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## Understanding the Cotton Marketing Loan and LDP/MLG

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Cotton is a "loan eligible" crop. Bales of cotton can be stored and the producer receives a government CCC loan, pledging the cotton as collateral. The loan program is not meant to be a major marketing tool, but it can be and it is for some producers. The Loan provides cash flow and can serve to reduce price risk.

The cotton producer can store cotton under the Loan, take an LDP (Loan Deficiency Payment) if available and forgo the Loan, or bypass the Loan altogether. Southeast producers, for example, have little experience with the Loan and rarely use it compared to other parts of the country.

The 2018 farm bill established that the loan rate for upland cotton is the average Adjusted World Price (AWP) for the previous 2 completed crop marketing years—but it cannot be less than 45 cents/lb, cannot exceed 52 cents/lb, and cannot decline by more than 2% from year to year.

The loan rate for the upcoming crop year must be announced by October 1 of the year before planting—which means the average AWP for the immediate prior crop year will not have been determined at that time (cotton is on an August-July marketing year). So, there is a 1-year lag—the loan rate for 2019 cotton, for example, is determined based on the average AWP for the 2016 and 2017 crop years. The average AWP for the 2016 and 2017 crop years was over 52 cents. So, the loan rate for the 2019 crop is 52 cents.

The loan period is 9 months. Once the cotton is in loan, eventually it must come out of loan and be sold (unless forfeited to the CCC which hardly ever happens). From the producer's standpoint, this will take place in 1 of 2 ways—the producer can either redeem the cotton at the loan repayment rate in effect (as discussed in the next section) or the producer can accept a merchant "equity" offer (as also discussed later).

<u>Loan Repayment Rule</u>

So, the loan rate for cotton is allowed to float between 45 and 52 cents subject to the AWP. The AWP is also important for another reason—what I call the "loan repayment rule". The "loan repayment rule" essentially says that the CCC loan is repaid at the loan rate plus charges or the AWP, whichever is less. So, the loan rate itself can be tied to what the AWP was for the most previously completed 2 crop years and is set/fixed as of October 1 for the next crop year. Then, during that next crop year the loan repayment rule may allow the loan to be repaid at the AWP if the AWP falls below the loan rate.

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1/ The purpose of the Marketing and Policy Insights publication series is to provide timely education, discussion, and analysis of critical issues facing the cotton producer. The analysis and opinions expressed and any errors are those of the author. This publication is not affiliated with the University of Georgia. The author can be reached by email at donshur@uga.edu or dshurley@abac.edu, by phone at 229-386-3512 or 386-7275 or on Facebook at https://www.facebook.com/don.shurley.5

The Far East (FE) Price

The AWP is derived from the Far East (FE) Price or what is commonly considered the "World price" of cotton. This FE Price is quoted daily and is the average of the 5 lowest (cheapest) prices (by origin) for 31-3/35 cotton delivered FOB the port at several select southeast Asia locations. The following is an example of recent daily price quotations:

**Daily Average of Lowest 5 FE Quotes**

| | | | | | |
|---|---|---|---|---|---|
| Friday | Monday | Tuesday | Wednesday | Thursday | Average |
| 23-Aug-19 | 26-Aug-19 | 27-Aug-19 | 28-Aug-19 | 29-Aug-19 | Aug 23-29 |
| 69.25 | N/A[1] | 68.25 | 68.25 | 69.05 | 68.70 |

SOURCE: National Cotton Council, "Government Programs - Marketing Loan Program Values", http://www.cotton.org/econ/govprograms/index.cfm

1/ European bank holiday; no quote for the day.

The daily FE price is then averaged for the "week" beginning on a Friday and ending the following Thursday. This example shows the daily and weekly average FE price for the "week" beginning on Friday, August 23, 2019 and ending on Thursday, August 29, 2019. The average FE Price for the week was 68.70 cents/lb.

The Adjusted World Price (AWP)

As just shown, the FE price is determined daily. The AWP, however, is determined weekly based on the average of the daily FE prices for the week. The FE is the "World" price—the AWP is this World price "adjusted" for cost-to-market and quality. From the weekly average FE price, the costs from FOB southeast Asia back to average US location are deducted and an adjustment/deduction is also made for quality (the FE price is quoted for 31-3/35 compared to US base quality of 41-4/34).

