

The Kentucky Agricultural Economic Outlook for 2005

edited by Linda Inman and A. Lee Meyer



The Kentucky Ag Economy

Larry Jones

2004 Review: Kentucky farm cash receipts are estimated for 2004 to be \$3.97 billion, up 14% over 2003. Cash receipts at this level would represent a record high for the Commonwealth. Farm cash receipts since 1990 have been relatively flat averaging \$3.362 billion (range from \$3.1 to \$3.6 billion). So the 2004 estimate would be above trend and represent a record cash receipt level. Our analysis suggests that the combination of higher sales for traditional commodities as well as generally higher prices explains most of the increase in farm cash receipts for 2004, rather than arguing that there has been a fundamental change in the agricultural economy. Net farm income also likely increased significantly during 2004 due to higher receipts and modest increases in the cost of most inputs; however, energy prices were up sharply during 2004.

Both crops and livestock cash receipts registered gains with crops increasing 14% over 2003 levels while livestock increased nearly 13%. Crop enterprises that registered significantly higher cash receipts during 2004 included corn (41%), soybeans (22%), and

wheat (17%). These three crop enterprises represented \$185 million increase of the total \$214 for all crops. Although tobacco is not the leading source, the enterprise generated an estimated \$450 million in cash receipts in 2004. Fruits, nuts, vegetables, floriculture and ornamental crops continue to increase in importance for some producers and collectively represent 3% of total farm cash receipts. Livestock sectors registering significant increases for 2004 (estimated) included equine, dairy, and poultry. These three enterprises collectively represented 90% of the increase in livestock receipts (\$256 million of the \$285 million estimated). Equine receipts are estimated to have increased due to higher numbers being sold as well as higher prices. The dairy increase is largely explained by sharply higher prices, particularly early during 2004. Poultry (all poultry categories) is again the second largest category of cash receipts in 2004 with an estimated \$766 million. Beef cattle receipts are expected to have increased slightly to \$555 million. Other livestock enterprises have registered significant percentage gains in the past five years, but collectively they represent less than 1% of total cash receipts.

2005 Outlook: We expect farm cash receipts to moderate to \$3.8 billion from the record 2004 level, but this figure would still be above trend. Commodity prices are expected to show some weakness for the year and for many commodities we do not expect the high level of sales to continue. Row crops, for example, had nearly ideal growing conditions in many parts of the state resulting in higher sales volumes. But excellent growing conditions will not likely be replicated in 2005. Farm balance sheets in the aggregate continue to look very strong by historical standards.

