they contain *default values* based on price/yield estimates that are not finalized by the USDA for CY 2018. Producers should understand that variations in either price and/or yield will impact projected payments.

4. Examine forecasted ARC-CO/PLC payments under both Options 1 and 2 for generic base acre conversion/reallocation.

Once ARC-CO/PLC payment projections, by commodity, have been made, multiply the projected payment by the number of that commodity's on-farm base acres. If the producer's strategy is to reallocate that farm's generic base as to maximize farm program payments the option that provides the highest level of projected payment should be selected. Only valid future price and yield estimates (USDA-FSA) should be input into the 2018 ARC-CO/PLC payment estimator tool.

Strategy 2- Reallocate Generic Base to Match Planting Intentions

1. Collect FSA production records for each farming enterprise number

2. Evaluate potential generic base conversion/reallocation acreage breakdowns under Options 1 and 2 of the Seed Cotton program using FSA production records

Tool*: *Generic Base Decision Tool for the Seed Cotton Program*

What are my future planting intentions? What existing commodity base(s) does the farm currently have? Does the farm's current base(s) capture future planting intentions? If so, the producer may elect to convert generic base acres to seed cotton base in an effort to diversify base holdings by type. If the producer deems that expansion of current base is in order, they could elect to reallocate generic base acres to proportionate share(s) of covered commodity base(s), thus expanding that base.

3. Formulate ARC-CO/PLC payment projections for the 2018 and subsequent crop years.

4. Apply forecasted ARC-CO/PLC payments to Options 1 and 2 for generic base acre conversion/reallocation with regards to planting intentions.

Materials and Methods

Example #1

The farm has 100 acres of generic base, with no other covered commodity bases. Over the period 2009-12, cotton, corn, and soybeans were planted in equal proportions (33.33 acres each).

Option #1 for the 2018 CY and beyond	80 acres of seed cotton only
Option #2 for the 2018 CY and beyond	33.33 acres of seed cotton
	33.33 acres of corn
	33.33 acres of soybeans

In 2014, the farm made the program choice of ARC-CO for corn and soybeans. It is assumed that the farm will select to participate in the seed cotton PLC program for the 2018 CY (program yield of 2,400 pounds). Using current MYA price (PLC) and yield (ARC-CO) estimates for the 2018 CY, the farm runs a payment projection scenario specified by the following parameters.

Cotton lint and Cottonseed prices	$0.75 per pound and $140 per ton
Seed Cotton Weighted Shares	42% lint and 58% cottonseed
Seed Cotton Price	$0.3556 per pound
Corn Price	$3.60 per bushel
Corn Yield (Franklin Parish)	170 bushels per acre
Soybean Price	$8.90 per bushel
Soybean Yield (Franklin Parish)	50 bushels per acre

The above mentioned parameters will result in a seed cotton PLC payment being triggered in 2018. However, the ARC-CO price and yield conditions for corn and soybeans do not trigger a payment.

Option #1 for the 2018 CY and beyond	80 acres of seed cotton = $1,860.48 payment ($23.26/base ac)
Option #2 for the 2018 CY and beyond	33.33 acres of seed cotton = $785.26 ($23.26/base acre)
	33.33 acres of corn = $0
	33.33 acres of soybeans = $0

Option #1 produces a combined farm program payment of $1,860.48, while reallocating generic acres (proportionately) results in a $785.26 total farm payment for 2018. However, examining the commodity outlook post-2018, the producer should consider: *Will I participate in the ARC-CO program for corn and soybeans in the 2019 and subsequent crop years?* If the producer considers switching their program election to PLC for corn (CY 2019), they should take into account the long-term forecast for corn prices. Do they anticipated it falling below the $3.70 per bushel reference price? Will this result in substantial price protection (assuming corn remains a main component of the farm's crop rotation)? Will yield variability be so minor in the parish that an ARC-CO payment will not be triggered? If the producer expects corn price to fall below the reference price, it is reasonable to assume that reallocating a portion of the generic base to corn (PLC) would then be a viable strategy. Because this farm did plant cotton in the period 2009-12, under Option#2, that farm would still retain a portion of seed cotton base, while simultaneously diversifying acreage with increases in corn and soybean bases.

