Crop Insurance Safety-Net Projected to Decline (Again) for 2015

As this is written, Western Kentucky is in the midst of a blizzard and sub-freezing temperatures that make the 2015 planting season seem like a far-away activity that is too distant to contemplate. Yet, we are more than half-way through the crop insurance price discovery period for corn and soybeans, which will determine the prices used to peg the revenue guarantee provided by Revenue Protection (RP) insurance.

The projected price for crop insurance is based on the closing prices for the November soybeans and December corn futures contract during the entire month of February. While the projected price is yet unknown, what is certain is that the revenue guarantee provided by crop insurance will continue to decline from the record price levels of 2011 when the projected prices for corn and soybeans were $6.01 and $13.49 per bushel, respectively.

Figure 1 shows the revenue guarantee provided for a corn farm with an APH yield of 150 bushels per acre with RP insurance coverage levels ranging from 70% to 85%. The projected prices for RP insurance for corn in 2013 and 2014 were $5.65 and $4.62 per bushel, respectively. The 2015 corn projected price is currently averaging $4.16 per bushel as of February 20, 2015.

Figure 1 also has the 2015 per acre variable cost for corn of $415 (red line) and the per acre variable cost plus cash rent of $615 (black line) based on UK crop enterprise budgets.

The revenue guarantee for corn at the 80% coverage level has declined $179 per acre since 2013. The guarantee in 2013 was $678 per acre and declined to $554 in 2014 (Figure 1). If the projected price in 2015 is $4.16, the revenue guarantee would drop $55 per acre from 2014 to $499. For perspective, compare the revenue guarantees to the budgeted 2015 total variable cost (red) and the total variable cost plus cash rent (black). RP Insurance at 80% coverage in 2013 may have provided a revenue guarantee at a level to pay all variable costs and cash rent expense. The same coverage in 2014 had a revenue guarantee that covered all but $26 per acre of all variable costs plus cash rent expense. This deficit is projected to widen in 2015 to not covering $116 of the total variable costs plus cash rent (Figure 1).

Soybeans tell a similar story as the projected price has declined from $12.87 per bushel in 2013 to $11.36 per bushel in 2014. Current forecasts are for a projected price of $9.67 in 2015. Figure 2 shows the revenue guarantees for a soybean farm with an APH yield of 50 bushels per acre at the 70, 75, 80, and 85 percent coverage levels.

Figure 2 shows the revenue guarantee provided for a soybean farm with an APH yield of 50 bushels per acre with RP insurance coverage levels ranging from 70% to 85%. The projected prices for RP insurance for corn in 2013 and 2014 were $5.65 and $4.62 per bushel, respectively. The 2015 corn projected price is currently averaging $4.16 per bushel as of February 20, 2015.

Figure 2. Revenue Guarantee for Soybeans with a 50 bushel APH Yield at 70%-85% Coverage Levels at the 2013, 2014 and 2015(F) Projected Prices

The deficit is projected to widen in 2015 to not covering $116 of the total variable costs plus cash rent (Figure 1).
The soybean guaranteed revenue at the 80% coverage level has declined from $515 per acre in 2013 to $454 per acre in 2014 (Figure 2). If the projected price in 2015 is $9.67, then the same coverage’s revenue guarantee would decline an additional $68 from 2014 to a guarantee of $387 per acre (Figure 2). At 80% coverage, the 2015 soybean revenue guarantee is $60 per acre short of covering all projected variable costs plus cash rent expense (Figure 2).

Figure 3 compares the 2015 projected revenue guarantee provided for corn and soybeans less each crop’s total variable costs plus cash rent expense at the 70 to 85 percent coverage levels. Because soybeans have lower production costs, RP insurance for soybean may provide a safety-net with a smaller per acre loss than that for corn. At the 85% coverage level, RP insurance for soybeans doesn’t cover $36 of the total variable costs plus cash rent (Figure 3). In contrast, RP insurance for corn doesn’t cover $85 of the total variable costs plus cash rent at the same coverage level (Figure 3).