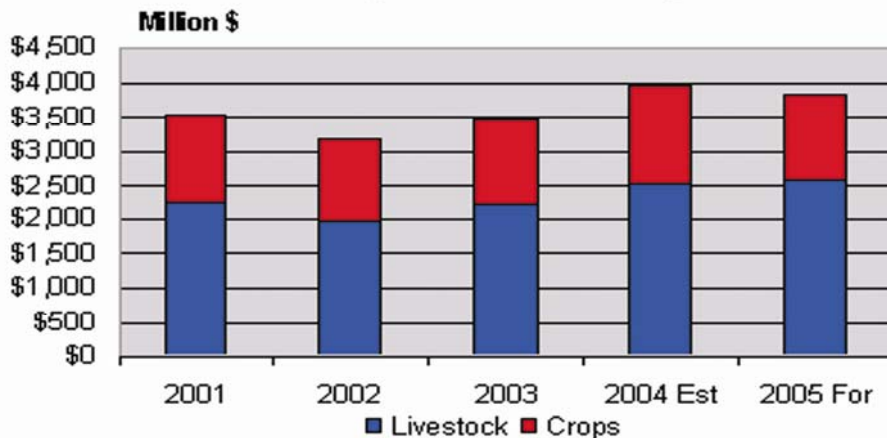
Tobacco

Will Snell

2004 Review: After seven long years of debate, discussion, and uncertainty, 2004 will be remembered as the year the tobacco buyout eventually became law. While most of the attention centered on the buyout, Kentucky tobacco farmers, despite a challenging growing season, were generally able to produce a decent crop during their last year of production under the depression-era federal tobacco program. In response to an expected 6% increase in production, Kentucky tobacco sales in 2004 could exceed \$450 million for the first time since 2001. Prices remained relatively strong in response to the safety net provided by the program. U.S. burley demand continued to be hampered by increasing use of less expensive imported tobacco, stagnant exports, and declining domestic cigarette consumption. U.S. dark tobacco demand continued to benefit from higher product demand for smokeless tobacco products, projected to increase another 4 to 5% in 2004 – the 17th straight year U.S. snuff consumption has increased.

2005 Outlook: The upcoming year will be the most uncertain and unpredictable year in Kentucky's tobacco industry since the pre-program years in the 1930s. The only item with certainty is that Kentucky tobacco farmers will begin to receive their first buyout payments (scheduled to total nearly \$250 million, although they will likely be much greater in response to the accelerated payment option). Burley prices could fall by 50 cents per pound or more as the market

Kentucky Farm Cash Receipts



Source: KY Agricultural Statistics/UK Estimates

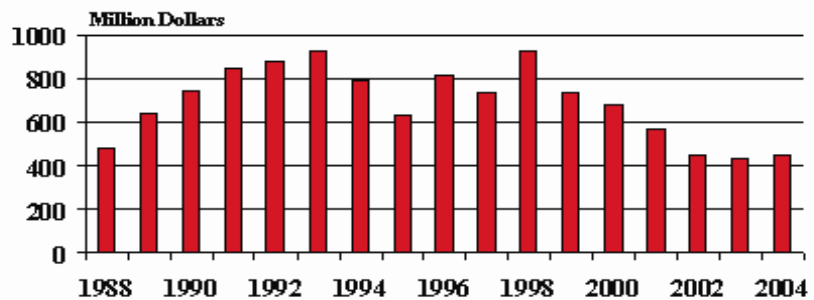
adjusts to the absence of quota rents, production controls, and price supports. Demand opportunities will improve as lower prices will improve the U.S. price competitiveness, but don't expect significant gains in burley demand in the short-run in response to foreign price reaction, declining domestic cigarette demand, and perhaps of greater concern, whether the price incentives will be attractive enough to generate a supply level to meet a potentially growing demand. In addition to price concerns, labor, capital, housing, and management constraints could very easily result in a smaller crop size and crop value for Kentucky's tobacco economy in 2005. Without growing restrictions, a safety net, and a guaranteed market, burley production will tend to shift away from the higher cost regions (e.g. Appalachian regions in Kentucky and Tennessee), with potential expansion on some farms in central and western Kentucky, and middle Tennessee. And burley production could possibly move outside of the traditional burley belt into areas such as the flue-cured regions of North Carolina and into the lower cost region of Pennsylvania. The location of dark tobacco production may not change abruptly, with less of a price adjustment than cigarette tobaccos. Consequently, tobacco will likely continue to play an important role in the Kentucky agricultural economy in 2005— but these tobacco dollars will be concentrated among fewer farms and in fewer areas as the tobacco economy adjusts to the post-buyout era.

Grains Steve Riggins

2004 Review: U.S. corn production for the 2004 crop now looks to total about 11.74 billion bushels, an incredible 1.6 billion bushels above last year's record large crop. USDA has forecast 2004 U.S. corn yield to average a record 160.2 bu/acre (November Crop Report). This is a yield roughly 20 bushels above the trend yield of the past 30 years and at 14 percent above trend is the largest gain above trend over the 30 year data set. Over this time period there have been only two other years when corn yields were nearly this much above expectations – 1979 and 1994 when corn yields were 13 percent above trend yield.

