Crop Insurance Performance in 2017

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In 2017, the Federal crop insurance program had low insurance payments relative to total premium. The 2017 loss ratio for the entire Federal program was .42, well below the targeted loss ratio of slightly below 1.0. Since 1989, the two lowest loss ratios have occurred in 2016 and 2017.

Loss Ratios over Time

Data reported in this article comes from the Summary of Business which is available from the Risk Management Agency (RMA) website. Data were downloaded in late April of 2018. Some changes to loss ratios will occur over time as more data become available. However, performance will not materially vary from loss ratios presented here.

Figure 1. Loss Ratios for All Federal Crop Insurance Polices, 1989 to 2017

Source: Summary of Business, Risk Management Agency
A loss ratio equals payments made on crop insurance policies divided by a total premium paid for crop insurance policies. A loss ratio of 1.0 means that crop insurance payments equal total premium. Ratios above 1.00 indicate that payments exceed premium, which occurs with some regularity. On the other hand, loss ratios below 1.00 indicate that payments are less than premium. Given the way RMA sets premiums, loss ratios should average slightly below 1.00 when over time. Given the high correlation of losses across crop insurance policies in a year, variability in aggregate loss ratios will occur from year to year.

The 2017 loss ratio is .51, well below 1.0 (see Figure 1). The 2017 loss ratio is the second lowest in history, with the 2016 loss ratio of .42 being the lowest loss ratio. The last two years have seen remarkably low loss ratios.

**Distribution of Loss Ratios**

More often than not, loss ratios are below 1.0, as is illustrated by the histogram shown in Figure 2. In 62% of the years, the overall loss ratio for the entire Federal crop insurance program has been below 1.0 between 1989 and 2017. The loss ratio is below .6 in 24% of the cases, between .6 and .8 in 14% of the cases, and between .8 and 1.0 in 24% of the cases.

![Figure 2. Histogram of Loss Ratios, 1989 to 2018](image)

The loss ratio is above 1.4 in 10% of the years, or in three cases between 1989 and 2017. The highest loss ratio occurred in 1993 when the loss ratio was 2.19. The second highest was 1.57 in 2012, the drought year. The third highest occurred in 1989 and was 1.49.

**Summary**

Payments on crop insurance have been low in 2016 and 2017, partially due to relatively good yields for corn and soybeans across the United States. Having low loss ratios; however, are not unprecedented, as about 25% of the time loss ratios are below .6. Exceptionally high loss ratios have occurred in relatively few years.