



Fall 2008

# Agricultural Situation and Outlook Fall 2008

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## FOREWORD

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This publication is prepared by the faculty and staff of the Department of Agricultural Economics, University of Kentucky. These articles present information on the economic situation and outlook for Kentucky agriculture and are intended to assist farmers, agribusiness professionals, Extension field staff, and others with interest in agriculture and agribusiness. Information presented here is based on the most recent information and research available. However, the rapidly changing economic and policy conditions for agriculture limit the usefulness and life span of conclusions and recommendations cited here. Decision makers should keep these facts in mind. Feel free to use the information included in this publication for other uses, but please provide professional citation about the source. The papers contained in this publication are published without formal review and the views expressed are those of the author and do not necessarily reflect the views of the University of Kentucky, the Agricultural Experiment Station, or the Cooperative Extension Service. If you need additional information or if you would like to provide comments or suggestions, contact the author or the editor. A list of authors (in alphabetical order) and contact information is provided below.

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**AGRICULTURAL SITUATION AND OUTLOOK**  
**FALL 2008**  
**ESM-34 OCTOBER 2008**

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*Kenny Burdine & Sara Williamson*

<b>Economic and Agricultural Outlook</b> .....	1
Craig L. Infanger & Larry D. Jones	
<b>Farm Bill</b> .....	3
Will Snell	
<b>Land Values</b> .....	5
Richard Trimble	
<b>Beef</b> .....	7
Kenny Burdine	
<b>Dairy</b> .....	9
Kenny Burdine	
<b>Pork</b> .....	11
Lee Meyer	
<b>Poultry</b> .....	13
Lee Meyer	
<b>Sheep &amp; Goat</b> .....	15
Lee Meyer	
<b>Grain</b> .....	17
Cory Walters	
<b>Tobacco</b> .....	19
Will Snell	
<b>Timber</b> .....	21
Greg Halich	
<b>Biofuels</b> .....	23
Alison Davis	
<b>Produce</b> .....	25
Tim Woods & Sara Williamson	
<b>New Consumer Research and Updated Direct-Marketing Data</b> .....	27
Tim Woods & Sara Williamson	
<b>The Role of Debt in Today’s Family</b> .....	29
Jennifer Hunter	
<b>2009 Whole Grain Farm Projections</b> .....	31
Kentucky Farm Business Management Program, c/o Jerry Pierce	

# Economic Outlook for Agriculture, Fall 2008

*Craig L. Infanger and Larry D. Jones*

**U.S. Economic Outlook**—In September, the U.S. was plunged into potentially the most precarious financial crisis of the last four decades. As financial institutions failed, world markets lost confidence in the U.S. economy and international credit flows were reduced. The intent of the “bailout” legislation is to restore confidence and liquidity to banking and investment institutions; however, it will be months before we know the impact. In the meantime, the federal budget deficit will balloon to record levels, leading to much higher national debt.

There is an emerging consensus that the “ripple effects” of the financial crisis are having serious negative impacts on economic growth. Rising unemployment – now over 6% – and much higher food and fuel costs are eroding consumer spending, the major factor in recent economic growth. It would appear that growth in Gross Domestic Product (GDP) may turn negative in 2009, leading to an official recession, or be very low (1%-1.5%). Relatively high unemployment and inflation in a period of 1% growth will result in “recession-like” conditions. The growth in exports, led by agricultural exports, and the general decline in commodity prices – led by the substantial drop in oil prices—are positive factors in the general economic outlook for 2009.

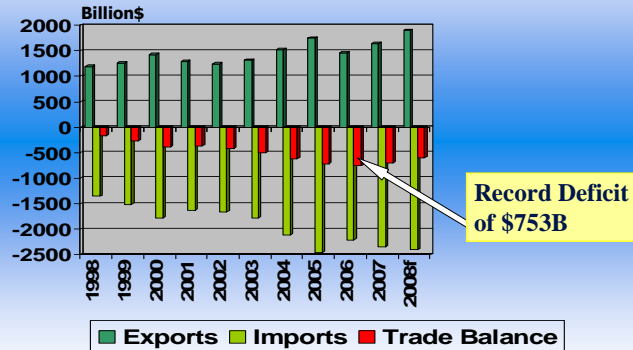
**Economic Outlook for Agriculture**—The past four years have been record net farm income years in U.S. agriculture. Net farm income in 2008 is projected by USDA to be a record \$95.7 billion, 10.3% above last year’s record high and 57% above the 10 year average of \$61.1 billion. Farm input expenditures have jumped 16%, narrowing profits for producers with below-average crop yields. Government payments, despite higher commodity prices, are projected to increase to \$13.2 billion (from \$11.9 billion in 2007), but payments will be 19% below the average of the past five years. The value of crop products (\$188.8 billion) is forecast to exceed the 2007 record by 25% due primarily to significantly higher prices. Livestock receipts are projected to increase by 6% and will be led by higher receipts for cattle, broilers, hogs and eggs. U.S. food exports continue to surge, led by tighter world food supplies, rising incomes in parts of the developing regions of the world, and continued weakness in the U.S. dollar. Despite increases in farm debt, the U.S. agricultural balance sheet is exceptionally strong with farm sector equity projected to reach \$2.1 trillion. Looking ahead to 2009, price increases in farm real estate values are likely to moderate in the face of the credit crisis and projected declines in net farm income.

Most years Kentucky’s agricultural economy and state net farm income mirrors trends in the U.S. agricultural economy, but 2008 will likely be an exception for several reasons. First, equine cash receipts, the Commonwealth’s leading agricultural enterprise, are declining more than 10% this year due to lower prices. Second, tobacco will likely have lower farm cash receipts. Third, drought conditions this summer will result in reduced yields of crops in major portions of the state. Kentucky’s net farm income is forecast around \$1.7 billion, 21% below the record \$2.23 billion in 2005. However, net farm income for 2008 will likely be the second highest in the past 10 years.

ECONOMIC FORECASTS	
<b>GDP growth</b>	Slowing to +1% or -1%
<b>Interest rates</b>	Trending down – Prime to 4.5%
<b>Inflation</b>	Moderating for food & energy
<b>Oil Prices</b>	Prices settle in \$80-\$90 range
<b>Unemployment</b>	Continued job losses; 6%+ unemployment rate
<b>Housing</b>	Price declines bottom, Q1-Q2
<b>Trade deficit</b>	Recent improvement stops
<b>Budget deficit</b>	Balloons, all-time high >\$650B

## Exports are the main factor behind recent economic growth

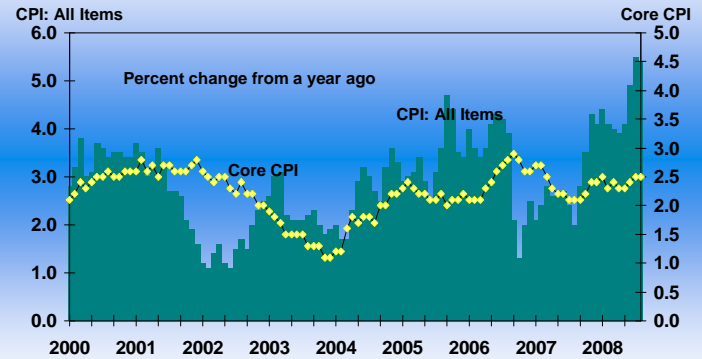
International Trade Balance 1998-2008



Source: U.S. Department of Commerce

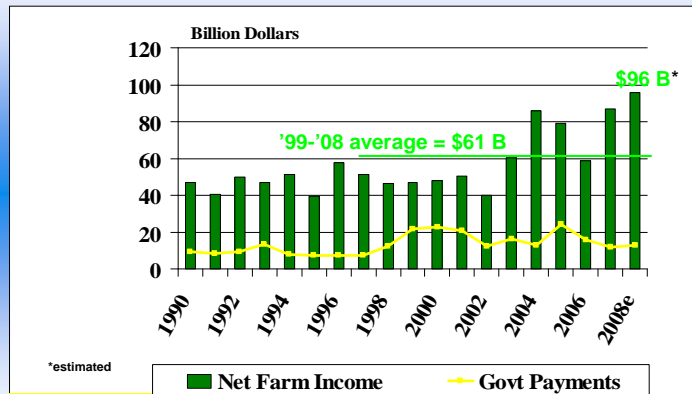
## Inflation pressure turns up

Consumer Price Index



Source: Bureau of Labor Statistics

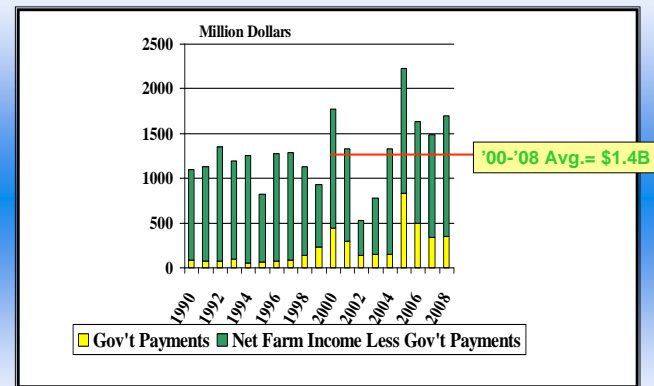
## U.S. Net Farm Income Another Record Year in 2008



\*estimated

Source: ERS/USDA

## Kentucky Net Farm Income



Source: ERS/USDA



# The Food, Conservation, and Energy Act of 2008 (2008 Farm Bill)

*Will Snell*  
August 2008

**Background:** The Food, Conservation, and Energy Act of 2008, better known as the 2008 Farm Bill, establishes the nation's farm commodity, conservation, food assistance and various other programs and policies related to agriculture for the next five years (2008-2012). Approximately 2/3 of this \$307 billion farm bill is devoted to nutrition and food assistance programs, with less than 15% allocated to farm program subsidies. In addition to an extra \$10 billion for food/nutrition programs, this bill places greater funding and emphasis on conservation, specialty crops, and energy research/infrastructure, with new titles for livestock, horticulture, and disaster assistance. A side by side comparison of the 2008 and 2002 farm bills is available from USDA ([www.ers.usda.gov/FarmBill/2008/](http://www.ers.usda.gov/FarmBill/2008/)).

**Traditional Commodity Programs:** This bill maintains the 2002 Farm Bill safety net for traditional farm bill crops consisting of direct payments, countercyclical payments and marketing loan benefits. Direct payment rates remain the same, but payment base acres are reduced from 85% to 83.3% for 2009-2011. Loan rates and target prices remain at 2007 levels for 2009, with some rebalancing for some commodities for 2010-2012. A new optional counter-cyclical program called the Average Crop Revenue Election (ACRE) is offered.

**ACRE:** This new program provides eligible crop producers with an optional state-level revenue-based countercyclical program beginning in crop year 2009 in exchange for a 20% reduction in direct payments and a 30% reduction in loan rates. If selected, ACRE covers all program crops grown on each FSA farm number electing this option and will remain in effect for all crops through the 2012 crop year. All parties affiliated with a given FSA farm number must agree to this election or the farm's safety net for program crops will revert back to the traditional counter-cyclical program. An individual producer may select different counter-cyclical safety net program options for different farms. ACRE provides producers with a payment for an eligible commodity when the actual state revenue (state yield times the national average market price) for an eligible program commodity is less than 90% of a state revenue guarantee (which is based on a 5-year state average yield, excluding the high and low yield and a 2-year national average price) AND the actual farm revenue (actual farm yield times the national average market price) for the crop is less than the farm revenue guarantee (which is based on the farm's 5-year average yield, excluding the high and low yield, a 2-year national average price, and the crop insurance premium per acre.) The ACRE state revenue guarantee for a given crop for 2010-2012 cannot change by more than 10% from the previous crop year and the per unit payment cannot be greater than 25% of the state program guarantee for the crop. ACRE payments are calculated on planted, not base or harvested acres, but the total number of eligible planted acres for all crops on a given farm cannot exceed the farm's total base acres. ACRE payments will be made on 83.3% of planted acres for the 2009-2011 crops and 85% of the 2012 planted acres, and will be adjusted based on a ratio of individual farm yields relative to state yields. An ACRE payment calculator is available at [www.card.iastate.edu/ag\\_risk\\_tools/acre/](http://www.card.iastate.edu/ag_risk_tools/acre/).

**Payment Limitations:** The bill denies direct payments to any individual whose previous three year average adjusted gross farm income exceeds \$750,000 annually, and eliminates all commodity program payments to any individual whose previous three year average adjusted gross non-farm income exceeds \$500,000. A husband and a wife would be able to apply their own individual payment limits, effectively raising the commodity program limit for farming families to \$1.5 million annually. Retains the maximum \$40,000 direct payment limit, except for ACRE participants where the maximum is \$40,000 less the 20% reduction in direct payments under the ACRE program. The countercyclical payment limitation remains at \$65,000, except for ACRE participants where the limitation is \$65,000 plus the 20% reduction in direct payments under ACRE. Benefits under the loan program (e.g., loan deficiency payments and marketing loan gains) are no longer subject to a payment limitation of \$75,000. The three entity rule is eliminated. All payments must be attributed to an individual, which allows a spouse of someone actively engaged in farming to qualify for payments. For conservation programs, payments would be eliminated for individuals whose adjusted gross income averaged over three years exceeds one million dollars, with those who receive more than 2/3 of their total income from farming being exempt from any conservation payment limits. Commodity payments will be eliminated for any farm with less than 10 base acres, with exceptions for socially disadvantaged or limited resource farmers.

**Disaster Assistance:** A permanent, whole-farm revenue disaster assistance program called the Supplemental Revenue Assurance Program (SURE) has been established to allow for direct emergency assistance in response to weather-related events without requiring legislation each time a disaster occurs. Additional disaster programs are authorized to provide assistance to livestock, forage, and orchard and nursery tree producers

**Livestock:** This portion includes a new livestock title that implements mandatory country of origin (COOL) labeling for meats and produce, increases market access for small, state inspected meat processing plants, provides better protection for livestock producers entering into contracts (e.g., cancellation allowances, clear disclosure of large capital investments required within the contract, outlines producer arbitration options, and allows producers to petition for local court jurisdiction if litigation arises over contract disputes.)

**Credit:** Programs have improved for beginning farmers and increases farm ownership and operating loan limits.

**Horticulture:** There is a reauthorization for states to receive block grants and other programs to support marketing, research, education, and pest/disease management for specialty crops. Additional grants available to support local farmers markets, other direct marketing ventures, and agritourism are included, with an increased emphasis and funding for enhanced market information, certification, and regulation for organic food production.

**Rural Development:** Funding for a wide variety of economic development programs such as water, energy, and health programs are included, as well as loan guarantees to support value-added ag enterprises, and broadband internet expansion to enhance rural economies.

**Miscellaneous:** Tax laws are revised to allow race horses to be depreciated over three years. It prohibits closure or relocation of FSA offices for two years, and provides grants to improve ag labor supply, safety and training.