The good news for corn farmers is that USDA and the market both appear to believe that use of U.S. produced corn will be record large and for the second consecutive year exceed 10 billion bushels. In fact, total disappearance of U.S. produced corn is projected to equal nearly 10.9 billion bushels. However, the huge record production will still result in an increase in carryover stocks and therefore keep any price rallies in check. If corn exports live up to expectations, prices might be somewhat higher than expected by

Kentucky Tobacco Cash Receipts



Source: Kentucky Ag Statistics

many farmers, but they should still be well below those of last season.

The situation for soybeans is very similar to that for corn – record production, robust disappearance, but building stock levels with lower prices. Currently, USDA places U.S. average soybean yield at a record setting 42.6 bu/acre. As in corn, U.S. farmers increased soybean plantings compared to one year earlier. U.S. planted soybean acreage was up 1.7 million acres compared to the 2003 crop year. The combination of more acres and record yield has produced the first ever 3 plus billion bushel U.S. soybean harvest. Kentucky soybean yields are currently listed at 42 bu/acre. This equals the second best year ever for soybean yields in Kentucky that occurred in 2001 and is only slightly below last year's record yield figure of 43.5 bu/acre.

Land devoted to wheat production in the U.S. continued to decline in 2004, but at a somewhat slower pace than has been the case since the implementation of the 1996 farm bill. Total U.S. wheat production from the 2004 crop is currently listed at 2.16 billion bushels. Production is just under expected total disappearance of 2.2 billion bushels. Stable U.S. stocks coupled with a new world record wheat production level and record corn production will serve to restrain any price rallies in U.S. wheat.

Outlook for 2005: The price outlook for U.S. corn, wheat and soybeans over the next several months will be heavily dependent on production prospects for corn and especially soybeans in the Southern Hemisphere, weekly export sales and shipments of U.S. grains/products and livestock feed demand in the U.S. By early spring, the driving force behind price outlook will be expectations about acres planted to principal crops in the U.S. Production prospects will then dominant the market news until mid summer.

Current forecast by USDA call for an important increase (8 percent) in U.S. corn exports while wheat exports are expected to decrease by nearly 16 percent compared to last year. It is early in the corn marketing year, however, weekly U.S. corn exports have been somewhat disappointing to-date while weekly wheat exports have been somewhat better than the rates needed to attain the USDA's forecast for a marketing year total. Soybean exports are projected to be strong at 1.01 billion bushels, the third best year ever following the 2002/03 season's 1.044 billion bushels and the 1.064 billion bushels shipped in the record setting 2001/02 marketing year. Currently, weekly U.S. soybean sales and shipment data have been very large due to robust buying of U.S. soybeans by China.

Record large supplies of soybeans, corn and wheat in the global market and forecast record large production of soybeans by South America next spring should serve to restrain commodity prices this winter. However, low commodity prices have stimulated record setting usage rates for these commodities. In addition, the increasing percentage of U.S. produced corn that goes into domestic ethanol production (forecast to account for 12.6% of total U.S. corn disappearance in 2004/05) will help provide support to corn prices. More new ethanol plants are expected to come into production during 2005 and the production of biodiesel should increase due to recent tax changes. China's presence in global commodity markets is also a major factor that will affect the seasonal price pattern, especially for corn and soybeans.

Production is record large, use is expanding rapidly and stocks are building, but not yet to burdensome levels. And Asian soybean rust has been confirmed in the U.S. and is already identified in some of the early planted South American soybeans.

Production prospects for South America this winter and for the U.S. next year will be the main market drivers unless some unexpected demand side issue like BSE or the U.S. economy emerges this winter.

Soybean prices could soften if the market sees evidence that users are starting to curtail purchases from the U.S., via switching to South American supplies. The monthly soybean crushing report by the Census Bureau needs to show a continuation of strong use for domestic soybean crushing. For corn and wheat prices to maintain or even increase in price the weekly export data need to show strong export demand. Additionally, in January, the USDA data need to confirm strong domestic use of corn for livestock feed and record use of corn for ethanol production. Now is the time for farmers to develop their first marketing plan for the 2005/06 marketing season.

