Net Farm Income by Decile Group

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Net farm income (NFI) for the Kansas Farm Management Association (KFMA) was near a record low for 2015, even when adjusting for inflation. The average net farm income for the entire state and for all farm types was less than \$5,000. The median NFI for 2015 was only slightly better at just over \$9,000. You have to go all the way back to 1981 to find a lower average NFI.

Figure 1 below shows the inflation adjusted average and median NFI for the entire state and for all farm types. Older values were adjusted by the CPI index so that comparisons across time could be more accurately made. This adjustment makes a dollar in the past comparable to a dollar today.

While the average and median values show a lot about what happened to farm income in Kansas across time, the use of these measures tends to obscure much of the details of how different farm segments are faring. To show how a broader cross section of farms is doing, NFI for all the farms in a given year are ranked in order and the NFIs are divided into deciles. Thus, the top 10 percent of net farm incomes would be in decile number 1, the second 10 percent of net farm incomes would be in decile number 2, etc. The lowest 10 percent of net farm income farms would be in the lowest decile (#10). Every year, the net farm incomes are re-ranked so a farm may move among decile groups across time depending upon the level of net farm income compared to the other farms.

By using decile groups we can see how the entire cross section of farms is doing in any one year. In particular, the farms in the bottom two or three decile groups are of interest as these are the farms most at risk when the state average NFI is low.

Figure 2 shows the net farm income by decile group for the entire state from 1975 through 2015. As can be seen from this figure, decile groups 3 through 8 are usually fairly consistent across time. These groups usually earn between \$0 and \$100,000 when adjusted for inflation. Even during the period from 2007 through 2013, when average net farm income increased greatly, these middle deciles groups showed more consistent net farm income.

The large increases in average net farm income from 2007 through 2013 can mainly be attributed to the top two decile groups. These top earning farms helped to bring up the overall state average from \$55,000 in 2006 to \$132,000 in 2007 (adjusted for inflation).

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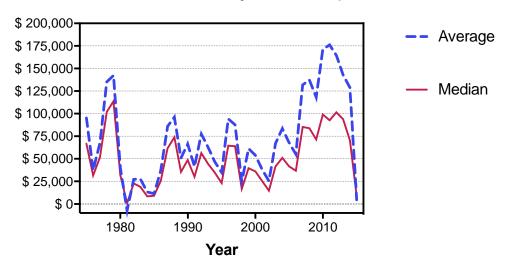
By contrast, the bottom decile group tends to lose money in a given year while the ninth decile group tends to break even. Even during the very profitable years from 2007 through 2013, the bottom decile group lost money. Keep in mind though, the bottom 10 percent of farms is not the same each year.

This past year in 2015, net farm income resembles what happened in 1981. In 1981, the bottom decile group lost \$245,000. In 2015, the bottom decile group lost \$306,000. Also, in 1981, decile groups 6 through 10 lost money. In 2015, groups 7 through 10 lost money and the 6th decile group averaged less than \$1,000 of NFI.

Figures 3 through 8 show net farm income by decile groups but for each of the 6 KFMA regions across the state. For the most part, these regional comparisons mirror the state numbers. Some of the regions show more variation than others though. In particular, the two central regions tend to show less extremes at the top and the bottom end compared to the other regions. By contrast, the northwest region shows the greatest variation. The northwest region results (Figure 7) has a different scale on the graph to accommodate the greater variation: from \$1.4 million to a negative -\$400,000. The other region graphs are scaled from \$900,000 to a negative \$400,000

Conclusions

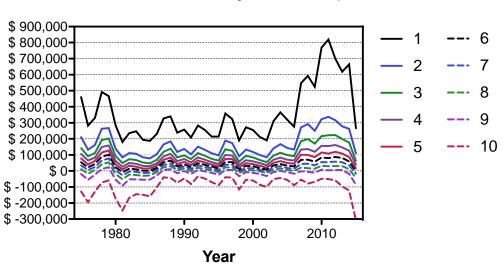
2015 was a very difficult year for many farms across the state. Although the average NFI was positive, four of the decile groups averaged negative NFI while the next group had an average NFI close to zero. Thus, nearly 45 percent of the KFMA farms lost money in 2015.