**Implications for Kentucky:** Despite reduced direct payments and loan rates, grain farmers will likely give consideration to the new optional ACRE program given the price outlook for grains for the next several years. Very few Kentucky farms will be affected by the new payment limitations, but Kentucky will likely lead the nation in the number of farms losing commodity payments for having less than 10 base acres. (Note: Congress is revisiting this issue). The expansion in conservations programs will likely provide more wide-spread benefits to Kentucky livestock and crop producers than other farm bill programs. The fruit and vegetable industry may be able to take advantage of programs designed to educate and promote locally grown specialty crops, including the growing organic food sector. Expanded nutrition programs and funding will be a benefit to low income consumers amidst increasing food prices and provide more access to fruits and vegetables in our schools.

**Dairy:** This bill modifies the dairy price support program by directly supporting the price of dairy products, increases the payment rate on the Milk Income Loss Contract (MILC) program, adjusts the MILC payment for changes in the cost of feed, extends the Dairy Export Incentives Program (DEIP), and authorizes producers and cooperatives to voluntarily enter into forward price contracts with milk handlers.

**Conservation:** To reauthorize most existing conservation programs, it increases conservation program spending by nearly \$8 billion. A maximum of 32 million acres will be enrolled in the Conservation Reserve Program (CRP), beginning in 2010, compared to the current maximum level of 39.2 million acres. The Environmental Quality Incentives Program (EQIP), which provides cost-share and technical assistance for adopting approved conservation practices, will receive \$2.4 billion. Over \$1 billion in new funding is authorized for the revamped Conservation Security Program (CSP) to enroll nearly 13 million acres annually by structuring payments that encourage producers to implement more soil, water, air, energy, plant and animal life, and other conservation practices on land already in production.

**Energy:** It increases funding for biofuels research and infrastructure, with emphasis on cellulosic and on-farm adoption of improved energy efficiency systems. It also reduces the blenders tax credit for corn ethanol from 51 cents to 45 cents per gallon, creates a \$1.01 per gallon tax credit for cellulosic biofuels, and extends the duty on ethanol imported for fuel.

# Kentucky's Land Values, Fall 2008

*Richard L. Trimble*

U.S. farm real estate values continued to increase during 2007. According to information recently released by the USDA, the value of farmland and buildings on farms across the US averaged \$2,350 per acre on January 1, 2008. This \$2,350 value is another record high and \$190 per acre more than last year. While the upward trend continued, the rate of increase of 8.8 percent was considerably less than the 14 percent increase a year ago. Crop land values increased 10 percent to \$2,970 per acre. Pasture land went up to \$1,230 per acre, an increase of 6 percent. Regionally, increases ranged from a low of 1.6 percent in the Northeast to a high of 15.5 percent for the Northern Plains.

## **Kentucky Land Values**

Kentucky's farm real estate values also increased during 2007. As indicated in Figure 1, Kentucky's average value of agricultural land was \$3,000 per acre as of January 1, 2008. This represents an increase of \$150 per acre which is 5.3 percent greater than the 2007 value. Most surrounding states experienced higher rates of increase. Illinois and Indiana land values increased by 15.5 and 11.3 percent, respectively.

A survey of Kentucky county extension agents was conducted in October 2007 to supplement the USDA information. Figure 2 reports the results of this survey concerning Kentucky land values. According to the survey, participating agents estimated Kentucky farm real estate values to be higher than indicated by the USDA. The average value of Kentucky farm land according to the agent survey was estimated to be \$4,165 per acre. Regionally, the values were: East Region - \$4,487, Central Region - \$4,684, and West Region - \$2,928.

## **Kentucky Land Rental Rates**

According to USDA's estimates, Kentucky's crop land cash rental rate was estimated to be \$82.00 per acre in 2008, which was unchanged from 2007. The Corn Belt states of Illinois and Indiana, experienced rental rate increases of \$19.00 and \$15.00 per acre, respectively. At the other extreme, Tennessee experienced a decline of \$2.00 per acre while Virginia's remained unchanged as did Kentucky's.

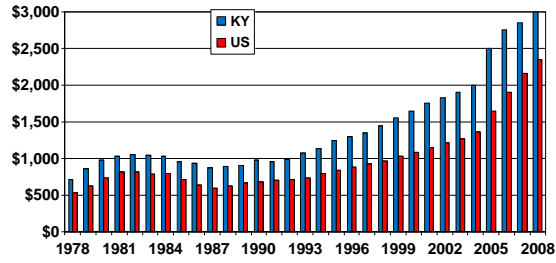
The survey of County Agents also collected information on cash rental rates for both crop and pasture land. Figure 3 indicates the Agent's Survey found the state average rental rate to be \$79.48 per acre for crop land, which was just a bit lower than that reported by the USDA. The rental rate for pasture land from the Agent's Survey was \$34.66 per acre. The USDA does not report rental rates for pasture land in Kentucky.

As farm real estate values have increased over time, cash rent as a percent of value has declined. As Figure 4 indicates, the Agent's Survey found crop land cash rent as a percent of value was 2.8% while it was 2.0% for pasture land.

## **Future Directions for Farm Real Estate Values**

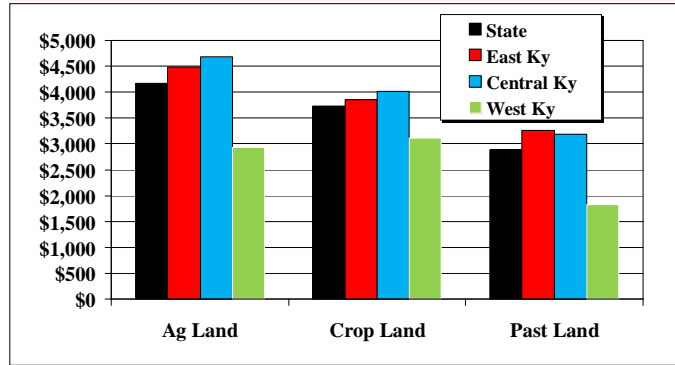
Strong commodity prices, supportive government programs, and low interest rates suggest that increases in land values will continue. However, dramatic increases in Agriculture's cost of production resulting in falling profit margins and a general economy seemingly on the brink of recession may result in a "cooling off period" for the farm real estate market. If these problems continue or worsen, we might expect future land value increases to be more moderate.

**Figure 1. Historical Land Values, US and Kentucky, Dollars Per Acre, 1978-2008.**



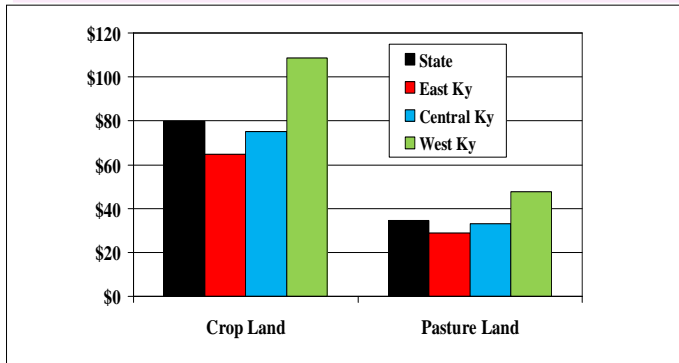
Source: National Agricultural Statistics Service, USDA, Washington, D.C.

**Figure 2. Average Price, per acre, of Kentucky Agricultural Land, October, 2007**



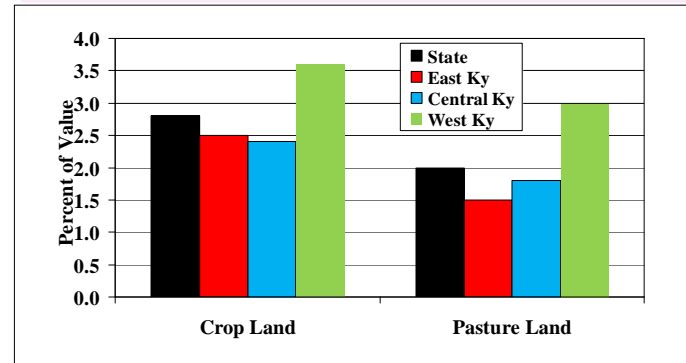
Source: Survey of participants in ESM Meetings, October, 2007

**Figure 3. Typical Kentucky Crop and Pasture Land Cash Rental Rate, per acre, October, 2007**



Source: Survey of participants in ESM Meetings, October, 2007

**Figure 4. Typical Kentucky Crop and Pasture Land Cash Rent as Percent of Value, October, 2007**



Source: Survey of participants in ESM Meetings, October, 2007

# **Kentucky Beef Market Outlook for 2008-2009**

*Kenny Burdine*

**October 2008**

## **2008 Summary**

While 2007 will be remembered as an especially brutal year for beef cattle producers, few will remember 2008 as much better. This year marked a second straight summer drought for most Kentucky producers, who were also dealing with lower calf prices and rapidly rising input costs. Following a year when US and Kentucky beef cows numbers were down, liquidation appears to have continued as a result of both weather and profitability challenges.

Kentucky feeder cattle prices flirted with 2007 levels early and again during the summer, but will likely average about \$5 per cwt. lower. At the time of this writing, feeder cattle markets have weakened substantially due to concerns about the overall health of the US economy and weakening live cattle futures. Winter live cattle futures were once trading above \$110 per cwt., but had fallen below \$100 by early October.

## **Outlook for 2009**

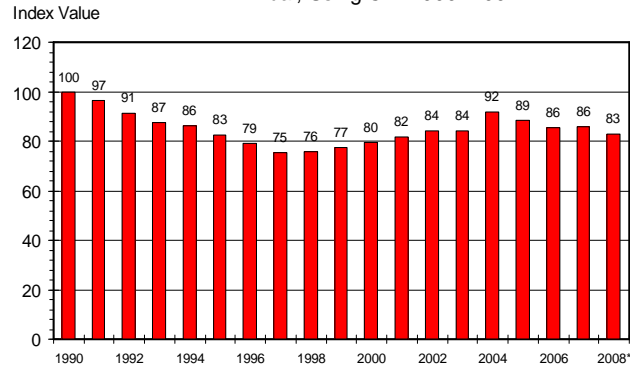
All indications are that herd liquidation continued during 2008, resulting in smaller beef cow numbers in 2009. As a result, beef production is likely to be a bit smaller next year. Another positive factor for beef in 2009 should be exports, which continue to push towards 2003 levels. Demand appears to be the biggest question mark as we look ahead to 2009. While it is concerning that slaughter cattle prices did not even approach the levels that were expected at the time of this writing, I would be more concerned if boxed and retail beef prices had fallen substantially as well.

This uncertainty makes forecasting difficult, but prices will likely be well below 2008 levels in the spring and summer, but be comparable in the fall. Backgrounders have benefited in some ways from higher corn prices if they have had access to grazing or other less expensive feed sources. Demand this winter for calves to graze wheat will likely be low historically, but I expect more grazing during the winter of 08/09 than in 07/08.

Finally, the untold story in the beef sector once again is production costs. Fertilizer has become the single biggest expense to cow-calf operations as we think about pasture maintenance and hay production costs. The rate of increase in fertilizer prices over the last 2-3 years has been astounding. These and other costs have squeezed cow-calf operators and essentially pushed us into a liquidation phase. This liquidation will continue until profit returns to cow-calf operations.

### RETAIL ALL FRESH BEEF DEMAND INDEX

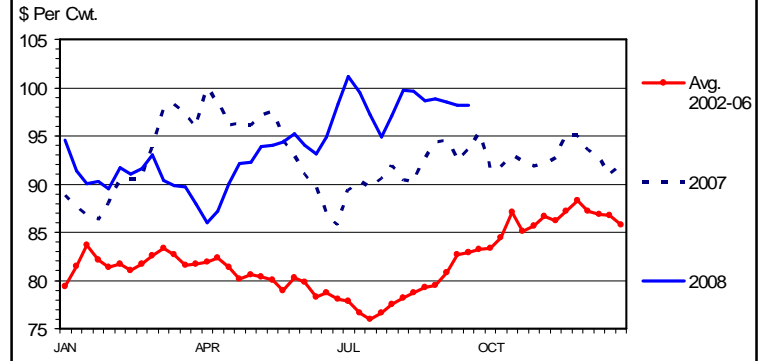
Annual, Using CPI 1990=100



Livestock Marketing Information Center  
Data Source: USDA/NASS

### SLAUGHTER STEER PRICES

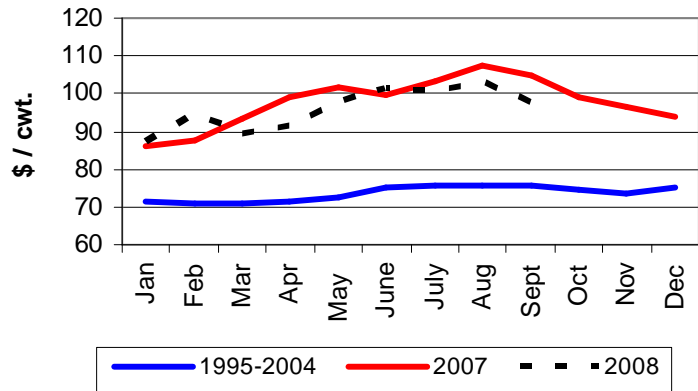
5 Market Weighted Average, Weekly



Livestock Marketing Information Center  
Data Source: USDA/NASS

### KY Auction Prices

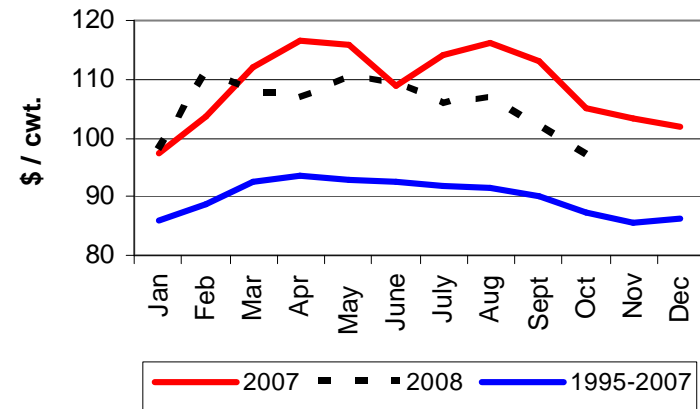
700 to 800 lbs Steers (Med / Large #1)



1995-2004 2007 2008

### KY Auction Prices

500 to 600 lbs Steers (Med / Large #1)



2007 2008 1995-2007

# Kentucky Dairy Market Outlook for 2008-2009

*Kenny Burdine*

October 2008

## **2008 Summary**

Increases in milk cow inventory and milk per cow have resulted in about a 2% increase in milk production in 2008. The majority of these year-over-year increases were seen in the first half of 2008 and were largely the result of extremely high milk prices during the second half of 2007. Prices moderated in the spring, rallied in the summer, but dropped again in the fall. The US All Milk price for 2008 should settle about \$0.50 to \$0.75 per cwt. lower than 2007.

