Kentucky grain farmers have just started harvesting corn and are getting to the point where they will decide how much wheat they will plant this fall. In Kentucky, wheat is almost always planted in the fall following the harvest on corn ground, and then double-cropped with soybeans in early summer after the wheat harvest. This allows for two crops in one year. However, soybeans planted after the wheat harvest are more susceptible to summer drought, which means on average yields are lower for these double-cropped soybeans. In Kentucky, this yield reduction typically averages around 20%. As a consequence, the majority of soybeans planted in KY are full-season plantings rather than double-cropped.

A major change the last two years is the continued price declines for wheat and soybeans (as well as corn). The following analysis includes estimated returns comparing double-cropped wheat/soybeans with full-season soybeans for the 2016 crop, and the likely implications for Kentucky grain farmers.

In this analysis, I account for additional costs associated with the double-cropping including fuel, machinery repairs and depreciation, labor, hauling, etc. I’m using 2016 new crop CME future’s prices on September 10, 2015 and adjusting for a new crop basis of -$.25 for both soybeans and wheat. This results in new crop prices of $8.40/bu for soybeans and $4.70/bu for wheat.

Finally, I’m evaluating two regions with different agronomic characteristics. The first region is along the southwest tier of counties near Hopkinsville, which traditionally does a lot of double-cropping. The second region is along the northwest tier of counties (Ohio Valley region) that has some of the best yields for corn and soybeans, but traditionally plants less wheat. Cash rent is assumed to be $225/acre for both these regions (note: this will vary substantially, but is done here for illustrative purposes only). Net profit is estimated after subtracting out all variable and fixed costs represented by an efficient operation. Major assumptions are: $2.15/gallon fuel, 25 mile one-way grain hauling, $.40/unit N, $.40/unit P, and $.40/unit K.

Southwest Tier Assumptions:
- 70 bu wheat
- 35 bu double-cropped soybeans
- 44 bu full-season soybeans

Resulting net profits:
- $180 double-crop
- $143 full-season soybeans

This results in a $37 difference in favor of the full season soybeans. The double-cropped soybean yield would have to increase to 39.5 bu before wheat/double-crop soybeans were as profitable.

Northwest Tier Assumptions:
- 65 bu wheat
- 38 bu double-cropped soybeans
- 50 bu full-season soybeans

Resulting net profits:
- $179 double-crop
- $93 full-season soybeans

This results in a $86 difference in favor of the full season soybeans. The double-cropped soybean yield would have to increase to 48 bu in this case before the wheat/double-crop soybeans were as profitable.

Continued on page 2
Given the current market conditions, double-cropping doesn’t look attractive for 2015-2016, particularly in northwest Kentucky. An important note is that this analysis doesn’t account for potential payments from the new ARC and PLC Farm Bill programs. However, these programs would pay on base acre crop allocation and not planted acres. So there should be no effect on planting decisions.

Another important result from this analysis was that all projected net returns were highly negative even for the more profitable crop using a $225/acre land rent (-$93/acre to -$143/acre with full season soybeans), primarily due to the continued drop in commodity prices. Potential payments from the ARC and PLC Farm Bill programs will improve these net returns, but even with the best case-scenario we would still see steep losses.

To change the assumptions above to your specific conditions and evaluate your expected profitability, go to the grain budget site at:

http://www.uky.edu/Ag/AgEcon/halich_greg_rowcropbudgets.php.

The Corn-Soybean Budgets and Wheat Budgets can be downloaded or opened directly from this page.

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**USDA’s September Crop Production and WASDE Give Futures Market New Information. How have Corn and Soybean Prices Reacted?**

The USDA Crop Production and WASDE/World Agricultural Supply and Demand Estimates reports released on September 11, 2015 provided the futures market an updated yield and production forecast as well as projected ending stocks for the 2015-16 marketing-year. Analysts and farmers were expecting USDA to make significant yield adjustments from the August Crop Production report because of the wet weather that plagued the Eastern Corn Belt plus Missouri this summer.

USDA did reduce the projected corn yield to 167.5 bu./acre which is 1.3 bu./acre less than the August forecast. If realized, this would be the second largest yield on record. The 2015 corn crop is projected at 13.585 billion bushels which is 101 million bushels smaller than the August forecast. If realized, the 2015 corn crop would be 631 million bushels smaller than the 2014 crop but would still be the third largest crop in history.

