BARNYARDS & BACKYARDS
April 2010
University of Wyoming
UW Cooperative Extension Service · Profitable & Sustainable Agricultural Systems · Risk Management Agency

Manage your risks through financial analysis

By James Sedman and John Hewlett

Risk and uncertainty are nothing new to production agriculture.

Despite this, it is clear that manager emphasis on financial analysis and risk management is key to survival and profitability in today's ag economy.

Though market prices have been favorable for certain commodities over the past two years, not all have been profitable. Successful farmers and ranchers are those who manage risk, control costs, and market effectively – not the operations that shoot for maximum revenue without considering various sources of risk and production costs.

Careful financial analysis is critical to obtain and retain access to necessary operating credit. Banks and lenders are tightening lending standards and are requiring farm and ranch financial measures be healthy and trending in a positive direction.

Production Records and Budgeting

Farm and ranch financial analysis best begins at the enterprise level. Keeping accurate and up-to-date production records is the first step. From these records, managers can use enterprise budgeting to make accurate projections for the coming production season.

The goal of enterprise budgets are: 1) to outline the potential costs for the coming production season, and 2) to determine the projected break-even price and yield. With these in hand, the manager can determine what types of risk management options may be necessary to cover costs and protect profit margins. For example, the manager of a corn enterprise may determine that input costs, especially seed and fertilizer, are sufficiently high to warrant a level of crop revenue insurance to make certain that revenue from the crop will at least reach break-even. Higher levels of coverage may also be possible but only at correspondingly higher premium levels.

Financial Statements and Analysis

The next step is to develop projected financial statements including a cash flow, beginning and ending balance sheets, and an accrual income statement. The cash flow projection will include information from each of the enterprise budgets to form a whole-farm projection. These estimates are best made using a combination of past revenues, expenditures, and forecasts. This allows a manager to consider seasonal differences in enterprises and develop alternative plans for the most feasible combination of enterprises.

A balance sheet showing total assets and liabilities should be compiled for both the beginning and end of each fiscal year. These statements show changes from one year to the next. Assets and liabilities should be divided into current versus long-term categories. Current asset and liability values reflect available capital and demands on that capital over the next 12 months.

Liquidity is calculated as current assets divided by current liabilities. Ideal liquidity values should be 2 or higher, and values below 1 indicate potential problems in making payments. Low liquidity values tend to indicate an increased sensitivity to negative price swings.

Long-term measures include solvency (calculated as total assets minus total liabilities) and the debt-to-asset ratio (total liabilities divided by total assets). The debt-to-asset ratio shows the percentage of farm/ranch assets that are financed; less than 30 percent is ideal and more than 60 percent may indicate problems ahead.

Projected Accrual Income Statement

Finally, a projected accrual income statement showing overall profitability of the operation should be developed for each fiscal year. A complete income statement forecast should show all income and expenses (cash and non-cash).

Total income or loss can be used in conjunction with balance sheet figures to determine return on assets (net farm income plus interest expense minus family labor and management expense divided by total assets) and return on equity (net farm income minus family labor and management divided by total average equity).

For More Information

There is no time like the present to begin financial analysis. By developing a detailed financial plan complete with enterprise budgets and projected financial statements, the manager is better able to adjust when problems arise, to maintain credit arrangements, and to minimize unnecessary financial risk.

For more information on developing enterprise budgets, projected financial statements, or other risk management topics online, visit the Western Risk Management Library at agecon.uwyo.edu/riskmgt, and follow the links to desired topic areas.

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Good records provide foundation for management decisions

By Bridger Feuz

The old adage "you can't manage what you don't measure" holds true for cattle ranchers.

Keeping a good set of production and financial records enhances the ability of ranchers to make good decisions. In addition, requiring basic recordkeeping before extending credit is becoming more common for lending institutions.

Recognizing these factors, the Wyoming Master Cattleman Program added a section on basic ranch recordkeeping to this year's curriculum.

Many methods exist for producers to keep records, all of which can be useful depending upon the preferences of the individual. Records can be kept as written documents, (i.e. National Cattlemen's Beef Association [NCBA] Redbook), computerized spreadsheets, commercial cattle management software, and commercial financial management software. The key is to keep track of essential production and financial data that enable producers to make good decisions.

Collecting and recording too much data, which can overwhelm the decision process, is certainly possible; however, a more common problem for ranchers is making decisions based on assumptions because records essential to the decision are not available.

There are several tools available to aid the decision-making process once a producer has established a good set of records; they can help a producer make decisions about new opportunities and look at a break-even analysis on a current opportunity. Often, using these tools without first developing good recordkeeping habits is tempting for producers. This can lead to bad decisions as all of these tools assume accurate data is being entered.

The Wyoming Master Cattleman Program utilizes two basic approaches. **Partial budgeting** is used so a producer can analyze only the costs and revenues that will change given a specific change in the operation that results in a net gain or loss. If a capital investment is needed for an opportunity, **net present value analysis** is used in combination with partial budgeting to adjust for interest and risk associated with the investment.

These tools can be utilized online at http://agecon.uwyo.edu/wyoag/MasterCattleman/EnterpriseAnalysisTools/default.htm.

If a producer wants to calculate the break-even potential of his current cow/calf or stocker operation, a great place to start is www.cattlemarketanalysis.org. Go to Market Analysis and click Cowboy Calculators.

Many other tools exist to help producers make decisions, including enterprise budgets, return on investment, and unit cost of production. All, including the tools detailed in this article, have one important thing in common: they are only as good as the data entered into the analysis.

A foundation of basic production and financial records is essential to the success of any decision-support tool.

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An easy transition to computer recordkeeping

Many producers use the National Cattlemen's Beef Association Redbook for a hand-written recordkeeping system. This book is available in spreadsheet form from the NCBA. Just go to www.beef-usa.org/prodredbooksandothertools.aspx and download a copy or get a CD for $5.