Contrary to the national trend, Kentucky saw another decrease in dairy cow numbers to begin the year 2008. Another year of dry weather and economic challenges likely lead to a further reduction in dairy cow numbers in Kentucky. USDA's monthly milk production report suggests that Kentucky will start 2009 with fewer than 90,000 milk cows in production.

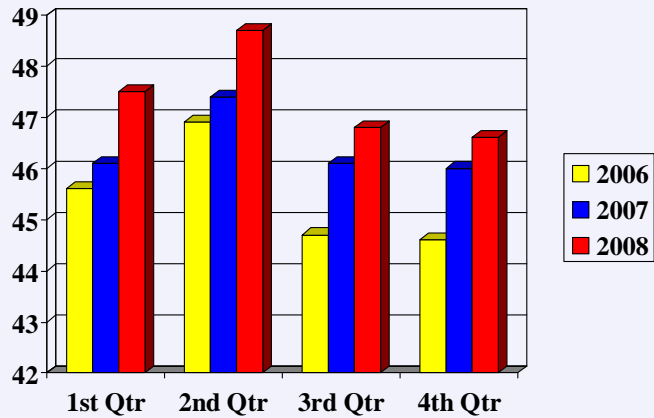
The components that drove milk prices above \$20 in the second half of 2007 have been quite mixed in 2008. Butter prices followed 2007 levels quite closely until summer, when they broke to the upside. On the other hand, non-fat dry and whey prices have been well below 2007 levels. Cheese prices were above last year's levels until summer, but are now pretty close to where they were last fall.

## **Outlook for 2009**

Growth in dairy production is likely slowing, hampered by decreasing profit margins. USDA is forecasting less than a 1% increase in milk production next year, fueled primarily by a small increase in milk per cow. The weakening demand that is impacting all sectors of the agricultural economy is also likely to have a negative impact on dairy products as we move into 2009. Milk prices in 2009 will likely be slightly below 2008 levels. It is also important to note that milk price formula adjustments were made, effective October 1, 2008, that increased the make allowances for cheese, dry whey, non-fat dry milk, and butter. Holding everything else constant, these changes will decrease the minimum price that can be paid for farm level milk.

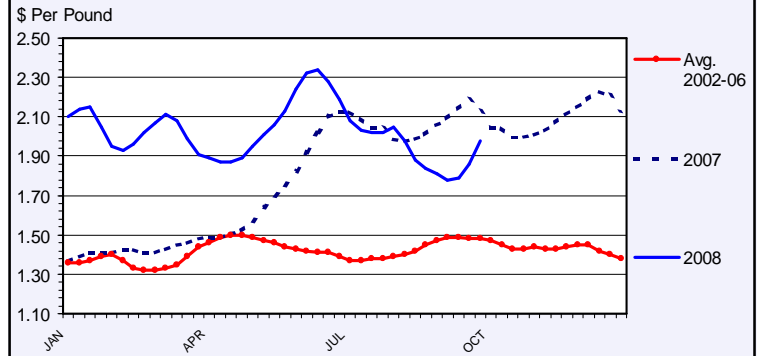
While 2009 milk prices are likely to be above long term average, many producers will struggle due to higher input costs. Feed costs remain high for quality hay, silage, and concentrates. Dairy producers are also wrestling with higher fuel and fertilizer costs. Like most sectors, breakeven prices in the dairy sector have gone up substantially over the last three or four years, which makes current prices levels deceiving.

## US Milk Production (billion lbs)



## CHEDDAR CHEESE PRICES

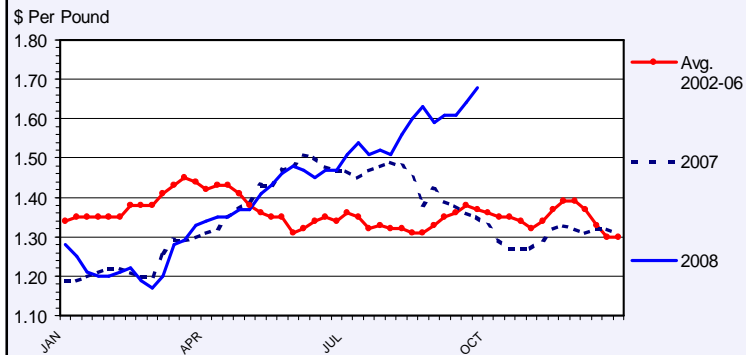
500 Pound Barrel, US, Weekly



Livestock Marketing Information Center

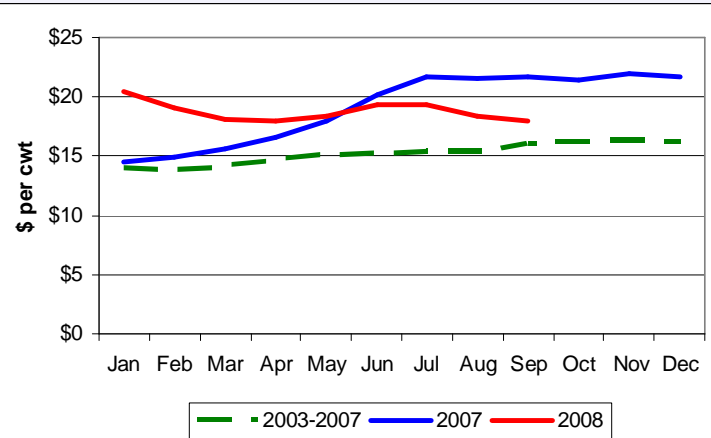
## BUTTER PRICES

US, Weekly



Livestock Marketing Information Center

## US All Milk Price





## Hog Market Update 2008-09

*Lee Meyer*

As feed costs escalated in recent years, most analysts expected the hog industry to face major losses which would, in turn, lead to a smaller hog/pork sector. Well, the losses did materialize, but the industry did not shrink. Pork production in 2007 was up by 4% over 2006 and this year's output is likely to be up another 7%. The average farrow to finish hog operation went through a period of losses from the fourth quarter of 2007 until the middle of 2008. However, this three quarter period followed about three years of strong profitability. And, in spite of the high costs, the industry is currently earning some profits, which are projected to continue through 2009.

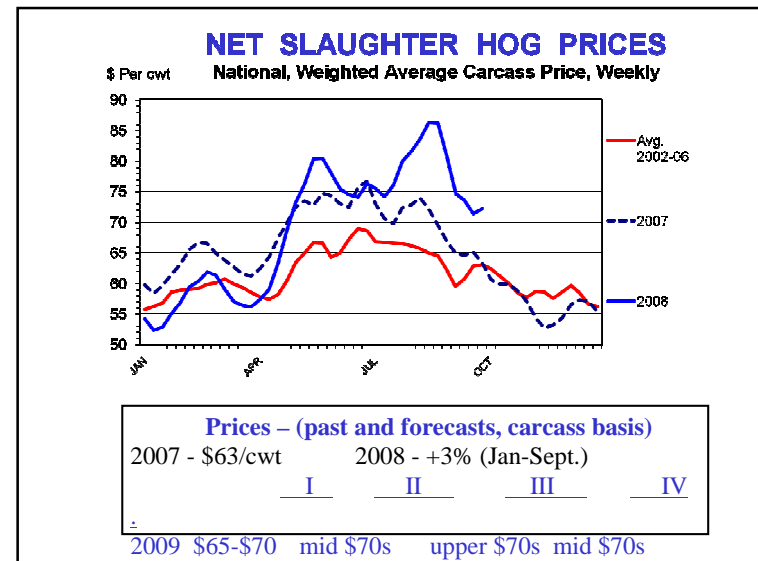
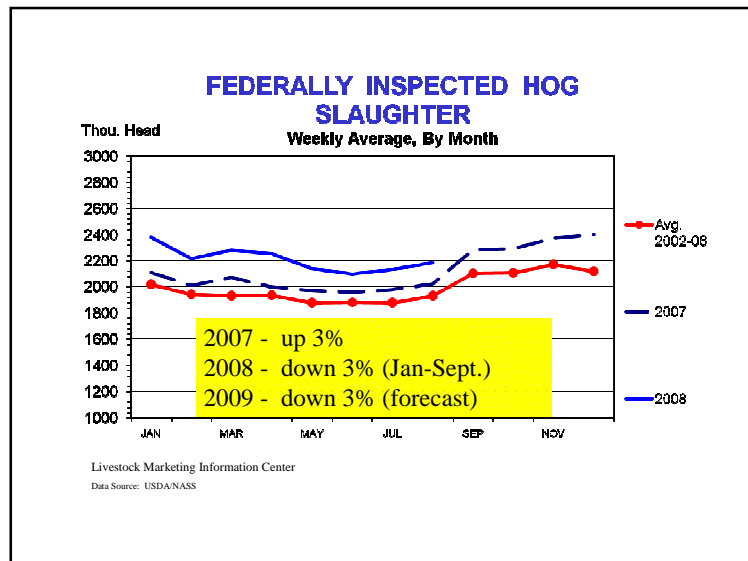
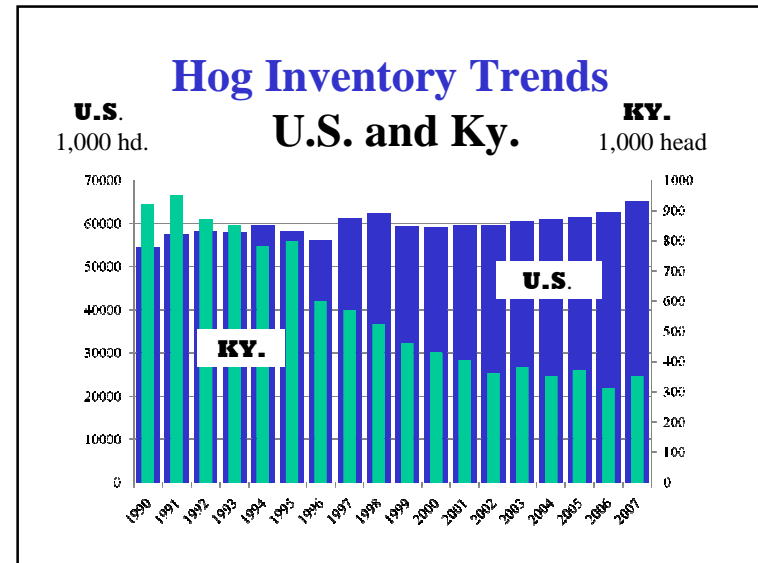
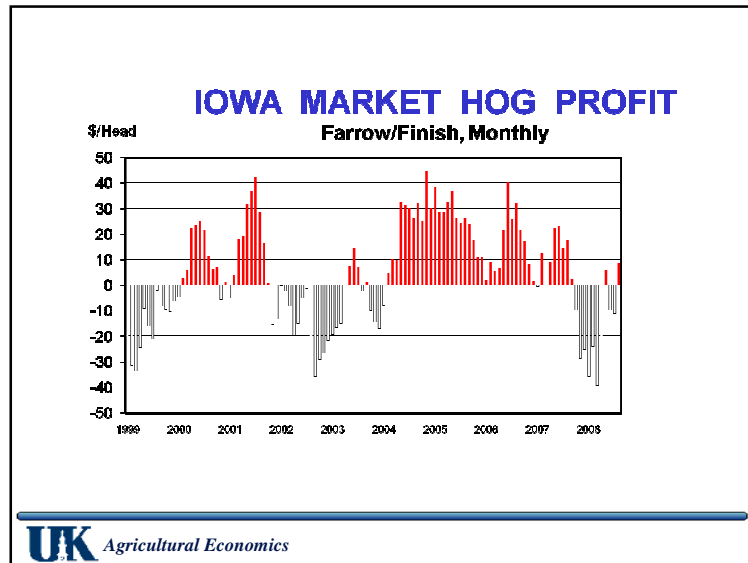
The reason for the profits is that sale prices have been stronger than expected. Prices for 2007 were up about 2%, averaging \$63/cwt. (\$47/cwt. on a live weight basis), and are expected to be up about 5% this year. As of early October, the average price is about \$70/cwt., compared to \$56 a year earlier. There is one key factor behind the strong prices – exports.

Pork exports now take about 20% of the domestic production. Key buyers are Japan (up 16% in the first half of this year), Canada (up 25%), S. Korea (up 13%), Russia (up 145%), and China/ Hong Kong (up 400%). Why the surge? U.S. pork is cheap. With our stable prices and the dramatic drop in the value of the dollar, the purchase prices have been declining.

Production for 2009 is likely to decline a small amount, as the industry reacts to continued high feed costs. According to the U.S.D.A., there were 3% more market hogs in the U.S. as of Sept. 1 in contrast to the number of sows, which was down 3%. As the wave of market hogs moves through the system, production will stay up for the rest of 2008. But in 2009, production is likely to decline as the reduced number of sows has an impact.

For the rest of 2008, prices are likely to decline about ten percent, or \$4 to \$8 per cwt. Supplies will get tighter in 2009 and support stronger prices for next year. Prices for 2009 could average 5% to 8% higher than this year – about \$65 to \$72. However, there are wild cards on the demand side. The U.S. economy is clearly weak, and that could spill over into meat demand. The other consideration is export demand. The weak U.S. dollar has made the price of U.S. pork less expensive in terms of euros, Canadian dollars, yen and yuan. If the dollar strengthens, export prices will increase even more than the domestic price and it is unknown how overseas customers will respond.

Kentucky's hog industry has shown some signs of leveling off, but at a low about one-third of its former million head size. A large part of Kentucky's swine industry is engaged in contract production, while another group uses an alliance to stay competitive buy group purchasing and selling.



