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## Commodity Program Base Acre Update: Overlooked Issues

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Current working public versions of both the House and Senate Farm Bills contain a voluntary base acre update option for farms with fewer base than planted acres. This article examines three little-discussed issues with this type of update: (1) length of the update window, (2) fairness for max FSA farms, and (3) wealth creation from adding base for non-based acres. Moreover, this type of update does not solve the underlying planting vs. base issue; it only temporarily resets it. The policy treadmill starts again with the crop year following the update period.

### Update Window

Length of the base acre update window matters because crop rotations are prevalent in the US, in part to control pests and diseases. No good statistical information exists regarding the length of these rotations, but anecdotal evidence suggests 2-year and 3-year rotations are common, with longer rotations used in some areas of the country.

The House Agriculture Committee Farm Bill proposes a 5-year update window using average acres over the 2019-2023 crop years. The 2002 and 2014 Farm Bill base acre updates used 4-year windows (1998-2001 and 2009-2012, respectively). Both 4-year and 5-year update windows are imbalanced with respect to 2-year and/or 3-year rotations. This creates an issue because expected payments are rarely the same for different program crops. For example, a corn-soybean rotation in a 5-year update window has 3 years of corn and 2 years of soybeans, or vice versa. According to FSA (Farm Service Agency) data, over the 2014-2018 crop years, 3 years of corn and 2 years of soybeans in ARC-CO (Agricultural Risk Coverage - County) averaged \$18 per base acre more than 2 years of corn and 3 years of soybeans (\$90 vs. \$72) even though the crop rotation was the same.

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Given the length of some rotations and the prevalence of 2-year and 3-year rotations, a 12-year update window is probably close to optimal. It is long enough (1) to cover almost all rotations and thus more accurately reflect a farm's cropping strategy, (2) to encompass a variety of market situations which also impact planting decisions, and (3) to correspond with cycles of the common 2-year and 3-year rotations (6 and 4 complete cycles, respectively). A 12-year update window may be deemed too long; thus, a 6-year window may be more realistic. It corresponds to 3 and 2 complete cycles of 2-year and 3-year rotations, respectively.

## **Max FSA Farms**

Max FSA farms have base acres that equal all acres that can be tilled on the farm given conservation compliance requirements. The proposed update provides much smaller or no benefit to these FSA farms. Limited benefits may occur if the updated distribution of base acres by program crop for the FSA farm generates a higher expected payment than the existing distribution. No benefit occurs if the existing distribution generates the highest expected payment.

No publically available information is available on the number of max FSA farms; however, the number may not be trivial. The 2002 Farm Bill authorized the addition of base acres for soybeans (Young, et al., September 2005). Base soybean acres currently total 55 million according to FSA data. It seems distinctly possible that a nontrivial number of FSA farms on which soybeans were planted prior to 2002 could have base acres that equal total acres that can be tilled on the FSA farm.

The preceding discussion prompts a policy question, "Is it fair that a base update provides no or much smaller benefit to max FSA farms?"

If max FSA farms are indeed nontrivial and if Congress wishes to provide more update benefit to them, a policy option is to allow current FSA farms to update base yields or acres, but not both.

Note, all max FSA farms are fully-based FSA farms but not all fully-based FSA farms are max FSA farms. Fully-based FSA farms have base acres that equal or exceed acres planted to covered program crops. Fully-based FSA farms that are not max FSA farms have the well-known issue that, when an update is voluntary, they will not give up high payment base acres in crops that are no longer planted on the farm. As a result, base acres can exceed acres planted to the crop, often by more than 25% (see *farmdoc daily*, [August 24, 2022](#)).

