

BARNYARDS & BACKYARDS

Getting on track: Understanding financial performance

In previous installments we highlighted the first two courses in the *Getting On Track* series – covering the importance of keeping basic records and financial statements – and how they help business managers identify and address risk.

The courses describe not only how to start organizing and tracking necessary production and financial records, but also how to build on those to prepare detailed financial statements for further analysis.

Knowing what to do with or how to interpret the information in these documents is often not easy for many farm and ranch managers.

The third course in the *Getting on Track* series, *Understanding Financial Performance*, helps rural business owners and managers correctly evaluate financial data through ratio and index analysis,

sometimes referred to as benchmarking. This type of analysis can also be done with production measures such as yield performance, pounds weaned per exposed female, or tons harvested per acre-foot of water applied.

Financial analysis can help identify weak areas or risk in a business and can compare performance over time to make decisions and address problems before they become severe.

Understanding financial performance can help calibrate expectations of a manager and a lender and address concerns they may have.

The financial performance course follows the example producers highlighted in the previous two courses and demonstrates the practical aspects of financial analysis and determining financial performance. Five categories of financial measurement are outlined in detail: liquidity, solvency, profitability, financial efficiency, and repayment capacity.

Liquidity and Solvency

Liquidity measures the ability of a business to meet current financial obligations without disrupting normal business operations. The three main ratios for measuring liquidity include the current ratio, the working capital ratio, and the working capital/gross revenues ratio (Table 1).

These ratios are calculated using information found on a balance sheet. The current ratio is calculated as current assets divided by current liabilities. Anything below 1.0 indicates possible problems meeting obligations and may be addressed by restructuring expenses. Working capital can be calculated by subtracting current liabilities from current assets, showing the current capacity available to meet upcoming obligations.

Liquidity Benchmarks	Low	Moderate	High
Current ratio	> 1.5	1.0 - 1.5	< 1.0
Working capital	The appropriate level will vary primarily due to farm size, inventory levels, and accounts receivable.		
Possible actions for improvement: Increase sales, decrease short-term debt and other financial obligations, restructure debt to better reflect current assets, evaluate a marketing plan to better time cash inflows and outflows.			

Solvency refers to the ability of a business to meet long-term obligations and ability to withstand financial adversity. Solvency is measured by the debt/asset ratio, the equity/asset ratio, and the debt/equity ratio.

Information for these ratios is also found on the balance sheet. As with liquidity ratios, solvency measures can be compared over time or to industry benchmarks. For example, a debt/asset ratio greater

than 0.7 generally indicates a high debt load and room for improvement.

Profitability and Financial Efficiency

Profitability refers to the ability of a business to generate more revenue than expenses over a period of time. The course outlines five measures of profitability, including rate of return on assets (ROA), rate of return on equity (ROE), operating profit margin, net farm income, and earnings before interest, taxes, depreciation, and amortization.

Data for these are on the income statement, statement of owner equity, and the book value balance sheet. Rate of return on assets and rate of return on equity are two particularly important measures, describing earnings compared to the value of total assets and owner equity, respectively.

While benchmarks for these measures are somewhat subjective, depending on the business examined, but generally an ROA of less than 0.01 or an ROE of less than 0.05 are cause for concern. Low performance may be addressed by reducing operating expenses and owner withdrawals or by restructuring and reducing debt.

Financial efficiency measures help identify whether the physical assets of a business are being used in a profitable manner. The five measures covered in the course include asset turnover, operating expense, interest expense, depreciation expense, and net farm income from operations. As with the profitability measures, what makes a financial efficiency ratio good or bad depends on the type and scope of the operation.

Repayment Capacity

The ability of a borrower to repay farm debt from farm and non-farm sources is also an important measure of financial performance. The course outlines the important indexes for measuring repayment capacity, including capital debt repayment capacity and the term debt/capital lease coverage ratio.

Capital debt repayment capacity describes the funds available to cover debt and/or lease payments or make alternative investments. These indexes help a potential borrower be prepared when meeting with a lender, as well as addressing long-term financing needs or opportunities.

Next Steps ...

