Marketing Assistance Loans and Loan Deficiency Payments FOR UPLAND COTTON

Yangxuan Liu and **Anukul Bhattarai,** University of Georgia Department of Agricultural and Applied Economics
John Robinson, Texas A&M University Department of Agricultural Economics

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EXTENSION

The Agricultural Act of 2018 (2018 U.S. Farm Bill) extended the cotton commodity loan programs for the 2019 through 2023 crop years. Cotton commodity loan programs include the marketing assistance loan (MAL) program and the loan deficiency payment (LDP) program.

These programs provide cotton producers with alternative marketing tools during periods of low cotton prices. Cotton producers can receive marketing loan benefits in the form of marketing loan gains (MLG), loan deficiency payments (LDP), commodity certificate exchange gains, and forfeiture gains. Producers can participate in the MAL or obtain an LDP on all or part of their production at any time during the loan availability period, from harvest until May 31 of the following calendar year.

Table 1 shows the annual upland cotton production, MALs made, MALs forfeited, and LDP applied from 2009 to 2018. On average, approximately 50% of annual cotton production is put in the MAL program. Only a small number of MALs were forfeited during the 2009-2018 time period. In 2014 and 2015, when cotton prices were low, a large number of cotton bales received LDPs.

Table 1. Annual upland cotton production, marketing assistance loans made, marketing assistance loans forfeited, and loan deficiency payments.

Year	Production	MALs made	MALs forfeited	LDPs
2009	12,183,000	8,271,361	2	0
2010	18,101,800	11,397,838	0	0
2011	15,573,200	7,262,220	888	0
2012	17,313,800	8,330,405	0	0
2013	12,909,200	3,980,526	30	0
2014	16,319,400	7,625,042	61	6,914,025
2015	12,888,000	6,757,528	431	5,114,438
2016	17,169,900	9,372,917	16	0
2017	20,922,500	9,799,746	59	0
2018	18,367,000	8,250,189	63,567	0

Upland cotton production described in bales, where 1 bale equals 480 pounds.

The history of cotton commodity loan programs

Cotton commodity loan programs have provided price support since their establishment in 1933. Originally, producers had two options for closing out the outstanding loans: 1) repaying the loan principal plus accrued interest charges; and 2) settling the loan at loan maturity by forfeiting their pledged cotton to the government and keeping the loan rate.

If the market prices of cotton were below the loan rate, the government became the cotton buyer of last resort. The forfeit option is equivalent to selling cotton to the government at a price equal to the loan rate, while the interest for the loan and storage costs are forgiven by the government. When producers forfeit the loan, the government has to acquire the cotton, which, in combination with the U.S. Department of Agriculture (USDA) Commodity Credit Corporation (CCC) sales price restrictions, removes cotton from the marketplace. As a result, the early stage of the commodity loan program provided price support for cotton.

During periods of low commodity prices, the likelihood of producers forfeiting the loan increases substantially. Low market prices during the late 20th century led to frequent loan forfeitures and large government stocks. As a result, the cotton commodity loan program unintentionally impacted producers' planting decisions, as producers grew cotton based on loan rates rather than market prices.

The 1985 U.S. Farm Act added marketing loan provisions to lower costs and reduce government stocks. The goal of these provisions was to reduce the forfeiture of cotton to the government for the loan settlement. Marketing loan provisions allow farmers to repay cotton commodity loans at less than the original loan rate (plus interest) when market prices are lower.

The operation of the commodity loan programs changed significantly from price support to income support with the introduction of marketing loan provisions. It reduces the government's purchase of cotton and accumulation of stocks through loan forfeitures. Instead, marketing loans now provide farmers with economic incentives to retain ownership of cotton and sell it in the marketplace. Marketing loan provisions now reduce the forfeiture of cotton as a repayment method, minimize the accumulation of government stocks, and ensure the competitiveness of U.S. cotton in the global market.

Upland cotton loan rate

According to the 2018 U.S. Farm Bill, the base quality[1] loan rate of upland cotton cannot be less than 45 cents per pound, greater than 52 cents per pound, or less than 98% of the previous year's loan rate. The base quality loan rate of upland cotton is based on the simple average of the adjusted world price (AWP) for the two marketing years[2] preceding the sowing of the ensuing year's crop. For this reason, there is a one-year lag in the calculation of the base quality loan rate. For example, the base quality loan rate for 2019 is based on the marketing year AWP for 2016 and 2017.

