

KEEPING THE FARM SAFETY NET FOR COTTON IN “PROPER” PERSPECTIVE

Darren Hudson

**International Center for Agricultural Competitiveness
Texas Tech University**

Staff Paper SP17-02

Darren Hudson is Professor and Larry Combest Endowed Chair for Agricultural Competitiveness and the Director of the International Center for Agricultural Competitiveness, Texas Tech University. All data here are sourced from the U.S. Department of Agriculture, Risk Management Agency, Farm Service Agency, Economic Research Service, and National Agricultural Statistics Service.

KEEPING THE FARM SAFETY NET FOR COTTON IN “PROPER” PERSPECTIVE

Darren Hudson

A recent *farmdocDAILY* publication by Carl Zulauf and others¹ purports to provide “perspective” on the cotton safety net programs. In this time of debate about the future of farm programs, perspective is good, if it is good perspective. Unfortunately, this document and their subsequent analysis of generic base acres contain a number of key flaws that need to be corrected lest we develop the wrong ideas about the effectiveness and the future of farm programs in general, and for cotton especially.

Before delving into the numbers, it is useful to clarify a subtle point that is embedded in the analysis (and, indeed all such analyses of farm programs). The authors state support levels in terms of the value of production. This comparison is fair enough, however, when you consider that corn and cotton have overall gross receipts of roughly \$55 billion versus \$5 billion a comparison of the raw support dollar values provides nothing to an analysis of the relative effectiveness of the underlying programs. Further, stating support in this manner tied to a specific period of time (and, thus, prices and values of production) can be misleading. Consider a simple example. If we were to give \$10 to a person making \$100 and \$10 to a person making \$200, the value of support would show to be twice as large for the first person. But, that says nothing about the required level of support. Stating support levels as percentages of the total value of each crop does not accurately show the scale of the support provided relative to the level of support required to examine the economics of the two crops on a comparable basis in terms of costs and returns.

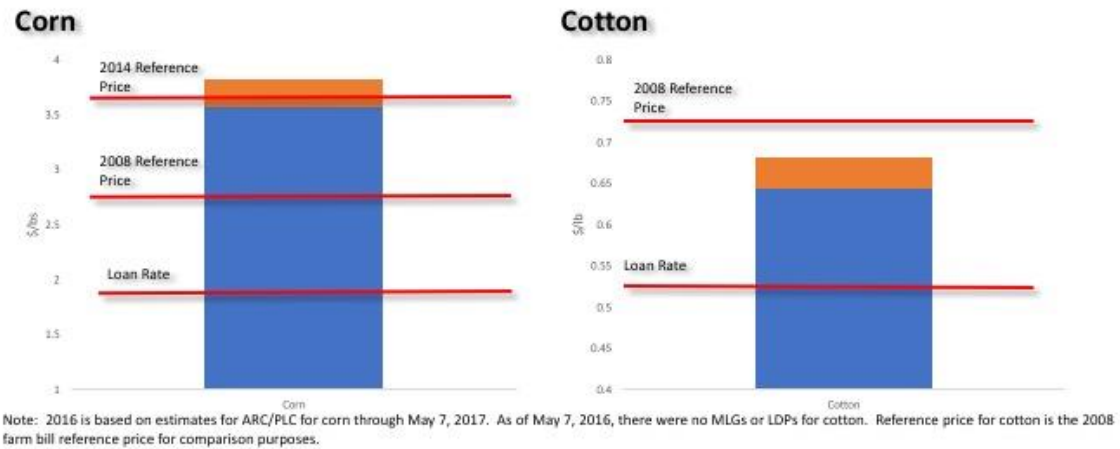
In the case of corn and cotton, the authors suggest that corn receives support equal to approximately 8% of the value of production from 2014-2016, whereas cotton will average support of around 12% (a figure that includes net insurance payments, which is of dubious validity as a measure of support because a net insurance payment only occurs when a significant loss is experienced). But, this fails to account for the level of support required to put producers of the two crops on an equal footing. Figure 1 shows the net price (excluding net insurance payments) to both cotton and corn for 2014-2016. For corn, this includes the average farm price, plus the per bushel equivalent price of ARC/PLC payments based on the total bushels of corn produced. For cotton, the net price is the market price plus the sum of the per pound value of all marketing loan gains (MLG) and loan deficiency payments (LDP) across the total pounds produced. The graph also shows the respective reference prices for PLC (and the 2008 cotton and corn counter-cyclical reference price for comparison) as well as the respective loan rates.²

¹ Zulauf, C., G. Schnitkey, J. Coppess, and N. Paulson. “Farm Safety Net Support for Cotton in Perspective.” *farmdoc daily* (7):87, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, May 11, 2017.