Example #2

The farm has 100 acres of generic base, with no other covered commodity bases. Over the period 2009-12, soybeans (50% of acres), corn (33.33%), and wheat (16.67%) were planted.

Option #1 for the 2018 CY and beyond	80 acres of seed cotton only
Option #2 for the 2018 CY and beyond	50 acres of soybeans
	33.33 acres of corn
	16.67 acres of wheat

In 2014, ARC-CO was chosen for corn and soybeans and PLC for wheat. The producer develops their own set of farm program payment projections for CY 2018 from the information below.

Cotton lint and Cottonseed prices	$0.75 per pound and $140 per ton
Seed Cotton Weighted Shares	42% lint and 58% cottonseed
Seed Cotton Price	$0.3556 per pound
Corn Price	$3.60 per bushel
Corn Yield (Franklin Parish)	170 bushels per acre
Soybean Price	$8.90 per bushel
Soybean Yield (Franklin Parish)	50 bushels per acre
Wheat Price	$5.10 per bushel

The above mentioned parameters will result in a seed cotton PLC payment being triggered in 2018. Similarly, PLC will trigger for wheat (program yield of 40 bushels per acre). However, price and yield conditions under ARC-CO for corn and soybeans do not trigger a payment.

Option #1 for the 2018 CY and beyond	80 acres of seed cotton = $1,860.48 payment ($23.26/base ac)
Option #2 for the 2018 CY and beyond	50 acres of soybeans = $0
	33.33 acres of corn = $0
	16.67 acres of wheat = $226.71 ($13.60/base acre)

Results and Discussion

Option #1 produces a combined farm program payment of $1,860.48, while reallocating generic acres (proportionately) resulting in a $226.71 total farm payment for CY 2018. For this farm scenario, a producer would need to consider the commodity price forecasts for corn, seed cotton, soybeans and wheat post CY 2018. Option #1 results in fewer farm base acres eligible for farm program payments while Option #2 allocates the full acreage amount (100 acres) to three alternative crop bases. Having planted wheat provides the farm the option to establish wheat base on the farm. The producer should consider, assuming they continue in PLC for wheat, whether or not future wheat prices will remain below the current reference price of $5.50 per bushel. Along the same lines, long term price outlooks for both corn and soybeans, relative to future program election, should be taken into consideration. In this example, 50% of the farm's base could be reallocated to soybean base. The potential of this farm receiving a farm program for soybean base (ARC-CO or PLC) is relatively remote. Under this condition, does having established soybean base on the grounds of diversifying base, as opposed to capturing program payment, outweigh the possibility of no program payment for the foreseeable future? Finally, the producer should ask themselves is having the ability to establish seed cotton base (with a potentially higher program payment) more valuable in their farming strategy than establishing corn, soybean and wheat base (long-term)?

Summary

The decision to convert/reallocate generic base acres is a multifaceted, farm-by-farm decision. Does the producer reallocate farm generic base acres to maximize program payment potential **or** expand crop base(s) proportionately to reflect future planting intentions? If the producer doesn't have existing commodity base on the farm, they should consider the following: Does reallocating generic acres proportionately under ARC-CO/PLC garner a higher program payment than electing 80% of generic base converted to seed cotton? If the producer foresees future seed cotton prices being below the seed cotton PLC reference price ($0.367/lb.), Option 1 may be the viable option if the frequency (amount) of program payments are greater than those of other covered commodities under Option 2. If, on the other hand, the producer foresees ARC-CO/PLC program payments for covered commodities for CY 2018 and beyond being greater than those under Option 1, the producer could then elect to proportionately reallocate generic base acres under Option 2.

Farm programs exist to protect producers from downside price risk (PLC) and downside area revenue risk (ARC-CO). Payments in CY 2018 onward are decoupled from planting decisions, allowing producers the freedom to have planting flexibility in response to market signals. While program participation is free, program designs do differ as to which type(s) of risk is addressed. Producers should also examine how their participation in a particular program (ARC-CO/PLC) complements crop insurance decisions made for that particular farm.

References

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