## **Poultry Outlook 2008-09**

*Lee Meyer*

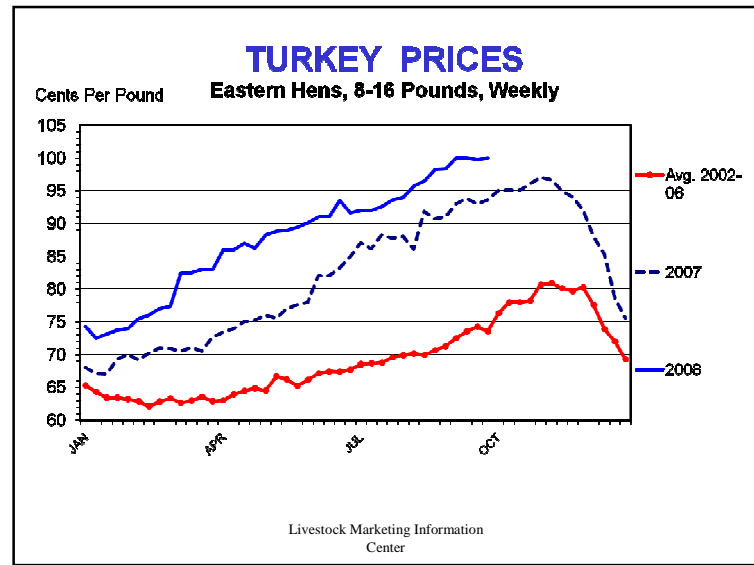
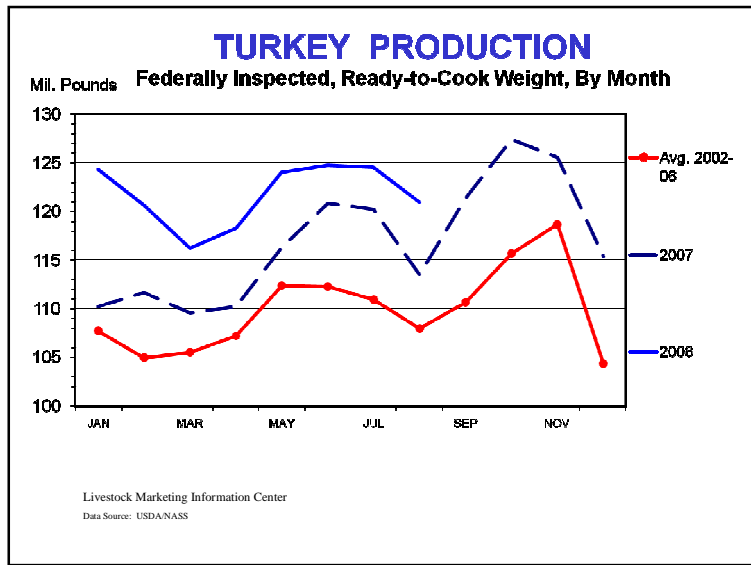
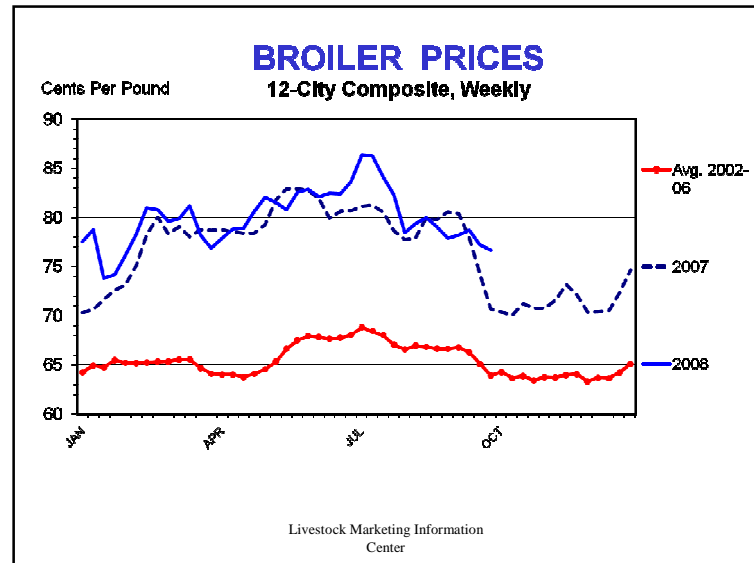
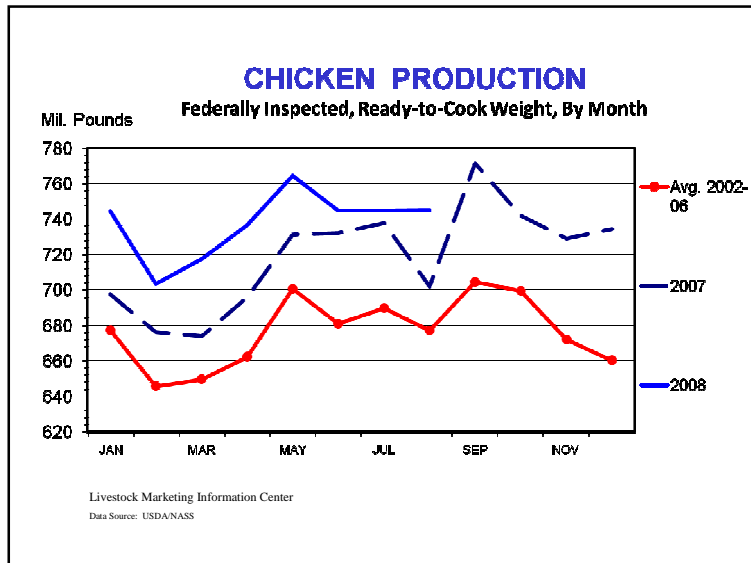
In the past two years, poultry prices have risen dramatically. Broiler prices were 20% higher last year and rose another 5% this year - to record high levels. These production level prices have been passed on to consumers. According to the USDA, the grocery store price for whole chickens hit a record high of \$1.22 per pound in August, up about 17% from the 2002-06 average. Likewise, whole turkey prices hit record levels, at \$1.29 per pound, up from \$1.23 last year.

Feed costs in the poultry sector have risen at scary rates. Chicken feed costs are up 42%, turkey costs are up 55% and feed costs for layers are up 61% - all from year earlier levels. Feed costs might decline modestly in the next year, but will at best remain at very high levels.

The high costs have resulted in slightly lower egg production, probably keeping that industry profitable as wholesale prices rose 58% last year and another 12% in 2008. While the egg industry is primarily a domestic industry, the broiler industry has increasingly focused on exports. In 2008, about 18% of the U.S. broiler production is likely to be exported. The weak dollar is one of the key factors, making U.S. chicken less expensive in terms of other currencies.

Overall broiler production is likely to up for 2008. Production was up in the first seven months of this year, but did decline in August under the pressure of high feed costs. Production for 2009 is likely to decline slightly, based on the number of eggs set and chicks placed. With overall strong demand, U.S. broiler prices have been mostly above the 2007 price levels. The strength of the foreign markets is showing up in prices of the various parts. The price for breast meat, the favorite of U.S. consumers, is down about \$.25 per pound from last year, while the price of leg quarters, a strong product in export markets, is up about \$.10 per pound. With continued strength in export markets, broiler prices are expected to be at or above the 2008 levels next year. In recent years, almost all of the increase in domestic production has found a home overseas.

The turkey market is also strong. Normally, higher production levels would result in weaker prices. However continued strong turkey prices indicate strong demand. Exports account for about 9% of U.S. turkey production – important, but not at the level of broilers. But like broilers, turkey production is leveling off and prices will continue at historically high levels.



## Sheep and Goat Market Situation for 2008-09

*Lee Meyer*

Kentucky's sheep and goat enterprises continue modest growth in an environment of strong selling prices. Table 1 shows both the U.S. and Kentucky inventory of sheep and goats from 2004 through January 1, 2008. Kentucky sheep and lamb numbers are up about 40% while the U.S. flock declined by about 1%. For meat goats, the Kentucky inventory has grown about 30% while the U.S. goat herd has grown by 22%. In Kentucky, there are roughly twice as many goats as sheep, but the opposite is true for the U.S. as a whole, where there are more than twice as many sheep as goats.

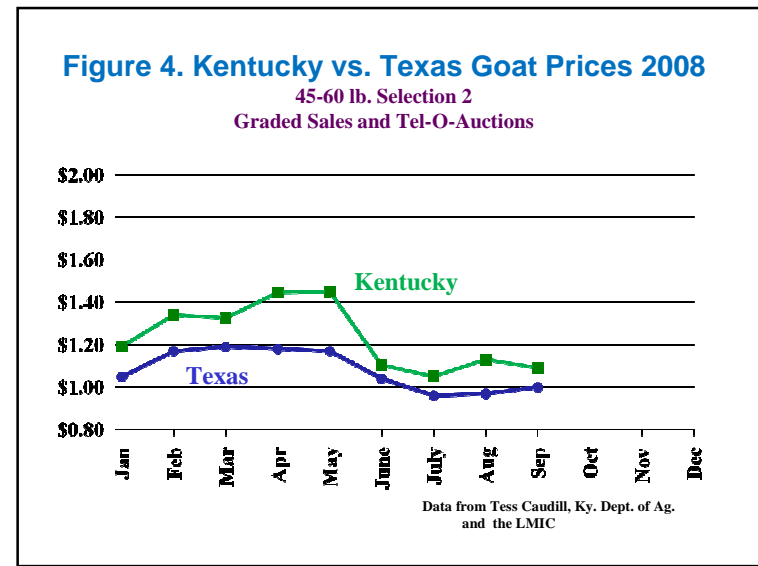
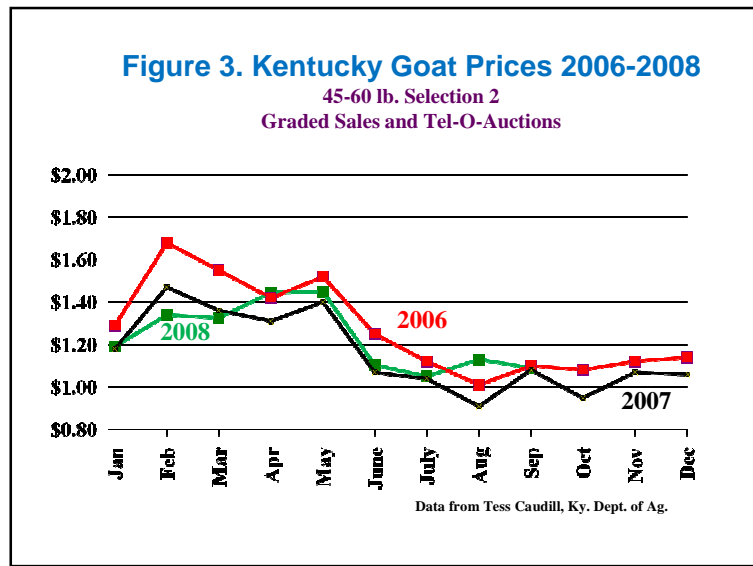
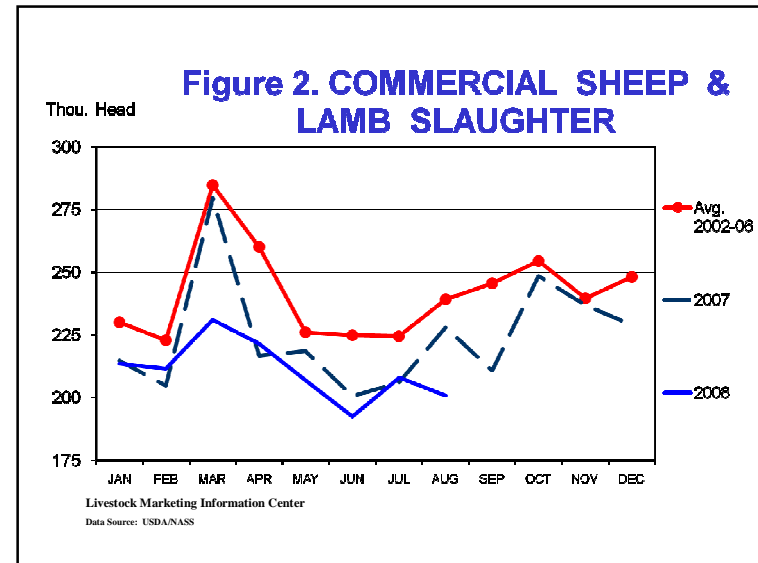
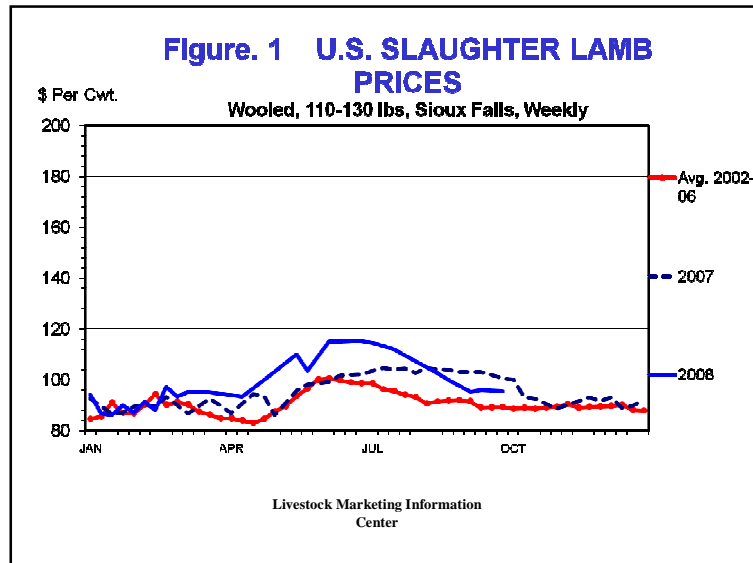
**Table 1. Kentucky Meat Goat and Sheep Inventory**

Year	Ky. Goats	U.S. Goats	Ky. Sheep	U.S. Sheep
	1,000 hd.	1,000 hd.	1,000 hd.	1,000 hd.
2004	63	2,044	26	6,105
2005	64	2,150	32	6,135
2006	68	2,287	35	6,230
2007	74	2,402	37	6,165
2008	81	2,500	37	6,055

Source: USDA, NASS

The lamb market has followed economic principles, with smaller supplies being associated with rising prices. Lamb production has declined by 6% from 2004 through 2007, and the national average lamb price has risen from \$1.88 per pound (carcass weight) in 2004 to \$1.94 last year. The trend is expected to continue, with a 4% decline in production for 2008 and a price average just over \$2 per pound. For 2009, production is forecast to drop another 3%, while prices should continue rising. Kentucky prices follow the national price trends closely, as show in Figure 1. U.S. Slaughter Lamb Prices.

Unfortunately for goat market analysts, the goat data is much poorer than the market data for lamb. Figure 3 shows Kentucky goat prices for the past three years. Prices have been strong by historical standards, but not as high as 2006 prices. There is little reason to expect 2009 prices to change much. With about half of the goat supply coming from imports, the weak dollar will make prices of imported goat meat more expensive and dampen competition. Figure 4 shows the price premium Kentucky sellers receive compared to Texas prices, due in large part to proximity to the east coast markets.



## **Kentucky Grain Market Outlook for 2008-2009**

Cory G. Walters

Corn, Soybean, and Wheat prices generally remained high in 2008 when compared to pre-2006 prices. In addition to the higher prices the market has also seen a lot of price volatility. These two factors have made pricing commodities more challenging than in previous years.

Corn production is estimated to be 12.1 billion bushels, down 8 percent from the 2007 crop. Average U.S. corn yield is forecast at 152.3 bushels, down from the August forecast of 155 bushels. A decline was brought on by dry weather in many areas, with Michigan and Ohio bringing the largest declines of 8 bushels. For Kentucky, corn yields are expected to be 137 bushels per acre, also down from the August forecast of 141 bushels.

On the corn consumption side, the USDA lowered the feed and residual use of corn, citing reduced livestock feeding rates. Additionally, export forecasts were reduced. The use of corn for ethanol is expected to increase by 1.1 billion bushels, an increase of 37 percent over the previous year and accounting for 34% of production. Ending year stocks are expected to be tight at 1.0 billion bushels, about 8% of production compared to 12% for last year.

