Northwest FARM CREDIT SERVICES

BUSINESS TOOLS

Understanding Financial Ratios and Benchmarks

Historically, great production drove success in agricultural businesses. To maintain long-term success in today's volatile and highly competitive marketplace, leaders in ag businesses still have to be great producers, but also have to be sophisticated financial managers. One critical aspect of financial management is to understand and interpret your business' financial position, performance and progress towards achieving goals. Financial statements and record-keeping systems provide the foundation and data, but ratios and benchmarks enable managers to interpret financial information to make decisions and evaluate performance.

Quick Definitions:

Financial Ratios:

Financial ratios are measures of financial performance and position. Ratios provide a mathematical relative comparison of one piece of financial information to another, and can be used to:

- Evaluate profitability, efficiency and risk
- Assess short-term risk bearing ability (liquidity)
- Assess overall financial position (solvency)
- Determine capacity for growth
- Drive performance
- Make informed business decisions

Benchmarks:

Benchmarks are guidelines or 'rules of thumb' for industry or business segment-specific financial ratio targets. Benchmarks also include peer comparisons that evaluate financial ratios relative to a group of similar businesses. Benchmarks are presented in many ways, but one common approach

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Tip: Ratios and benchmarks help producers set goals, make decisions and compare business performance to similar operations.

uses the following reference points for each ratio or measure:

Green: Low Risk - Normal or healthy range for an industry/segment

Yellow: Moderate Risk - Slightly outside normal/ healthy range

Red: High Risk - Significantly outside normal/ healthy range

Note: While benchmarks provide general guidelines, a green light doesn't guarantee success, nor does a red light imply failure. An operation may overcome weakness in one area with strengths in other areas. Variations may occur between industries.

Tip: Ask your Northwest FCS Relationship Manager for general financial benchmark guidelines used in your specific industry.

Who uses ratios and benchmarks?

Financial ratios and benchmarks are useful to decision makers inside and outside a business. Management uses the information to assist in decision making, goal setting and to compare business performance to other operations. Lenders, investors and other creditors use the same information to evaluate risk, return and performance compared to a portfolio of loans or investments.

To measure progress over time, users should calculate financial ratios on a regular basis at similar times in the business cycle. Ratios can help identify symptoms of underlying problems in a business and enable managers to focus attention on key issues. Basing decisions and priorities on objective measures like financial ratios reduces the likelihood that the management team will make decisions solely on intuition, 'gut feel' or emotion.

Where can I get benchmarks for my business?

Financial ratios are most useful with benchmarks that help determine if you're in the 'green' or 'red.' The easiest way to get specific information for your industry is to ask your lending relationship manager. They'll use our database of peer studies to compare your results to others in your industry and/or region. If peer data is not available for your industry or operation, they'll compare your results to the benchmark guidelines used to evaluate your operation's financial performance and risk profile.

Various public and private organizations also collect and analyze financial data on the agricultural and specific industries. These include the Risk Management Association and Farm Financial Standards Council, among others. Ratio guidelines for general agriculture, retail, wholesale, service, and manufacturing firms are available for purchase through these organizations. Refer to the end of this document for general agricultural benchmarks from the Farm Financial Standards Council.

Before You Start

Strategy and Goals: Understanding and interpreting financial information first requires a clear assessment of personal and business goals. Without a sense of business direction and strategic priorities, it is very difficult to determine if the business is positioned to achieve owners' goals and objectives. For example, an operation preparing for significant growth or expansion will require significantly more cash or liquidity (for

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down payments and funding additional operating expenses) than a business preparing to reduce in size or scale. With strategies and goals in mind, managers and owners can begin to assess financial performance and ratios.

Tip: When requesting a review of your financial performance with a lender, ask them to identify specific benchmarks and key drivers as well as their assessment of your operation's top three financial strengths and weaknesses.

Information Needed: Financial ratios require information from multiple financial statements. Before you start, prepare your operation's balance sheet and annual income statement or profit and loss statement as of the same date. While the ratios are very interrelated, there are subtleties to interpretation that managers must consider. Some ratios are measured at a single point in time, which varies depending upon the particular point in the production cycle. Others encompass a certain time period or an entire operating cycle. As such, trends become important in understanding the relative progress of an operation.

