Operator and farmland returns are projected to be lower in 2013 and 2014 as compared to returns from 2010, 2011, and 2012. Lower returns occur primarily because of lower commodity prices, but also because of higher non-land costs. Lower returns will require adjustments. On many farms, machinery and other capital purchases will need to be decreased. In addition, cash rents set at high levels may have to be adjusted downward to reflect lower returns. Because projected commodity prices in 2013 and 2014 are near long-run projected levels, the level of returns projected in 2013 and 2014 likely are more representative of levels of returns in the future than return levels from 2010 through 2012.

Operator and Farmland Returns

Figure 1 shows operator and farmland returns for northern Illinois farms, central Illinois farms with high-productivity farmland (Central-High), central Illinois farms with low productivity farmland (Central-Low), and southern Illinois farms. Operator and farmland returns equal gross revenue from crop sales, crop insurance proceeds, and other government payments; minus non-land costs. Operator and farmland returns represent a return to both the farmer and land owner. Subtracting land costs results in the return to the farmer. Take a cash rent situation in which the operator and farmland return is $300 per acre and the cash rent is $250 per acre. In this case, the farmer return is $50 per acre ($50 = $300 operator and farmland return – $250 cash rent).
In Figure 1, actual returns are shown from 2003 through 2012. These returns are based on data summarized from Illinois Farm Business Farm Management (FBFM). Returns for 2013 and 2014 are projections. More details on yields and costs used to calculate projections are available in the October releases of the 2014 Crop Budgets (available here) and Revenues and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans (available here).

Projections for 2013 are based on corn prices of $4.55 per bushel for 2012 and $4.60 for 2014. Soybean prices are $12.80 per bushel for 2013 and $11.00 per bushel for 2014.

For northern Illinois, operator and farmland returns are projected to be $296 in both 2013 and 2014. Projections are based on corn yields of 185 bushels per acre for 2013 and 186 bushels for 2014. Projected soybean yields are 54 bushels per acre for 2013 and 56 bushels for 2014. The $296 per acre returns from 2013 and 2014 are down considerably from 2010 through 2012 returns. Operator and farmland returns were $426 per acre in 2010, $543 per acre in 2011, and $489 in 2012. Average returns from 2010 through 2012 are $190 per acre higher than the average projected for 2013 and 2014.

For central Illinois farms with high productivity, operator and farmland returns are projected to be $302 per acre in 2013 and $331 per acre in 2014. Projections are based on corn yields of 182 bushels per acre for 2013 and 196 bushels for 2014. Projected soybean yields are 52 bushels per acre for 2013 and 57 bushels for 2014. Projected 2013 and 2014 returns are down considerably from 2010 through 2012 returns. Operator and farmland returns were $476 per acre in 2010, $551 in 2011, and $498 in 2012. Average returns from 2010 through 2012 are $192 per acre higher than the average projected 2013 and 2014.

For central Illinois farms with low productivity, operator and farmland returns are projected to be $248 per acre in 2013 and $284 per acre in 2014. Projections are based on corn yields of 166 bushels per acre for 2013 and 184 bushels for 2014. Projected soybean yields are 49 bushels per acre for 2013 and 53 bushels for 2014. Projected 2013 and 2014 returns are down considerably from 2010 through 2012 returns. Operator and farmland returns were $386 per acre in 2010, $465 in 2011, and $430 in 2012. Average returns from 2010 through 2012 are $161 per acre higher than the average projected 2013 and 2014.

For southern Illinois farms, operator and farmland returns are projected to be $206 per acre in 2013 and $188 per acre in 2014. Projections are based on corn yields of 150 bushels per acre for 2013 and 159 bushels for 2014. Projected soybean yields are 48 bushels per acre for 2013 and 57 bushels for 2014. Projected wheat yields are 67 bushels per acre in 2013 and 65 bushels in 2014. Projected 2013 and 2014
returns are down considerably from 2010 through 2013 returns. Operator and farmland returns were $319 per acre in 2010, $369 in 2011, and $311 in 2012. Average returns from 2010 through 2012 are $136 per acre higher than average projected 2013 and 2014.

Commentary

Two factors contribute to the lower projected returns in 2013 and 2014. The first is higher non-land costs. Non-land costs have increased in recent years. For example, non-land costs for corn in northern Illinois were $476 per acre in 2010, $549 in 2011, and $620 in 2012, giving an average cost of $548 from 2010 through 2012. Projected costs in 2013 and 2014 are down from 2012 levels, but are still above the average from 2010 through 2012. Non-land corn costs in Illinois are projected at $600 per acre in 2013 and $565 in 2014, for an average of $583 per acre. The $583 projected average for 2013 and 2014 is $35 per acre higher than the $548 average from 2010 through 2012. Decreases in 2013 and 2014 costs are projected due to lower fertilizer costs.

The second factor, and the one having a larger impact on returns, is lower commodity prices. Projected corn prices are $4.55 per bushel in 2013 and $4.60 for 2014. These projected corn prices compare to actual prices for northern Illinois farms of $5.03 in 2010, $6.10 in 2011, and $6.60 in 2012. Average projected prices in 2013 and 2014 are $1.34 per bushel below the average for 2010 through 2012. Projected soybean prices are $12.90 per bushel in 2013 and $11.00 in 2014. These projected prices compare to $11.31 in 2010, $12.71 in 2011, and $14.30 in 2012. Average projected soybean prices are $.86 below the average of actual prices from 2010 through 2012.

In many respects, the decline in 2013 and 2014 projected returns is to be expected. Commodity prices in 2010 through 2012 were above what many agricultural economists believe to be long-run commodity prices. Long-run averages around $4.60 for corn and $10.60 for soybeans seem reasonable (see here for more detail). Prices used in 2013 and 2013 projections are close to long-run prices. Hence, return levels like those projected in 2013 and 2014 likely are better representations of average returns in the next several years than return levels for 2010 through 2012.

Lower returns will require adjustments by farmers. Machinery and other capital purchases likely will have to be reduced. In addition, cash rents may have to be reduced in certain situations to reflect the projected lower returns for 2013 and 2014.