Soybean production is estimated to be 2.9 billion bushels, up 13 percent from the previous year. The average U.S. soybean yield forecast is 40 bushels per acre, down from the August forecast of 40.5 bushels. A decline was brought on by weather, with Wisconsin bringing the largest decline of 4 bushels. For Kentucky, soybean yields are expected to be 36 bushels per acre, also down from the August forecast of 39 bushels.

On the soybean consumption side, the USDA reduced crushings and exports. The decline in crushings and exports reflect the tight domestic supply and increased world production. Ending year stocks are expected to be tight at 135 million bushels, about 4.6% of production compared to 5.4% for last year. Wheat production is estimated to be 2.5 billion bushels, up 19 percent from the previous year. The average U.S. wheat yield forecast is 43.5 bushels per acre up 3 bushels from the previous year. This indicates that overall, wheat production experienced relatively good growing conditions.

On the wheat consumption side, the USDA significantly increased feed and residual use to 250 million bushels. The increase in wheat use for feed has bid down cash prices for the lowest quality wheat, soft red wheat. For Kentucky, where soft red wheat is primarily grown, this has triggered very large negative basis between cash price and futures price.

2009 outlook – Future price changes, high fertilizer prices, and weather will dominate planting outlook across all crops. With the current volatility in grain prices successful marketing will depend upon risk management based upon long-term profitability. We recommend a decision plan that includes, but is not limited to, selling future crop in small percentages, preferably no more than 20 percent at any one time, monitor basis, consider crop insurance to protect revenue against potential yield loss, and know your cost of production.

## Corn Balance Sheet

Corn Balance Sheet, Millions of bushels			
	2006/2007	2007/2008	2008/2009
Beg. Stocks	1,967	1,304	1,567
Production	10,535	13,074	12,072
Imports	12	18	15
Total Supply	12,514	14,396	13,663
Feed & Resid	5,595	6,050	5,200
Food, Seed & Ind	3,490	4,345	5,445
Ethanol	2,119	3,000	4,100
Exports	2,125	2,425	2,000
Total Use	11,210	12,820	12,645
Ending Stocks	1,304	1,576	1,018

Source: USDA

## December 09 Corn Futures



## November 2009 Soybean Futures



## July 2009 Wheat Futures





# Kentucky's Tobacco Outlook

*Will Snell*

September 2008

## **Burley Situation and Market Outlook:**

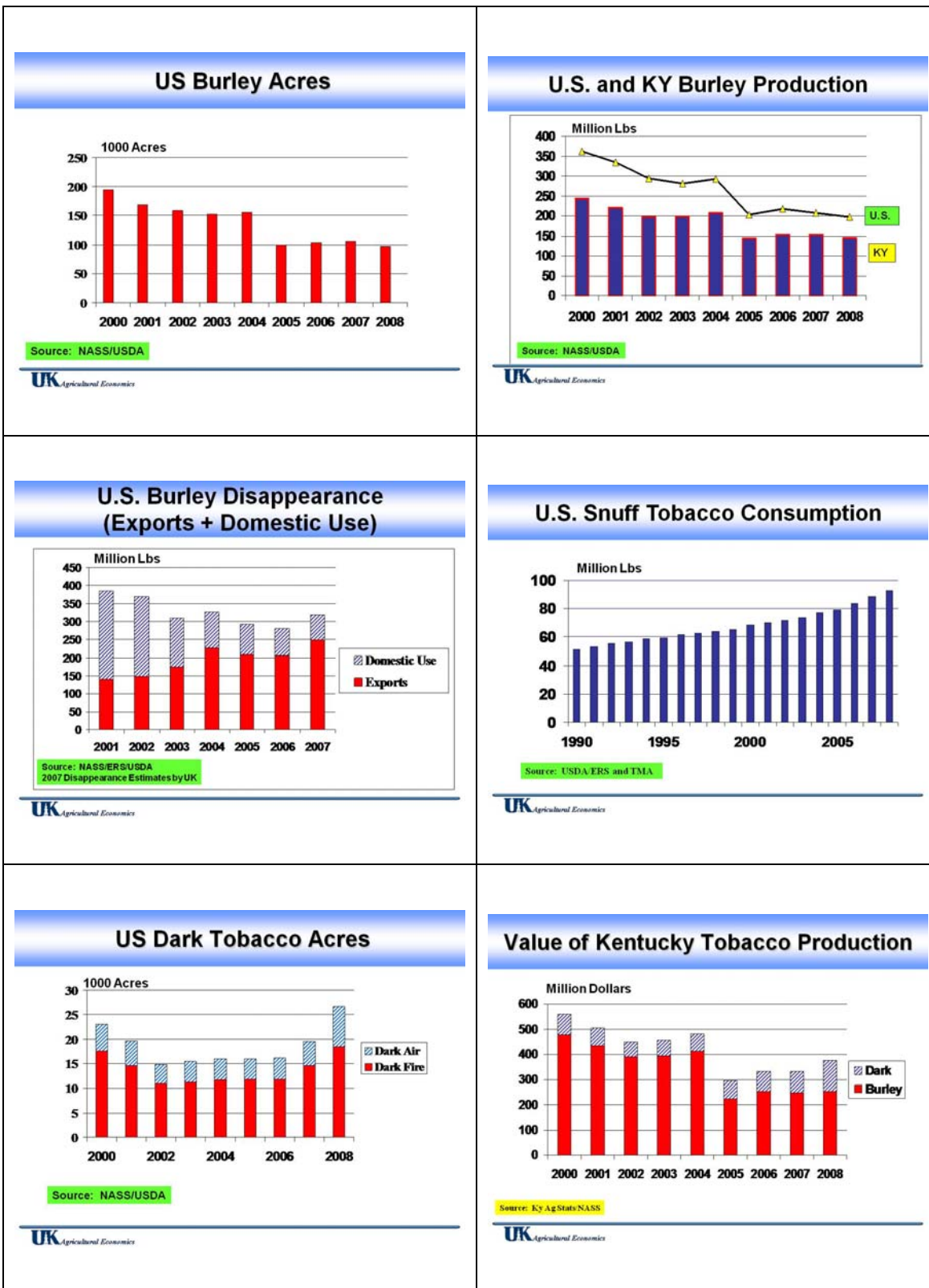
After a 35% drop in acres in 2005 (first year of the post-buyout era), U.S. burley acreage increased marginally in 2006 and 2007, but retreated once again in 2008 for a variety of reasons. Certainly disappointing initial contract prices (which were later increased) amidst escalating input prices played a key role in burley acreage being down nearly 10% in 2008. Another factor inducing a down-turn in burley acres was the expansion in dark tobacco acres in western Kentucky and mid-western Tennessee. As of September 1<sup>st</sup>, USDA projected Kentucky's 2008 burley yield to average 2100 pounds per acre – roughly the historical pre-buyout average yield. According to the September crop report, U.S. burley production is pegged at 197 million pounds (which excludes perhaps 5 to 10 million pounds in Indiana and a few other states), 5% below the 2007 crop size and nearly 10% below the 2006 production level. Worldwide, burley production is projected to be 10% higher in 2008, following sharp declines the past three years. But most of the growth is occurring in Africa which produces primarily a filler (low quality) style burley. Production in flavor markets such as Brazil and Argentina is rebounding slowly. Consequently, world stocks for higher quality burley remain relatively tight. While there are some quality concerns for this year's U.S. crop, contract prices should allow prices plus incentives to average in the \$1.70s, compared to \$1.55 to \$1.60/lb for last year's poor quality crop. Despite higher prices, increased production costs will likely offset most, if not all of the price advances on the 2008 crop leading to much production uncertainty entering 2009.

**U.S. Burley Disappearance (Use):** U.S. burley exports grew to around 250 million pounds last year and have exceeded 200 million pounds annually during the post-buyout era, as more competitive grower prices coupled with favorable exchange rates have boosted exports from their pre-buyout levels. Domestic use of U.S. burley has declined to 75 million pounds or less compared to exceeding 400 million pounds during the 1990s. Collectively, total U.S. burley disappearance (exports plus domestic use) has been relatively stable during the post-buyout era totaling around 300 million pounds. This compares to post-buyout U.S. burley crops that have struggled to exceed much above 200 million pounds. Pre-buyout pool stocks and company inventories have been utilized to shore up this shortfall in recent years, but overall supply remains relatively tight. Although domestic and export needs will retreat in 2008, it appears the industry could use around 250 million pounds of U.S. burley production to meet domestic and international demand.

**Dark Tobacco Production & Outlook:** The situation and outlook for dark tobacco is very upbeat. Snuff consumption, the primary user of dark tobaccos, has been increasing steadily over the past two decades, with no indication that these trends amidst smoking bans and successful product promotion will be reversing in the near future. In addition, the entry of new players (cigarette manufacturers) in the marketplace has increased needs for these companies to build inventories. Consequently, dark tobacco acreage has expanded well beyond pre-buyout levels. USDA is projecting that dark tobacco acreage increased 21% in 2007 and another 36% in 2008. The September crop report indicates that USDA expects total dark production to exceed 80 million pounds in 2008, compared to pre-buyout levels in the 40 to 50 million pound range. Dark growers are building new barns and making other investments in their operations to meet the growing demand. Dark air-cured prices are expected to average around \$2.25/lb for 2008 and \$2.50/lb for dark fire-cured -- very similar to pre-buyout prices. Although costs of production have increased for dark tobacco growers as well, profitability for dark tobacco is much greater than for burley. Consequently, if product demand continues to grow, expect dark acreage to continue increasing at the expense of burley in Kentucky and Tennessee.

**Value of Kentucky Tobacco Production:** Despite the loss in burley acres, the value of Kentucky tobacco production will likely be up in 2008 in response to higher prices and especially increased dark tobacco acres. Following a couple of years when the value of tobacco production averaged around \$330

value to possibly be \$350 to \$375 million this year, with dark accounting for nearly 1/3 of the total value. Demand opportunities (new product development/expanding sales for dark, and favorable exchange rates/tight quality supplies for burley) will provide an opportunity for total Kentucky tobacco production to expand. However, actual acreage planted and the overall value of production though will hinge critically on 2009 price/profit expectations, along with alternative ag and non-ag opportunities.



# Kentucky Timber Situation and Outlook 2008-09

*Greg Halich*

## **Current Situation – Timber:1**

The general timber market in Kentucky and adjoining states has been poor in 2008 with a few notable exceptions. Stumpage prices (paid to landowners for standing timber) for red oak, the predominate timber species in Kentucky, has continued downward. Current prices have now fallen 50% from just a few years ago. Stumpage prices for walnut, which improved in 2007, have fallen back to where they were two years ago. Stumpage prices for black cherry and maple have slowly continued in a long downward trend. However, both are still high relative to historical standards.

Stumpage prices for white oak were down over 20% in Ohio where the overall quality of timber is higher than in Kentucky. However, a continued strong tie market has pushed prices up in lower quality stands and as a consequence, stumpage prices for Kentucky white oak have not suffered as badly when compared to regions with higher timber quality. Prices for yellow poplar were fairly steady and stumpage prices for hickory declined slightly. Ash prices have stabilized.

## **Recommendations – Timber:**

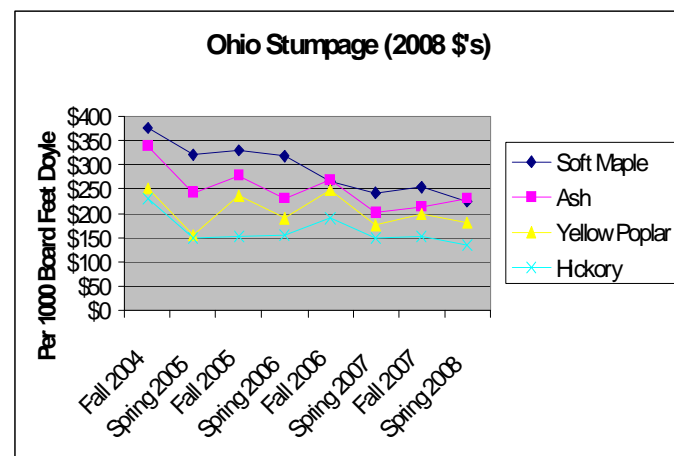
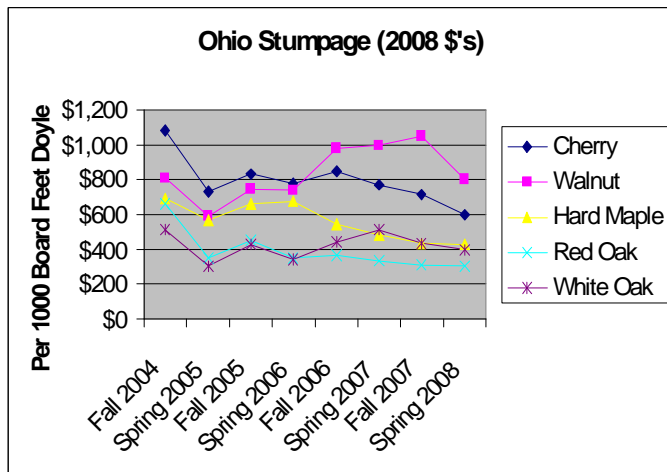
As with last year, I would generally not advise cutting high-quality red oak stands at this time. White oak stands are currently better candidates for harvest as stumpage prices are still decent. Continued strong demand in the tie market for both oak species has improved opportunities for scheduling timber stand improvement cuttings in stands that have lower-quality mature timber.

Although walnut stumpage prices dropped last year, they are still strong compared to the last five years. Consequently, it may still be a good opportunity to harvest black walnut timber. Prices could drop much lower if we have a prolonged global economic slowdown. Hard maple, soft maple, and black cherry stumpage prices are still relatively high by long-term historical standards but have declined significantly in the last few years. It now appears that the market for these species may have peaked. Consequently, holding onto mature timber for these species with the hope of increased prices may also be risky at this point.

Ash prices have stabilized somewhat over the last year. However, there is a high level of uncertainty about the spread of the emerald ash borer from Ohio and other surrounding states. Although there have been no confirmed cases in Kentucky, many people believe it may already be here. Forestland owners whose stands have a heavy ash component face a dilemma: waiting in hopes of rising stumpage prices, but with the possibility that their stands may eventually become worthless. Salvage cuts just ahead of the borer's path have the potential to flood already weak ash markets. The possibility of quarantines also exists in areas that become infected with the borer. Thus landowners in high-risk areas may want to consider harvesting mature ash timber.

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<sup>1</sup> Prices quoted here are based on stumpage prices from adjoining states.



## Guidance and Recommendations

### Red Oak:

- Stumpage prices have declined over 50% from what they were just a few years ago.
- Still much potential for upward movement in the long-term (5-15 years).
- Short-term movement potential???