Key Financial Ratios

Basic financial ratios are grouped into management categories that help decision makers assess business performance from multiple perspectives. The best assessments reference more than one financial ratio in each basic management category.

Ratio Management Categories

Category	Definition
Liquidity:	The availability of cash and near-cash assets to cover short-term obligations without disrupting normal business operations.
Solvency/Leverage:	The proportion of debt versus equity in a business' capital structure.
Profitability:	Compares business revenues against all economic costs and evaluates how productively a business is utilizing its resources, both capital and human.
Repayment Capacity:	Repayment capacity is the ability of a business to support the family's living expenses, meet all expenses and debt payments, replace depreciating capital assets and prepare for the future through business investments and retirements plans.
Financial Efficiency:	Financial efficiency measures how effectively a business uses its productive capabilities.

IMPORTANT NOTE: The benchmarks referenced for each measure below are based on work completed by the Farm Financial Standards Taskforce and Council and represent benchmarks for ag businesses across the United States and in all commodities. These benchmarks provide high-level guidelines only, and do not reflect the unique attributes of each industry, region or segment. Benchmarks vary from industry to industry, and managers should address specific circumstances with an expert before making decisions based on benchmark information.

Ratios and benchmarks presented in this document may not directly align with Northwest FCS' loan underwriting standards. Benchmarks are based on information from the Farm Financial Standards Taskforce and Council and are representative of national averages across all agricultural commodities. Measures are not industry or segment-specific.

Liquidity Ratios

Liquidity is the measure of an operation's short-term cushion for risk, including availability of cash and near-cash assets to cover short-term obligations without disrupting normal business operations.

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Key liquidity ratios include:

- Current Ratio
- Working Capital
- Working Capital to Total Expenses

Exhibit 2
Liquidity Analysis

Current Assets	$111,200
Current Liabilities	÷ $62,240
Current Ratio	**1.79**
Current Assets	$111,200
Current Liabilities	- $62,240
Working Capital	**$48,960**
Working Capital	$48,960
Total Expenses	÷ $236,250
Working Capital Rule	**21%**

Current Ratio – Liquidity	
Description:	The most common measure of liquidity is the current ratio, which compares current assets to current liabilities.
Calculation:	Current Assets (divided by) Current Liabilities
Risk Impact:	Higher ratio → less risk
Benchmark:*	Green: Greater than 1.50 Yellow: 1.00 to 1.50 Red: Less than 1.0
Discussion:	While the general benchmarks apply to many ag businesses, several factors, including industry, can affect the current ratio. For instance, dairy producers and similar operations with low inventories and stable monthly incomes can manage with a lower current ratio. Conversely, operations with high inventories and accounts receivable require a higher ratio. Since this ratio is measured at a single point in time, the ratio will vary depending on the point in the production cycle. Other factors affecting the current ratio include loan repayment terms, credit card usage and accounts payable. Businesses attempting to improve the current ratio should start by analyzing loan structure. Many agricultural producers are guilty of trying to repay debt too quickly. This increases current obligations and hinders repayment ability. A second strategy is to evaluate the marketing plan to better time cash inflows and outflows.
Example:	In the example above, for every dollar of obligations in the next year (current liabilities), the business has 1.79 dollars of assets (current assets) it can convert to cash within the next year – a cushion of 79 cents per dollar.

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Working Capital – Liquidity	
Description:	Similar to the current ratio, working capital measures the difference (in dollars) between current assets and current liabilities, which represents the owners' share of production assets. The ratio states that an operation has XX dollars of 'liquid' assets (current assets) in excess of upcoming obligations in the next year (current liabilities).
Calculation:	Current Assets (minus) Current Liabilities
Risk Impact:	Higher number → less risk
Benchmark:*	N/A – Compare to business expenses and benchmarks
Discussion:	Because working capital is an absolute measure rather than a ratio, no one level of working capital is preferred. However, as working capital increases, the flexibility a business has in marketing, acquiring capital assets and timing cash flows also increases. All these things reduce the relative risk in the operation. The appropriate level of working capital for a particular business will vary with average levels of inventories and accounts receivable and with production or marketing volatility. As inventories rise or as volatility increases, working capital should also increase to offset those risks.
Example:	In the example above, the operation has $48,960 dollars of 'liquid' assets (current assets) in excess of upcoming obligations in the next year (current liabilities).

