

Agriculture likes to produce, which is great during the good times, but disastrous when production exceeds what is needed

We have long advocated farm policies that include supply management programs that utilize government programs that reign in the production of major storable row crops by reducing the number of acres in active production in order to provide a price that covers a significant portion of the full cost of production for those crops. To achieve this reduction, we advocate the withdrawal of marginal or environmentally significant land from production.

In light of our support for this kind of program, we were interested to see two recent articles evaluating the effects of supply management programs posted on the *farmdocsdaily* website (<https://farmdocsdaily.illinois.edu/>) maintained by the Department of Agricultural and Consumer Economics at the University of Illinois Champaign-Urbana.

The articles are “Production Controls and Set Aside Acres, Part 1: Reviewing History” by Jonathan Coppess, Gary Schnitkey, Nick Paulson, Krista Swanson, and Carl Zulauf (<https://tinyurl.com/yd7gv7qc>) and “Land Retirement - Part II: US Role in World Crop Markets and Effectiveness of Retiring US Land” by Carl Zulauf, Nick Paulson, Jonathan Coppess, Gary Schnitkey, and Krista Swanson (<https://tinyurl.com/yctprefo>).

Before we respond to the conclusions reached in these two papers, we think it is important to lay out our understanding of agricultural markets. Most, if not all, agricultural economists recognize that agricultural markets, particularly the markets for storable row crops, are characterized by a low price elasticity of supply and a low price elasticity of demand. That means that the effect of price signals—particularly low prices—on how much farmers produce and how much consumers purchase are very weak.

We need to recognize that food is not like most other consumer products. It is a requirement for life. As a result, when the price is high people will do almost anything to obtain the amount of food they and their families need to survive. This describes a coercive market, not a free market where the buyer can walk away with no consequences if they can't afford the price.

For some in our world economy even unprofitably low prices for the agricultural products they need are too high and though they might depend on public feeding programs, they often suffer from undernutrition and death.

Relatively high prices that result from production problems or significant unemployment situations like we see today can rapidly increase the number of people dependent on programs that enable them to obtain some of the food they need. Even then they may suffer from malnutrition or death.

For us this means the price signals that make the markets for most consumer products work reasonably well do not have the same results for agricultural markets, thus the need for public farm and food programs.

In this column we will review the first paper. It is a relatively conventional analysis of the changes in agriculture and agricultural policies between 1933 and today.

We would, however, quibble with way they constructed their graphs for the paper. Three of the graphs use the 1933-2019/20 period for the horizontal axis while one uses a period beginning in 1919. It would be more helpful to readers and other analysts if the data covered the

same years. Otherwise, we need to go and pull the data and make the graphs for ourselves, which most lay readers will not do.

More significant than that is the failure of the authors to use a zero origin for one of the four graphs; they do for the other three. This failure to use a zero origin over emphasizes the relative changes in the graph for “Total Cropland Used for Crops.” This could give some readers the impression that the change in total acres has been more dramatic than it actually has been.

It also does not let them accurately visualize the change in acres devoted to other feed grains to the decline in total crop acres. The paper also fails to note that the decline in other feed grains is, in part, related to the long-term technological change from animal-powered agriculture to fossil fuel-powered agriculture and thus the change in total cropland.

We do find Figure 3, “Acres Planted to Major Commodities” to be valuable in illustrating the flexibility needed in designing farm programs. The needs for different crops has changed over time and future policies need to take that into account. Otherwise, establishing base acres for each of the crops has the tendency to distort the planting decisions of farmers. In addition, research in crop genetics has allowed for the planting of various crops in areas previously not possible. Future policies need to take total cropland into account.

Next week we will share our impressions of the second paper.

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Dr. Harwood D. Schaffer: Adjunct Research Assistant Professor, Sociology Department, University of Tennessee and Director, Agricultural Policy Analysis Center. Dr. Daryll E. Ray: Emeritus Professor, Institute of Agriculture, University of Tennessee and Retired Director, Agricultural Policy Analysis Center.

Email: hdschaffer@utk.edu and dray@utk.edu; <http://www.agpolicy.org>.

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