12

## Guidance and Recommendations

### White Oak:

- Stumpage prices for higher-grade timber have declined somewhat.
- KY stumpage haven't decrease as quickly as other states due to a continued strong tie-market.
- May be a good time to sell stumpage on poorer quality white oak stands and stands that need timber stand improvement.

13

# **Biofuels Situation & Outlook, Fall 2008**

*Alison Davis*

With historically high prices at the gas pump, plenty of attention has been paid to renewable energy sources as a solution. The national 25 x '25 Action Plan is a renewable energy initiative that calls for 25% of energy to be produced by renewable energy sources, in addition to reduced demand resulting from energy efficiency, by the year 2025. The goal of Kentucky's 25 by '25 program is to strengthen the state's economy, diversify Kentucky's energy resources and provide new economic opportunities for businesses, industries and communities that call Kentucky home.

There are many expected benefits from this program. By relying on local farmers to produce the resources needed to make renewable energy such as ethanol and biodiesel, more money is expected to go into the pockets of Kentucky farmers. In addition, other small businesses will be created to support the production of renewable energy, for example, a business that manufactures small parts for a corn ethanol plant or a company that specializes in the mechanics of cellulosic ethanol production. This will hopefully translate into larger profits and higher paying jobs for the residents of Kentucky. Thus, this program is expected to stimulate economic growth and enhance development in the rural areas of Kentucky. There are other expected benefits from this program: decreased dependency on foreign oil, better air quality, and lower greenhouse gas emissions to name a few. The following is a brief description of the renewable energy options that could be used to meet the goals of Kentucky's 25 x 25.

## **Corn Based Ethanol Production**

The conversion of corn to ethanol is not a new technology. Over 30% of the nation's US corn crop is devoted to the production of Ethanol. We have seen just in the last year that the profits made at the ethanol plant drive production decisions. When corn prices are high, profits fall and ethanol production declines. The profitability of this market depends on many factors, some of which are very unpredictable including the price of corn, the price of fuel, demand, weather, and the success of other renewable alternative energy options.

## **Switchgrass Ethanol Production**

While producers have learned how to grow switchgrass for this energy option, the technology that converts switchgrass to ethanol has not been completed yet. However, it is anticipated that we can expect the technology to be developed soon. If this materializes, Kentucky would have some clear potential for switchgrass production. If 20% of Kentucky's hay ground and 5% of unused land were converted to switchgrass, this would be a substantial amount of energy. Statewide, this could lead to as much as 6 million tons of switchgrass being converted to ethanol, replacing as much as 14.5% of our gasoline.

## **Soybean Biodiesel**

For Kentucky, the production of biodiesel from soybeans will do little to displace diesel production (approximately 8.1%).

## **Wind Power**

There are very few places in Kentucky where wind is a viable option. Eastern Kentucky has a few pockets on the sides of mountains where it might work.

## **Solar Power**

An expensive alternative, but should be promoted. There are incentives offered by the state and federal governments as well as private foundations to offset the capital costs of construction or for purchase of equipment.

## Corn and Ethanol

Region	Number Planned Plants	2006 Million Bushels Corn Production	Corn Needed @ average 70 MGY
Corn Belt Total	201	9,173	10,573
Non Corn Belt Total	128	836	3,980
U.S. Total	329	10,535	14,554

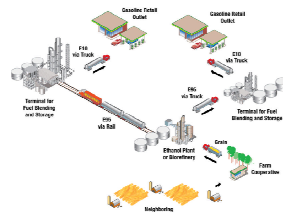
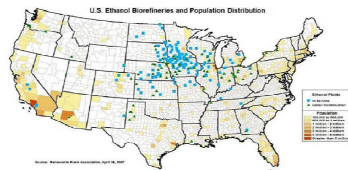
- Excess Demand for Corn
- Increase Price of Corn
- Decrease Profitability of Ethanol
- Decrease Demand for Corn
- Until Equilibrium or Other Alternative Energy Option Develops

## Needs for Improved Bio-energy Production

- Inputs for corn and ethanol production
  - Corn receiving, drying, storage, farm transporting infrastructure
  - Water supply systems
  - Research on pipelines for ethanol
- Cellulosic based ethanol technology to be developed

Region	Material Consumed (ton/yr)	KY Gasoline Displaced (%)
West	2,750,000	6.6
Central	2,868,000	6.9
Eastern	995,000	1.0
Total for State	6,014,000	14.5

## Corn Based Ethanol



### Transportation

- Most ethanol is currently produced in the Nation's heartland, but 80 percent of the U.S. population (and therefore implied ethanol demand) lives along its coastlines.
- Efficient rail shipping of ethanol & DDGS
- More tank cars for ethanol movement

## Kentucky's 25 x '25

- Relies on corn-based ethanol, cellulosic-based ethanol, wood to ethanol, wind, solar, geothermal, digesters, landfill gas, co-firing of wood and other biomasses

### Potential Benefits:

- Reduce dependence of foreign oil
- Stimulate economic growth
- Enhance rural development
- Increase manufacturing capability
- New industries with good jobs
- Retain a large share of energy payments in Kentucky

	Economic Impact	# Jobs
<b>Cellulosic Residues (entire state)</b>		
Construction	\$119 Million	1,912
Operation	\$272 Million/yr	1,110
State Taxes	\$2.1 Million/yr	
<b>Corn (Western)</b>		
Construction	\$1.08 Million	204
Operation	\$44.6 Million/yr	444
State Taxes	\$308,000	

## Produce Outlook: Planting & Marketing for 2008-09

*Tim Woods & Sara Williamson*

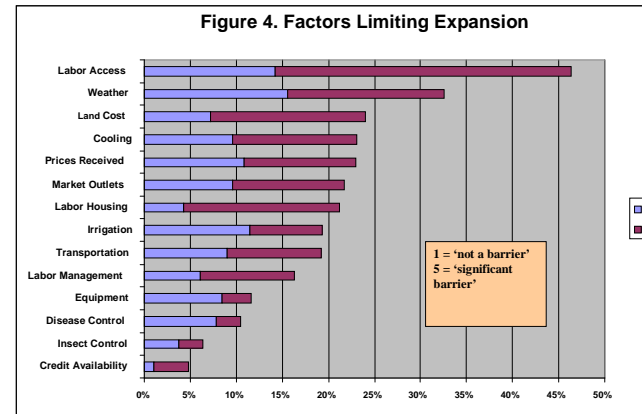
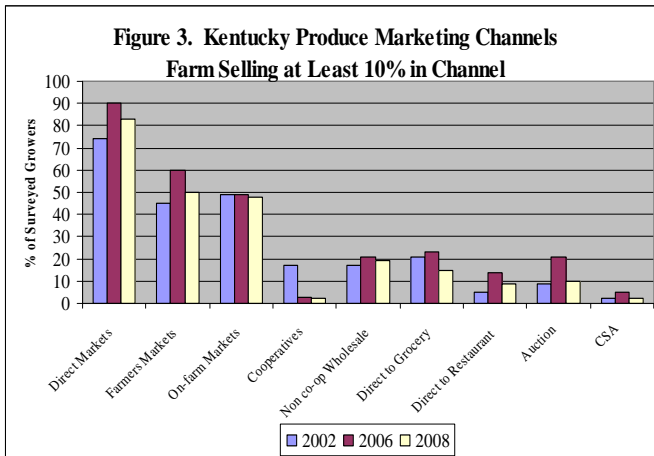
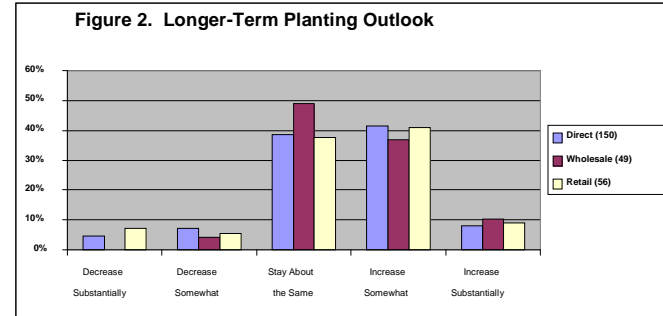
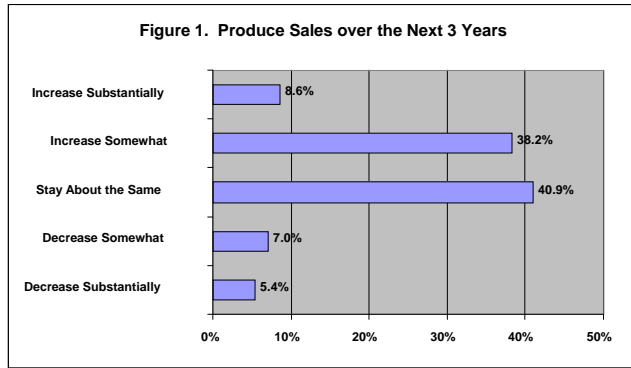
According to the sixth consecutive Kentucky Produce Planting and Marketing Intentions Survey, market expansion is expected to continue across the board, despite higher land prices and input costs. The majority of survey respondents indicated a plan to either increase or maintain the same level of planted acreage and sales over the next three years (Figures 1 & 2).

Gross sales are anticipated to exceed the \$26 million experienced in 2007, and estimated to reach \$40 million by 2010. While direct marketing is leading the way (Figure 3), commercial vegetable acreage will increase by 17% over 2007 (to 10,580 acres) and commercial fruit acreage by about 9% (to 2,727 acres).

According to growers who completed the survey, the most significant limitation of business expansion is labor access and housing (Figure 4), which has been an industry-wide issue in Kentucky for horticulture. In addition, with rising costs of land and inputs, growers are steering clear of produce items that bring lower prices (Table 1, cabbage and jalapeno peppers).

**TABLE 1:**

<i>Acreage &amp; Planting Intention Projections</i>	<i>2002 USDA Estimated. Acreage (Ag Census)</i>	<i>2007 Acreage Estimate</i>	<i>2008 Acreage Forecast</i>	<i>2007-08 Percent Change</i>
Asparagus	44	42	58	37%
Beans, Snap	541	401	427	6%
Broccoli	49	320	419	31%
Cabbage	262	450	68	-85%
Cantaloupes	575	552	749	36%
Corn, Sweet	2010	2797	3101	11%
Cucumbers, Fresh	146	156	266	70%
Garlic	8	46	56	22%
Greens (Collards, Kale, Mustard, Turnip)	81	66	79	20%
Lettuce - Leaf, Head, & Romaine	14	51	74	45%
Lettuce (Greenhouse)	N/A	16	18	10%
Okra	12	29	309	964%
Onions (Dry & Green)	13	36	59	64%
Peas	6	51	367	620%
Peppers, Bell	348	505	531	5%
Peppers, Jalapeno	52	86	46	-47%
Peppers, Other	N/A	92	103	12%
Potatoes, Red	N/A	77	75	-2%
Potatoes, White	N/A	89	87	-2%
Pumpkins	1524	1310	1437	10%
Squash, Summer	136	131	185	41%
Squash, Winter	N/A	50	57	13%
Sweet Potatoes	N/A	83	171	106%
Tomatoes, Field	911	578	596	3%
Tomatoes, Greenhouse	N/A	23	31	33%
Watermelons	450	574	819	43%
Herbs	12	19	29	55%
Other Vegetables	69	97	128	32%





## **Creating a Regionalized Food System: New Consumer Research and Updated Direct-Marketing Data**

*Tim Woods & Sara Williamson*

Direct food marketing has become a popular way for small to medium sized farmers to increase farm revenue. Kentucky alone has seen the number of farmers' markets statewide increase 20% from 2004 to 2008, not to mention the growth in community supported agriculture programs. The popularity of value-added products is on the rise, and consumers are often paying a premium price for regionalized products. In an effort to provide more insight into this growing market, Dr. Tim Woods and Dr. Wuyang Hu are conducting the Kentucky Food Consumers' Panel. The project is a series of online surveys among up to 1,000 households in Kentucky, to collect information about food consumption, marketing, prices, and perception in the Commonwealth.

Produce is regarded as an expensive category in the grocery, although margins for the retailer are slim due to the perishable nature and high distributor mark-up of the products. As fuel prices and mortgage rates increase, household food budgets are decreasing, and families are looking for more economical choices. According to data collected by the KFCP, 55% of panelists statewide reported the high cost of produce as a barrier to increasing consumption. In terms of additional barriers, more rural panelists reported a struggle with availability and taste preferences, whereas urban panelists experience a lack of preparation skills.

Communities are increasingly supportive of farmers' markets, where produce is fresh and often less expensive. Food farmers are able to retain a higher percentage of the dollar when the supply chain is condensed, and consumers feel more connected to their food, thus creating a brand loyalty to "local". The KFCP reported that 78% of panelists have been to a farmers' market at least once in the last 12 months. Of panelists that have shopped at a farmers' market six or more times in the last year, 45% live in a rural area, compared to 55% who live in an urban area. The average age of a farmers' market shopper in the panel is almost 10 years younger than a non-market shopper (48 vs 59), yet the non-farmers' market shopper is 17% more likely to have children in the home.

In response to rising fuel costs, consumers are implementing many lifestyle changes. According to the KFCP survey, 65% of panelists statewide are cooking at home more often. Rural panelists seem to be more affected by gas price surges, with 60% making fewer grocery trips, compared to 45% of the urban panelists. With the increase in home cooking, farmers' market vendors have a solid opportunity to grow their businesses. As consumers are condensing the number of shopping visits, farmers' markets will need to provide a wide variety of products to ensure consistent and solid traffic.

The KFCP has collected product information for blueberries, sweet potatoes, salsa, dairy, sweeteners, agritourism, and more. Results will soon be available on the UK Ag Econ website.