The 2015 projected prices for corn and soybeans will be announced in early March after the price discovery period ends. Farmers have until March 15, 2015, to make their crop insurance decisions.

**WARNING:**

Farm Bill Deadlines are closer than They Appear

Just like the warning label on a car’s passenger-side mirror, the deadlines to make farm bill decisions are closer than they appear. Owners have until February 27 to make two separate decisions – the payment yield update decision and the decision to reallocate base acres. Farmers have until March 31 to make their choice of farm program – ARC-County, Price Loss Coverage, or ARC-Individual.

I’m sure everyone reading this newsletter has already made an appointment with their local FSA office to make these decisions. This reminder is for your friends and neighbors who do not receive this newsletter. Please help them out and remind them of the approaching deadlines. Thank you for reminding your neighbors of their farm bill deadlines!

~ Todd Davis

USDA released their annual cattle inventory estimates in late January. This report was especially significant this year as many were looking for confirmation that beef herd expansion had begun. Overall, the report indicated that expansion was underway, and perhaps at a faster pace than many expected. Also, the report confirmed that the cow herd was larger coming into 2015, likely as a result of decreased cow slaughter during 2014. Total cattle and calves were estimated to be up by about 1% from 2014. Estimates are shown in the table at the end of this article and include both 2014 and 2015.

The number that will likely have the most immediate impact on beef producers is the estimated size of the beef cow herd. The January 2015 estimate was just under 29.7 million, which was an increase of a little more than 2% from 2014. Sizeable increases were seen in Texas, Oklahoma and Kansas. Increases in herd size in the southeast were more moderate for the most part. Cow slaughter had been running well below year ago levels for virtually all of 2014, and I think this was the primary driver of the increase in cow numbers. Deep culling in much of the US during 2011-2013 resulted in beef producers coming into 2014 with a younger cow herd. The combination of a younger herd, favorable weather, and attractive calf prices likely resulted in producers simply culling fewer cows in 2014. The impact will be a larger calf crop being marketed in the US for 2015, which will have an impact on calf prices this fall.

The other number that has gotten a lot of attention was a 4% increase in the number of heifers held for beef cow replacement. Heifer retention was also slightly above year ago levels last year, but by a smaller percentage. Further, I felt that some of the increase in heifer retention last year was partially in response to deceasing cow numbers. Conversely, the heifer retention seen this year occurred when total beef cow numbers had actually increased.
To put this 4% in perspective, it amounts to an additional 226,000 more heifers being held for beef cow replacements. As a percentage of the 29.7 million US beef cow herd, this would be slightly less than 1%. Heifer development estimates for July will also be of importance as we start thinking about how quickly this cow-herd will grow. Of course, so will weather conditions in the coming years, and how well the calf market holds as production starts to increase and the beef market sees increased pressure from competing meats.

The Kentucky numbers told a story similar to what most would have expected – the Kentucky beef cow herd has grown, but at a more moderate pace than the Southern Plains. The estimated size of Kentucky’s beef cow herd came in 2% higher than January 2014, but that was after a 2% reduction in the 2014 estimate. So, the Kentucky beef cow herd is about where it was estimated to be last year – just over one million cows.

While this report confirms that beef cow herd expansion is underway, many of the fundamentals remain positive for the beef sector in 2015. I fully expect calf prices to respond positively to grass this spring, and think we are likely to see the strongest spring calf market that we have seen. While I do look for fall calf prices to be softer in fall 2015, I fully expect the fall 2015 market to be another strong one, second only to the fall of 2014. Cow-calf operators should take advantage of the increased income they enjoyed in 2014, and are likely to enjoy in 2015, to get their beef herds where they want them to be in the next few years.