The *Getting on Track* course covers many different financial ratios and indexes. Users should remember the point of calculating these financial measures is to understand how the farm or ranch business is performing. Secondly, they can be used to create a plan for improving that performance into the future.

continued next page



UW EXTENSION | AGRICULTURE & HORTICULTURE | USDA | RISK MANAGEMENT AGENCY

Livestock handling tips to help prevent ranch ATV accidents

Agriculture has always been dangerous.

When horses were predominately used, there were more horse accidents. With an increasing number of people using ATVs to move livestock, we now have more ATV-associated accidents.

There were three fatalities in 2016 involving 20 injury crashes, according to the Wyoming Department of Transportation's Wyoming's Report on Traffic Crashes for 2016.

Most everyone knows someone who has had a bad accident or has been involved in an ATV accident themselves. While not every accident is preventable, there certainly are things we can learn and teach our children to be safer when using ATVs.

Start with improving stockmanship practices

I like to think of ATVs as tools for handling livestock. Used properly, they can be very handy. Used improperly, they can be overpowering and dangerous. You may be able to get the job done by forcing livestock to do what you want, but this causes stress on livestock and could cause a dangerous situation for yourself – a four-wheeler is no match with a 2,000-pound bull. A well-trained stock dog also can be an excellent tool when moving cows, especially in rough country.



Financial Performance, continued

This can be done by comparing financial performance over a multi-year period, as well as monitoring those measures as the year unfolds. In this way, monitoring financial performance allows a manager to stay ahead of potential problems before they become business-threatening and be better prepared to take advantage of opportunities as they arise.

James Sedman is a consultant to the Department of Agricultural and Applied Economics in the University of Wyoming College of Agriculture and Natural Resources, and **John Hewlett** is a farm and ranch management specialist in the department. Hewlett may be reached at (307) 766-2166 or hewlett@uwyo.edu.

Use the animal's natural instincts and behavior to get the job done instead of using force. Learn about animal flight zones, applying pressure and release, point-of-balance, and start applying these principles every time you handle livestock.

Consider attending a low-stress, livestock handling program or school (also see <http://bit.ly/handlinglivestock>). Even if you feel you are a top hand, you might learn something that makes a difference on your operation. I think stockmanship is like playing a musical instrument: there is always room for improvement, and there usually is someone out there better than you. Learn from them if you can.

Have the right frame of mind when moving livestock

Many people enjoy moving cows, but oftentimes it gets treated as a job that needs to get done as quickly as possible to get back to other important work on a ranch. If we have this mindset and things don't go as planned, tempers often flare, and we go back to using force. Plan and set aside plenty of time to get your livestock moved. If for some reason it isn't working today, come up with another plan and try again tomorrow.

Work livestock slow and the job will be done faster

Many ATV accidents happen because drivers are going too fast and focused solely on livestock and not the terrain. A misconception is we need to be more active (riding hard and fast, hollering, pushing, etc.) to get cattle to work faster. The more distractions there are, the harder it is for livestock to process what you want them to do. Communicate effectively with your livestock (use their natural behavior and position yourself correctly) and always be aware of terrain when using an ATV.

Use the right tools when moving livestock

I'm not debating whether or not horses are better than ATVs for moving livestock. If comfortable riding a horse, there are many instances a horse can be more practical than an ATV. However, in some instances, ATVs may be a better option.

Get off the ATV and walk if necessary. A cow down in the bottom of a ravine is not worth yours or anyone else's life. Too many accidents happen when we think we can get away with something we think will save us a little time.

Blake Hauptman is a University of Wyoming Extension educator based in Crook County and also serving northeast Wyoming. He can be reached at (307) 283-1192 or at bhauptma@uwyo.edu.

$$\begin{aligned}
 & \text{Net Farm Income} \\
 & + \text{Depreciation} \\
 & + \text{Net Non-farm Income} \\
 & - \text{Family Living} \\
 & - \text{Income Taxes} \\
 & + \text{Interest on Term Loans} \\
 \hline
 & = \text{Capital Debt Repayment Capacity}
 \end{aligned}$$

These values can be found on the income statement, book value balance sheet, and owner equity tabs.