² We do not include the net insurance payments into these calculations unlike Zulauf et al. because (1) insurance indemnities do not occur unless there is an actual loss and (2) those indemnities are not paid across all acres so it would be inappropriate to apply those indemnities to all acres for a net price calculation.

When viewed on more equal terms, these data paint a much different picture from the percentages of the value of production reported by Zulauf et al. Yes, the cotton support from MLGs and LDPs average 5% of the value of production, but even with those payments, the average net price received by cotton growers is 4.4% below the 2008 reference price for cotton. By contrast, market revenue plus ARC/PLC payments was an average 3.3% above the reference price for corn over the same period and represented an average 7% of the value of production. So, one wonders how these authors conclude that cotton is somehow receiving an equivalent safety net to corn? Note here that we are using the 2008 reference price for cotton. All program crops received an increase in their reference price in the 2014 Farm Bill. When you compare the corn revenue to the 2008 reference price, the differences are even more stark.

Figure 1. Net Price Received for Corn and Cotton Relative to the Loan Rate and Reference Prices for Each Crop, Average, 2014-2016.



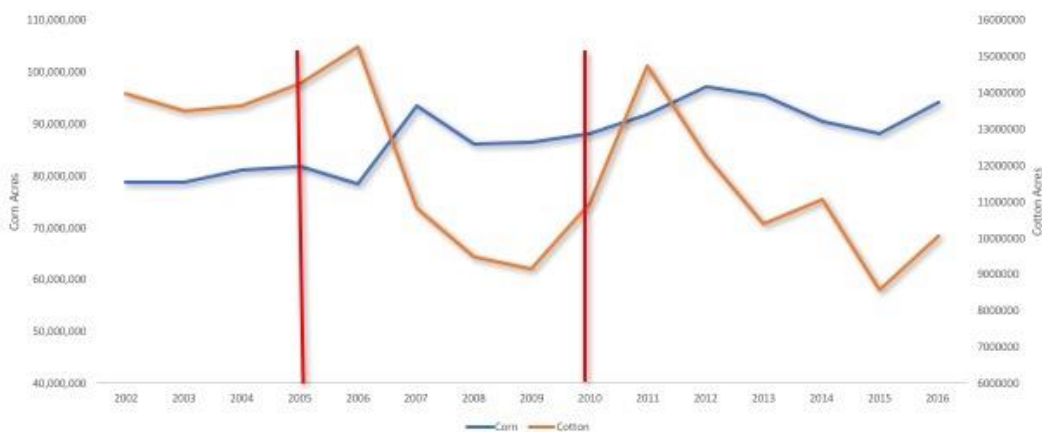
In addition to just the raw differences in support levels, the use of value of production centers on an assumption that the underlying market prices are un- (or at least equally) distorted. This is simply not the case. The U.S. Renewable Fuel Standard (along with other global biofuels policies) has served to provide substantial support for corn prices since 2005-8, while global cotton policies serve to suppress cotton price (high production subsidies and import constraints in China, for example). Thus, their comparison is based on market prices that not on an equivalent basis when it comes to the impacts of U.S. and global policies.

A second critical error in their analysis is the attempt to lump “generic acres” payments in with the cotton safety net. It is true that generic acres are derived from old cotton base acres, and this allowed producers with previous cotton base to plant other program crops and receive ARC/PLC payments on those acres. It follows that because generic base acres must be initially planted to a specific program crop to be eligible for payments, the payments received on generic acres were for crops actually planted on those acres. So, if a former cotton producer decided to plant corn on generic acres and was then eligible for ARC/PLC payments on those crops in that year, then, yes,

they received the payments. But, to link the payments to “cotton support” is a logical fallacy and simply does not make sense. Money is fungible to be sure. But, the *farmdocDAILY* authors do not appear to apply the same standard to decoupled ARC/PLC revenue from a wheat base, for example, as supporting the corn a producer planted on that farm. Likewise, they should not infer that payments generated from a program crop on planted generic acres are supportive of anything other than the crop that was planted.

