



Financial Performance Analysis for Directors

Phil Kenkel

Bill Fitzwater Cooperative Chair

Boards of Directors have the responsibility to evaluate the annual audit and to track the financial successes or failures of the cooperative. This means the directors need to not only be able to read the financials and see trends, but they also must be able to understand the underlying causes of those trends. The board must be able to compare their cooperative financials to industry benchmarks, peer performance, and company projections. They will then use this information to build strategic plans and financial projections for the coming year.

Much of this analysis is "common sense" analysis. Directors should be able to scan the cooperative's financial statement and identify factors that impact each statement. The factors that impact long-term growth are most important. The cooperative should pay particular attention to the local savings (loss) of the cooperative. This means that the cooperative only looks at ratios calculated from the earnings and expenses of the main cooperative, not the patronage received from regional investments.

Once this "common sense" analysis is complete, the board can move on to a more in depth study of the cooperative, utilizing "common size" analysis, peer analysis, and an in-depth ratio analysis.

Common Size Analysis

A common size analysis scales the financials into a percentage of sales for the income statement and a percentage of total assets on the balance sheet. The scaling effect highlights the most important expense areas and can reveal problem areas that may not have been noticed before. It also provides a way to compare year-to-year variations in financials.

Peer Analysis

A peer analysis involves comparing the cooperative's performance with the performance of other cooperatives of a comparable size, industry, and primary business type. For example, if the company is an Oklahoma grain cooperative with \$3 million in sales last year, it could compare itself to the average performance of other Oklahoma grain cooperatives with sales ranging from \$1 million to \$5 million.

This is an excellent tool for highlighting the strengths and weaknesses of cooperatives. The peer data to compare to can be obtained from universities, state statistic services, or the company's banker will have some of the data.

Ratio Analysis

Ratio analysis is perhaps the most common method of financial analysis and it is this method on which the most weight is placed. Ratio analysis provides a way cooperatives can high-

Oklahoma Cooperative Extension Fact Sheets
are also available on our website at:
<http://osufacts.okstate.edu>

light strengths, as well as problem areas, and positive/negative trends. It also allows for the company to better compare to peer financial results and to industry benchmarks.

Benchmarks are considered to be acceptable financial results in the particular industry in which the cooperative operates. The peer analysis shows how the company is doing compared to its peers; however, if the industry is in a slump, it may make the financials look better than what it is actually doing. A benchmark analysis shows the cooperative and its peers where the industry should ideally be. Some of these ratios include:

- Efficiency and Turnover Ratios: includes accounts receivables turnover, inventory turnover, and total assets to sales;
- Expense Ratios: includes personnel to gross income, fixed expenses to gross income, and bad debt to credit sales;
- Profitability Ratios: includes local savings margin, local savings to local assets, return on assets, and return on net worth; and
- Debt Ratios: includes debt service coverage, debt to asset ratio, and local leverage.

In the following paragraphs we will go over some of the more commonly used financial ratios, and how they interrelate. At the end of this paper is a supplement that provides calculations for these ratios as well as the benchmarks associated with that ratio.

Efficiency and Turnover Ratios

Efficiency and Turnover ratios measure how efficient a company is at collecting accounts receivables and rotating inventory. These ratios measure how well a cooperative is using its resources or if improvements could be made. The main ratios, as listed earlier, measure: how efficiently a cooperative is spending its money relative to how much money it is making, and how efficiently the cooperative is using its assets to generate sales.

Accounts Receivable Aging

The accounts receivables turnover ratio (also called accounts receivable aging) measures how often accounts are paid off in a year. The benchmark for this ratio is usually 30 days, meaning that on average, members pay off their accounts every month. However, this will vary with the credit terms of

the cooperative. Another benchmark that is more universal is that no more than 20 percent of accounts should be more than 60 days old, and no more than 5 percent should exceed the maximum days allowed by your credit policy.

Accounts receivables aging can be improved by tightening the credit policy, placing historically troublesome accounts on a cash only policy, collecting past due accounts (by legal means if necessary for accounts that are unreasonably overdue), and writing off those doubtful accounts that the manager feels will never be paid off. Collecting accounts receivables can be hard in a cooperative, so most boards of directors pay close attention to this ratio. If a problem can be stopped before it becomes an issue for the cooperative, the needed changes can be implemented quickly and reasonably painlessly.

Inventory Turnover Ratio

Inventory turnover is another important issue because it reflects the number of times the inventory is sold out during the year. Management can discover sales trends, and what “dead inventory” items he/she is carrying by paying close attention to the inventory that is being sold out. The inventory turnover ratio measures the overall effectiveness of an inventory system.

Reducing overall inventory levels, getting dead items out of the warehouse, and coordinating inventory between branches can improve it. Another more popular option is to increase sales through smart marketing. If this option can be accomplished, the cooperative can improve inventory turnover as well as other crucial ratios based on sales.