The USDA Agricultural Marketing Service (AMS) provides standard procedures to classify the quality of cotton based on physical attributes (color, staple length, leaf, extraneous matter, micronaire, length uniformity, and strength) of raw cotton fiber. Depending on the quality of the cotton, producers can receive premiums or face discounts for each bale. The cotton loan rate differentials, also referred to as loan rate premiums and discounts, have been calculated based on market valuations of various cotton quality factors for the prior three years.

The USDA Farm Service Agency (FSA) announces the loan rate for the base quality of upland cotton and the cotton loan rate differentials every year. The CCC adjusts base quality loan rates for each bale of cotton through premiums and discounts. Thus, when producers put cotton into the MAL program, the cotton loan rate reflects the differences in market prices for different fiber quality. Premiums are added and discounts are subtracted from the base quality loan rate when the MAL is made.

Upland cotton adjusted world price

The weekly AWP is derived from the daily CotLook A Index, which is commonly considered to be the index of world cotton prices. CotLook Ltd, which is a British company, calculates and publishes the daily CotLook A Index, which is a simple average of the five lowest price quotes from a selection of the principal upland cotton traded internationally (Table 2).

Table 2. Selection* of the principal upland cotton traded internationally for the CotLook A Index.

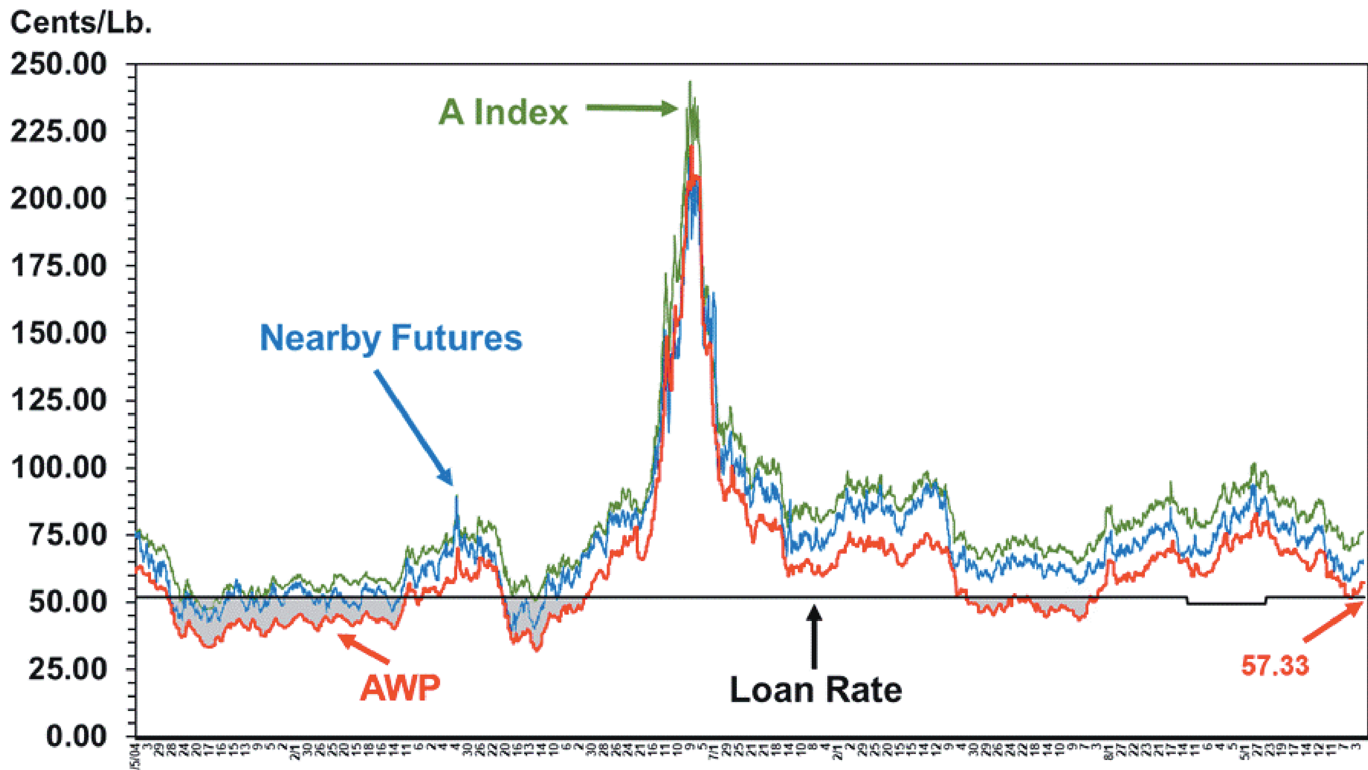
Australian	Greek	Mexican
Benin BELA**	Indian medium grade	Paraguayan
Brazilian	Ivory Coast BEMA**	Syrian
Burkina Faso RUDY**	Mali KATY**	TanzanianType 1 SG
California/Arizona	Memphis/Eastern	Turkish S. Eastern Std 1 RG
Chinese 328	Memphis/Orleans/Texas	Uzbekistan

* Growths are occasionally added to or withdrawn from the selection.