Working Capital to Total Expenses – Liquidity	
Description:	For operations with an annual production cycle, comparing working capital (a balance sheet measure) to total expenses (an income statement item) enables managers to evaluate the adequacy of working capital to fund ongoing operations and provide a cushion for risk. This measure also enables comparison to other operations.
Calculation:	Working Capital (divided by) Total Annual Expenses
Risk Impact:	Higher ratio less risk
Benchmark:*	Green: Greater than 50 percent Yellow: 20 percent to 50 percent Red: Less than 20 percent
Discussion:	This ratio is measured as a percentage, which can be converted to time. For example, a business with working capital to total expenses of 50 percent can cover six months of total expenses with the working capital on hand as of the balance sheet date.
Example:	In the example above, the operation can cover 21 percent (or 2.5 months) of total expenses with the cushion already reflected on the balance sheet.

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Managing Liquidity:

In many agricultural businesses, the family is an integral part of the operation, and business and personal liquidity must both be examined. Financial analysts like to see a business or the owners maintain two to six months of family living expenses in cash or near-cash assets. This serves as a safety net in the event of a business hardship, disability of the operator, or other misfortune. A lack of adequate cash for family living can spill over into business disputes, and ultimately cause financial problems.

Tip: The number one reason businesses fail is too much financial leverage.

To increase an operation's liquidity, a manager can:

- Structure debts to carefully balance operating needs and long-term debt reduction
- Develop and follow marketing plans to match timing of cash flows and increase operating profits
- Reduce production costs
- Sell assets
- Raise equity capital

Solvency and Leverage Ratios

Solvency or leverage addresses the relationship between assets and obligations, including the respective investment levels of both owners and creditors.

Exhibit 3
Solvency Analysis

Total Liabilities	$426,900
Total Assets	÷ $965,100
Debt-to-Asset Ratio	**44%**
Total Equity	$538,200
Total Assets	÷ $965,100
Equity-to-Asset Ratio	**56%**
Total Liabilities	$426,900
Total Equity	÷ $538,200
Debt-to-Equity Ratio	**79%**

Debt-to-Asset Ratio – Solvency and Leverage	
Description:	The most common measure of balance sheet solvency is the debt-to-asset ratio, which measures the level of debt held by outside sources relative to assets.
Calculation:	Total Liabilities (divided by) Total Assets
Risk Impact:	Higher ratio → more risk
Benchmark:*	Green: Less than 30 percent Yellow: 30 percent to 55 percent Red: Greater than 55 percent
Discussion:	Increasing debt levels translate into higher risk as the operation loses flexibility and more stress is placed on earnings to service debt. As the debt-to-asset ratio increases, management flexibility decreases and earnings are more stressed to service debt. Also, the chance of insolvency (liabilities exceeding assets) is greater when deferred federal and state taxes are incurred in the case of a business liquidation.
Example:	In the example above, the operation has a debt-to-asset ratio of 44 percent, meaning for every dollar of assets on the balance sheet, there are 44 cents of liabilities. Otherwise stated, there are debtor claims on 44 percent of the company's assets.

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Key solvency and leverage ratios include:

- Debt-to-Asset Ratio
- Equity-to-Asset Ratio
- Debt-to-Equity Ratio

Three ratios are commonly used to measure solvency. While all three ratios provide the same basic information on the leverage position of the business, they show the information from different perspectives. Select the solvency ratio that makes the most sense for your operation.

