

Debt Levels of KFMA Farms - An Examination of D/A Ratios

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<http://www.agmanager.info>

Introduction

The current median debt-to-asset (D/A) ratio for all farms in the Kansas Farm Management Association (KFMA) is 20%. While this number is usually considered very good, half the farms have ratios higher than this. The median value has no way to show the variability of financial risk that some farmers have so other ways of examining the D/A ratio are needed. This article examines the quintiles of the D/A ratio to see how much variation there is in the risk level of Kansas farms.

Procedure

To generate the quintiles, the D/A ratio for all the farms each year are ranked in order from highest to lowest. The 20 percent of farms with

the highest D/A ratios are put into group one, the next highest set of D/A ratios are in group two, etc. The bottom 20 percent of farms with the lowest D/A ratio would be in group five. Once the grouping of farms is established, the median D/A ratio is calculated for each group. The median works better than the average for these type of calculations as some financial ratios can distort averages. This would occur for farms in group one particularly.

Results

Figure 1 shows the median D/A ratios of each of the five quintiles when farms are ranked by their D/A ratio. Group one, with the highest D/A ratios, has a median ratio of almost 70 percent. While this number is high, it is actual-

ly below what it has historically been. Back during the 1980's farm crisis, this highest risk group had a median value above 100 percent. The other four groups have median D/A ratios that are more in line with standard norms for acceptability. The group five set of farms carry very little debt. In fact, the median D/A ratio for these farm is zero.

While Figure 1 shows that all groups have reduced their

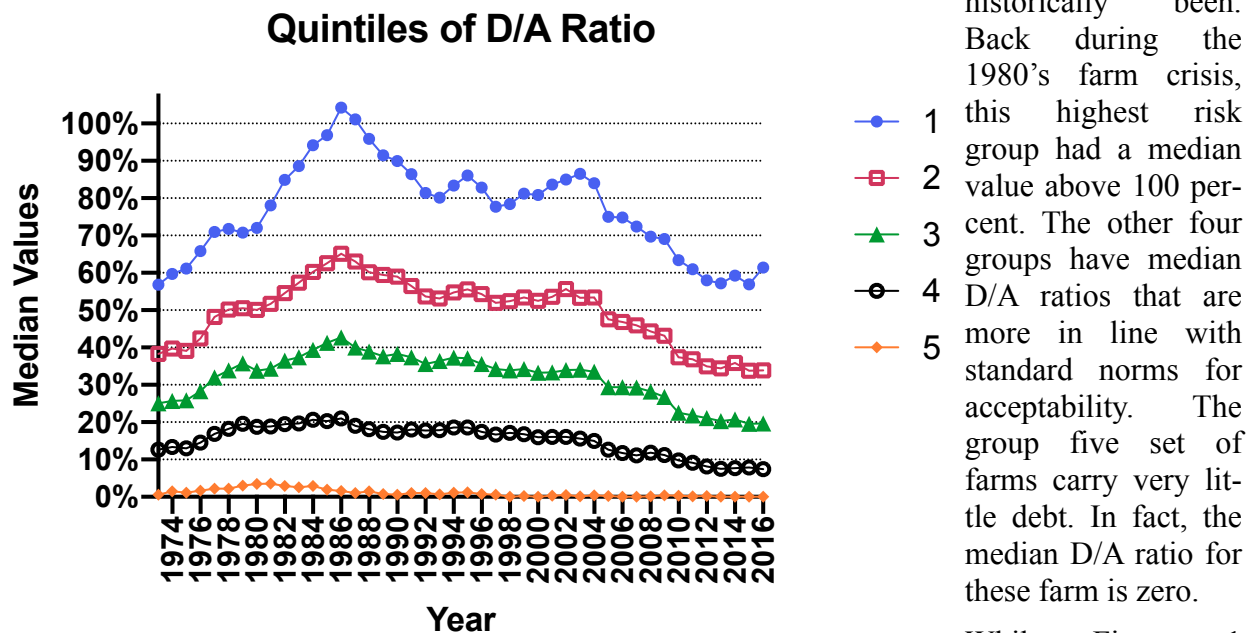


Figure 1. Median Debt/Asset Ratios by Quintiles

median D/A ratios since the farm crisis of the 1980's it has not been the case that farmers have reduced their debt. As shown in Figure 2, the three groups with the highest level of financial risk have increased their debt levels substantially while the two groups with the lowest level of financial risk have not increased their debt levels very much.