** Only 2 African Franc Zone origins are currently allowed to figure in the A Index calculation on any day.

The USDA refers to the CotLook A Index as the Far East (FE) price. The destinations include all of the major recipient ports for which no significant freight surcharges exist. The base quality of the A Index is Middling 1-1/8-inch. Based on the average of the daily A Index for the week beginning on a Friday and ending the following Thursday, the USDA determines the weekly AWP. Figure 1 shows the relationship between the AWP, A Index, nearby futures, and the upland cotton loan rate. The AWP is announced for the following week every Thursday in the USDA FSA Upland Cotton Announcement.

Figure 1. The adjusted world price, A Index, and nearby futures for upland cotton.



The AWP reflects the value of U.S. cotton on the world market, which is roughly what an exporter or foreign buyer would bid for U.S. cotton. The AWP adjusts the A Index for the average cost difference of transportation and handling from the U.S. to Asia, and the average quality difference for U.S. base grade (Strict Low Middling, 1-1/16-inch) cotton. An example of the AWP is shown in Table 3 below.

Table 3. Calculating the adjusted world price.

Far East (FE) Price (Average for November 15 – 21, 2019)	73.61 cpp
Adjustments:	
Average Costs to Market	-15.20 cpp
SLM 1-1/16 Inch Cotton	-2.05 cpp
Sum of Adjustments	**-17.25 cpp**
Adjusted World Price (AWP) for November 22 – 28, 2019	**56.36 cpp**

cpp: cents per pound
Source: USDA FSA Upland Cotton Announcement

Marketing assistance loans

Operated by the USDA, the cotton MAL program provides both a floor price and interim financing for cotton producers. It is a way to store cotton at harvest when prices tend to be seasonally low and price it later when the market conditions become more favorable.

The MAL allows farmers to receive some money upfront to meet cash flow needs for the farm while delaying the sale of cotton. Producers can put the harvested cotton as loan collateral under a non-recourse loan[3] through the MAL program, receive the loan rate for each pound of cotton, and pay fees and costs associated with the MAL program. The harvested cotton serves as the loan collateral, and the loan rate establishes a price floor.

The maturity date of the cotton MAL is on the last day of the ninth month following the month in which the loan is made. A producer may repay a loan at any time after the loan is made through that loan's maturity date. To participate in the MAL program, cotton needs to be stored in approved storing facilities, which are assigned by the CCC. The MAL can be redeemed in the following four ways:

1. **Delivering the pledged crop to the CCC as full payment for the MAL at maturity.** When the crop is forfeited, no interest should be paid, and the farmer will have a net price equal to the loan rate. A forfeiture gain (loan rate minus AWP) is realized when the AWP is less than the loan rate. However, the forfeiture option is less common and is generally used as the last resort.

2. **Redemption of the loan at the loan repayment rate.** The redemption option takes the cotton out of the loan and pays off the loan at the loan rate plus accrued interest or the AWP, whichever is lower. Producers can then sell the cotton on the world market. Producers are advised to constantly compare the AWP with the loan rate for their repayment options. If the AWP is less than the loan rate, a marketing loan gain (MLG) is realized, given that the loan is paid off at less than the loan rate. The MLG is the difference between the loan rate and the AWP. Any accrued interest and other charges on the loan are waived when the AWP is below the loan rate plus interest.

3. **Accepting a merchant equity offer.** An equity offer from merchants, also known as selling equities, is the most common way to take cotton out of the MAL program. Equity offers are calculated by merchants based on the estimated MLG, trends in U.S. and world prices, the time remaining until expected loan redemption by the merchant, and the expected cost of carrying the cotton. Table 4 shows how the merchant equity payment is calculated.

Table 4. Calculating a merchant equity payment to growers.

Assuming a 70-cent cash market and 52-cent-per-pound base quality loan rate.

