Understanding and assessing financial risk

By Dennis A. Kaan

While it is impossible to avoid all sources of risk in production agriculture, it can be managed. Exposure to financial risk comes from three basic sources: the ability to meet cash flow needs in a timely manner, the cost and availability of debt capital, and the ability to maintain and grow equity.

A business plan to manage these sources of risk will help an agricultural business enjoy long-term success. Information for developing a plan must come from sound financial statements and measures of financial performance. The tendency for agricultural managers historically has been to try to produce their way out of difficult situations. The truth is, without business planning and measuring financial performance, managers can be producing their way out of business as easily as producing their way out of difficult situations.

Managers of agricultural businesses must ask several questions: what are my short-term and long-term goals, how do they affect my financial planning, which records do I need to monitor my financial status, and which records do I need to document my borrowing request? These are questions that need to be answered in order to assess an operation’s financial risk.

The minimum financial statements required to assess risk and measure performance include a balance sheet, income statement, statement of cash flows, and a statement of owner equity. The balance sheet, or statement of financial position, presents a financial snapshot of a business at a point in time. It is a summary of all assets, liabilities and owner equity and interrelationships on the date the balance sheet is prepared. The balance sheet reflects the
cumulative effect of past transactions but does not describe how the existing financial position was achieved.

The primary purpose of an income statement is to compute the profit of a business over a specified period of time. An income statement also may be referred to as an operating statement or a profit and loss statement. This statement addresses the question: “Did the business make a profit during the time period specified?” The result is net income. The time period specified is called the accounting period and usually covers a twelve-month period. Net income should explain the change in owner equity between the beginning and ending balance sheets.

The statement of cash flows provides a summary of cash receipts and cash payments during a specified time period. Its format breaks the cash flows into operating, investing and financing activities. This information is very helpful to managers in identifying and controlling cash flows. What did the manager do with cash earned from business operations? What did the manager do with cash obtained from financing or from the sale of investments? Where did the cash for new investments or repaying debt originate -- from operations, from debt financing, or sale of investments? These are questions that can be answered with information from this financial statement.

“Owner equity” and “net worth” are terms often used interchangeably by non-accountants and essentially mean the same thing. Owner equity is used in statements prepared for business only entities. Net worth is used in statements prepared for combined business and personal entities. The main concept of the owner equity statement is to reconcile the value of the business as reported at the beginning of the accounting period with that reported at the end of the period. This reconciliation verifies that the financial statements are in agreement. Change in owner equity can only come from a few sources. The first source of change is from retained earnings and
contributed capital. Retained earnings are the portions of net income reinvested into the business. Contributed capital is capital invested into the business from outside sources. The second source of change is from valuation equity. Valuation equity represents the difference between the net book value and market value.

In assessing your financial risk, ask if documented historical information was used, and if it was accurate. What have been the trends in my operation's key performance measures? The process of turning financial statement information into meaningful performance measures will be the result of answering these questions.

Financial performance refers to the results of production and financial decisions made over one or more periods of time. Financial performance must be measured in five categories to be meaningful. The categories are liquidity, solvency, profitability, financial efficiency, and repayment capacity. Liquidity refers to the ability of a business to meet financial obligations as they come due without hurting normal business operations. It is a measure of a firm's ability to repay current debts by converting current assets into cash. Liquidity is a short-run concept since we are dealing in current assets and current liabilities. In general, the more cash available to pay current debts, the more liquid the firm is said to be.

Solvency is a measure of the firm’s risk-bearing ability. Solvency measures provide an indication of the firm’s ability to repay all financial obligations if all assets were sold. It also can indicate the ability to continue operations as a viable business after financial adversity strikes, which would result in increased debt or reduced equity. Solvency, as compared to liquidity, is a long-run concept since these measures deal with the ability of the business to survive in the future.

Profitability measures the profit generated from the use of available resources such as land, labor, capital, and management. It is a goal of every business to be profitable. Not
everyone understands that a business can be liquid and solvent and not be profitable. This usually can be traced to inefficient use of resources, and it demonstrates the need for using more than one category of financial performance measure.

Financial efficiency measures the intensity with which a business uses its assets to generate gross revenues, it is measured by the asset turnover ratio. Operational ratios represent the total composition of gross revenues. These ratios are operating expense ratio, depreciation expense ratio, interest expense ratio, and net income from operations ratio.

Repayment capacity measures the ability of a borrower to repay term debt from net income. Without capital contributions from outside sources, principal payments on term loans must come from net income after owner withdrawals. Repayment capacity is a long run concept resulting from the long-term profitability of the operation.

What does this all mean for agricultural managers? In times of low prices received for agricultural products, the first area to be affected in the operation is cash flow. If sufficient levels of cash are not generated from the sale of products, profitability is the first to suffer. Remember that the cash flow statement will shed light on which activities are generating cash within the operation. Ask yourself, what is an effective contingency plan for meeting cash flow needs after a crop failure or low market prices?

Reduced profitability measured by net income and return on assets within an operation leads to serious problems in both the short-run and long-run. In the short run, liquidity is reduced and producers find it hard to meet current obligations on time. The current ratio is one of the first ratios a lender will evaluate. The rule of thumb is, if the current ratio is less than 1.5:1, the operation may experience trouble meeting its current obligations, and debt levels will begin to increase or assets will be sold to meet obligations.
Repayment capacity is also adversely affected as a result of reduced profitability, and lenders will watch this measure as time goes along. If reduced profitability persists over time, ultimately solvency is adversely affected. Solvency measures the risk-bearing ability of the operation. Lenders carefully watch this ratio and when solvency erodes, borrowing power also deteriorates. If the debt to asset ratio goes above 0.5:1, creditors have a greater claim on the assets than the operators do, and the business is no longer considered solvent.

In assessing financial risk exposure ask yourself, what can I do to reduce my risk exposure, and thereby, reduce risk exposure to outside creditors. Reducing risk requires agricultural managers to set goals and to plan. Assessing and reducing financial risk requires sound financial statements and measures of performance.

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