Equity-to-Asset Ratio – Solvency and Leverage	
Description:	Another way to measure solvency (the reverse of the debt-to-asset ratio) is the equity-to-asset ratio, which measures the level of equity in the business relative to assets.
Calculation:	Total Equity (divided by) Total Assets
Risk Impact:	Higher ratio → less risk
Benchmark:*	Green: Greater than 55 percent Yellow: 30 to 55 percent Red: Less than 30 percent
Example:	In the example above, the operation has a equity-to-asset ratio of 56 percent, meaning for every dollar of assets on the balance sheet, there are 56 cents of equity. Otherwise stated, 44 percent of the company's assets are owned free-and-clear.

Debt-to-Equity Ratio – Solvency and Leverage	
Description:	Yet a third measure of solvency and leverage is the debt to equity ratio, which compares the owners' and creditors' percentages of ownership in the operation.
Calculation:	Total Liabilities (divided by) Total Equity
Risk Impact:	Higher ratio → more risk
Benchmark:*	Green: Less than 42 percent Yellow: 42 to 122 percent Red: Greater than 122 percent
Example:	In the example above, the operation has a debt-to-equity ratio of 79 percent, meaning for every dollar of debt on the balance sheet, the owners have 79 cents of equity. Otherwise stated, the company has more debt than equity.

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Managing Solvency and Leverage

Solvency and leverage measure the company's entire balance sheet position, but do not reflect the operation's ability to meet ongoing cash obligations. Other factors, such as management skill and debt structure, impact how ratios should be interpreted. The reasons for equity growth should also be examined. For example, growth through earnings is looked upon more favorably than growth from inflation or inheritance. Growth generated from the profits should be identified to accurately gauge the real progress of a business and its future potential.

Tip: Inadequate profits may result in repayment, liquidity and solvency problems.

The type of operation is also an important determinant of healthy leverage or solvency measures. As with all financial measures, an ideal benchmark is specific to your segment of the industry.

Strategies to increase equity and manage leverage include:

- Increase operating profits through a combination of:
  - Increasing prices, quality, volume, or added value to production
  - Improving production efficiencies
- Make additional principal payments, where prudent
- Avoid unnecessary capital expenditures
- Control family living withdrawals from the operation

Profitability Ratios

Profitability compares business revenues against all economic costs and evaluates how productively a business is utilizing its human and capital resources.

Key profitability ratios include:

- Operating Profit Margin
- Return on Assets
- Return on Equity

Exhibit 4
Profitability Analysis

1.	Net Farm Income From Operations	$	43,750
2.	Plus: Farm Interest	+	31,000
3.	Subtotal	=	74,750
4.	Minus: Operator Management Fee	-	26,500
5.	Subtotal	=	48,250
6.	Total Farm Assets	$	965,100
7.	Rate of Return on Assets (Line 5 / Line 6)		5.00%

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Operating Profit Margin – Profitability	
Description:	A good way to measure profitability is the operating profit margin ratio, which relates profits realized to income generated.
Calculation:	Net Farm Income adjusted for interest and operator management fees (divided by) gross revenue. Operator management fees represent any unpaid value of family labor and management.
Risk Impact:	Higher margin → less risk
Benchmark:*	Green: Greater than 25 percent Yellow: 10 to 25 percent Red: Less than 10 percent
Discussion:	Since profitability is the key to lasting success, ag businesses should be more concerned with profit margins than they are with managing income tax liability. As profits rise managers and owners have greater financial flexibility and more capital can be retained in the business, improving liquidity, solvency and repayment. This measure can also be calculated based on net profit (after family living and other expenses) for a more comprehensive measure of total profitability.
Example:	In the example above, the operation has an operating profit margin of 17.2 percent, meaning for every dollar of sales generated by the business, operations generate 17.2 cents in profit before interest and after operator management fees.