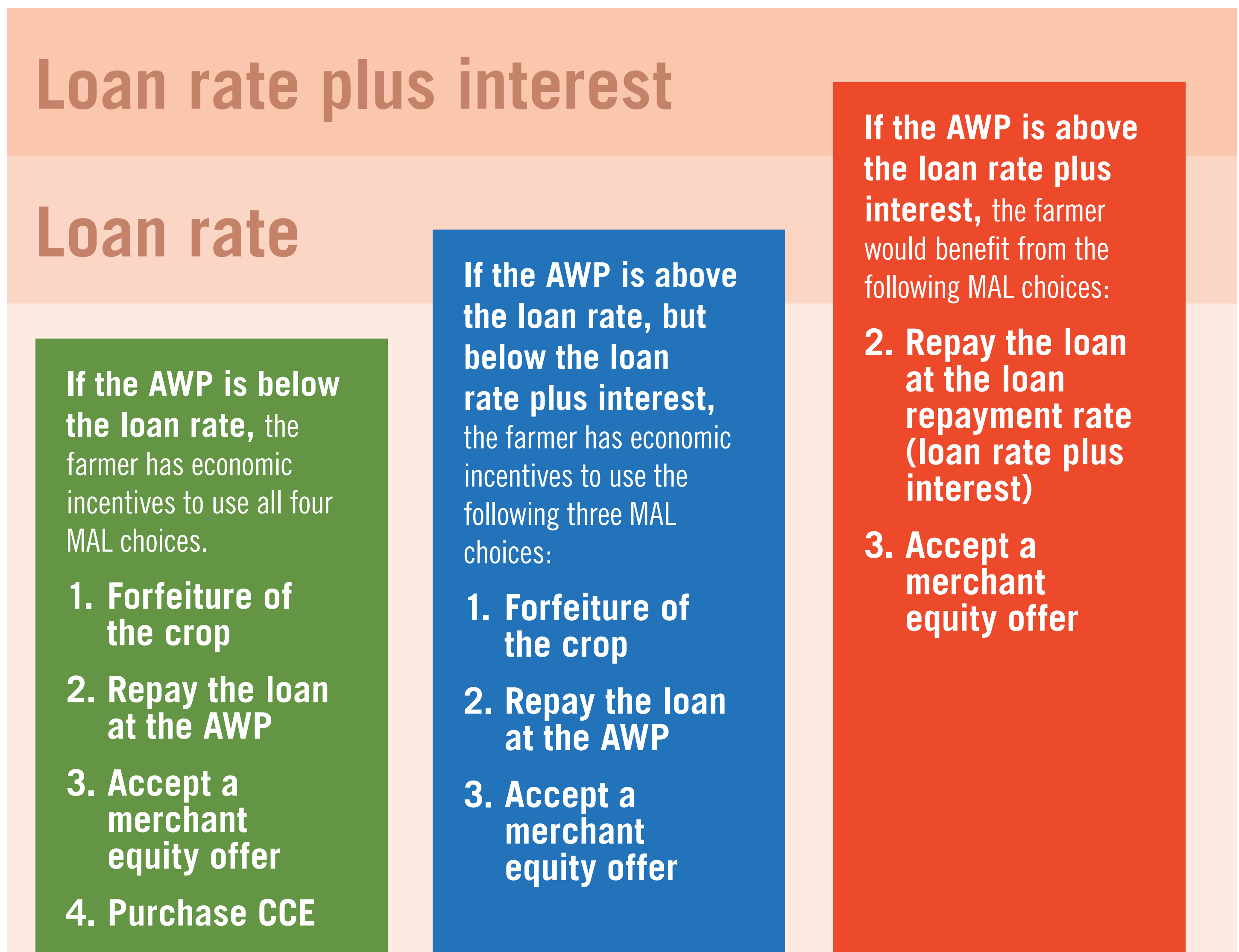
Item	Value
Market price	70 cpp
Base quality loan rate	-52 cpp
Interest and other charges*	-3 cpp
Equity payment	15 cpp
Total amount received by grower (Loan rate + equity payment)	**67 cpp**

cpp: cents per pound

* **Charges may vary.** The value here is for illustration purposes only.

4. **Purchasing and exchanging the commodity certificate for loan collateral.** The 2016 Consolidated Appropriations Act resumed the commodity certificate exchange (CCE). Agricultural producers with cotton pledged as collateral for a MAL can purchase a commodity certificate, immediately exchange the certificate for their outstanding loan collateral, and thus pay off the loan. The CCE is designed to limit forfeitures of cotton to the government at loan maturity. According to the USDA, a commodity certificate is available only in situations where the MAL rate exceeds the CCE rate. The CCE rate is the same as the alternative loan repayment rate, which is the AWP for upland cotton. Realized gains from the certificate exchange, also called certificate exchange gains, equal the amount by which the loan rate exceeds the CCE rate.