Livestock and Meats

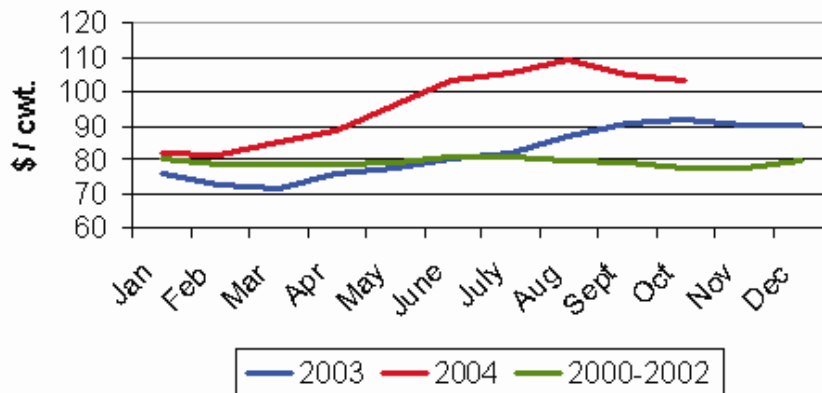
Lee Meyer

2004 Review : Broiler prices have varied considerably during 2004. The USDA reported that prices for breast meat products have dropped by about 50% since mid year and are about 20% below 2003; however leg prices are only down about 10% and wings prices are actually up 15% (but only make up a small portion of the total chicken weight). Exports take roughly 15% of U.S. broiler production. A few years ago, a Russian embargo disrupted the exports. More recently China had closed it borders to U.S. chicken because of Avian Influenza, but that market has now been open since early November. 2004 prices will have averaged about 20% higher than the 2003 level, for the whole year, even though prices late in the year were only about 5% higher than the 2003 level.

Hog prices have been over the 2003 level all year. On a live weight basis, hog prices were 30% higher, with an average over \$50 per cwt. (Prices received in Kentucky average about \$3/cwt. lower.) Prices began the year in the low \$40s, strengthening into the mid \$50s for mid year. Prices declined late in the year, to end near the \$50/cwt. level. With production costs in the upper \$30s per cwt, 2004 has been a profitable year and production is likely to increase in 2005. Exports were up almost 20% for the year.

BSE ("mad cow disease"), variability and record prices marked 2004. After Canada's BSE episode in May, 2003, the U.S. experienced its own in December, 2003, which carried over into 2004. Slaughter cattle prices dropped \$20/cwt., but Kentucky feeder steer prices dropped by only \$10 per cwt. Even though export markets were immediately closed, tight supplies and support from consumers brought prices back

Kentucky Feeder Cattle Prices-- 500 to 600 lb. Steers



to profitable levels. A huge 2004 corn and soybean crop dropped production costs, and probably contributed \$5 to \$10/cwt. to feeder cattle prices. The year ended with beef production down 6%, slaughter cattle prices in the \$80s, near the same level as 2003, and feeder cattle prices \$15/cwt. higher than late in 2003.

2005 Forecast: Broiler production is on track for another 3% increase. Prices are expected to hold near late 2004 levels during the first half of 2005, but then increase later in the year. Feed cost is the greatest domestic risk to the industry, but the increasing importance of trade means that any disruption due to a disease outbreak would also have a significantly negative price impact.

Even with increases in production, strong demand should keep pork prices at profitable levels. Based on the Hogs and Pigs report, production should only increase gradually in 2005. The number of market hogs was up 1%, with the breeding herd up the same 1%. Pork trade should stay at the same strong level, taking about 5% of the pork off the market when both exports and imports are accounted for. While 2005 prices are forecast in the \$45 to \$52/cwt. range. Summer prices could average in the mid \$50s, with prices late in the year declining into the mid to even low \$40s.