Return on Assets – Profitability	
Description:	It is useful to compare profits to the business resources used to generate them. The most common ratio used to accomplish this is the return on assets (ROA) measure, which indicates how much profit each dollar of assets generates.
Calculation:	Net business income from operations adjusted for interest, operator management fees and family living expenses (divided by) total business assets. Operator management fees represent any unpaid value of family labor and management.
Risk Impact:	Higher ratio → more efficient asset utilization
Benchmark:*	Green: Greater than 5 percent Yellow: 1 percent to 5 percent Red: Less than 1 percent
Discussion:	Agriculture tends to be an asset and investment-heavy business, where a significant asset base is required to maintain an economically viable unit. Businesses that mostly rent or lease production assets (including land) tend to generate and also require higher return on asset ratios to remain competitive.
Example:	In the example above, the operation generates 5 cents (5 percent) of annual return (profits) for every dollar of assets owned by the business.

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Tip: Regardless of size, decreasing margins increases relative risk.

Return on Equity – Profitability	
Description:	Similar to return on assets, return on equity (ROE) indicates how much profit each dollar of equity generates.
Calculation:	Net business income from operations adjusted for interest, operator management fees and family living expenses (divided by) total equity. Operator management fees represent any unpaid value of family labor and management.
Risk Impact:	Higher ratio → more efficient asset utilization
Benchmark:*	N/A – compare to alternate investments and benchmarks
Discussion:	The rate of return on equity ratio (ROE) measures how well the owner's investment in the business is generating net income. Because owner equity levels vary widely, no guidelines are given for benchmarking. Return on equity in a business is the same as ROE in a Wall Street investment portfolio. Comparing your expected returns on other investments with the ROE in your business is helpful to understand performance, but only in comparison to non-farm investments of comparable risk. While the mathematical comparison is relevant, returns are not measured solely in terms of dollars – some also consider lifestyle and legacy as intangible returns from their investment in the business. Owners should set targets for acceptable ROE thresholds relative to the risk perceived in the business. These targets differ based on operational and industry characteristics as well as the profile of owners and management.
Example:	In the example above, the operation generates 5 cents (5 percent) of annual return (profits) for every dollar of equity in the business.

Managing Profitability

Profitability is one of the most important, yet underemphasized measures of financial performance. Although a business can operate in the short-run on break even or negative returns, profits are necessary in the long-run to support the family, build equity, service debt and sustain the business. If not remedied, inadequate profits may result in repayment, liquidity and solvency problems in the operation, sometimes as long as two to five years down the road.

To be meaningful, profitability analysis requires true earnings information. In agriculture, operations can maintain and report cash basis accounting records, but this leaves many owners knowing more about how much tax was paid than what actual profit the operations made. Decision makers should use accrual income information to analyze profitability accurately. Trends in income and profitability are useful to observe. Steady or increasing profit levels are desirable, while erratic profits are a sign of instability and may indicate a need for more robust risk management strategies.

Strategies to increase profitability include:

- Aggressively monitor and increase efficiencies of production costs
- Reduce unproductive capital or human assets
- Reduce costs (especially in the operation's largest expenses)

- Improve revenue through increased volume or quality of production
- Proactively manage interest rate risk and interest costs
- Maintain adequate working capital to take advantage of cash discounts from suppliers

Repayment Capacity Ratios

Tip: One who has cash can purchase assets at 50 cents on the dollar in down times.

Repayment capacity is the ability of a business to support the family's living expenses, meet all expenses and debt payments, replace depreciating capital assets and prepare for the future through business investments and retirement plans.

- Term Debt and Lease Coverage Ratio
- Term Debt and Lease Coverage Margin

Exhibit 1
Repayment Analysis

1.	Net Farm Income From Operations	$	43,750
2.	Plus: Non-Farm Earnings	+	36,500
3.	Subtotal	=	80,250
4.	Plus: Depreciation Expense and Interest Paid on Term Debt and Capital Leases	+	59,000
5.	Earnings Available for Family Living, Income Taxes, Interest and Principal, Payments and New Investments	=	139,250
6.	Minus: Family Living Withdrawals and Income Taxes	-	58,000
7.	Capacity Available for Interest, Principal Payments and New Investments	=	81,250
8.	Scheduled Interest and Principal Payments on Term Debt and Capital Leases	$	60,700
9.	Term Debt and Lease Coverage Ratio (Line 7 / Line 8)	=	134%
10.	Capital Replacement and Term Debt Repayment Margin (Line 7 - Line 8)	=	20,550
11.	Debt Payment / Income Ratio (Line 8 / Line 5)	=	44%