Total Assets to Total Sales

The total assets to total sales ratio measures whether a cooperative is efficiently using its assets to generate sales. Like the expense to sales ratio, it can be improved by increasing sales or by reducing unproductive assets. Most cooperatives have a “dead horse” asset that is kept, either because the members want to keep it or it provides a valuable service to the rest of the cooperative. Whatever the reason, these kinds of unproductive assets should be re-configured or removed because they put a drain on the cooperative’s profitability and productivity.

Fixed Assets

Cooperative is over invested in long term investments including plant equipment. This ratio can be improved by selling equipment or increasing sales. It is determined by sales divided by total assets.

Expense Ratio

Expense ratios measure the expense of the company for the past year. By using local ratios, the cooperative can remove the variability produced by the ups and downs of regional patronage refunds. It also prevents the cooperative from looking worse than it actually is, due to weak joint ventures, extraordinary losses, and regional stock write-downs.

Fixed Expenses to Gross Income

The fixed expenses to gross income ratio measures whether or not cooperative expenditures, such as buildings,

are appropriate given the cooperative’s size (as measured by sales). It can be improved by either increasing sales or decreasing expenses. A decreasing trend in this ratio is better because it means your expenses are decreasing relative to your sales.

Personnel to Gross Income

The personnel to gross income ratio is a measure of how efficiently the personnel of the cooperative are being used. Human capital is a key part of a successful cooperative. The best people should be in the right positions where they can be the most productive. This ratio can be improved by reducing overtime of employees who are “milking the clock,” reducing unproductive employees, or encouraging productivity and margins without removing any employees.

Bad Debt to Credit Sales

The bad debt to credit sales measures the ultimate cost of the cooperative’s credit policy. This preferably averages less than a quarter of a percent. Many cooperatives charge an allowance for bad debts each year, then adjust for the actual amount. Bad debt expense estimate can be best calculated by averaging the actual amount of several years.

Profitability Ratio

Profitability measures do exactly what they say; they measure the profitability of the company for the past year and give indicators of how to further improve local profitability. A key term is that these financial ratios are local numbers. By using local ratios the cooperative can remove the variability produced by the ups and downs of regional patronage refunds. It also prevents the cooperative from looking worse than it actually is, due to weak joint ventures, extraordinary losses, and regional stock write-downs.

Local Savings

The local savings margin removes non-cash and cash patronage income, gains and losses on sales of assets, and income from joint ventures from the net profit (before tax) of the company. This gives the savings number that was actually generated by the local cooperative, without the income (loss) provided by outside sources.

Joint venture income is becoming a big issue as many local cooperatives branch out and diversify. Most cooperatives participate in joint ventures that are substantially different than their core business (i.e. a grain elevator entering a joint venture in a convenience store). This income would clearly be taken out in calculating local savings. However, there are instances where the joint venture may be so closely related to the cooperative’s core business that the joint venture income will be included in the local savings (i.e. a grain elevator entering a joint venture in a grain marketing alliance). If in doubt whether or not joint venture income would be included in local income, consult your auditor or lender.

Local Savings to Local Assets

Local savings to local assets summarizes the return your cooperative is getting from its assets. It can be improved by increasing margins, eliminating unproductive assets, or

reducing expenses. Again, local savings should be used to reflect the efficiencies of the local cooperative.

Return on Assets and Return on Equity

Return on assets is another measure that takes into account local assets and their relation to profits. It indicates whether or not local assets are being used efficiently and can be improved by reducing unproductive assets. Similarly, return on equity (or return on net worth) compares the pre-tax profit to total net worth. This is a measurement of how your cooperative is providing returns to your member/owners. It can be improved by increasing profits or by changing your debt structure.

Return on Local Equity

Return on local equity is calculated as pre-tax profits less dividends received from regional cooperatives as a ratio of local equity. Local equity is calculated as total equity less investments in regional cooperatives which are outside of the control of the local manager and board.

As you can see, all of these formulas are interrelated. The primary theme of profitability ratios is how your local cooperative is efficiently using its assets to generate profits and returns to members. You will notice these same themes of improving profits, local savings, and controlling local debt throughout the next set of ratios.

Debt Ratios

The debt ratios measure the solvency of your cooperative. The debt to assets ratio is another useful ratio, but will not be discussed in depth at this time. The two most important debt ratios are the debt service coverage ratio and local leverage.

Debt Service Coverage Ratio (DSC)

The Debt Service Coverage ratio (commonly just identified as DSC) measures the ability of the cooperative to generate cash flow to cover long-term obligations. This is a particularly important ratio to lenders because they want to see that the cooperative will be able to make their scheduled payments on debt. This ratio can be improved by increasing local savings or reducing debt that the cooperative holds.

The cooperative wants to exceed a ratio of 2.00 when the calculation is based on current debt payments. However, like all ratios, the benchmark for the DSC ratio is something that can be decided with the cooperative's lender in the loan documents.

Local Leverage

Local leverage is the principle measure of how much of the cooperative's total net worth is due to borrowed money. Notice that this is also a local ratio. The total net worth of the company less the investments the cooperative has in regional companies is the net worth number used in calculating this ratio. Reducing debt load, reducing equity retirements or increasing equity by issuing stock can improve it. The preferred way of improving this ratio is of course reducing the debt load of the company.

