Weekly Farm Economics: Non-land Costs Continue to Increase

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June 4, 2013

*far*mdoc daily (3):107

Non-land costs continued to increase in 2012. Data from Illinois Farm Business Farm Management indicate that non-land costs in central Illinois on high-productivity farmland averaged $581 per acre for corn in 2012, up $78 per acre from non-land costs in 2011. Non-land cost for soybeans averaged $353 per acre, up $50 per acre in 2011. Non-land costs in 2012 represent record high levels for both corn and soybeans.

**Continuing Trend of Cost Increases**

The increases in 2013 continued a string of large increases that began in 2005 (see Figure 1). In 2005, non-land costs for corn averaged $287 per acre. Costs then increased to $302 per acre in 2006, $341 per acre in 2007, $428 per acre in 2008, and $534 per acre in 2009. High costs in 2009 occurred because of high fertilizer prices and high drying costs due to a wet crop in 2009. Costs then declined to $452 per acre in 2010. After the decrease in 2010, non-land costs again rose to $503 per acre in 2011 and $581 per acre in 2012.
A similar trend exists for soybeans (see Figure 1). Non-land costs increased each year from 2005 to 2009. Non-land costs were $187 per acre in 2005, $190 per acre in 2006, $207 per acre in 2007, $253 per acre in 2008, and $290 per acre in 2009. Costs then decreased in 2010 to $273 per acre. Costs then increased to $303 per acre in 2011 and $353 per acre in 2012.

The period of large increases corresponds to the period of higher corn and soybean prices that began in 2006. A central question is whether non-land costs decrease will occur when commodity prices decrease.

Increases in Non-land Cost Components

Insights into whether non-land costs will decrease can be gained by examining components of costs that contribute to increases in non-land costs. Three components have accounted for 75% of the increase in corn costs from 2005 to 2012:

- Fertilizer costs increased from $78 per acre in 2005 to $200 per acre in 2012, an increase of $122 per acre. There are some reasons to believe that fertilizer costs could decrease. Nitrogen fertilizer capacity is being built which could lead to lower nitrogen fertilizer prices. Between 2011 and 2012, fertilizer costs increased while fertilizer costs remained relative stable between 2011 and 2012. This may indicate farmers built up phosphorus and potash soil levels, which could be drawn down in future years.
- Seed costs increased from $43 in 2005 to $108 per acre in 2012, an increase of $65 per acre. For seed costs to decrease, seed prices likely would have to decrease. Decreasing seed prices would cause technology companies profits to decline. Hence, seed price decreases are unlikely.
- Machinery depreciation increased from $20 per acre in 2005 to $55 in 2012, an increase of $35 per acre. Larger machinery purchases lead to increases in depreciation costs. A period of lower incomes could lead to lower machinery purchase. Lower machinery purchases would then lead to slowly declining depreciation.

Summary

Non-land costs continue to increase. Because higher non-land costs require higher prices to cover costs, these higher costs place farms at risk when commodity prices decrease. There is potential for some costs to decrease when commodity prices decrease.