## **Wealth Creation**

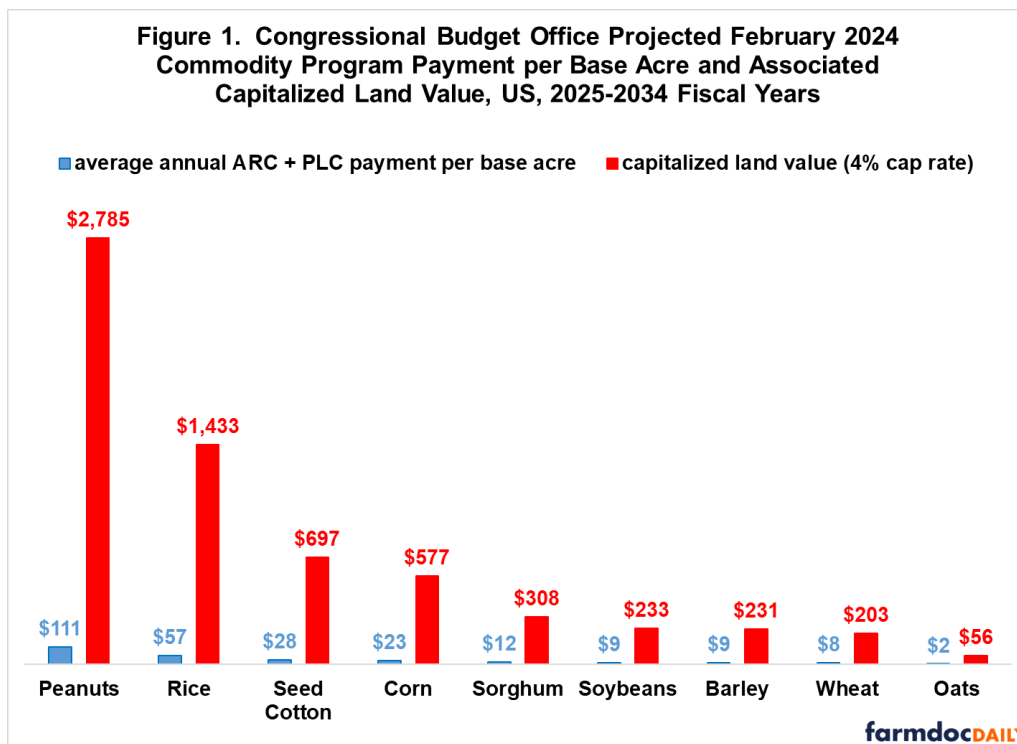
Most consider the US market for cropland to be efficient at pricing information regarding the value of cropland. It seems reasonable to speculate that cropland which currently has fewer base than planted program crop acres would be priced less than equivalently productive cropland which is fully based since commodity program payments are lower and possibly zero. By extension, assigning base acres to cropland with no base should increase its value since it is now eligible for commodity payments.

Capitalization of farm program payments into land values has been a topic of interest to academics for many years. Most studies find government payments are capitalized into cropland value, but the share of payments that is capitalized into land prices varies notably across studies. Kirwan and Roberts (2016) have a relatively recent, excellent review and critique of the literature.

To provide an indication of potential wealth creation by assigning base acres to land with no current base, the average annual payment per base acres that CBO (Congressional Budget Office) forecasts for ARC-CO (Agriculture Risk Coverage – County) plus PLC (Price Loss Coverage) over the 2025-2034 Fiscal Years is calculated. A 4% capitalization rate is then applied. This cap rate is within its range for the last 10 years (Cowley and Kreitman, June 10, 2024). It is also assumed that all expected commodity payments are capitalized into land. This assumption is used because Congress clearly ties eligibility for these new commodity payments to the establishment of new base acres. In addition, it is easy to scale the results by multiplying them by the share you think is capitalized into land values.

A wide range exists across program crops on both annual CBO forecasted payment per base acre and the associated capitalized land value (see Figure 1). The latter ranges from \$56 for a new oats base acre to \$2,785 for a new peanut base acre. Wealth creation also exceeds \$500 per base acre for a new rice,

seed cotton, and corn base acre. Note, these values are based on current policy. They do not consider any increase in any payment parameter, such as the higher statutory reference prices in the House Agriculture Committee Farm Bill.



Adding new base acres will make it harder for new farmers to enter farming since land prices will increase. It may also increase concentration in crop production by likely benefiting the largest current farms the most, thus increasing their ability to expand further. Both entry of new farms and concentration of farm production are issues on the national agenda.