The major reason that D/A ratios increased during the farm crisis was that asset values (i.e., land values) declined. When comparing Figures 1 and 2, notice that farmers stopped adding debt from 1980 through through the mid 1990's. Meanwhile the D/A ratios continued to climb until about 1986 because of declining land values. Thus, the numerator in the ratio stayed the same while the denominator in the ratio decreased resulting in a higher D/A ratio. The reverse situation happened from about 2002 until 2015. In this timeframe, farmers added debt but their D/A ratio stilled declined. This occurred because land values rose faster than the debt added.

One interesting point from Figure 2 is that group one (with the highest D/A ratios) has nearly the same amount of debt as group two. This would indicate that group two farms are bigger in size. Farmers with the highest D/A ratios are mostly likely younger, beginning farmers (note: a future paper will investigate the age aspect of farm debt).

Conclusion

Debt to assets ratios appear to be at acceptable levels now. However, as the farm crisis of the 1980's showed, D/A ratios are really a trailing indicator of problems. Farms have added a lot of debt during the past 15 years. So far this has not been a problem thanks to rising land values. However, a repeat of the 1980's where land values declined significantly could change the D/A picture considerably.

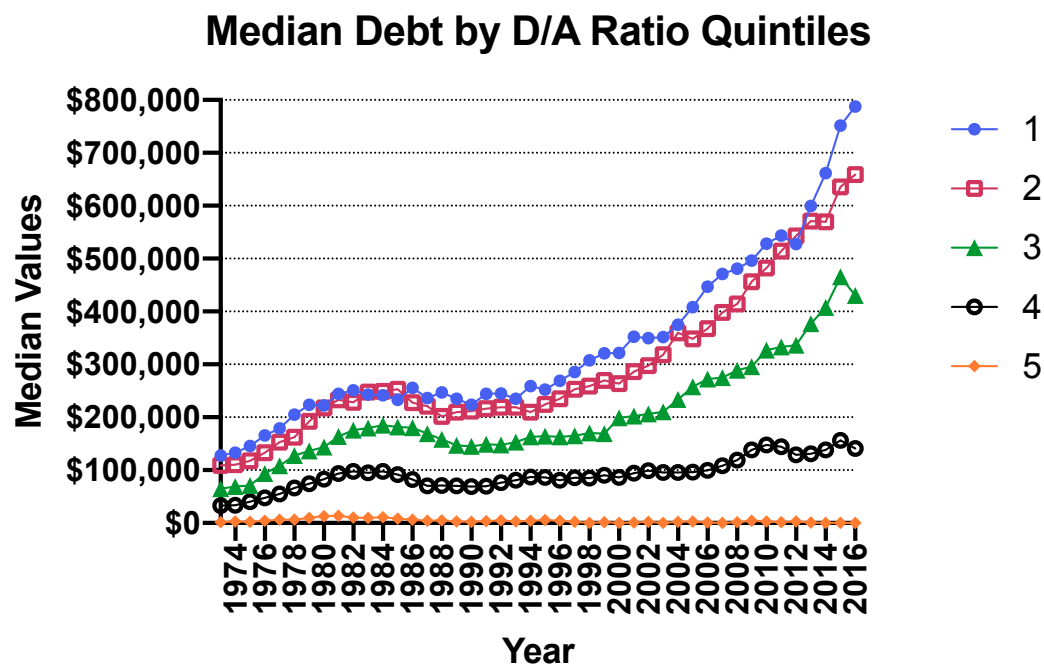


Figure 2. Median Debt Levels by Quintiles of D/A Ratio