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Corn and Soybean Acres in Illinois

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In recent years, corn has been less profitable than soybeans in Illinois. Since crop profitability likely has an impact on acreage changes over time, a shift to soybeans may be expected. In this article, trends in corn and soybean acres in Illinois are examined. Overall, total acres in corn and soybeans have been relatively stable in Illinois since 2000. While the total has been stable, shifts between corn and soybeans have occurred. Corn acres increased and soybean acres decreased in the early to mid-2000s. In recent years, corn acres have declined, and soybean acres have increased.

Total Corn and Soybean Acres in Illinois

Figure 1 shows National Agricultural Statistical Service (NASS) data on acres harvested of corn and soybean in Illinois. Acres for the two crops are added together and reported in Figure 1. As can be seen, total corn and soybean acres in Illinois began at 8 million acres in 1924. From this level, total acres increased and reached a plateau in 1977 of around 20 million acres. Total corn and soybean acres did not trend up or down but exhibited year-to-year variability from 1977 to 2000. Since 2000, total acres of corn and soybeans have been relatively stable, varying in a tight band between 21 and 21.5 million acres.

In Figure 1, acres of "land in farms" also is reported since 1960. Land in farms is a measure of total acres devoted to agriculture in Illinois. Land in farms exhibits a slight downward trend. Total land in farms was 30.3 million acres in 1960, decreasing to 26.9 million acres in 2016.

Note that there are two trends in Figure 1: total corn and soybean acres increased till 1977 and land in farms has decreased slightly. Both cause total corn and soybean acres to be a higher proportion of land in farms. In 1960, corn and soybean acres was 49% of land in farms. Since 2010, corn and soybean acres averaged 80% of land in farms.

In recent years, Illinois farms have not changed total acres in corn and soybeans, with the range in acres being between 21.0 and 21.5 million acres. Total corn and soybean acres constitutes a significant, stable portion of total acres in Illinois. It is difficult to foresee factors that would cause this stability to change in the near future.

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Corn and Soybean Acres

Figure 2 breaks out total acres into one line for each crop. From 1924 to 1980, both corn and soybean acres grew, but the most persistent growth came from soybeans. Soybeans acres increased from 115,000 acres in 1924, reaching 9.4 million acres in 1980.



In 1998, corn and soybean acres were about equal: 10.5 million acres of corn compared to 10.6 million acres of soybeans. Between 1999 and 2007, corn acres grow from 10.5 million acres to 13.0 million acres while soybean acres declined from 10.6 million acres to 8.3 million acres. From 1999 to 2007, corn was more profitable than soybean in most years (see *farmdoc daily*, February 16, 2016).

In recent years there has been a shift from corn to soybeans. Corn acres were 12.2 million acres in 2013, reducing to 11.5 million acres in 2015 and 2016. Soybean acres were 8.9 million in 2012, increasing to 9.8 million in 2016.

Commentary

Recent acreage history suggests that Illinois farmers do not vary total acres in corn and soybeans in aggregate. However, they can change the split of acres between the two crops. In recent years, there has been a movement of acres back to soybeans. Given current profitability outlook (*farmdoc daily*, September 27, 2016), a shift to more soybeans in 2017 seems more likely than a shift to more corn.

A benchmark of the largest possible shift is to have corn and soybean acres equal each other, a situation that only happened once in history in 1998. In 2016, 11.5 million acres were in corn and 9.8 million were in soybeans, giving 21.3 million acres. Given the same total acres in corn and soybeans, 21.3 million total acres implies 10.65 million acres in each crop. For equal acres of corn and soybeans to occur, corn acres would have to decrease by 850,000 and soybean acres increase by 850,000. A shift of this size would be large, but not without historic precedent.

Whether or not this acreage shift happens is an open question. Changes in acres will be one of the variables under considerable interest in the upcoming year.

References

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