In summary, the proposed base acre update generates both an income and wealth effect for new base acres. The following policy questions are prompted: (1) “Should wealth creation be considered in designing a base acre update?” and (2) “Is it good policy to use Federal tax money to increase the wealth of farm households who have more wealth than the average American households?” In 2022, 98% of farm households had wealth levels higher than the U.S. median wealth level for all US households (US Department of Agriculture, Economic Research Service, June 10, 2024).

## Discussion

If the next farm bill includes a base acre update, it would be the third in the last five Farm Bills to do so. The frequency of base acre updates clearly reveals that Congress would like to tie base acres more closely to planted acres.

The proposed updates, like the two previous updates; however is a temporary reset not a solution. The policy treadmill of planted acres differing from base acres will restart with the next planting season. Recent history implies another base acre update in the 2034 Farm Bill.

“Has the time arrived for a radical rethink of base acres?” The House Agriculture Committee Farm Bill appears to broach this question by proposing to expand base acres to include acres planted to eligible non-covered program commodities, including cropland that was idle or fallow. Thus, questions that may permeate the rest of the farm bill debate are “What is the purpose of base acres?”, “How should policy be designed given this purpose?”, and “Which crops should be designated as base acres?”

## References and Data Sources

Cowley, C. and T. Kreitman. Accessed June 10, 2024. Growth in Farmland Values Slows Amid Higher Interest Rates. Ag Finance Update. Federal Reserve Bank of Kansas City.  
<https://www.kansascityfed.org/agriculture/agfinance-updates/growth-in-farmland-values-slows-amid-higher-interest-rates/>

House Committee on Agriculture, Chairman Representative Glenn “GT” Thompson. May 27, 2024. *Farm Bill: Certainty for All Farmers*. [https://agriculture.house.gov/uploadedfiles/detailed\\_summary\\_final.pdf](https://agriculture.house.gov/uploadedfiles/detailed_summary_final.pdf)

Kirwan, B. E. and M. J. Roberts. 2016. Who Really Benefits from Agricultural Subsidies? Evidence from Field Level Data. *American Journal of Agricultural Economics*. Volume 98(issue 4), pages 1095-1113.  
<https://doi.org/10.1093/ajae/aaw022>

US Department of Agriculture, Economic Research Service. Accessed June 10, 2024. U.S. Department of Agriculture, Economic Research Service. *Farm Household Well-being: Income and Wealth in Context*, November 30, 2023. <https://www.ers.usda.gov/topics/farm-economy/farm-household-well-being/income-and-wealth-in-context/>

US Department of Agriculture, Farm Service Agency. June 2024. *ARC/PLC Program Data*.  
[https://www.fsa.usda.gov/programs-and-services/arcplc\\_program/arcplc-program-data/index](https://www.fsa.usda.gov/programs-and-services/arcplc_program/arcplc-program-data/index)

US Department of Agriculture, National Agricultural Statistics Service. June 2024. *QuickStats*.  
<https://quickstats.nass.usda.gov/>

US Senate Committee on Agriculture, Nutrition, and Forestry. May 21, 2024. The Rural Prosperity and Food Security Act of 2024 Section-by-Section Summary.  
[https://www.agriculture.senate.gov/imo/media/doc/rural\\_prosperity\\_and\\_food\\_security\\_section-by-section.pdf](https://www.agriculture.senate.gov/imo/media/doc/rural_prosperity_and_food_security_section-by-section.pdf)

Young, C. E., D. W. Skully, P. C. Westcott, and L. Hoffman. September 2005. Economic Analysis of Base Acre and Payment Yield Designations Under the 2002 U.S. Farm Act C. United States Department of Agriculture, Economic Research Service Economic Research Report 12.

Zulauf, C., N. Paulson, K. Swanson, J. Coppess and G. Schnitkey. "Planting Flexibility and Current US Crop Acres." *farmdoc daily* (12):127, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 24, 2022.