As a general rule of thumb, you do not want local leverage to exceed 50 percent, or half of the total net worth. However, the cooperative's primary lender is likely to set leverage standards in the loan agreement that must be maintained.

Liquidity Measures

Our final category of ratios is the liquidity measures. These measures look at the cash position of the company and how well the company can generate cash flows. The working capital ratio is the primary liquidity ratio at work here and is the one that will most often be used in the debt guidelines by lenders.

Working Capital

Working capital measures the capital that a company has on hand at any time to deal with any unexpected expenses. Like the local leverage ratio, guidelines for a cooperative's working capital are usually set forth in the loan documents of the company's primary lender. The working capital ratio can be improved by reducing accounts receivable, reducing short term debt, retaining a greater portion of allocated savings and avoiding financing long term assets with current liabilities. The working capital is an easy ratio to calculate, but it is a hard ratio to change. For this reason, it should be watched closely and tracked by the cooperative to assure that the working capital stays at a healthy level.

Days Accounts Receivable

The days accounts receivable measures the effectiveness and administration of the credit policy. This ratio is not interchangeable with the accounts receivable aging ratio discussed earlier. They are both important ratios that need to be tracked. The days accounts receivable measures how effective the administration of the credit policy is, where the accounts receivable aging ratio measures how often a customer pays an account off. These ratios compliment each other, and are most effective when considered together.

Using All Available Tools

A financial issue that your cooperative is dealing with today may be the result of a trend that began several months or years ago. By closely tracking financial ratios, understanding why they are important, and looking for trends in your company you can prevent a small problem from becoming a major issue for the cooperative. Every director uses common sense analysis in looking at these financials; however, to really understand the financials a director must also use common size analysis, peer analysis, ratio analysis, and benchmarks.

If directors still have questions regarding financial analysis of the cooperative, there are resources available to further explain it. Auditors and bankers are more than happy to help in creating a stronger cooperative financially. The Bill Fitzwater Chair at Oklahoma State University can answer questions or attend a board retreat to provide a more detailed explanation. Regional cooperatives also have staff members whose job is financial analysis. A free software program "Financial Ratio Analysis for Cooperatives" is available from Oklahoma State University.

Conclusion

Today's cooperative director is faced with a changing business form and members that demand transparency in the cooperatives financials. As the ambassadors of the members, it is the duty of directors to provide this transparency and

watch for damaging financial trends. Below is a supplement that provides the calculations for the major ratios that were discussed here as well as some benchmarks. Please review it and direct any additional questions to one of the sources mentioned earlier.

Common Ratio Calculations and Benchmarks

<i>Ratio</i>	<i>Benchmark</i>	<i>Ratio</i>	<i>Benchmark</i>
Turnover and Efficiency Ratios		Return On Local Assets	8% or Greater
Inventory Turnover	Farm Store/ Hardware: > 5-10	Pre-Tax Profits	
Cost of Goods Sold	Feed: >10-25	÷ Local Assets	
÷ Average Inventory	Bulk Fertilizer: > 2-5	Return On Net Worth	>10%
	Crop Production:> 7-10	(Also Called Return on Equity)	
	Bulk Fuel: >15-20	Pre Tax Profit	
		÷ Total Net Worth	
Efficiency Ratios		Return on Local Equity	
Operating Expenses To Sales		>10%	
Operating Expenses	<10%	Local savings/members equity	
÷ Sales			
Sales to Total Assets	>4-5	Debt Ratios	
Sales ÷ Total Assets		Debt Service Coverage	Greater than 2.00
		Available Cash Flow	
		÷ Debt Payments	
Personnel expense To Gross Income	30% - 40%	Debt/Total assets	< 50%
Fixed Expenses to Gross Income	25%-30%	Local Leverage	<30% - 40%
Other Expenses to Gross Income	25%	long Term Debt	
Bad Debt/sales	< .25%	÷ Net Worth	
		– Regional Investments	
Profitability Ratios		Local Equity/Total Equity	> 80%
Local Savings Margin	1.0% of Grain Sales	(Equity-Regional Investments)/Total Equity	
Profit before tax	and 2.5% of Supply Sales		
– Non-cash patronage income		Liquidity Ratios	
– Cash patronage income		Working Capital	
– Gain (loss) on asset sales		Current Assets	> (1.5% of Grain Sales
– Income from joint ventures		– Current Liabilities	+2.5% of Supply Sales)
÷ Total Sales		Current Ratio	
		Current Assets	1.5 for supply co-ops
Local Savings To Local Assets	8%	÷ Current Liabilities	
Local Savings		up to 2.0 for grain co-ops	
÷ Local Assets		Fixed assets/total assets	< 33%
Sales Trend	5%	Days Accounts Receivable	<30 – 45 days
(Current Sales-Prior Sales)/Prior Sales		Average Accounts Receivable	<20% over 60 days
		÷ Average Daily Credit Sales	
		Accounts Receivable over 60 days	< 20%

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, gender, age, religion, disability, or status as a veteran in any of its policies, practices, or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, Director of Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of 20 cents per copy. 0107 GH.