

RIGHTRISK™

How Much Risk is Right for You?

DATES TO REMEMBER

NAP Coverage
(Spring-planted crops)
- county specific deadlines

Spring crop acreage reporting deadline
- July 15

Margin Protection Program Dairy (MPP-D)
- 2017 crop year
July 15th-Sept. 30th

Forage Insurance
- September 30th

RI-PRF Coverage
November 15th, 2016 for 2017 crop year coverage

Acreage Reporting:
- November 15th

For more information see:
<http://www.rma.usda.gov>
<http://www.fsa.usda.gov>

RIGHTRISK NEWS

The importance of evaluating financial performance

The last several years have been stressful for most crop and livestock producers. Much of that stress comes from the variability in input costs and output prices. Variability in these factors lead immediately to increased risk. Operations of all types and sizes are taking a hard look at tough financial decisions: should we buy feed or sell cows, what crops can we plant profitably with limited irrigation water, or how can we best adjust our production to weather the downturn in commodity prices?

Accurate financial analysis is crucial to the profitability and survival of any agricultural business. It is also a form of risk management. Producers who calculate and assess their business's financial well-being are in a much better position to make risk management decisions and protect their bottom lines.



Understanding Financial Performance

Producers need accurate and up-to-date records, financial statements, and analysis of their financial and production data. The academic professionals at RightRisk.org have created the course Understanding Financial Performance to compliment two previous Getting on Track courses on financial records and financial statements. To access the course, point your browser to RightRisk.org and select Products > Getting On Track: Analysis from the menu.

Example producers show progress toward calculating and evaluating financial performances. These producers are learning the five key areas of financial health: liquidity, profitability, solvency, financial efficiency, and repayment capacity. In each section, users are shown how to calculate and apply various financial ratios and to better understand what they mean for their operations. Parameters for each ratio

(high/low and satisfactory/unsatisfactory) are discussed and help guide users' understanding on areas of strengths and weaknesses in their business and how to improve in each of the five areas.

Smith Ranch Example

Let's take the example ranch operated by John and Marcia Smith and their journey through the financial records and financial statements courses. The Platte County operators own and operate a commercial cowherd of 100 head and an irrigated farming enterprise of 250 acres. The Smiths primarily use the farmland to produce alfalfa on 200 acres and corn silage on the remaining acres for their cattle and for sale. For more on the Smith's, see: RightRisk.org > Resources > Risk Management Profiles > Gates Creek Land and Livestock.

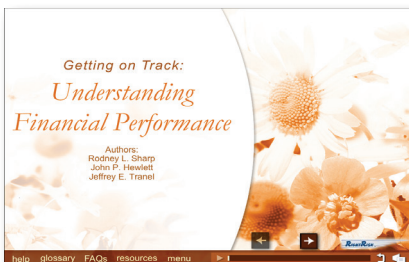
The past year has been tough on the Smiths, with the drought reducing their average alfalfa yields from 5 to 3 tons per acre and their corn silage from 25 tons/acre to 15. They are short of pasture. In addition, they supplemented feed for their cattle throughout most of the summer and are feeding their cows after selling their calves earlier than normal. They recently purchased \$20,000 worth of hay and protein supplement to make up for their production shortfalls. The Smiths are now assessing their situation from their financial records and financial statements to determine which direction they will go for the coming year. Analysis of their financial picture through the steps outlined in the Understanding Financial Performance course is in order.

Table 1. Smith Ranch Financial Ratio Analysis

Selected ratios Ratio/measure	Value	Satisfactory	Needs improvement?
Current	0.9	No	Yes
Working capital	\$2,000	No	Yes
Debt/asset	0.4	Yes	Yes
Net farm income	\$15,000	No	Yes
Rate of return on equity	0.05	Yes	Yes

Liquidity

Liquidity is the ability of a business to adequately meet current obligations. Three measures of liquidity are discussed in the course: the current ratio (current assets divided by current liabilities), working capital (a measure of capital available to purchase inventory/inputs after



current obligations are met), and working capital divided by gross revenues. For this example we will look at the Smiths' current and working capital ratios. After purchasing feed and selling calves earlier than normal, the Smiths' current ratio is 0.9 with \$2,000 available in working capital. These low numbers can be attributed to the reduced feed inventory and feed purchases. To remedy this situation, the Smiths should look to raise more operating revenue (such as culling cows or increasing off-farm revenue).

Solvency

Solvency is the long-term measure of a business's ability to meet its obligations and how well it can withstand adversity. The three main measures (ratios) of solvency discussed in the course are debt-to-asset, equity-to-asset, and debt-to-equity ratio. For our analysis, we assume the Smiths have a 0.4 debt-to-asset ratio. While satisfactory for most businesses, it shows the Smiths should be careful not to let it approach levels greater than 0.6 to 0.7. They could accomplish this by cutting back capital purchases or paying down term debt.

Profitability

The course defines profitability as the ability of a business to generate return over all costs. There are five main measures of profitability discussed, including: net farm income, rate of return on assets (ROA), rate of return on equity (ROE), operating profit margin, and earnings before interest, taxes, depreciation, and amortization. In the Smiths' case, net farm income was \$15,000 (down from their average of \$40,000) attributed to lower production and higher feed costs. Their ROE (net farm income less labor and management divided by total equity) was 0.05. While this number is not in the high-risk range, it could be detrimental to their long-term success and goals to continue with low ROE.

Measures of Profitability

Profitability Ratio Benchmarks

Profitability Benchmarks	Low	Moderate	High
Rate of Return on Assets	> 0.05	0.01 - 0.05	< 0.01
Rate of Return on Equity	> 0.1	0.05 - 0.1	< 0.05

Possible Actions for Improvement: Increase the value of production, reduce production costs where prudent, control or reduce family living withdrawals, improve marketing practices, properly structure debt for revenue generation.

ing expense ratio, interest expense ratio, depreciation expense ratio, and net farm income from operations ratio. The Smiths' repayment capacity (ability to repay farm debt from farm and non-farm income) is measured by capital debt repayment capacity and term debt and capital coverage ratio.

Summary

John and Marcia Smith knew their business would take a hit in the short term, as their financial analyses show. Reduced production and extra feed purchases lowered their liquidity and net farm income in addition to reducing their ability to repay debt. Looking ahead, the Smiths can consider several options to improve their situation, such as making debt repayment a high priority, restructuring debt payments to coincide with cash flows, reduce or eliminate capital purchases in the short term, and/or reduce family/living withdrawals from the business.

**HIGHLIGHTED COURSE:
GETTING ON TRACK-
UNDERSTANDING FINANCIAL
PERFORMANCE**

Think of assessing your business's financial health much like a doctor would assess your personal health. A doctor looks at several areas to determine overall physical health, like temperature or blood pressure, along with specific indicators that may show areas for improvement or immediate attention. Five key areas should be addressed to determine financial health: liquidity, profitability, solvency, financial efficiency and repayment capacity.



These areas are important for all operators. For instance, a small vegetable operation, that services farmer's markets, might use this information to determine cash flow needs for the coming year, profitability, the effectiveness of the working capital and appropriate risk management strategies. An ag lender will use this information to determine credit worthiness and the credit risk of clients.

For more information, see:
RightRisk.org > Courses >
Financial Analysis



RightRisk helps decision-makers discover innovative and effective risk management solutions.

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- Coaching
- Research

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How much risk is right for you and your operation?