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Term Debt and Lease Coverage Ratio and Margin – Repayment Capacity	
Description:	This ratio compares the funds generated and available for debt service to upcoming debt and lease payments to determine if the operation is generating sufficient cash flow to meet obligations.
Calculation:	See <<<Reference to calculation table>>>
Risk Impact:	Higher ratio → less risk
Benchmark:*	Green: Greater than 150 percent Yellow: 110 percent to 150 percent Red: Less than 110 percent
Discussion:	The greater the cash flow to cover debt payments, the easier an operation can handle unforeseen expenses or opportunities. A business with a ratio in the red zone or showing a declining coverage trend should take immediate measures to remedy the situation. Instead of dividing the numerator and denominator, managers may also subtract one from the other, calculating a dollar amount margin (or cushion) for coverage. This margin is useful for assessing the significance of non-farm income by comparing the level of non-farm revenue to the margin. If the margin approaches zero or is negative when net farm income is deducted, this indicates a heavy reliance on outside sources of repayment. The margin should also be compared to annual depreciation expense. If depreciation is greater than the margin, it may indicate insufficient capacity to replace capital assets such as machinery and equipment. Conversely, a small amount of depreciation and a large margin may indicate deferred maintenance on the machinery line.
Example:	In the example provided, the operation has term debt and lease coverage of 134 percent, indicating for every dollar of upcoming debt and lease obligations, the business has generated 1.34 dollars of cash flow.

Tip: Many producers are guilty of trying to repay debt too quickly.

Managing Repayment Capacity

Meeting financial obligations is important, and when a business does not generate sufficient funds in a given period to fund required payments, it relies on the strength of the balance sheet (liquidity and solvency) or equity from owners to fund shortfalls. While profitability and cash generated by the business may vary from year-to-year, trends in coverage are very important to watch closely.

To protect against adversity and position for unexpected opportunities, an operation needs cushion in the margin to cover debt payments. The relative level required may change depending on business needs. In periods of expansion, having higher coverage margins helps mitigate risks. In a growing business, maintaining adequate margins protects against cost overruns or problems in production or marketing. Conversely, an operation that is stable/downsizing and has fixed rate debt or significant/reliable non-farm employment can maintain an acceptable risk profile with a smaller coverage margin. This is true especially if living expenses and income tax payments are low.

In all cases, however, the lower the coverage ratio, the more important risk management tools become. These include crop and property insurances, liquidity, hedging, options or contracted production.

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Strategies to manage repayment capacity include:

- Increase net farm income through:
  - Improved quality, price, or amount of production
  - More effective marketing
  - Sale of capital assets (short-run strategy)
- Reduce operating expenses
- Increase off-farm earnings
- Closely monitor family living withdrawals and reduce if necessary
- Restructure debt

Tip: The good manager generates $1 of revenue 10 cents cheaper than their competitor.

Managing Efficiency

Ag businesses spend a significant amount of time managing costs and expenses, and efficiency ratios enable managers to determine what strategies work and what strategies don't. Evaluating efficiency ratios over time allows decision makers to identify expenses that are increasing or decreasing disproportionately to the operation's size and scale.

Strategies to increase financial efficiency:

- Aggressively monitor and reduce production costs where prudent
- Increase the quality, amount and value of production
- Improve marketing practices
- Keep family living withdrawals to a minimum
- Properly structure debt

Tip: If you have questions regarding this information or would like assistance calculating your ratios, contact your lending relationship manager for additional information

Trend Analysis

While a particular ratio can provide insight into financial performance, trends in the ratios are even more useful. A trend is a direction or tendency exhibited by a ratio over two or more years. Positive or negative trends for three to five years are considered significant. Managers should also watch for a lack of trends, or erratic financial performance, as this can be a sign of instability due to management problems, insufficient risk management or other factors. When making financial projections, be conservative to avoid overestimates. Projections of ratio improvement of more than 5 percent should be carefully scrutinized, as cost savings, price increases and other variables are often overestimated.

