

Department of Agricultural and Consumer Economics, University of Illinois Urbana-Champaign

## How Does the Percentage of Cash Rented Acres Affect Liquidity?

## Brandy Krapf, Dwight Raab, and Bradley Zwilling

Illinois FBFM Association and Department of Agricultural and Consumer Economics University of Illinois

June 17, 2016

farmdoc daily (6):115

Recommended citation format: Krapf, B., D. Raab, and B. Zwilling. "How Does the Percentage of Cash Rented Acres Affect Liquidity?" *farmdoc daily* (6):115, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 17, 2016.

Permalink: http://farmdocdaily.illinois.edu/2016/06/percentage-of-cash-rented-acres-affect-liquidity.html

With lower net incomes projected for 2016, liquidity continues to be a concern. The two measures of liquidity in this article are the current ratio and working capital. The current ratio is calculated by taking current assets divided by current liabilities. Working capital is calculated by subtracting current liabilities from current assets. Higher levels of these measures of liquidity indicate a greater ability to withstand adverse financial conditions. Current assets include: 1) cash and cash equivalents; 2) crop, feed and market livestock inventories; and 3) prepaid expenses. Current liabilities include: 1) operating loans; 2) the current portion of intermediate and long-term debt, 3) accrued real estate and income tax and 4) end-of-year accrued expenses. Both the current assets and current liabilities included non-farm items as well.

The March 18, 2016 article looked at working capital by age. The article on October 6, 2015 by Gary Schnitkey discussed the likely reductions in working capital that would occur in 2015. This article will look at the current ratio and working capital changes for a group of grain farms from 2003 to 2014. This group of grain farms is divided into five groups by percentage of cash rented acres of total acres farmed to further evaluate changes in liquidity. Those groups are: Under 25% cash rented, 25% - 50% cash rented, 50% - 75% cash rented, 75% - 100% cash rented and 100% cash rented. Liquidity measures used in this article refers to the median for the group.

Figure 1 shows the current ratio for the group of farms participating in Illinois Farm Business Farm Management. The percent of cash rented acres farmed and the current ratio tends to be inversely related. As the percent of cash rent acres farmed increased, the current ratio decreased. This relationship is more noticeable when comparing the Under 25%, 25% - 50% and 100% groups. Once the cash rented acres as a percent of all acres farmed goes above 50%, these current ratios move closely together. The trend from 2006 to 2012 showed rising current ratios for all groups due to higher prices/higher incomes in those years. Also, there is much more variability in the groups during this period as well. The trend from 2012 to 2014 shows reductions in the median current ratio mainly due to lower grain prices. With the trend downward, all groups still stayed above 2006 levels. 2015 and 2016 will continue this downward trend.

We request all readers, electronic media and others follow our citation guidelines when re-posting articles from farmdoc daily. Guidelines are available <u>here</u>. The farmdoc daily website falls under University of Illinois copyright and intellectual property rights. For a detailed statement, please see the University of Illinois Copyright Information and Policies <u>here</u>.

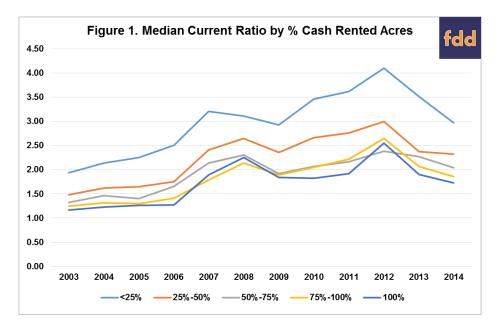
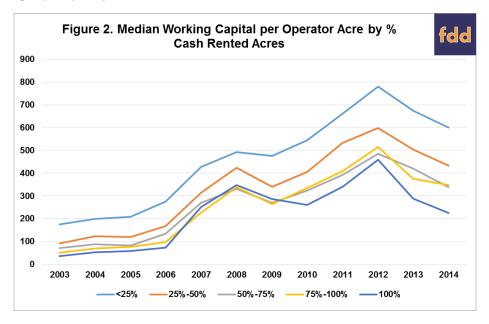


Figure 2 takes a different approach to liquidity and divides the median working capital for each of the five cash rented acres percentage groups by the number of operator acres. Operator acres are defined as acres farmed that the farmer also received 100% of the production. The same trends shown in Figure 1 (Increasing from 2006 to 2012 and decreasing from 2012 to 2014) are apparent in Figure 2. One difference when looking at the median working capital by operator acres is that you see about the same difference between the groups until 2009. Starting in 2009 the difference between the five groups begin to increase, except for the 50% - 75% and the 75% - 100% groups that tend to stay about the same each year for their median working capital per operator acre.



Further analysis shows that median working capital per operator acre dollar differences. When comparing the Under 25% and the 25% - 50% group, the average difference is about \$90 from 2003 to 2008. From 2009 to 2012, the difference increased to about \$130. \$170 is the average difference between 2012 and 2014. The average difference when comparing the 25% to 50% and the 100% cash rented group from 2003 to 2008 is about \$70. From 2009 to 2011 that difference increased to \$130. \$190 is about the average difference from 2012 to 2014.

When analyzing liquidity, many factors come into play. In this article, we focused on how the percent of cash rented acres impacted the current ratio and working capital per operator acre. Some of this trend

(lower liquidity as the percent of cash rent acres increased) is due to the additional risk of cash rent. Therefore, as the percent of acres in cash rent increases, closer monitoring of the farm business is required to manage this risk to maintain liquidity, especial in these times of lower margins.

The authors would like to acknowledge that data used in this study comes from the local Farm Business Farm Management (FBFM) Associations across the State of Illinois. Without their cooperation, information as comprehensive and accurate as this would not be available for educational purposes. The Illinois FBFM Association, which consists of 5,500 plus farmers and 60 professional field staff, is a not-for-profit organization available to all farm operators in Illinois. FBFM staff provide on-farm counsel coupled with recordkeeping, farm financial management, business entity planning and income tax management. For more information, please contact the Illinois FBFM Office located at the University of Illinois Department of Agricultural and Consumer Economics at 217-333-5511 or visit the FBFM website at www.fbfm.org.

## References

Schnitkey, G. "Significant Reductions in Working Capital Likely in 2015 on Grain Farms." *farmdoc daily* (5):184, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, October 6, 2015.

Zwilling, B., B. Krapf, and D. Raab. "Working Capital and the Age of the Farm Operator." *farmdoc daily* (6):54, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, March 18, 2016.