### Table 1. USDA January 1, 2015 Cattle Inventory Report

<table>
<thead>
<tr>
<th>Category</th>
<th>2014 (1,000</th>
<th>2015 (1,000</th>
<th>2015 as %</th>
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<tr>
<td>Total Cattle and Calves</td>
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<td>89,800.0</td>
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<td>Cows and Heifers That Have Calved</td>
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<td>Beef Cows</td>
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<td>Heifers 500 Pounds and Over</td>
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<td>For Beef Cows Replacement</td>
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<td>For Milk Cow Replacement</td>
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<td>Steers 500 Pounds and Over</td>
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<td>Bull 500 Pounds and Over</td>
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<td>2,204.3</td>
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<td>Calves Under 500 Pounds</td>
<td>13,557.9</td>
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<td>Cattle on Feed</td>
<td>13,018.3</td>
<td>13,093.0</td>
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<td>2013</td>
<td>13,730.0</td>
<td>13,900.0</td>
<td>101</td>
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<td>Source: NASS, USDA</td>
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</table>

~ Kenny Burdine

### ARC vs. PLC Choice in Central and Eastern Kentucky – Which is Best?

Farmers with base acreage in Kentucky will need to make a choice between two main programs available to them by the end of March. These programs will replace direct payments and are meant to pay out when profitability is low, rather than having a fixed payment each year. As such, projected payment will depend on prices, and in some cases yields, and will be highly variable. The PLC program is strictly price driven with payouts occurring when the actual national marketing price drops below target price levels for corn, soybean, and wheat. The ARC County program is revenue-based (at the county level), and will occur when average county revenue for a crop drops below target levels that will change each year. Note that there is an additional ARC Individual program, but that most farmers in Kentucky would not likely consider it. ARC County will henceforth be called ARC in this article. For more information on the basics of these programs, please see the following site with additional links: [http://www.uky.edu/Ag/AgEcon/farmbill/](http://www.uky.edu/Ag/AgEcon/farmbill/).

For the past month, the bulk of my extension work has focused on helping Central and Eastern Kentucky farmers evaluate this decision on a county by county basis. The following article summarizes the insights and recommendations from this process.

In general, the ARC program will prove better if prices stay closer to the projected market prices for 2015-18 (roughly $4.00/bu for corn, $9.50/bu soybeans, and $5.50/bu wheat). The lower actual prices drop from these projected prices, the better the PLC program will pay relative to the ARC program. Soybeans would have to fall to very low levels before PLC would be the better program (note that farmers can allocate ARC for one crop and PLC for another). All of these statements are generalities, as yield also plays into the ARC program. Higher actual county yields (compared to the average county yield) will reduce ARC payments and vice versa.

However, the choice between PLC and ARC will change based on the percentage of base acres relative to total planted acres. This dynamic will be different in Central/Eastern Kentucky compared to Western Kentucky in that the latter generally has high percentages of base acres compared to planted acres, while the former generally has low percentages. The lower the percentage of base acres to planted acres, the more advantageous the PLC program becomes. This is because there is a supplemental crop insurance (SCO), created by the Farm Bill, that can be used on non-base acres for a crop if PLC is chosen for that crop, but not if ARC is chosen. The SCO insurance is subsidized at a 65% level and brings the base insurance up to 86%. Since this is an insurance product, you will want to contact your crop insurance agent to find out the specifics of it related to your county. However, the following link will give you estimates of the cost and subsidies of various...
Kentucky farm revenues increased each year from 2008 through 2013, generally based on increasing crop and livestock returns, and supported by crop insurance and government payments. Revenues are projected to turn down for 2015 as crop prices continue to fall and government payments are reduced. Farm profits rose to record highs during the same time, but growth was much more sporadic. Profits are expected to drop off more dramatically than revenues for the coming years.

Gross Farm Revenue (GFR) is all farm income before expense (Figure 1). GFR increased from $1,188,945 in 2008 to $2,050,225 in 2013, largely based on increasing prices for grains. GFR is projected to remain stable for 2014. Falling prices and government payments are expected to produce lower GFR for 2015.