Figure 2. Three circumstances in which farmers can close out loans.



Loan deficiency payments

Alternatively, when the AWP falls below the loan rate, producers can opt to forgo putting cotton into the MAL program and apply for direct LDPs[4] for upland cotton. In this way, producers do not have to take out and subsequently repay a commodity loan.

To be eligible for an LDP, the cotton must not have been previously pledged as collateral for the MAL program and repaid at less than principal and interest. If an LDP is paid on a portion of the cotton, that portion cannot subsequently go under the MAL program. Under the LDP program, the producer has the freedom to decide where to store their cotton and when to sell their cotton in the market.

The LDP payment rate (the loan rate minus AWP) is equivalent to an MLG or forfeiture gain that farmers could obtain under the MAL program. The AWP is roughly what the grower would get by selling cotton on the world market. Therefore, when world cotton prices are low, producers can apply for the LDP and then sell their cotton on the world market in lieu of putting their cotton in the MAL program. As shown in Figure 1, the shaded area represents the LDP payment, and the LDP shrinks to zero in years when the A Index of world prices is high enough to result in an AWP above the loan rate. Conversely, the LDP increases as the AWP falls below the loan rate. The total amount of an LDP payment is equal to the LDP rate times the eligible quantity of the crop.

Marketing options using the commodity loan programs

In practice, many farmers tend to use a two-step marketing process when using cotton commodity loan programs. In the first step, the farmer decides whether to put cotton in the MAL or apply for an LDP. In the second step, the farmer decides when to take the cotton out of the loan, if cotton is put into the MAL, and when to sell the crop.

Growers have several alternatives to use commodity loan programs in the first step to mitigate their marketing risks. These alternatives include:

1. Forward contract before harvest while maintaining the beneficial interest of the crop and apply for the LDP when it is available.
2. Apply for the LDP during the harvest period when an LDP is available while maintaining the beneficial interest of the crop and then sell the cotton in the spot market.
3. Forgo the LDP and store the cotton under the MAL program.

Past history and experience show that if the LDP is available, producers will most likely opt to take the LDP and forgo the MAL program, especially if cotton is under contract and never intended to be put in the MAL in the first place. Alternatives No. 1 and 2 both require the monitoring of weekly LDP rates and diligence on the part of growers to make sure that their forward contracts or cash sales do not disqualify them from applying for the LDP. If an LDP is available and the producer takes the LDP, the total amount of money in the producer's pocket for each pound of cotton is the LDP rate plus the contract or cash sale price of the cotton.

An LDP is available when prices are very low. If taking the LDP, the producer should be aware that there is no further protection from prices going even lower. Producers should be prepared to sell their cotton or consider alternatives to manage the downturn risk. If a producer is willing to take the risk and feels that cotton prices are going to improve, then the producer could take the LDP and market the cotton later. Alternatively, the producer could forgo the LDP and put the cotton in the MAL.

Storage costs are waived for cotton in the MAL program when the AWP is below the loan rate. Free storage costs make cotton in the MAL program more attractive to merchants. Therefore, when the AWP is below the loan rate, if a producer chooses to take the LDP and opt-out of the MAL, they may get lower bids for their cotton than cotton in the MAL program.

Eligibility and payment limits

Producers must meet eligibility requirements, such as active engagement in farming and conservation compliance provisions, to participate in the commodity loan program. Under the 2018 U.S. Farm Bill, the marketing loan benefits are no longer subject to annual payment limits, which include MLGs and LDPs. Producers or legal entities whose adjusted gross income (AGI) exceeds $900,000 are not eligible for MLGs and LDPs, but they can use the commodity certificate exchange for the MAL and realize any commodity certificate exchange gains using the commodity certificate exchange. Finally, a farmer must own the beneficial interest of a crop when the marketing loan benefit is taken—that is, the farmer may not receive the marketing loan benefits after the crop is sold.

[1] The base quality of upland cotton has the following characteristics: color grade 41, leaf grade 4, staple length of 1-1/16 inches, micronaire 3.5-3.6 and 4.3-4.9, strength 26.0-28.9 grams per tex, and length uniformity of 80.0-81.9%.

[2] The marketing year for cotton is from August 1 to July 31 of the following year.

[3] Recourse marketing assistance loans are different from non-recourse marketing assistance loans. Recourse loans can only be redeemed by cash repayment, but non-recourse loans can be redeemed by cash repayment as well as by delivering the crop pledged as loan collateral for full payment of an outstanding loan to the CCC.

[4] The LDP is sometimes called a "POP" payment by producers; "POPing your cotton" means applying for an LDP.

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