

Liquidity Analysis: An Extended Look

by Dr. Paul Ellinger

As agriculture's structure changes, your borrowers' liquidity needs may also be changing. Historically, lenders tend to fall back on the current ratio as a measure of liquidity. The question, however, is whether the current ratio is adequate to measure liquidity and liquidity changes for your borrowers.

Liquidity refers to the ability to generate cash to meet short-term obligations. Three commonly cited motivations for farms and ranches to hold liquidity are: the transaction motive, the precautionary motive and the speculative motive. Motivations differ across management style, farm type, borrower age, farm size and risk tolerance of the borrower.

Three Motivations

♦ *Transaction motive*: the need to hold cash to satisfy normal payment disbursements.

Livestock operations typically have a higher volume of cash outflow transactions, but also have a steadier flow of cash receipts.

♦ *Precautionary motive*: the need to hold liquidity to act as a cushion or financial reserve for unanticipated cash demands. This could be a result of an inflow being lower than expected as well as an unexpected outflow.

♦ *Speculative demand*: the need to hold cash to take advantage of additional investment opportunities when they become available.

For example, a borrower may need to maintain liquidity to be able to purchase a local tract of land. Ag lenders must understand the specific motivations and needs of individual borrowers.

Management Strategies

Liquidation of assets and maintaining borrowing reserves are two major liquidity management strategies. The dimensions of liquidity that affect these strategies include:

- (1) Time necessary to convert assets into cash.
- (2) Loss of value as a result of liquidation of assets.
- (3) Availability of borrowing reserves.

An ag lender's challenge is to measure liquidity and assess the liquidity strategies of a borrower.

Current Ratio

The current ratio is often used to measure liquidity. Several potential pitfalls exist with this ratio. First, the current ratio measures the level of current assets relative to current liabilities without reference to the size of the potential liquidity needs of the borrower. For example, Farm A and Farm B are the same size. Farm A has \$120,000 of current assets and \$40,000 of current liabilities while Farm B has \$30,000 of current assets and \$10,000 of current liabilities. Both farms have equal current ratios, but Farm A would likely have more liquidity through higher credit reserves and more liquid assets.

The current ratio can also change substantially on a specific farm through selling inventory and using proceeds to pay an operating loan. Many of these transactions often occur in the last week of a tax year or the first week of a new tax year. For example, suppose on January 2, Farm B sold \$5,000 of grain and paid \$5,000 of the operating loan. The current ratio increased from 3.0 to 5.0. However, Farm B did not substantially increase its ability to meet potential precautionary or speculative liquidity demands.

Capital to Gross Revenue

Working capital to gross revenue (value of farm production) is another liquidity measure that does not have some of the same limitations. It is calculated as current assets less current liabilities (working capital) all divided by gross revenue (value of farm production) of the farm. Working capital is expressed relative to the size of the farm. Larger farms are expected to have more expenses and will need additional working capital to meet precautionary and transaction demands. Furthermore, working capital does not change when assets are liquidated and the proceeds are used to pay a current liability.

A potential drawback of the ratio is the limited experience ag lenders have with it. The median value for the working capital to gross revenue ratio of Illinois Farm Business Farms is 0.35. The cutoff value for the lower one-fourth of farms is 0.04, while the cutoff value for the highest one-fourth of farms is 0.75. The ratio tends to be lower for large farms, younger farm operators, dairy operations and farms that lease a lower proportion of land they operate.

Lenders need to look beyond the current ratio when evaluating liquidity. The working capital to gross revenue ratio provides additional information in many cases. However, the lender needs to understand the current and future liquidity needs of specific borrowers. This often goes beyond ratio analysis.

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