For the 2019 crop year, the costs-to-market is currently set at 15.20 cents/lb and the quality adjustment to 41-4/34 is 2.05 cents. So, the total "adjustment" to arrive at the AWP is 17.25 cents/lb. The following is an example of how the AWP is determined:

**Calculation of AWP from FE Price**

| | |
|---|---|
| FE Price, Average for Aug 23 - Aug 29 | 68.70 |
| | |
| Adjustments: | |
| Costs to market | -15.20 |
| Quality to 41-4/34 | -2.05 |
| Total Adjustments | -17.25 |
| | |
| Adjusted World Price for Aug 30 - Sept 5 | 51.45 |

SOURCE: USDA FSA, "Programs and Services - Economic and Policy Analysis - Fibers, Peanuts, and Tobacco Analysis - Upland Cotton Reports", https://www.fsa.usda.gov/programs-and-services/index

The average of daily FE prices for a week is used to determine the AWP that will be in effect for the following week. For example, the FE price for August 23-29 averaged 68.70 cents. The resulting AWP is 51.45 cents and will be in effect beginning the next day on August 30 through the close of business the following Thursday, September 5.

During the week beginning August 30, if the daily FE price is running less than 68.70, then the AWP for the following week beginning September 6 will decrease. Likewise, if the FE price is running higher, the AWP for the following week will increase.

POP or Loan Deficiency Payment (LDP) and Marketing Loan Gain (MLG)

Remember the loan repayment rule—if the AWP is less than the loan rate, the producer can repay the loan at the AWP. When the AWP is less than the loan rate, this difference is called an LDP (Loan Deficiency Payment) or MLG (Marketing Loan Gain). The loan rate for the 2019 crop is 52 cents. For the week of August 30 through September 5, as shown above, the AWP will be 51.44 cents. This will be the first time an LDP/MLG has been in effect since late in the 2015 crop marketing year (since May 2016).

52.00 Loan Rate – 51.55 AWP = 0.55 cents LDP

An LDP (or what producers still like to call a "POP" payment) is applied for and the payment received if the producer agrees to forgo putting those bales in Loan. An LDP is in lieu of putting the crop in Loan—in other words, any bales receiving an LDP are not eligible for the Loan.

Let's suppose it's harvest time or after harvest. The producer must still have "beneficial interest" in the crop—still have ownership and title to the crop. If an LDP is in effect, the producer has 3 options—take the LDP and forgo the Loan, forgo the LDP and store the cotton in Loan, or forgo both the LDP and Loan (this 3rd option is not likely). Let's assume the AWP is 49 cents and the loan rate is 52 cents. The producer has several choices including take the 3 cents and forgo the Loan—do what you wish with the cotton or forgo the 3 cents and store the cotton in Loan, sell later.

Past history and experience (in Georgia, at least) tells us that if a POP/LDP is available, producers will most likely opt to take the money. Especially if the crop is already contracted and never intended for Loan in the first place, producers are taking the LDP if it's available.

Unlike an LDP, which may be received in lieu of a loan, a Marketing Loan Gain (MLG) may be realized when cotton is stored in Loan. The cotton is stored under Loan and if during the loan period, the AWP is less than the loan rate, a loan gain (MLG) is realized if and when the loan is paid off at less than the loan rate. The math is the same for both LDP and MLG—it's the loan rate minus the AWP if the AWP is less. The only difference is simply the timing—one is received up front in lieu of the Loan (the LDP) and the other realized later if cotton is in Loan (the MLG).

Under the 2018 farm bill, there is no longer a payment limitation on LDP/MLG.

Price Relationships

A key to understanding how the Loan works and, more importantly, how the cotton producer will fare with the Loan whether an LDP/MLG is in effect or not, is in price relationships—not price itself, but price relationships.

The table below shows price relationships for the first 4 full weeks of the 2019 marketing year (as current as possible as of the date of this publication). Of course, the relationships are subject to change but can be relatively stable over the course of the marketing year.

**Price Relationships, Early 2019 Crop Marketing Year**

| Week | FE Price | AWP[1] | Futures[2] | Difference[3] |
|---|---|---|---|---|
| Aug 2-8 | 69.92 | 52.67 | 58.65 | -11.27 |
| Aug 9-15 | 69.47 | 52.22 | 59.14 | -10.33 |
| Aug 16-22 | 69.82 | 52.57 | 59.43 | -10.39 |
| Aug 23-29 | 68.70 | 51.45 | 58.08 | -10.62 |

1/ AWP in effect for the following week

2/ Nearby (October) New York ICE futures, average daily close

3/ Nearby futures minus FE Price

Our nearby cotton futures prices are currently running mostly 10 to 11 cents under the FE Price. As already mentioned, the AWP is 17.25 cents under the FE Price. Assuming a loan rate of 52 cents, when will there be a LDP/MLG in effect? Or, in other words, when will the AWP be less than 52 cents?

