**A Look at the Ukrainian Supplemental Proposal**

The [White House called on Congress](https://www.whitehouse.gov/briefing-room/statements-releases/2022/04/28/fact-sheet-white-house-calls-on-congress-to-provide-additional-support-for-ukraine/) last week to provide additional support to aid Ukraine in its defense against Russia’s invasion. The administration is requesting $33 billion to cover many facets including military aid, medical supplies, food aid and food supply disruptions, among others. Specifically, $500 million is being requested to support U.S. production of several crops. This article provides an economic analysis of portions of the request specifically relating to marketing loans and crop insurance.

Of the $500 million requested for U.S. food production, $400 million is to make revisions to the marketing loan programs through changes in several parameters. First, for the 2022 crop year the loan may be extended to 12 months instead of the current nine. This would allow producers more time to market the upcoming crop. Second, for the 2022 and 2023 crops, the loan rates would be increased for certain crops. Also, the increased loan rates would not be used when calculating Agriculture Risk Coverage (ARC) ARC or Price Loss Coverage (PLC) payments, leaving their calculations unchanged.

A producer can take a nonrecourse Marketing Assistance Loan (MAL) after harvest using the crop as collateral. The loan is based on the amount put under loan and the loan rate. This allows producers to wait for higher prices than usually occur during the harvest period. If the actual price falls below the loan rate, the commodity can be forfeited to USDA or can be settled. Alternatively, in lieu of a marketing assistance loan, the Loan Deficiency Payment (LDP) program can be utilized. If the price falls below the loan rate, the producer receives the difference multiplied by actual production. In either case, the loan rate serves as a price floor for the producer on the day the crop is sold or the LDP is taken.

Table 1 shows the current loan rates under the 2018 Farm Bill and the proposed loan rates for select crops. Other oilseeds, medium grain rice, dry peas, lentils and chickpeas are included in the proposal but not shown here. The two-year proposed loan rate increase would be 40% for oilseeds (including soybeans), 63% for wheat and 21% for rice. For soybeans and wheat, this would set the loan rate above the reference price used in PLC and ARC calculations.

Table : Current and Proposed Farm Safety Net for Select Crops



Figure 1 displays the current loan rate, proposed loan rate and marketing year average farm prices. The farm prices for 2021/22 through 2023/24 are projections from [FAPRI-MU’s April 2022 Market Snapshot](https://www.fapri.missouri.edu/publication/u-s-agricultural-market-snapshot-april-2022/). Both the current and proposed loan rates remain well below price expectations for soybeans during the period of consideration in the legislation. However, loan programs are more complicated in practice. The loan rates are adjusted by county or region to reflect local prices and production. Additionally, the price used to trigger soybean payments is based the Posted County Price (PCP), which is county specific and can vary by the day. This means that payments can occur even if the national average price for the year remains above the national loan rate.

Figure



To correct for this, [FAPRI-MU’s equation](https://www.fapri.missouri.edu/publication/fapri-mu-stochastic-u-s-crop-model-documentation-2/) that relates the marketing year average farm price to the average LDP rate for soybeans is utilized. Also, since prices are not known with certainty, information about price volatility is taken from the options market[[1]](#footnote-1) to capture uncertainty by generating a distribution of outcomes. The results are in Table 2. Under the current marketing loan rates, soybean LDPs almost never trigger. The average expected payment is $0.00 per bushel, and payments only occur in 0.2% of the simulations in 2023/24 and virtually none of the simulations in 2022/23. Raising the loan rate in the proposal increases average payments and the number of outcomes where payments occur. Given the lower prices in 2023/24, the LDPs are higher that year, with an average payment across all outcomes of about $.05 per bushel. Payments were triggered in just under 8% of the outcomes.

Table : Soybean loan deficiency payments

|  |  |  |
| --- | --- | --- |
|  | **2022/23** | **2023/24** |
| 2018 farm bill |  |  |
| Avg rate ($/bushel) | $0.00 | $0.00 |
| Frequency | 0.0% | 0.2% |
|  |  |  |
| Proposal |  |  |
| Avg rate ($/bushel) | $0.01 | $0.05 |
| Frequency | 2.8% | 7.7% |

Although LDP payments are important, it is also worthwhile to remember that a higher loan rate provides more operating cash to producers who utilize the MAL program. Given the high cost of inputs this year, the extra liquidity can provide a helpful bridge until the crop is sold. This can allow producers more time to sell crops.

Additionally, the proposal includes an extra $10 per-acre crop insurance subsidy for double crop soybeans for the 2023 crop year. The amount is subject to the limitation that total subsidies cannot exceed total premiums for the crop. According to USDA National Agricultural Statistics Service data with ASA calculations, there were 4.4 million acres of double crop soybeans in 2021. Double cropping allows increased agricultural output from the same acreage.

Once again, FAPRI-MU equations were used to evaluate the acreage effects of increasing the crop insurance subsidy for double crop soybeans. Only the planted area equations are used, so the impacts will be slightly overstated as crop prices would adjust lower if demand were considered. The equations suggest that 2023 winter wheat and double crop soybean area would increase by 47,000 acres with the additional subsidy. Single crop soybean and wheat acres would decline slightly, so the net for those two crops would be an increase of 35,000 planted acres of total soybeans and 37,000 acres of total wheat (spring and winter). Actual acres used in ag production would increase by 2,000 acres while total plantings would increase by 50,000 acres.

The Ukrainian supplemental request provides several mechanisms to increase domestic food production, especially for soybeans and wheat. Increasing the soybean loan rate is shown to have a modest impact on the expected loan deficiency payment rate. Likewise, the increase in the premium subsidy for double crop soybean crop insurance would also provide a slight increase in planted area to soybeans and wheat. The next step for the proposal is congressional consideration and potential modification to the language and resulting impacts.

1. Specifically, an implied volatility of .22 is used with a log-normal distribution and FAPRI-MU expected prices to generate simulations. [↑](#footnote-ref-1)