USDA continued to surprise analysts and farmers by increasing the projected soybean yield to 47.1 bu./acre from the August estimate of 46.9 bu./acre. USDA is currently forecasting the U.S. soybean crop to be 3.935 billion bushels which would be the second largest crop in history record, if realized. While not a record, the 2015 soybean crop would only be 34 million bushels smaller than last year’s crop.

The September WASDE continues to forecast that the corn and soybean markets are struggling with bearish fundamentals. USDA is currently projecting 2015-16 corn ending-stocks at 1.592 billion which would be 140 million bushels lower than in 2014-15. Projected ending-stocks of 1.592 billion bushels can be thought of as about a 42 day supply of corn on hand on September 1, 2016. While ending-stocks are trimmed from 2014-15, the U.S. currently has an adequate supply of corn. The 2015-16 projected U.S. marketing-year average (MYA) price at $3.75 is a $0.07/bu. increase from the previous marketing-year.

For soybeans, USDA is projecting 2015-16 ending-stocks of 450 million bushels which, if realized, is an increase in stocks by 240 million bushels. Ending-stocks of 450 million bushels can be thought of as a 44 day supply of corn on hand on September 1, 2016. As soybean stocks increase, the projected 2015-16 US MYA price of $9.15/bushel would be $0.91/bushel lower than the previous year’s price.

The market is already looking forward to the October Crop Production report as it will incorporate the USDA-FSA certified acreage information to better estimate the amount of acres...
that were prevented from planting this year. The question of the amount of prevented planted acres is something the market wrestles with in years when there is a wet spring and planting is extended beyond the optimal agronomic planting window. As harvest gets underway, USDA will include actual harvested yield data which greatly improves the production estimates.

How have prices reacted since the September 11th report?

The initial reaction in the December Corn futures contract was a $0.13/bushel jump from the previous day's closing price as the market was relieved that USDA trimmed projected yield, albeit only by 1.3 bushels per acre. That bullish news, however, was short-lived as the prospect of large enough stocks continues to weigh on the market. December Futures is following the typical harvest-time pattern of declining into November. As of September 23, the December corn futures contract closed at $3.83 which is $0.09 per bushel above the pre-report closing price on September 10th (Table 1). The corn futures market currently has a carry of $0.18 ¾ from December to May and $0.24 ¾ from December to July which is signaling farmers to store. However, farmers will need to know their cost-of-carrying corn into the spring to determine the expected profit from storage and the best time to sell corn post-harvest.

Western Kentucky spot corn price for harvest delivery on September 11th closed up about $0.14 per bushel from the pre-report price on September 10th. The initial exuberance of a lower projected yield has worn off and the spot market is adjusting to harvest and local supply and demand conditions. As of September 23, cash corn for harvest delivery is about $0.04 per bushel higher than on September 10th. (Table 1).

The November soybean futures contract was not greatly impacted by the September 11th reports as there was no change from the previous day. Since September 11th, other fundamental forces have battered the November contract and the closing price on September 23 of $8.64 is $0.10 lower than the pre-report price on September 10th (Table 1). As soybean harvest gains speed throughout the Midwest, November futures will likely continue to decline throughout harvest. The soybean futures market, as of September 23, is offering a carry of $0.04 ½ from November to January; $0.08 ¼ from November to March; and $0.11 ¼ from November to May futures.

The storage signal isn’t as strong in soybeans as in corn and significant basis appreciation will be needed to cover the cost of storing soybeans into spring or early summer.

The Western Kentucky cash soybean price for harvest delivery is about $0.06 per bushel lower than it was on September 10th. The USDA reports provided a small bump in the harvest spot price the day of the report ($0.02 per bushel increase) but local supply-demand conditions have caused price to erode since the report release (Table 1).

<table>
<thead>
<tr>
<th>Date</th>
<th>December 2015</th>
<th>Western Kentucky</th>
<th>November 2015</th>
<th>Western Kentucky</th>
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Farmers storing corn and soybeans this fall should not rely on previous years’ price appreciation to guide when to sell stored grain. A study of Western Kentucky cash price change from October through spring and summer for the 2010 to 2014 marketing-years are presented in Table 2. Table 2 does not include any storage costs so the price appreciation is not a return to storage.