Assuming the most recent FE-Futures difference of 10.62 cents, the answer would be

52.00 + 17.25 – 10.62 = 58.63 or roughly less than 59 cents nearby futures

In other words, if our nearby futures were 58.63 cents, then current price relationships would imply an FE Price of 69.25 cents and an AWP of 52 cents equal to the loan rate.

58.63 futures + 10.62 difference = 69.25 FE Price

69.25 FE Price – 17.25 adjustments = 52.00 AWP = Loan

For the first 4 weeks of the 2019 crop marketing year, our nearby futures has averaged 10.65 cents below the FE Price. This difference has ranged from 11.27 to 10.33 cents. One important price relationship is that when our futures prices go down, the FE Price also tends to go down. When futures goes up, the FE tends to go up. This may not happen every day or every week and not penny for penny, but over a period of time our futures price and the FE Price tend to track together.

So, what does this mean? Two things:

1-Based on current adjustments and price relationships, if our futures prices are above roughly 59 cents, there is no LDP/MLG. In most years, thankfully, cotton is above 59 cents and while there is no LDP/MLG, that means a better price for cotton.

2-When the price of cotton falls below roughly 59 cents on futures for the week, an LDP/MLG will likely kick in. Because our futures and the FE Price tend to move together, the lower the price of cotton the lower the FE and AWP and the higher the LDP/MLG. The LDP/MLG acts like a “shock absorber” protecting the producer from lower prices.

<u>Merchant Equities</u>

The MAL (Marketing Assistance Loan) or what we’ve simply referred to as the Loan, is nothing more than a way to store the crop and sell it later. It’s primarily a cash flow tool—get the loan rate up front and deal with pricing and the market later on.

Most of the time, an LDP/MLG will not be a factor because the price of cotton is above the “trigger” (above roughly 59 cents on nearby futures and an FE price of roughly 69 cents). Regardless of whether an LDP/MLG is in effect or not, if cotton is stored in Loan the producer must eventually (before the end of the loan period) either redeem the cotton (pay off the loan and charges and sell the cotton) or accept an “equity” offer from a buyer/merchant. In most cases, producers will go the merchant equity route.

If an LDP (POP) is in effect and the producer takes the LDP (and forgoes the Loan on that number of bales), the total money in the producers pocket is the LDP plus the eventual contract or cash sale of the cotton. The cotton can be sold or stored or whatever, but it no longer is eligible for Loan.

If the cotton goes to Loan and especially if there will be a MLG in effect, how the producer will fare depends on price relationships. But, let’s look at 2 examples, one without a MLG and the other with MLG.

Look first at the following example with no MLG—this is going to be the case most of the time. The producer has cotton in Loan at 52 cents. Assuming no loan forfeiture, the producer must now eventually do 1 of 2 things—redeem (repay at the loan plus charges or AWP whichever is less) or he/she may keep the loan amount and accept additional money (an equity payment) from a buyer/merchant. Nearby May futures is 68 cents. Let’s assume the FE price is 10.65 cents above futures. So, the FE price would be 78.65. The adjustments are -17.25 cents. So, the AWP in effect would be 61.40 cents or roughly 8 cents below nearby futures as shown in the example.

**Example of Estimated Merchant Equity, No MLG**

| | | | |
|---|---|---|---|
| May futures | 68.00 | Loan | 52.00 |
| Basis | 1.50 | CCC Interest | 0.52 |
| Spot Price | 69.50 | Storage and Warehousing | 3.78 |
| | | Total | 56.30 |
| | | AWP | 61.40 |
| Estimated Equity | 13.20 | Lesser of Total or AWP | 56.30 |
| MLG | 0.00 | | |

If the producer went the redemption route—paid off the loan plus charges (or at the AWP if less) and sold his/her cotton, the net total money received would be 65.20 cents (loaned 52.00 – 56.30 payoff + sell 69.50 = 65.20). Alternatively, the producer could just accept an equity of 13.2 cents. The producer has already received and will keep the loan amount (52 cents). The equity estimate, as calculated, is the sale of cotton minus the payoff (69.50 sell – 56.30 payoff = 13.20). This amount (13.20) when added to the loan amount already received (52.00) would equal the net received through loan redemption (65.20). The AWP is above the loan rate so there is no MLG.

In exchange for the equity paid, the merchant then assumes control of the cotton in loan. The merchant will pay the interest and other charges when the cotton is eventually redeemed from loan (sold).