Expanding beef cow numbers, slightly more cattle on feed, potential border openings with Canada (negative to U.S. cattle prices) and with Japan (positive to prices) are key factors going into 2005. On the supply side, beef production is likely to increase. Driven by cheap feed for at least the first four to six months of the year, feedlots will deliver cattle at higher slaughter weights. With aggressive expansion, i.e. if herd managers put heifers into the cow herd instead of the beef chain, beef production could be reduced in the short run. The forecast for 2005 slaughter

steer price is \$82 to \$90/cwt. Consumer demand remains a wild card.

For the later half of the year, feed costs will be a key factor in feeder cattle prices. Even with strong slaughter cattle prices, a return to "normal" feed costs would bring feeder cattle prices down 5% to 10%. The expected price path for 2005 is for continued strong feeder cattle prices through the spring, then two scenarios. First, would be a typical seasonal pattern for the rest of the year if feed costs do not dramatically increase and slaughter cattle prices stay mostly in the \$80s. Prices for 500 to 600 lb. Kentucky feeder steers would average in the \$100 to \$108 range. Alternatively, if slaughter cattle prices do not hold in the \$80s and/or feed costs move up dramatically, feeder cattle prices will drop 10% to 20%, putting the Kentucky, year average price for 500 to 600 lb. steers in the \$90s.

Dairy
Bill Crist

2004 Review: Finally! After nearly two years of extremely low milk prices, dairy farmers saw an increase in milk prices, experiencing record high prices in the spring of 2004. Kentucky producer price peaked at \$20.40 per cwt. in June. U.S. milk production declined 0.9 percent in the first quarter of 2004 and 0.6 percent in the second quarter. Combined with low inventory levels for butter, these caused a strong reaction in the market resulting in a dramatic increase in both butter and cheese prices. This rise in these commodity prices was responsible for the jump in Class III milk price from \$11.61 per hundredweight in January to \$20.58 per hundredweight by May.

Milk production drops in the first half of 2004. were due primarily to reduced cow numbers. In January 2004, U.S. cow numbers were down 153,000 head from a year earlier. Production per cow was also increasing at a

slower rate than normal. For the first two quarters milk per cow increased only 0.85 and 0.65 percent compared to 1.8 percent for the period 1997-2003.

The milk supply has begun to respond to higher farm milk prices. Cow numbers began to increase and milk output has turned around. As a result Class III price has dropped to \$14.16 in October from a record high of \$20.58 in May.

However, the market is currently showing surprising strength, based on strong demand for fluid milk products and egg nog, dip, bottled cream, sour cream and cream cheese. In addition, Cooperatives Working Together (CWT) announced on November 17 that they are accepting bids to retire 51,700 milking cows. As a result the futures market for Class III milk is up to \$14.92 for November and \$15.59 for December.

Kentucky milk production has shown a turn around starting in July and August, with an increase of 1 percent and 5 percent respectively from 2003. This was due to increased milk per cow of 50 pounds in July and 70 in August. A cool, wet summer certainly helped milk production. Kentucky milk cow numbers continue to decline, down to 109,000 head in September, 2,000 head below last year. The value of milk produced in 2003 was \$196.2 million, down 8 percent from 2002.