Interrelationships among the ratios and benchmarks

The financial ratios and benchmarks presented in this publication are interrelated and should

Asset Turnover Ratio – Efficiency Ratios	
Calculation:	Gross revenue (divided by) total assets
Risk Impact:	Higher ratio → more efficient
Benchmark:*	N/A – Depends on type of operation and if assets are primarily owned or leased
Discussion:	The asset turnover ratio relates the profit margin to the asset base and tells managers how much revenue each dollar of assets generates.
Example:	In the example above, the operation generates 29 cents of revenue for every asset owned by the business.

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be considered together. A conclusion should not be reached based on one ratio. For example, an operation can maintain high leverage if combined with strong liquidity and repayment ability.

While a strength in one area can help offset a weakness in another area, the operation must be analyzed as a whole.

Summary / Key Ratio Calculations and Benchmarks

Repayment Analysis	Calculation	Green	Yellow	Red
Term Debt and Lease Coverage Ratio	[(NFIFO* + Non Farm Earnings + Depreciation Expense + Interest on Term Debts and Capital Leases) - Income Tax Expense - Family Living Withdrawals] / Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases	>150%	110% to 150%	<110%
Debt Payment / Income Ratio**	Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases / (NFIFO* + Gross Non-Farm Revenue + Depreciation Expense + Interest on Term Debts and Capital Leases)	<25%	25% to 50%	>50%
Liquidity Analysis				
Current Ratio	Total Current Farm Assets / Total Current Farm Liabilities	>1.50%	1.00 to 1.50	<1.00%
Working Capital	Total Current Farm Assets - Total Current Farm Liabilities	compare to business expenses, absolute amount depends on scope of operation		
California Working Capital Rule**	Working Capital / Total Expenses	>50%	20% to 50%	<20%
Solvency Analysis				
Debt / Asset Ratio	Total Farm Liabilities / Total Farm Assets	<30%	30% to 55%	>55%
Equity / Asset Ratio	Total Farm Equity / Total Farm Assets	>55%	30% to 55%	<30%
Debt / Equity Ratio	Total Farm Liabilities / Total Farm Equity	<42%	42% to 122%	>122%
Profitability Analysis				
Operating Profit Margin Ratio	(NFIFO* + Farm Interest Expense - Operator Management Fee) Gross Revenue	>25%	10% to 25%	<10%
Rate of Return on Farm Assets (ROA) (mostly owned)	(NFIFO* + Farm Interest Expense - Operator Management Fee) Average Total Farm Assets	>5%	1% to 5%	<1%
Rate of Return on Farm Assets (ROA) (mostly rented / leased)	(NFIFO* + Farm Interest Expense - Operator Management Fee) Average Total Farm Assets	>12%	3% to 12%	<3%
Rate of Return on Farm Equity (ROE)	(NFIFO* - Operator Management Fee) / Average Total Farm Equity	look at trends and compare to other farm and non-farm investments		
Financial History				
Operating Expense / Revenue Ratio (mostly owned)	Operating Expenses [excluding interest and depreciation] / Gross Revenue	<65%	65% to 80%	>80%
Operating Expense / Revenue Ratio (mostly rented / leased)	Operating Expenses [excluding interest and depreciation] / Gross Revenue	<75%	75% to 85%	>85%
Interest Expense Ratio	Interest Expense / Gross Revenue	<12%	12% to 20%	>20%
Depreciation Expense Ratio	Depreciation Expense / Gross Revenue	compare to capital replacement and term debt repayment margin		
Asset Turnover Ratio	Gross Revenue / Average Total Farm Assets	depends heavily on type of operation and whether it is owned / leased		
Net Farm Income from Operations Ratio	NFIFO* / Gross Revenue	look at trends, varies due to cyclical nature of agriculture prices and incomes		

*NFIFO = Net Farm Income From Operations excluding gains or losses from the disposal of farm capital assets. ** Not a ratio recommended by the Farm Financial Standards Taskforce and Council, but widely used.