

The World's Largest Open Access Agricultural & Applied Economics Digital Library

## This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.



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

## Working Capital and the Age of the Farm Operator

Bradley Zwilling, Brandy Krapf, and Dwight Raab

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

March 18, 2016

farmdoc daily (6):54

Recommended citation format: 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.

Permalink: http://farmdocdaily.illinois.edu/2016/03/working-capital-and-the-age-of-farm-operator.html

Working capital captures much attention as 2015 financial records are brought to a close and balance sheets are prepared for the period ending December 31, 2015. Calculated by subtracting current liabilities from current assets, working capital is a measure of funds available to purchase inputs and inventory after the sale of current farm assets and payment of all current farm liabilities. Adequate working capital is related to the size (in dollars) of the farm business. Higher levels of working capital 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. One shortcoming of working capital is that it does not take into account the access a farm operator might have to operating loans or other short-term financing sources.

The article on October 6, 2015 by Gary Schnitkey discussed the likely reductions in working capital that would occur in 2015. This article reviews working capital and working capital changes for a group of grain farms from 2009 to 2014. This group of grain farms is divided into five groups by age to further investigate changes in working capital. Those groups are: Under Age 30, Age 30-39, Age 40-49, Age 50-59 and Over Age 60. Working capital used in this article refers to the median amount of working capital for the group.

Figure 1 shows working capital for the group of farms participating in the Illinois Farm Business Farm Management. Operator age and the amount of working capital tend to be linked. As the age of the operator increased, the amount of working capital increases. This is more apparent for the lower age groups. The opportunity to accumulate earnings as short term assets over a career spent farming is apparent. The trend from 2009 to 2012 shows increasing amounts of working capital for all groups due to higher prices/higher incomes in those years. The exceptions are the Under Age 30 group and the Age 30-39 group from 2009 to 2010 where working capital decreased slightly. The trend from 2012 to 2014 shows reductions in median working capital largely due to lower incomes and lower price levels for corn and soybeans. The higher three age groups show a similar rate of decline in working capital from 2012 to 2014 while the Age 30-39 group shows a more rapid decline especially from 2012 to 2013. The Under Age 30 group shows a relatively stable amount of working capital over the six year period varying by \$35,385 from the high in 2013 (\$126,453) to the low in 2014 (\$91,068).

We request all readers, electronic media and others follow our citation guidelines when re-posting articles from farmdoc daily. Guidelines are available <a href="here">here</a>. 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 <a href="here">here</a>.

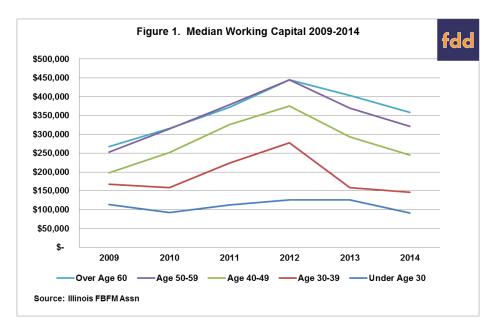
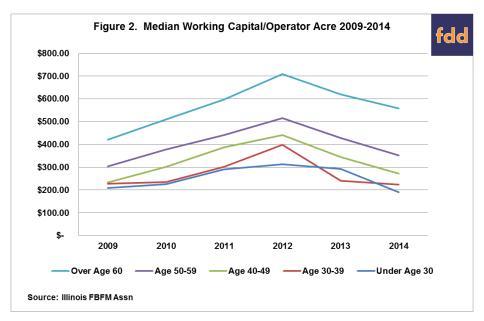


Figure 2 takes a different approach from other articles and divides the median working capital for each of the five age groups by the average number of acres for each of the age groups. The trends apparent in Figure 2 show nuances not seen in Figure 1. For example, the Over Age 60 group shows larger amounts of working capital per operator acre compared to the other four groups in Figure 2 that are not apparent in Figure 1.



Similar to that in Figure 1, the Under Age 30 group again appears to shows signs of more stable amounts of working capital per operator acre. That being said, working capital per operator acre varied by over \$100 from the high in 2012 (\$313.17) to the low in 2014 (\$191.32).

Figure 2 also seems to indicate that as the farm operator ages, the average number of acres farmed increases as well. This tends to minimize the differences in working capital per operator acre for the lower four age groups.

## **Summary**

Working capital can vary considerably across farms. As can be seen in Figure 1 and Figure 2, younger farm operators tend to have lower levels of working capital by both measures used in this article. Typically, the

greater the percentage of cash rent acres for a farm operation the lower the amount of working capital. One might presume that younger operators in their quest to grow their business are competing for more acres via cash rent leases. The trend of higher input costs also creates a greater demand on working capital as do family living expenses. Farm operators with lesser levels of debt and greater access to off-farm income tend to have greater levels of working capital.

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

Krapf, B, D. Raab, and B. Zwilling. "Farm Liquidity: Then and Now." farmdoc daily (5):130, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 17, 2015.

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. "Changes in Working Capital." *farmdoc daily* (5):90, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, May 15, 2015.