Here's another example but when a MLG is in effect. Nearby futures is much lower at 58 cents. Assuming the same FE and AWP differences, the AWP is below the loan rate resulting in a small Marketing Loan Gain (MLG) (52.00 Loan – 51.40 AWP = 0.60 cents MLG). Equity is estimated at 8.10 cents.

**Example of Estimated Merchant Equity, With MLG**

| | | | |
|---|---|---|---|
| May futures | 58.00 | Loan | 52.00 |
| Basis | 1.50 | CCC Interest | 0.52 |
| Spot Price | 59.50 | Storage and Warehousing | 3.78 |
| | | Total | 56.30 |
| | | AWP | 51.40 |
| Estimated Equity | 8.10 | Lesser of Total or AWP | 51.40 |
| MLG | 0.60 | | |

As in the first example, the estimated merchant equity offer is the spot price sale of cotton (59.50) minus the payoff (51.40 AWP since that is less than the loan plus charges). When a MLG is in effect, interest and storage are forgiven—CCC interest is forgiven and applicable storage and warehousing costs are paid by the merchant/buyer but taken into consideration when determining the equity.

Note: The above are general examples and estimates of equity. In reality, merchants use a different approach to determine equity and their equity calculation may vary somewhat from what is shown here. But, these examples are good for teaching several points. When cotton is in the Loan, how the producer will fare depends on price relationships. Equity and total money in the producers pocket will increase

- If futures increases in relation to the FE price
- If the FE price declines in relation to our futures prices
- If basis improves

<u>Summary and Implications for Decision Making</u>

Cotton is a "loan eligible" crop. Bales of cotton can be stored and the producer receive a government CCC loan, pledging the cotton as collateral. The loan program is not meant to be a major marketing tool, but it can be and it is for some producers. The cotton producer can bypass the Loan altogether, store cotton under the Loan, or take an LDP (Loan Deficiency Payment) if available and forgo the Loan.

An LDP or MLG is possible because of how the marketing loan for cotton works and the "loan repayment rule". Based on current (2019 crop year to-date) price relationships and adjustments, an LDP/MLG will be in effect when our cotton futures are below roughly 59 cents. Thankfully, LDP and MLG will not be a factor in most years. The 2019 crop, however, is the first time an LDP/MLG has been in effect since late in the 2015 crop marketing year (since May 2016).

History and experience (in Georgia, at least) tells us that if and when a POP/LDP is available, producers will most likely opt to take the money. Especially if the crop is already contracted and never intended for loan in the first place, producers will take the LDP if it's available. Marketing associations are traditionally heavy users of the Loan, but most producers in the Southeast have little personal experience with the Loan.

The FE Price and our cotton futures prices tend to move together—when our cotton prices go down, the FE price is likely also going down. If the FE price is low enough, the resulting AWP can be below the loan rate which means we'll have LDP/MLG. This helps insulate the producer from very low prices.

An LDP (POP), if available, is available because prices are very low. If taking the LDP, the producer should be aware that there is no longer protection from prices going lower on those bales (on the bales "POPed"). Producers should be prepared to sell or consider alternatives to manage downside risk.

An LDP is available because price is very low. Low prices are obviously, not what we want. If you think or are willing to take the risk that prices are going to improve, then you could take the LDP and market the cotton later on the (hopefully) higher market. Alternatively, you could forgo the LDP and store the cotton in Loan—which would afford protection from lower prices just in case in the form of a MLG.

If an LDP (POP) is available and the producer doesn't take the LDP, then the best strategy may be to put the cotton in loan and you may still realize a MLG later. The MLG is the same calculation as the LDP. Whether there is an LDP/MLG in effect or not, if cotton is stored under Loan, how the producer fares will depend on price relationships as this affects the spot price and the loan equity.

If cotton is in Loan and a MLG is in effect, remember that the FE Price (and thus the AWP and resulting MLG) and our futures price tends to move together. But, the MLG is fixed for a week whereas our futures obviously change daily. While the MLG is fixed for a week (until the close of business on Thursday), if the daily FE price during that week is increasing then you can be assured that the AWP will increase and the MLG decrease effective the following week. If the FE Price is going up, our futures are probably also going up. Selling into this increasing market before the MLG declines effective for the following week would be one way to increase your total money received.

The Loan is a marketing tool whether or not an LDP/MLG is in effect or not. In most years, cotton prices will be high enough that an LDP or MLG will not be triggered. The Loan is mostly a cash flow tool. The cotton must eventually come out of Loan and sold on the spot market.

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