The authors then go on to insinuate that the generic base is somehow creating friction in Southern agriculture. It was interesting to see how they attempted to make this case in a subsequent article published May 19. Unfortunately, a closer examination of actual planted acreage numbers failed to support their assertion. An analyses of acres planted to the seven major commodity crops from 2002-2016 shows that significant shifts in cotton planting has occurred, but not in relation to the advent of generic acres as intimated by the *farmdocDAILY* authors.

Figure 2. Corn and Cotton Planted Acres in the United States, 2002-2016.



Source: USDA, NASS.

From 2002-2006 cotton was planted on roughly 14 million acres, or roughly 80 percent of the cotton/generic base acres enrolled in farm programs from 2014-2016. In 2005 the renewable fuel standard was enacted (and expanded in 2007) and with it a shift of 5 million acres from cotton to corn and soybeans. That shift has remained fairly constant in the areas where it occurred and cotton has since averaged 10 million planted acres or roughly 59 percent of the 2014-2016 enrolled generic base.³ In practical terms, this means that 30-40 percent of all generic base acres across the U.S. have been planted to crops other than cotton since 2007 and before the creation of generic acres. By contrast, as shown in Figure 2, the RFS increased corn acres nationally to a new average level and the 2014 Farm Bill does not appear to have impacted those acres relative to the cotton average. The existence of generic base acres likely did not induce any significant

³ The exception was the high prices during 2010 that led to a large acreage response the following year, but that effect quickly dissipated and returned acreage back to its post-RFS average.

changes to cropping patterns as these producers were already planting corn and soybeans on their cotton base acres. The only difference being that instead of collecting decoupled cotton payments and planting corn, they were now collecting ARC/PLC payments on the program crop they were planting on those generic base acres.

Finally, the authors egregiously misrepresent the current policy proposals with respect to the inclusion of cottonseed as a minor oilseed. Here, they infer, although do not directly state, with no reference to the actual policy recommendation that the proposed cottonseed program will be *in addition to* the MLG, LDP, generic base acres, and net crop insurance payments (including potential benefits from the Stacked Income Protection plan (STAX)). In reality, the policy proposal put forward by the House of Representatives would have specifically generated the necessary savings to pay for the new cottonseed ARC/PLC program by prohibiting participation in the STAX insurance program on acres enrolled in a new cottonseed ARC/PLC program and requiring the elimination of generic base acres through conversion and other means. The result was a no net cost swap of program allocations for cotton producers and generic base holders, with no new payments available until 2018. Thus, the cottonseed program was simply designed to shift money from STAX and generic base towards producers of cottonseed.

It is unclear why these authors continue to target cotton in their analysis. Their data does show that cotton received marketing loan program benefits of roughly 5% of the value of production in 2014/2016 time period, but a cursory look at the circumstances that triggered the support show clearly that the payments occurred because world cotton prices were well below the 2008 farm bill's cotton reference price in 2014 and 2015. Marketing loan benefits are only triggered when prices are low. It is critical to recognize that cotton was triggering marketing loan benefits because its price was much closer to its loan rate and well below the 2008 target price and the cost of production. During the same time period corn was averaging almost two times its loan rate in 2014-2016 (where cotton averaged 1.2 times its loan rate) and also receiving significant support via the ARC/PLC program. Again, this is not to say that cotton did not receive benefits, but the authors' conclusion that its' situation is somehow equivalent to corn is not borne out by the data.

Corn, along with all other crops received a significant increase in their reference price in 2014, and cotton likely would have done the same were it not for the adverse ruling in the World Trade Organization. Thus, why would they target a crop that, *even with* the limited program benefits it retained, still falls short of historical norms for producer prices received while corn received substantial payments despite receiving a price well above the target price it had in the 2008 Farm Bill, and nearly equal to the higher reference price set for corn in the 2014 Farm Bill? It seems unfortunate that as we enter what will likely be a farm bill debate defined by a constrained budgetary environment that the first salvo by university researchers is to provide "perspective" that is designed to pit groups against each other.