A study of Western Kentucky corn prices from 2005 to 2014 found the average change in spot market price from October to March was +$0.76/bushel, on average, for the 2010-14 marketing-years. However, when you only look at years where stocks are slightly lower than the previous year (like in 2015), the change in price from October to March was +$0.24 per bushel. The take away message is that managers accustomed to storing corn until March should closely monitor their cost of storage and compare it to the returns to storage. Storing corn into spring or summer may not be as profitable for the 2015 crop as in previous years.

The average Western Kentucky soybean price change from October to March from 2010 to 2014 was a $1.04/bushel increase and even greater price appreciation occurred for storage into June or July. However the 2010-14 time periods reflected unique fundamentals of tight stocks coupled with year-over-year smaller crops. These fundamentals aren’t applicable for the 2015 crop as ending-stocks are projected to increase by a 24 day supply. When comparing the change from October to March for a year where stocks are projected to increase by 24 days of inventory, the increase in price from October to March is a $0.25 per bushel increase. However, producers would have obtained a larger return to storage by selling in January where the price appreciation from October to January was $0.36 per bushel. As in corn, farmers need to know their soybean storage costs and monitor if the potential return to storage is enough to compensate for storing an additional month.

These topics are covered in greater detail in the September Crops Marketing and Management Update which is posted online at:

http://www.uky.edu/Ag/AgEcon/pubs/extcmmu091501.pdf

Todd Davis, todd.davis@uky.edu
Most farmers would much rather spend their time on a tractor or in the pasture checking on their livestock, but it is often important to spend time in the office and manage the business aspect of the farm. One of the aspects of the farm that deserves attention as a farmer’s asset base increases, is estate planning. Estate planning is advisable for farmers of all ages, not just the older ones. Anyone with a significant asset base could use an estate to manage those assets during life, at death, or after death.

Estate planning includes the transferring of land and other assets to heirs and the settlement of estate taxes, but also maximizing the value of the estate. The sooner farm families begin the process, the more satisfying the results will be. The younger farm family should have a longer period to plan and take steps to put the plan in place.

The goal of estate planning should be to determine what you have, how you want your estate to be handled, and how you want the property to be distributed. There are a wide range of tools that should allow for your objectives to be accomplished.

One of the tools of estate planning is a trust. The trust is one of the most flexible devices and in many situations, may be very appropriate. With a trust, property is transferred into the trust and a third party, the trustee, manages the property and pays the income to the named beneficiary or beneficiaries according to the instructions given by the person setting up the trust, the trustor.

Basically, a person using a trust is trusting the trustee to handle property for the benefit of beneficiaries. The trustee can be a person or an institution, such as a bank, but usually receives a fee for management of the trust.

When property is transferred to a trust that has been created, a gift is made to the beneficiaries of that trust. There is separation between the assets and beneficiaries as the trust document sets out the powers of the trustee in managing the property and gives instructions for the timing of distributions for paying out trust income.

Trusts can help avoid expenses and time involved in the probate process after death, as well as, reduce estate taxes. Another advantage in a trust is that assets can be managed and distributed according to a predetermined schedule, especially beneficial in transfers to minors, elderly persons, and others that are not competent to make decisions. Simple trusts are required to distribute all of their income currently and may deduct the amount of the income which the trustee distributes. The beneficiaries of the simple trust pay the income tax. Complex trusts are not required to distribute all of their income currently, thus both beneficiaries and the trust, may be taxpayers.

It is important to learn about the different types of trusts before taking the steps to set up a trust. Two basic types are living trusts and testamentary trusts.

The living trust is established during life with property transferred to the trust, but it may also continue on after death. Living trusts can be revocable or irrevocable. Living trusts offer privacy as they are an agreement between the grantor and the trustee and may not have to be filed and become public after death.

A revocable trust can be amended by the grantor once it is established. Assets in a revocable trust are not required to go through probate process, so the transfer may be quicker after death. The property in the revocable trust does remain part of the taxable estate for purposes of calculating the federal estate tax; therefore, the value of the estate is not reduced. However, heirs do receive a step-up in basis on the property.

