

WELFARE EFFECTS OF THE MARKETING ASSISTANCE LOAN PROGRAM OPERATION IN THE PEANUT MARKET

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Situation: The Farm Security and Rural Investment Act of 2002 (2002 Farm Act, hereafter) eliminated the marketing quota for peanuts sold for the use in the US edible market. Instead, it introduced the Marketing Assistance Loan program (MLP) and loan deficiency payments for peanuts. Under this program, producers can receive a marketing loan rate equal to US\$355 per short ton for pledging their crop as collateral for up to 9 months, regardless of the peanuts' final usage. Within these 9 months, producers may repay the loan at a rate that is the lesser of the marketing loan rate plus interest or USDA-set loan repayment rate. Producers also have an option to forfeit the loan. Farmers not participating in the MLP are entitled to a loan deficiency payment equal to the difference between the loan rate and the USDA repayment rate.

According to the 2002 Farm Act, the loan repayment rate is determined by the USDA and serves the purpose of minimizing potential loan forfeitures and storage costs, and promoting competitive marketing of peanuts both domestically and internationally. Although the Commodity Credit Corporation (CCC) does not own the peanut stock kept as collateral, it can affect the release of the stock by setting the repayment rate. So far, setting the repayment rate equal to current market prices has been considered by many to be the most feasible way to comply with these objectives.

Liberalization of peanut prices and lifting production quantity restrictions made producers more vulnerable to market price fluctuations and to possible oligopsonistic behavior of the peanut processors – the shellers. One indicator of the shellers' buyer power has been the introduction of the “option to buy” contracts between the producers and the shellers according to which shellers have the option to buy peanuts stored by the producers under the MLP, and the purchase price is determined by the Loan Repayment Rate. Currently, about 80 percent of the harvest is sold through these contracts. In the economic literature, contracts of this type often have been viewed as a way to exercise market power. In peanut production, these contracts are also likely to benefit the shelling industry at the costs of the Marketing Loan Program.

Apart from these issues, there has been an issue of development of an efficient cash, or spot, market for peanuts, which was almost non-existent under the quota system. During the first year of operation of the peanut marketing loan program, cash market transactions in the post-harvest period have been markedly scarce: peanuts that were not sold at harvest were directly moved to the Commodity Credit Corporation (CCC) warehouses and thus were removed from the post-harvest cash market. The resulting thinness of the peanut cash market makes calculation of the loan repayment rate problematic since the observed spot prices may not represent a supply-demand equilibrium. Therefore, setting the loan repayment rate equal to the spot market prices may generate disequilibria in the peanut market.

Response: research efforts have been made to find out how the policy change, in particular the introduction of the MLP in peanuts, affects the market structure, revenue distribution between peanut producers and processors, and the program costs (incurred by the taxpayers). In particular, we modeled the mechanics of the program under different assumptions about the

government/USDA objective functions and repayment rate setting rules in operating the MLP. We also examined the types of contracts between producers and processors that appeared in the peanut markets and their possible interaction with the MLP. The objectives of this research were:

- 1) Find out who loses and who benefits from the MLP in the peanut production (welfare analysis).
- 2) Find how different policies of setting the repayment rate affect these distributional outcomes.
- 3) Come up with policy recommendations.

Results:

Several alternative scenarios for setting the repayment rate have been evaluated. When the loan repayment rate is set equal to current spot prices, the following outcomes are possible.

In the most typical case, i.e., when the Marketing Loan Rate is higher than competitive equilibrium price, overproduction results, which leads to a net welfare loss – total producer and processor surplus increase is more than offset by the program costs. The practice of making planting decisions based on the Marketing Loan Rate and not on anticipated/negotiated prices leads to dead weight losses. These losses are born by the government/USDA.

If production according to the loan rate results in undersupply (due to either *unanticipated* low domestic or foreign yields or high demand), the producers are willing to pay more than the MLR. The operation of the Marketing Loan Program then again leads to a net welfare loss. However, the loss is now born mainly by the processors (shellers) and may also partially be born by the producers. The USDA does not bear any of it.

In the presence of processor market power in the input market, the welfare results are ambiguous and depend on the bargaining power of the USDA vis-à-vis the processors (peanut shellers).

If the repayment rate is used by the government as a policy tool, welfare results depend on the government objectives and on the behavior of crop processors. If the objective is net MLP cost minimization, strategic repayment rate setting almost always improves the producer and consumer welfare at the expense of the shellers. However, when the shellers are organized, the outcome depends on their bargaining power vis-à-vis the USDA.

Overall, due to the nature of bargaining between the USDA and crop processors in concentrated (oligopsonistic) markets, welfare effects of government intervention pursuing program cost minimization by setting the loan repayment rate are ambiguous, particularly when *both* the USDA and the crop processors have bargaining power. Outcomes of the repayment rate setting intervention can even be inferior to an unrestricted monopsony situation under the official LRR setting rule. However, as long as the crop price is below the Marketing Loan Rate (MLR), the producers are immune and indifferent to policies – they are guaranteed the MLR if they participate in the MLP. The intervention policies, however, hurt processors in return for reduction in the program costs. An important tradeoff to be considered in choosing the rule for the loan repayment rate setting is that, while using the program cost minimization rule decreases the program costs, it also discourages development of efficient cash market. Deciding whether program cost minimization is worth neglecting the cash market requires passing a normative judgment.

Acknowledgement: We wish to gratefully acknowledge the Georgia Peanut Commission for partial funding of the research effort.