*Panelists are still being recruited. Contact [sara.williamson@uky.edu](mailto:sara.williamson@uky.edu) for more information.*

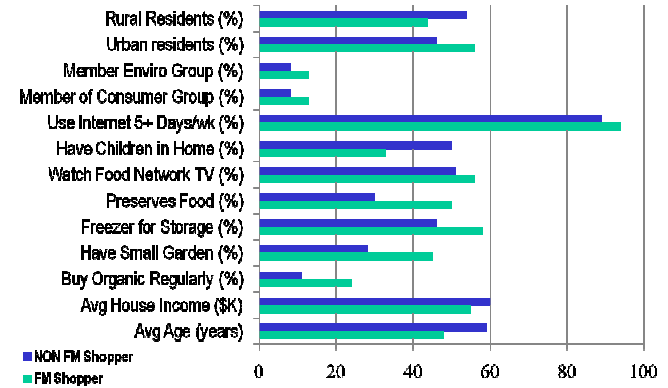
## 2008 Farmers' Market Report

Year	Markets	Vendors
2004	96	1,548
2005	98	1,678
2006	109	1,808
2007	114	2,015
2008	120	1,951
<b>Increase from 2004 -2008</b>		
	<b>20%</b>	<b>21%</b>

Food Products (aside from produce)	# markets	% markets
Baked Goods	76	64%
Cheese	14	12%
Eggs	64	54%
Fish/Shrimp	13	11%
Herbs	83	70%
Meat	35	24%
Mushrooms	20	17%
Sorghum	27	23%
Wine	7	6%

Data provided by Janet Eaton, the Kentucky Department of Agriculture Farmers' Market Report, Sept. 2008

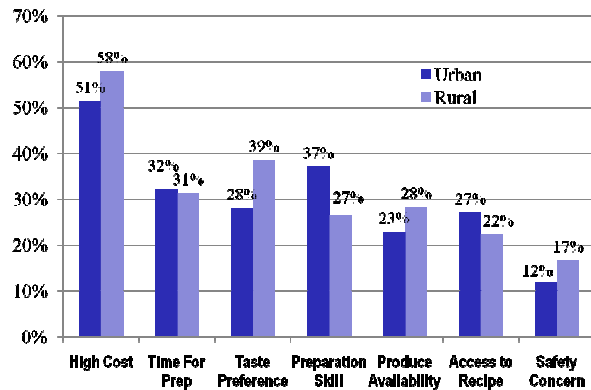
## The Farmers' Market Consumer



The Kentucky Food Consumers Panel, 2008

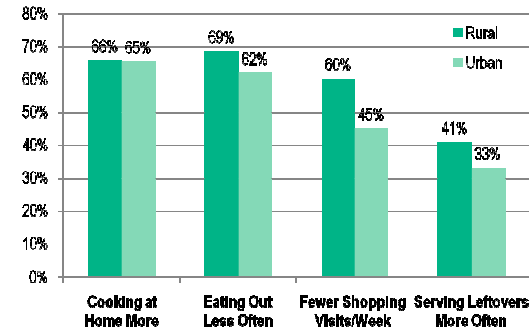
\*Data from KFPC panelists who shopped at a farmers' market within 12 months

## Barriers to Consumption of More Fresh Produce



The Kentucky Food Consumers Panel, 2008

## The Effects of Increasing Fuel Prices on Food Related Behavior



The Kentucky Food Consumers Panel, 2008

# **The Role of Debt in Today's Family**

*Jennifer Hunter*

The nightly news is an evening reminder to the current state of the United States economy. The economic situation is a result of numerous compounding factors; however, one issue which resonates with the American people is the topic of debt or credit loads.

For a near twenty-year period, spanning from the mid-1980s until the early part of the 21<sup>st</sup> century, Americans have experienced a strong economy, with a brief recession during the early 90s. A viable economy strengthened by a period of low unemployment rates, nominal inflation rates, favorable governmental policies, and a strong stock market encouraged Americans to become a consumption society.

Many Americans have jumped on the spending bandwagon. The personal savings rate fell below zero in 2005, and has remained below three percent through the second quarter of 2008 (Federal Reserve Bank of St. Louis, 2008). The declining personal savings rate indicates that Americans now view credit as a consumption-smoothing tool. The lack of personal savings leaves Americans without a rainy-day fund to cover short-term expenses in the event of unexpected circumstances such as medical illness, job loss, or a sudden increase in prices. In general, short-term expenses are fixed and must be paid prior to an individual having adequate opportunity to react to the current event. For example, if a person lost their job, for the short-term they must still make their vehicle payment, whereas over the long-term a person may adjust to the change in income by selling their car. Typically, either accumulated assets or borrowing provide consumption relief in the short-term.

For the first time since the Great Depression, Americans are spending more than they are saving. On average, Americans are estimated to carry \$7,500 in uncollateralized debt, including credit cards and unsecured lines of credit (Federal Reserve Bank of Boston, 2007). Unarguably, credit is a convenient form of purchasing power, reducing the need to carry cash or checks. However, market research indicates Americans are more willing to consume and pay higher prices when spending with credit versus cash. Annual credit card expenditures in 2002 were \$10,000; this is 16 times greater than the 1971 amount of \$600 (figure adjusted for real dollars). The increased use of credit cards adds to a trend of revolving credit, with 60% of cardholders carrying a balance on their cards (Cohen, 2007). The 2005 Panel Study of Income Dynamics, revealed wealth, which is a measure of all assets including home equity, increased by 35% from 1999 to 2005, while total family income only increased by 19.7%, thereby, leading to the plausible explanation that the increase in wealth could have been attributed to the nationwide increase in property values rather than a return on investment or other financial gains.

However, as the real estate market has slowed and the United States economy has shifted, consumers are faced with falling home equity ratios and a growing debt burden on the American middle class; which will ultimately lead to a decline in wealth. The consumer debt to disposable income ratio continues to increase, thereby raising further concerns regarding the effect of debt on the family.

From 1980 through the 1990s, the upward trend of credit loads is mirrored by an increasing trend in bankruptcy filings. A consumer carries the shadow of poor credit for a minimum of seven years, but typically a lifetime. Once a family has filed for bankruptcy, their potential for repeat delinquency increases. Continued financial stress can be attributed to a consumer being unable to qualify for preferred interest rates and loans, forcing an individual to pursue undesirable credit conditions. The relationship between bankruptcy and divorce is positively correlated, although the causality is still unclear, if divorce is a result of bankruptcy or if bankruptcy is a result of divorce.

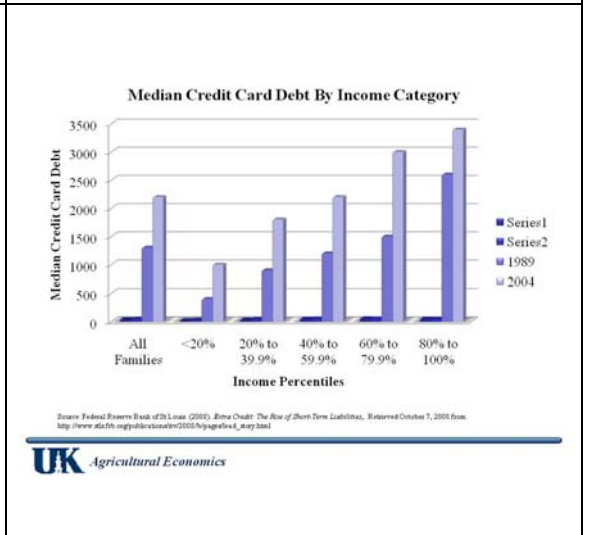
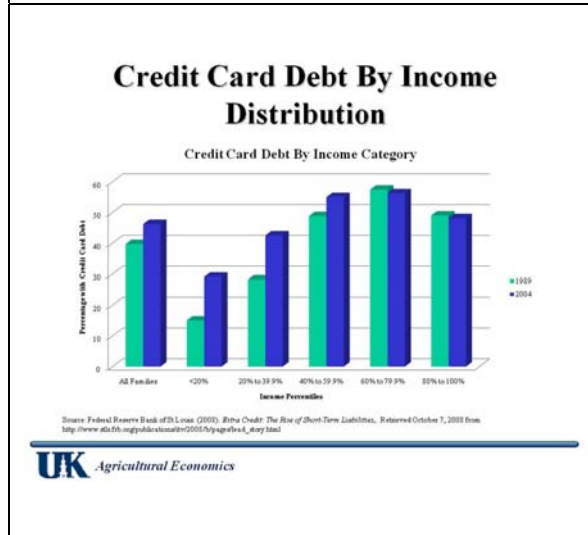
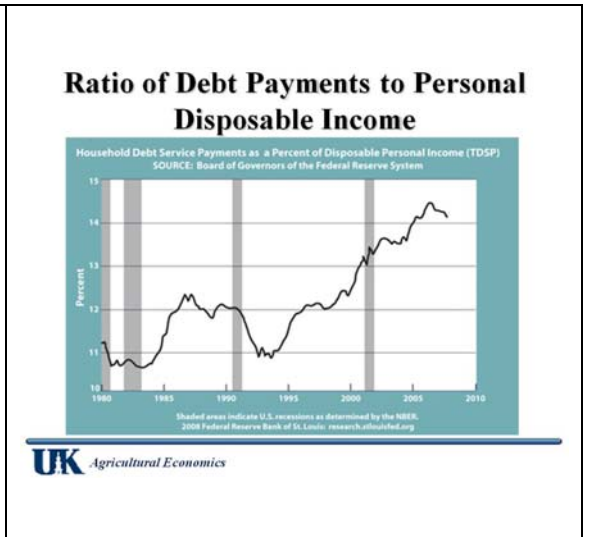
An overburdened family is at great risk of credit card default, delinquency, or bankruptcy. Consumers facing liquidity constraints have limited response in the advent of unfortunate economic circumstances, such as job loss or a sudden increase in prices. Many consumers are unaware of the discouraging effects associated with debt and therefore are not making informed decisions. Financial hardships have been identified as a key indicator of depression in young mothers. Furthermore, debt has been cited as an indicator of male suicide attempts, in addition to studies which document the negative effects of debt stress and debt loads on health and

well-being. The perceived rational use of credit by consumers to maximize their utility often leads to additional financial stress and strain and ultimately negative effects on the family unit.

Cohen, M.J. (2007). Consumer credit, household financial management, and sustainable consumption. *International Journal of Consumer Studies*, 31, 57-67.

Federal Reserve Bank of Boston. (2007). *Overborrowing and Undersaving: Lessons and Policy Implications from Research in Behavioral Economics* (Discussion Paper 07-4). Boston, MA: Benton, M., Meier, S., & Sprenger, C.

Federal Reserve Bank of St. Louis. (2008). *Personal Savings Rate*. Retrieved October 7, 2008 from <http://research.stlouisfed.org/fred2/series/PSAVERT/112>



## **2009 Whole Grain Farm Projections**

### ***Kentucky Farm Business Management (KFBM) Program***

Farms participating in the Kentucky Farm Business Management (KFBM) program experienced a second year of record Net Farm Income (NFI) in spite of rising input costs and poor weather conditions. NFI for Kentucky Grain Farms averaged \$233,943 in 2006 and \$233,954 in 2007 – a difference of only \$11. This was a 53% increase from 2005.

The Easter freeze caused havoc for wheat in 2007. Average yields fell from 82 bushels per acre in 2006 to 35. Abandoned fields are counted in this group as zero bushels per acre. Summer drought and extreme heat affected much of Kentucky. Average corn yields rose from 137 bushels per acre in 2005 to 158 in 2006, but fell back to 130 in 2007. Full season soybeans averaged 48 bushels per acre both in 2005 and 2006. Yields dropped to 33 bushels in 2007. Double-cropped soybeans suffered most, with a 66% decline from 41 bushels per acre in 2006 to 14 in 2007.

Whole farm costs, excluding feed, rose 41% from 2005 to 2007 for those farmers participating in KFBM. The largest increases were in fertilizer, seed, and insurance. Fertilizer costs increased 31% over 2005, with a 25% increase from 2006 to 2007. Seed increased 23% while insurance, including crop insurance, rose 54%. Like fertilizer, most of the increase came in the 2007 year.

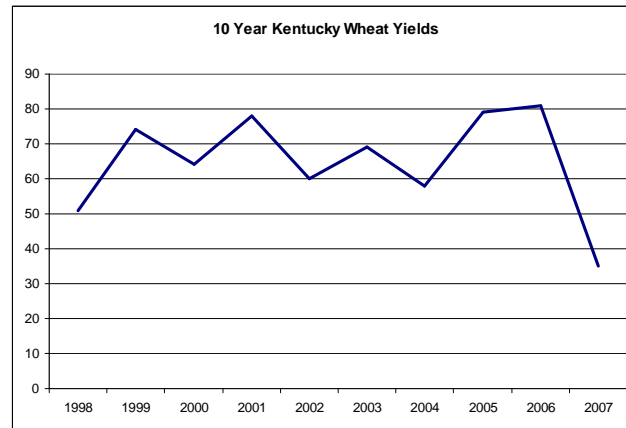
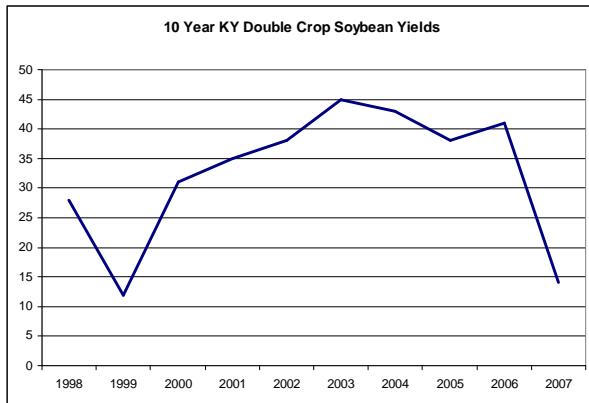
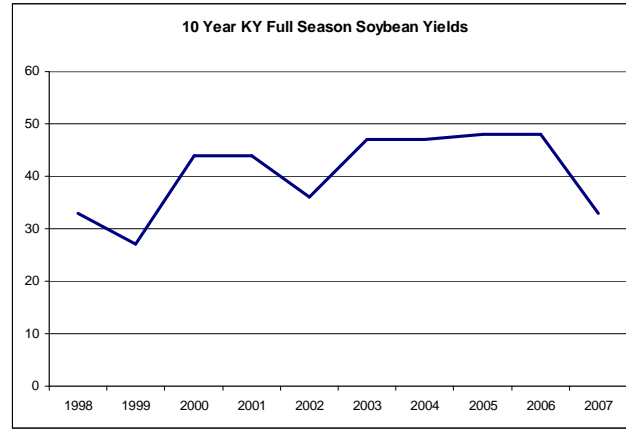
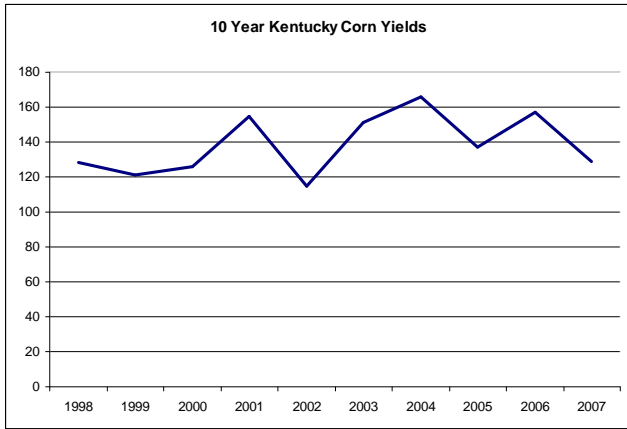
On a per-acre basis, total non-feed cost moved from \$457 in 2005 to \$541 in 2007. Gross income per acre rose from \$470 in 2005 to \$572 in 2007. Government payments fell from \$77 per operator acre in 2005 to \$24 in 2006 and 2007.