In areas with high percentages of base acres to planted acres, the decision dynamics will be different. The ARC program will probably be best for established farmers who have a high level of equity. This is assuming the farmer in this situation can survive 1-2 years of $2.50-3.00/bu corn. Conversely, the PLC program will likely be best for beginning farmers that have not built up much equity, have high cash rents, and where 1-2 years of $2.50-3.00 corn could put them out of business.

Farmers will also have the opportunity to update program yields and reallocate (but not increase) base acreage between crops. Reallocation would be based on the last four years of planted history for each FSA farm. You will have two options: keep your original allocation, or choose the new allocation based on the four year history. In general, it is best to choose the option that gives you the most corn base acreage.

For additional information on the Farm Bill decision, see the following site: [http://www.uky.edu/Ag/AgEcon/farmbill/](http://www.uky.edu/Ag/AgEcon/farmbill/).

Greg Halich can be reached at Greg.Halich@uky.edu and at (859) 257-8841.

~ Greg Halich

Gross Farm Revenues & Net Farm Income

The largest portion of GFR is crop and livestock returns, typically 88% of gross income during this period. Crop insurance and government payments generally represent a small portion of Gross Farm Revenues. Payments as a percent of GFR can be viewed in Figure 2. Government payments averaged $56,259 during the period, or about 4% of GFR. Crop insurance averaged $123,198 during the same period, but there were significant payments of $121,451 in 2008 and $338,955 in 2012. Crop insurance payments contribute around 6% or about $70,000 annually to GFR.

Figure 2. Crop Insurance & Government Payments Percent of GFR

Net Farm Income (NFI) is Gross Farm Revenue minus Gross Farm Expense. It is a primary measure of farm profit. Here, NFI is defined as GFR less total operating and interest expenses, plus...
net gain or loss on machinery and buildings. NFI averaged $377,057 during the period 2008-2013, but reached $473,943 in 2013 (Figure 3). Falling commodity prices and lower government payments are expected to reduce NFI to the period average.

Figure 3 shows total revenue from crop insurance, government payments, and other income plus the net income from crop and livestock sales that add up to NFI. Gross Farm Expense has been subtracted from crop and livestock returns to show the importance of certain payments to NFI for each year. Note how much of NFI comes from crop insurance in 2012.

Figure 3. Net Farm Income 2008-2013

Crop insurance and government payments as a percent of NFI can be viewed in Figure 4. The graph is identical to Figure 2 except for the percentages on the left side. Crop insurance and government payments make up a larger percentage of NFI. Government payments average 15% and crop insurance averages 33% of NFI. Note that crop insurance made up 78% of NFI for the 2012 drought year. Also note that government payments are projected to contribute 0% for 2015.

Kentucky farmers will have to make several management adjustments for 2015 and beyond. The potential loss of about $56,000 in government payments is one. Cost containment will become more important as commodity prices fall, and crop insurance will remain a key component of farm profitability.

Data is taken from farms participating in the Kentucky farm Business Management (KFBM) program. KFBM is a joint venture between the University of Kentucky Department of Agricultural Economics and participating farmers. Data for GFR and NFI are adjusted to accrual records to reflect calendar year production. More information on KFBM can be found at http://www.uky.edu/Ag/KFBM.

~ Jerry Pierce

UK Dining Market – Opportunity for More Kentucky Food Demand

An increasingly large number of farmers are looking at the local food market for sales opportunities. While this market is growing, it presents a variety of challenges. Many producers think of farmers markets as the primary outlet/destination for local food, but farmers markets present a variety of challenges. For example, they are labor intensive, seasonal and patrons expect a wide variety of products. Another outlet is the institutional market, and a new player has recently entered this arena.

As of July 1, 2014, Aramark has been the contract manager for the University of Kentucky food services, doing business as “UK Dining.” UK Dining has embraced the contract provision to buy a total of $2 million of Kentucky products in its first year; $1.2 million of Kentucky Proud products and $.8 million of “local” products from Fayette and surrounding counties. This is a challenging goal for UK Dining and, potentially, a great opportunity for local farmers and food processors.