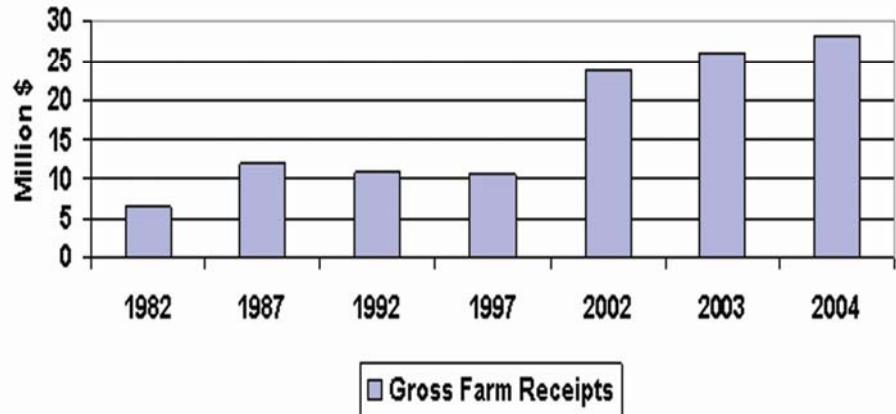
2005 Outlook: Kentucky producer milk price in 2005 will likely average near the 5-year average price of \$14.42 per hundredweight. This is due to a projected increase in milk production from both more milk cows and more milk per cow. U.S. milk production has started to increase, up 1.5 percent in August and is projected to grow at a more normal level of 1.2 percent in the fourth quarter of 2004. Looking historically, changes in the growth rate of the milk supply result in the Class III milk price moving in the opposite direction. Ken Bailey, Dairy Marketing and Policy Economist at Penn State University found that for the period January 1997 to June 2004 the relationship between milk supply and Class III milk price was -0.34. Therefore, on the average, a 1 percent increase in milk supply would result in a 0.34 percent decrease in Class III price. Class III milk price has a major impact on producer price. Government payments to producers will likely return starting in February based on the Class III milk futures price.

Horticulture

Matt Ernst and Tim Woods

2004 Review: Kentucky's produce (vegetables/fruit) and green (nursery/greenhouse) industries continued growth and diversification in 2004. Growth was fueled

Kentucky Gross Farm Receipts from Fruits and Vegetables



by increased consumer appetites for horticultural products and expanding local/regional markets for Kentucky-grown food. Despite challenging weather and volatile markets, gross produce receipts rose slightly in 2004 as producers benefited from more direct market channels and late-season price surges. Kentucky's green industry also posted modest growth, increasing slightly from decade-high gross sales of \$75 million in 2003.

Commercial Vegetables - U.S. Census of Agriculture data indicate Kentucky posted the second highest rate of growth (53%) in vegetable acres harvested among U.S. states between 1997 and 2002. In 2004, Kentucky vegetable acres harvested held steady, over 6,000 acres, due to weather-related production difficulties. Some growers benefited from skyrocketing late-season prices, especially for tomatoes and peppers which brought nearly double season average prices from August through November. This price surge resulted from hurricanes disrupting produce harvest and distribution throughout the Southeast.

Commercial Fruit - Tree fruit growers reported a great apple production year and outstanding fall festival season. Berry growers continued to increase acreage (blueberries, blackberries) and utilize Pick Your Own, value-added and local grocery sales. Kentucky wineries report purchasing more local grapes in 2004 while continuing to bottle more wine.

Green Industry - The green industry nationwide is fueled by new home construction and healthy consumer spending. Kentucky's growth in this sector is largely confined to larger greenhouses and a cooperative nursery venture. Smaller growers continued to find niche markets, especially for spring bedding plants, through produce auctions and farmers' market vending in 2004.

2005 Outlook: More Kentucky produce growers than ever will utilize some form of direct marketing. This has been primarily fueled by the explosion of community farmers' markets (from 30 in 1997 to over 90 in 2004) as well as the popularity of on-farm and roadside markets. Direct marketing to local restaurants, especially a new program for local produce purchases by Kentucky's state parks, will provide a profitable market niche for some growers in 2005.

The advent of a new produce auction (Lincoln County) for the entire 2004 season and the startup of auctions in Bath and Mason counties offered additional market channels for horticulture crops. The success of these auctions in 2005 will be dependent on their ability to attract larger-volume, wholesale buyers.

Wholesale produce growers should continue to benefit from sales to big-box retailers, especially Wal-Mart®, whose appetite for local produce is increasing. West Kentucky Growers' Co-op sourced broccoli to Wal-Mart® through an alliance arrangement with Mann's broccoli in 2004; successfully negotiating such agreements will be critical to long-term success of Kentucky's produce marketing cooperatives.

Gross receipts in Kentucky's greenhouse industry will continue to increase, with expansion among the largest producers. Ironing out production systems and selling regional nursery buyers on higher-quality Kentucky stock will be significant challenges.

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