

Cornhusker Economics

Working Capital and Cash Flow Tools to Improve Farm Business Performance

Working capital speaks to how the business is positioned to pay for things it needs, a measure of resiliency and solvency. For more detail, we refer to the article titled, "Working Capital's Role in Farm and Ranch Business Success" by Sand and Stockton. Working capital is one of two simple calculations. It is either the difference in the business's current capital assets minus its current expenses or the ratio of current assets divided by current liabilities. A positive difference indicates there is available capital to the business in addition to that needed to pay off current debt. As a ratio, this would be when that ratio is greater than one. The ideal ratio or amount of positive working capital available to the farm varies depending on many factors. Each individual business should strive to know what that value or ratio is. A cash flow statement on the other hand is a record of when expenses and receipts are expected to be paid or received. It provides a clear picture of the available funds by accumulating the difference between expenses and revenues over a specified time period, usually one complete production cycle. The cash flow statement is a dynamic document of resource purchases/payments and sales/revenues and is illustrative of the highs and lows of cash in and out of the business. Using a fictitious example for the upcoming month of July, the local co-op is going to spray fungicide on July 1 on a 150-acre corn field. They have a 30-day payment policy with a \$10/acre fee, they expect a payment of \$15,000 by August 1. During this same month, 10,000 bushels of corn grain are to be delivered to Super Sirloin Feedlot on the 13th of July. The agreed-

upon price is \$5.00/bu, \$50,000 total. Putting these transactions into a cash flow might look something like the following: July 13, \$50,000 cash is expected to be received, and come August 1, \$15,000 of cash will be paid to the local co-op. These two transactions will increase net cash by \$35,000, while reducing grain inventory by 10,000 bushels and eliminating the liability of fungicide sprayed on July 1. In the calculations of the working capital statement, the in-flows of cash have increased by \$50,000, while on August 1 there was a cash-out-flow of \$15,000. This results in a change of working capital if the \$5/bushel received is different from the \$/bushel inventory value of stored corn. If that inventory is valued at \$6/bushel before the sale, working capital will be reduced by \$10,000. If the inventory had been valued at less than \$5/bushel before the sale, at \$4/bushel, working capital will increase by \$10,000. Working capital generally changes with changes in the value of existing inventories or inventory changes. In farming, inventories change annually with the sales and addition of new production. Several factors are key to increasing working capital. For a gain in value, added inventories must have lower costs per unit, the opposite is true for a decrease in working capital. Obviously, working capital can be increased/decreased by personal actions. Such as when the owner contributes or withdraws funds. Variations in both market values and input costs can have positive or negative impacts on working capital depending on the direction of the variation.



From this brief example, we observe that the cash flow statement is much like a story that changes as factors affecting cash are recognized to occur. This story is one to be valued. The cash flow statement provides a path showing the disbursement and collection of cash. This statement pinpoints critical times when money is needed and received. It is a tool often required by lenders and used by producers to obtain an operating loan. It is normally applied to outline the year's production expenses, expected revenues, and cash reserves if any. An operating loan is generally paid off at the end of the production season. This would be the fall or winter after harvest or when livestock is marketed. This tool accounts for when and where money for the business flows, it gives credence to the borrower and assurance to the lender. It is much like proof of concept, where the money borrowed is justified by identifying its use, path and outcome. This tool satisfies the lender's need to know and understand. It gives substance to the operations with some degree of detail in terms of costs and revenues. It can be used to challenge the borrower, by exposing them to outside scrutiny and thought, providing helpful information and motivation to improve the likelihood of success. Cash flows should include all the "cash" production costs and revenue sources, e.g. interest owed for the current year, herbicide and fertilizer expenses, seed costs, cash savings, revenue from grain sales, value of grain in storage, etc. In some cases, these values are estimates based on current information, e.g. inventories of grain, future market value, etc.

A properly prepared cash flow statement provides the needed information for the lender to see with clarity the viability and nature of the proposed use of borrowed funds. It shows where, when, and how much money is intended to be used and obtained. This statement becomes a powerful tool in helping the borrower represent the true nature of his business and its planned activities, control costs, recognize the need for marketing price goals, and as a guide and tool in the development and operation of the farm business. Conversely, it provides the same information to the lender helping to assure loan remittance. The calculations needed to establish a working capital value use much of the same information as the cash flow statement. However, the results are quite different. The working capital value or

ratio is very specific to when the calculations are made. A value derived early in the season made after paying for all the early season operations, soil preparation, planting, fertilizing, etc. where costs have been incurred without the presence of any added inventory or insurance indemnity to balance the expenditures is quite different from one prepared later in the season. The one prepared later in the season after a fruitful harvest would likely be much more positive. Another obvious factor that alters working capital is sizeable personal deposits or withdrawals.

The point of this short essay is to briefly review the need and purpose of both tools, hoping that such a review will help farm managers and operators use them to reach their higher potential and improve their businesses and lives. Working capital represents the businesses' ability to deal with short-term conditions and its resilience conferred upon it as a result of past performance in accumulating liquid assets. The cash flow document provides the ebb and flow of liquid assets during the normal cycle of doing business, providing recognizable events, plans that can be scrutinized, and identifiable challenges. These tools, when used properly, provide added information and control in making better production, management, and financial choices for any and all operations.

Matt Stockton
Professor
Department of Agricultural Economics
University of Nebraska-Lincoln
West Central Research and Extension Center
mstockton2@unl.edu