UK Dining will not be a “direct” market. Almost all of their produce, meat and processed product purchases will come through one of their supplier partners, primarily Sysco and Piazza Produce. Sellers to UK Dining will need to meet industry standards for food safety and liability. For example, third party audits of GAP certification are a norm, along with a several million dollar liability insurance policy. While these expectations may challenge producers, they are the industry norm and will be increasing demanded by all buyers. UK Extension, along with our partners like the Kentucky Department of Agriculture and KCARD, will provide training and assistance to help producers adapt to these expectations.

UK Dining does about 30,000 “transactions” per day, which is a potentially huge market for Kentucky products. Of course, farmers recognize the seasonality conflicts; students are on campus from late August to early May, while much of our peak fruit and vegetable production is during the summer. Meat products are less challenging from a seasonality perspective, but bring the different challenge of how to find a market for all of
Farm sector profitability expected to weaken in 2015

U.S. net farm income—a measure of the sector’s profitability—is forecast to be $73.6 billion in 2015, down nearly 32 percent from 2014’s forecast of $108 billion. The 2015 forecast would be the lowest since 2009 and a drop of nearly 43 percent from the record high of $129 billion in 2013. Lower crop receipts (-$15.6 billion) and livestock receipts (-$10.1 billion) are the main drivers of the change, as production expenses are projected up less than 1 percent ($2.5 billion) and government payments are forecast to increase about 15 percent ($1.6 billion) in 2015. Net cash income is forecast at $89.4 billion, down about 22 percent from the 2014 forecast. Net cash income is projected to decline less than net farm income primarily because it reflects the sale of carryover stocks from 2014. This chart is found in 2015 Farm Sector Income Forecast, released February 10, 2015.

~ USDA, Economic Research Service

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The actual size of the UK Dining market can also be a challenge. Many producers would not have enough volume to meet the ongoing demand of this market. These farmers may want to explore the catering market, which typically has a focus on high quality, but smaller volume dishes. Catering menus are highly flexible and can be a great place for collaboration between chefs and farmers.

An indirect route to the UK Dining market is through a food processor. Two Kentucky processors who sell to UK are Custom Food Solutions and KHI. Both firms buy raw ingredients and then freeze or process them (for example, into soups), creating a storable product based on Kentucky-grown inputs.

Will UK Dining have a significant impact on the demand for local and Kentucky Proud products? While insurance and certifications are important, the key is probably going to be the pricing, which is still being developed. Farmers are going to be assessing price offerings and comparing them to other markets and production costs. UK Dining will be looking at the value they are getting, their need to buy local/Kentucky Proud items to meet the UK contract and competing products.

Farmers who are interested in learning more and seeking assistance may want to work with extension specialists in the areas of meat processing, meat marketing, produce production and marketing, or the follow organizations and programs:

**UK Dining:** Leisha Vance, Sustainability Manager  
• BuyLocal-UKDining@lsv.uky.edu

**Market Ready:** Tim Woods & Kevin Heidemann, UK Cooperative Extension Service  
• tim.woods@uky.edu & kevin.heidemann@uky.edu

**KY Department of Agriculture:** Josh Lindau, Ag Marketing & Agribusiness Recruitment  
• joshua.lindau@ky.gov

**UK Food Systems Innovation Center (FSIC):** Leeann Slaughter, Academic Coordinator  
• leecann.litton@uky.edu

**Kentucky Center for Ag and Rural Development (KCARD):** Aleta Botts, Executive Director  
• aleta.botts@gmail.com

**LFUCG:** Ashton Potter-Wright, Bluegrass Local Foods Coordinator  
• awright@lexingtonky.gov

**Louisville Farm to Table:** Sarah Fritschner, Louisville Local Foods Coordinator  
• sfritschner@gmail.com

**The Food Connection:** M. Scott Smith, Faculty Director  
• mssmith@uky.edu

~ Lee Meyer