Net Farm Income - by Decile Group

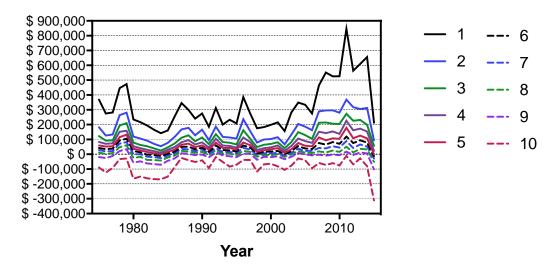
Figure 1. Inflation Adjusted Average and Median Net Farm Income Since 1975

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Figure 2. NFI by Decile Group - Entire State



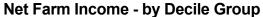
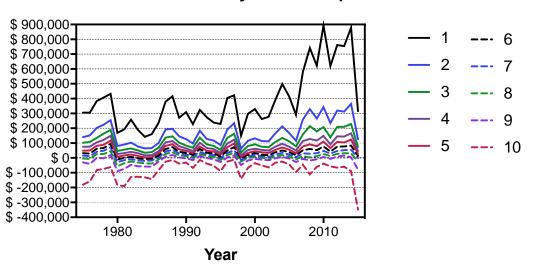


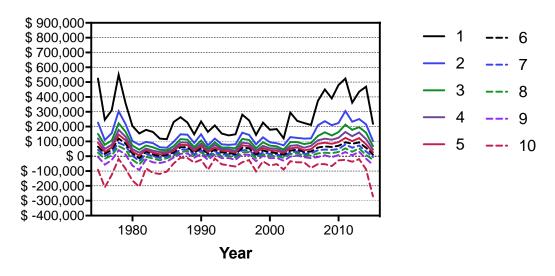
Figure 3. NFI by Decile Group - Northeast

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Figure 4. NFI by Decile Group - Southeast



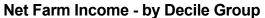
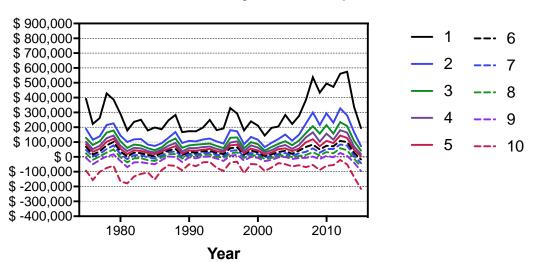


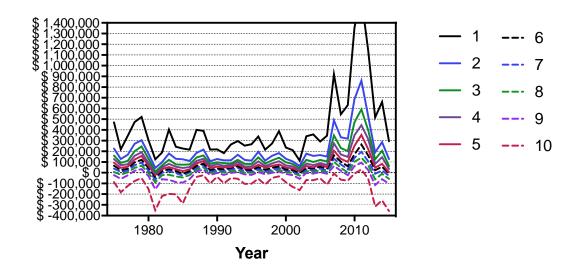
Figure 5. NFI by Decile Group – North Central

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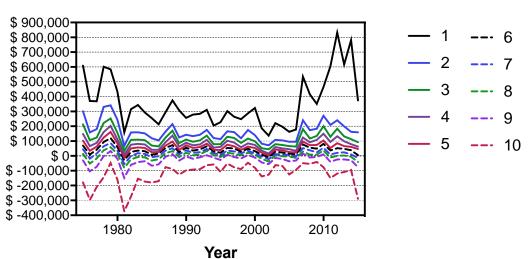
Figure 6. NFI by Decile Group – South Central



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Figure 7. NFI by Decile Group - Northwest

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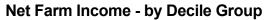


Figure 8. NFI by Decile Group – Southwest

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