The revocable trust can be used to transfer management of assets as successor trustees can be involved in managing the assets before death. An example of this would be the initial trustee being the property owner, but as the initial trustee approached incompetency or desired to be less burdened with property management, a successor trustee would assume responsibility of the property management. This type of trust will generally
cost more than creating a will. Irrevocable trusts cannot be changed once they are set up. An irrevocable trust is commonly used for high value estates as it can reduce the value of the taxable estate.

Transferring assets to an irrevocable trust does trigger federal gift tax concerns. If the grantor does not retain decision making power or the right to receive income, the trust will not normally be taxable in the decedent’s estate. Irrevocable trusts may also save estate settlement costs as property is transferred during life and thus not subject to probate. With this type of trust, enjoyment by beneficiaries cannot be contingent on death; there must be present interest from the beginning.

Testamentary trusts are established at the time of death and are often part of an individual’s will. The property owner retains complete right to the property until death. The property is transferred to the trust after settlement of the estate. The primary purpose of the testamentary trust is to provide for management of property after death. Testamentary trusts can be used to hold and manage the property of minor children. The trust may provide income as needed for the support, care, and education of the children. Income not needed would increase the value of the trust and once the children reach a specified age, they may receive their share of the trust.

Two types of testamentary trusts in which a charitable deduction may also be received for the portion of the trust going to charities are the charitable remainder uni-trust (CRUT) and the charitable remainder annuity trust (CRAT).

With the establishment of a CRUT, property is transferred into the trust irrevocably and the trust pays beneficiary income for life or term of years. There is no capital gains tax on the transfer of assets to the trust. The payment varies each year and is figured as a percentage of the fair market value of the trust assets. The remainder of the trust goes to charities after the death of the beneficiary or after a set term of years.

A CRAT is similar to a CRUT. Property is transferred irrevocably and the trust pays the beneficiary income at least annually for life or term of years. At the death of the income beneficiary, the trust terminates and the assets go to the charitable organization. There is no capital gains tax on transfer to the trust.

Estate planning shouldn’t be put on the “back burner” but should be tackled early on and communicated to others in the family. The trust may be worth considering in many estate planning situations. It would be very beneficial to ask for advice from your accountant and attorney in developing a plan.

Lauren O. Turley, lauren.o.turley@uky.edu

KFBM Associations
2015 Income Tax Seminar Schedule

The 49th annual UK Income Tax Seminars will be offered at fourteen locations around the state in November, December, and January. The two day seminars are targeted toward tax preparation professionals and financial advisors. Participants are eligible for up to 17 hours of continuing education credit. Seminar cost is $299, and early registration is encouraged as some locations fill quickly. Registration within two weeks prior to each seminar is $329.

These annual updates of federal and state tax regulations will begin on November 4-5 in Elizabethtown and conclude on January 6-7 in Burlington. All seminar dates and locations are listed below. For registration and additional information see the UK Income Tax Seminar website at www.uky.edu/uktax/.

Last year 1,670 registrants attended a UK Income Tax Seminar. Registration for 2015 seminars is underway. For additional information see the website listed above or contact Kathy Roe or Emily Brown, UK Income Tax Seminar Program Coordinators, at 859-218-5112, 859-218-3661, or toll free at 888-808-3303. You can also email Kathy or Emily at Kathy.roe@uky.edu or e.brown@uky.edu.

Steve Isaacs, sisaacs@uky.edu

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<tr>
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<tr>
<td>Elizabethtown</td>
<td>Nov 4-5</td>
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<td>Louisville/East</td>
<td>Nov 9-10</td>
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<tr>
<td>Grayson</td>
<td>Nov 12-13</td>
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<td>Bowling Green</td>
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Seminars are taught by two teams of experienced instructors with extensive backgrounds in state and federal taxes and include one practicing accountant. The Kentucky Department of Revenue and the IRS also provide instruction. The farm tax components are taught by current KY Farm Business Management specialists.

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Fax: 859-257-7290
http://www.uky.edu/Ag/AgEcon/extbluesheet.php

University of Kentucky Department of Agricultural Economics:
Economic & Policy Update

Please note that our website address has changed.
View all issues online at http://www.uky.edu/Ag/AgEcon/extbluesheet.php