The reason NFI stayed the same for a second year in a row is high crop prices. New crop prices for corn were up 61% from 2005 to 2007. The average farm sold new corn in 2005 for \$2.17 per bushel. New crop corn averaged \$3.50 in 2007. Soybean prices rose 40%, from about \$6.00 in 2005 and 2006 to \$8.31 in 2007. Wheat made the most dramatic move from \$3.62 per bushel in 2006 to \$5.28 in 2007 – a 55% increase in one year!

Projections for profitability in 2009 are not good! KFBM specialists estimate returns to land, labor, and management will be negative for all regions except the Purchase.

Based on price outlooks in early October and more typical yields Gross Farm Income should rise an average of 35 percent. Based on estimates of input costs Total Non-Feed Costs should increase by 36 percent. The average farm could show a loss of \$35 to \$62 per acre.

The biggest cost factors are soil fertility, land rent, and drying costs. Estimates are for farmers to spend three times as much on fertilizer in 2009 than in 2007. Drying costs are estimated to be nearly 4 times higher. The specialists see land rents increasing 2.67 times over 2007, from an average of about \$35 per acre to about \$133 per acre.



**Cost & Return Analysis: Kentucky Grain Farms by Area - 2007**  
**Kentucky Farm Analysis Associations**

<b>FARM RETURNS</b>	<b>Ohio Valley</b>	<b>Pennyroyal</b>	<b>Purchase</b>	<b>Central Ky</b>
Crop Returns	554.51	453.72	503.86	444.08
Livestock Return Above Feed	16.02	4.15	23.22	20.18
Custom Work	5.33	4.76	1.37	12.36
Other Farm Receipts	8.57	65.10	8.15	19.33
Tobacco Returns	17.45	41.74	0.00	50.83
<b>GROSS FARM RETURNS</b>	<b>601.88</b>	<b>569.46</b>	<b>536.60</b>	<b>546.78</b>

<b>FARM COSTS</b>				
Soil Fertility	77.11	88.00	65.37	72.87
Pesticides	38.45	36.97	43.54	31.03
Seed	44.71	45.37	51.31	39.06

<b>Crop Total</b>	<b>160.27</b>	<b>170.34</b>	<b>160.23</b>	<b>142.97</b>
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Utilities	5.61	6.67	8.97	8.55
Machine Repairs	27.21	27.73	17.68	33.41
Machine Hire & Lease	7.87	8.16	13.04	12.70
Fuel & Oil	22.37	22.80	18.63	25.37
Light Vehicle	0.40	0.08	0.00	0.33

<b>Power &amp; Equip. Total</b>	<b>63.47</b>	<b>65.43</b>	<b>58.31</b>	<b>80.35</b>
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Drying	3.23	2.06	0.94	1.67
Storage	0.66	0.90	1.76	0.95
Building Repair & Rent	7.33	7.41	6.91	6.05

<b>Building Total</b>	<b>11.22</b>	<b>10.37</b>	<b>9.60</b>	<b>8.67</b>
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Labor, Paid	23.28	44.87	24.82	65.32
Vet, Med, Livestock Supply	2.00	1.46	0.99	3.40
Rent	36.16	54.79	33.27	44.18
Insurance	17.83	23.11	14.53	20.49
Miscellaneous	5.20	6.85	8.07	9.05
Interest Paid	27.99	32.76	35.10	21.09

<b>TOTAL NON-FEED COSTS</b>	<b>347.42</b>	<b>409.99</b>	<b>344.92</b>	<b>395.51</b>
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Machine Depreciation	33.53	39.04	33.38	31.72
Building Depreciation	8.04	7.95	6.49	9.88

<b>TOTAL FARM COSTS</b>	<b>388.98</b>	<b>456.98</b>	<b>384.78</b>	<b>437.11</b>
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<b>RETURNS TO LAND, LABOR, &amp; MANAGEMENT</b>	<b>212.90</b>	<b>112.48</b>	<b>151.81</b>	<b>109.67</b>
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Average KY Family Living per Acre	0.00	0.00	0.00	0.00
Average KY Mortgage Paymet per Acre	-41.57	-46.99	-39.86	-41.60
<b>MANAGEMENT RETURNS</b>	<b>85.00</b>	<b>9.24</b>	<b>49.47</b>	<b>11.51</b>

<b>Number of Farms</b>	48	74	13	29
Total Acres in Farm	2349	2571	2651	1320
Tillable Acres in Farm	2162	2292	2557	1187
Operator Tillable Acres	1823	2104	2338	1100

<b>Crop Yields</b>				
Yellow Corn	162	107	165	123
Full Season Soybeans	42	21	30	32
Wheat	35	31	51	66

Months of Hired Labor	24.7	43.2	24.1	37.8
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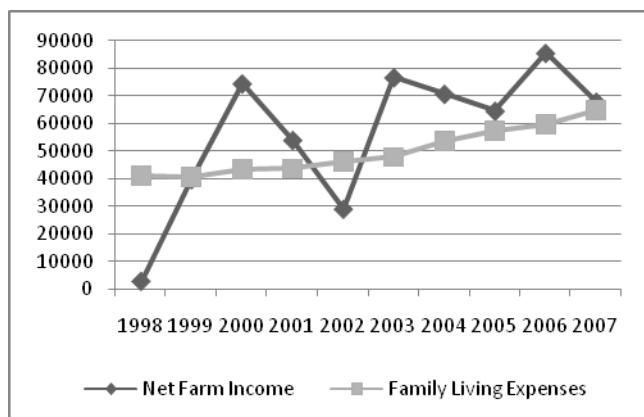
**Cost & Return PROJECTIONS: Kentucky Grain Farms by Area - 2009**  
**Kentucky Farm Analysis Associations**

	Ohio Valley	Pennyroyal	Purchase	Central Ky
<b>FARM RETURNS</b>				
Crop Returns	595.16	611.42	637.85	539.25
Livestock Return Above Feed	16.02	4.15	23.22	20.18
Custom Work	5.33	4.76	1.37	12.36
Other Farm Receipts	8.57	65.10	8.15	19.33
Tobacco Returns	15.91	36.52	0.00	59.53
<b>GROSS FARM RETURNS</b>	<b>640.99</b>	<b>721.95</b>	<b>670.59</b>	<b>650.64</b>
<b>FARM COSTS</b>				
Soil Fertility	200.04	209.32	162.03	190.05
Pesticides	63.77	43.75	49.87	41.96
Seed	62.15	69.32	63.62	64.84
<b>Crop Total</b>	<b>325.96</b>	<b>322.39</b>	<b>275.52</b>	<b>296.85</b>
Utilities	5.61	6.67	8.97	8.55
Machine Repairs	16.17	26.44	19.46	38.54
Machine Hire & Lease	4.83	7.02	13.97	16.47
Fuel & Oil	23.06	27.58	20.16	27.02
Light Vehicle	0.40	0.08	0.00	0.33
<b>Power &amp; Equip. Total</b>	<b>50.07</b>	<b>67.78</b>	<b>62.56</b>	<b>90.91</b>
Drying	17.26	17.87	1.49	14.61
Storage	0.00	0.90	0.69	0.95
Building Repair & Rent	7.33	7.41	6.91	6.05
<b>Building Total</b>	<b>24.59</b>	<b>26.18</b>	<b>9.09</b>	<b>21.61</b>
Labor, Paid	15.01	53.76	29.16	78.24
Vet, Med, Livestock Supply	2.00	1.46	0.99	3.40
Rent	159.42	167.37	82.51	123.23
Insurance	26.94	23.82	14.54	20.15
Other Costs	13.27	13.00	21.94	15.34
Interest Paid	27.99	32.76	35.10	21.09
<b>TOTAL NON-FEED COSTS</b>	<b>645.24</b>	<b>708.53</b>	<b>531.40</b>	<b>670.80</b>
Machine Depreciation	34.87	39.64	38.51	32.40
Building Depreciation	7.18	9.67	6.49	9.88
<b>TOTAL FARM COSTS</b>	<b>687.29</b>	<b>757.84</b>	<b>576.40</b>	<b>713.09</b>
<b>RETURNS TO LAND, LABOR, &amp; MANAGEMENT</b>	<b>-46.30</b>	<b>-35.89</b>	<b>94.19</b>	<b>-62.44</b>
Average KY Family Living per Acre	35.55	30.79	27.71	58.90
Average KY Mortgage Paymet per Acre	87.74	63.11	56.18	172.80
<b>Number of Farms</b>	48	74	13	29
Total Acres in Farm	2349	2571	2651	1320
Tillable Acres in Farm	2162	2292	2557	1187
Operator Tillable Acres	1823	2104	2338	1100
<b>Crop Yields</b>				
Yellow Corn	154.00	150.00	160.00	150.00
Full Season Soybeans	40.00	40.00	40.00	48.00
Wheat	69.00	75.00	60.00	65.00
Months of Hired Labor	24.7	43.2	24.1	37.8



## Family Living Expenses are Still on the Rise

According to data from the Kentucky Farm Business Management Program average family living expenses increased 9% in 2007 despite a 21% decline in family net farm incomes from 2006 levels. The average net farm income for the 86 families who provided family living information in 2007 was \$67,939. This is down from \$85,642 for 123 families, just a year prior. Average net non-farm incomes were also down in 2007, dropping from \$43,641 in 2006 to \$39,535. This represents a \$21,809 decrease in earned income for the average family during 2007. However, despite these depressed incomes, family living expenses continued to rise, up \$5,280 in 2007 to \$64,784. The trend has been that although net farm incomes fluctuate up and down from year to year, family living expenses continue to increase.



Depending upon the sources of income that are available to fund the family, family living expenses can have a significant impact on the sustainability of the farm. This is especially true when there are limited or no sources of off-farm income, indicating that the farm must provide funds for farm operating expenses, debt repayment, capital replacement, and funds to support the family. While some family living expenses are necessary (food, shelter), the concern is that family living can take vital funds from the farming operation. It is important to note that family living expenses in this study include only contributions, medical expenses, life insurance, family expendables, and capital purchases (vehicles, boats, appliances). Taxes, principle payments, and savings or other investments are not included.

Tracking all expenses that go to family living is not done by most farming operations; however, it is essential that all farming operations are aware of how much money is leaving the farm for non-farm uses. When non-farm uses of farm funds exceed net farm income, the farming operation is in danger. Borrowing funds to pay for farm expenses or investments that will in turn provide for more productivity or increased incomes for the farm are important for growth and continuity of the farming operation. However, when borrowed funds are used to fund family living expenses, it can not only drain the borrowing capacity of the farming operation, but also does not add to the productivity or growth of the farming operation. At some point the farm will not be able to borrow additional funds and without surplus earnings will not be able to make debt payments, thus leading to a detrimental financial situation for both the farming operation and the family.

**Table 1. Farm and Family Sources and Uses of Dollars - Average per Farm in Kentucky, 2001-2007.**

Item	2007	2006	2005	2004	2003
Number of families . . . . .	86	123	121	136	120
Age of operator . . . . .	54	57	55	54	53
Number in family . . . . .	3.1	2.8	2.8	2.8	2.9
Age of oldest dependent child . . . . .	16	17	17	17	16
Total tillable operator acres <sup>1</sup> . . . . .	707	746	685	745	678
Value of feed fed . . . . .	\$53,466	\$29,365	\$32,446	\$29,791	\$34,494
Net farm income . . . . .	\$67,939	\$85,642	\$64,594	\$70,785	\$76,774
<b>FAMILY LIVING EXPENSE:</b>					
<b>Contributions . . . . .</b>	<b>\$3,290</b>	<b>\$4,358</b>	<b>\$4,060</b>	<b>\$3,881</b>	<b>\$3,347</b>
<b>Medical . . . . .</b>	<b>6,755</b>	<b>7,697</b>	<b>7,346</b>	<b>7,529</b>	<b>6,185</b>
<b>Life Insurance . . . . .</b>	<b>1,585</b>	<b>1,800</b>	<b>1,421</b>	<b>1,772</b>	<b>1,695</b>
<b>Expendables . . . . .</b>	<b><u>49,631</u></b>	<b><u>43,121</u></b>	<b><u>40,936</u></b>	<b><u>36,950</u></b>	<b><u>33,615</u></b>
<b>Total Non-Capital. . . . .</b>	<b>(61,260)</b>	<b>(56,976)</b>	<b>(53,763)</b>	<b>(50,131)</b>	<b>(44,842)</b>
<b>Capital. . . . .</b>	<b><u>3,524</u></b>	<b><u>2,528</u></b>	<b><u>3,573</u></b>	<b><u>3,543</u></b>	<b><u>3,083</u></b>
<b>Total Living Expenses . . . . .</b>	<b>(\$64,784)</b>	<b>(\$59,504)</b>	<b>(\$57,336)</b>	<b>(\$53,674)</b>	<b>(\$47,925)</b>
<b>SOURCES OF FUNDS:</b>					
Non-taxable receipts <sup>2</sup> . . . . .	58,667	40,419	31,556	26,891	24,740
Net non-farm income . . . . .	39,535	43,641	42,068	36,213	31,380
Money borrowed . . . . .	309,955	206,185	190,236	203,804	204,563
Total farm receipts . . . . .	<u>484,540</u>	<u>396,481</u>	<u>375,553</u>	<u>379,183</u>	<u>324,239</u>
TOTAL SOURCE ALL FUNDS . . . . .	\$892,697	\$686,726	\$639,413	\$646,091	\$584,921
<b>USES OF FUNDS:</b>					
Farm					
Interest paid . . . . .	\$28,025	\$18,468	\$16,806	\$15,236	\$15,537
Other farm expenses . . . . .	352,048	288,439	271,895	265,496	239,735
Machinery-bldg. purchases . . . . .	<u>87,417</u>	<u>55,045</u>	<u>49,276</u>	<u>59,004</u>	<u>43,025</u>
Total Farm Expenditures . . . . .	(\$467,490)	(\$361,951)	(\$337,976)	(\$339,736)	(\$298,297)
Principal payments . . . . .	\$236,558	\$184,033	\$177,369	\$187,334	\$182,680
Income & S.S. tax . . . . .	11,360	19,382	14,805	13,173	11,109
Savings and Investment <sup>3</sup> . . . . .	112,532	61,857	51,932	52,166	44,901
Living expenses:					
Total Non-Capital . . . . .	\$61,260	\$56,976	\$53,763	\$50,131	\$44,842
Capital . . . . .	<u>3,524</u>	<u>2,528</u>	<u>3,573</u>	<u>3,543</u>	<u>3,083</u>
Total Living Expense . . . . .	(\$64,784)	(\$59,504)	(\$57,336)	(\$53,674)	(\$47,925)
TOTAL USE OF FUNDS . . . . .	\$892,723	\$686,727	\$639,418	\$646,084	\$584,913
Balancing error . . . . .	27	1	5	-7	-8

<sup>1</sup> Total tillable acres prior to 2002.

<sup>2</sup> Included fund transfers and withdrawals from savings, tax refunds, gifts, inheritances, transfer from other business ent. & misc.

<sup>3</sup> Includes transfers to savings, loans to others, real estate purchases, other non-farm capital and net change in bank balance.



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