Critical Skills for Directors

- Reading and understanding financial statements
- Identifying the underlying causes
- Monitoring performance relative to budgets and benchmarks
- Understanding relationships between financial variables

Financial Tools for Directors

- Common sense analysis
- Common size analysis
- Ratio analysis
- Peer analysis
Common Sense Analysis

- The income statement is the report card for operating performance
- A good director seeks to understand what led to the final grade
- As you scan the income statement think about the factors that impact each category

The Basic Business Equation

Sales - Cost of Sales = Gross Margin
- Expenses = Local Net Savings + Regional Patronage
= Savings

Example Statement of Operations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$4,500,000</td>
</tr>
<tr>
<td>Cost of Sales</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Selling Expense</td>
<td>$ 462,000</td>
</tr>
<tr>
<td>General Expense</td>
<td>$ 230,000</td>
</tr>
<tr>
<td>Administrative Expense</td>
<td>$  50,000</td>
</tr>
<tr>
<td>Interest</td>
<td>$  150,000</td>
</tr>
<tr>
<td>Total Expense</td>
<td>$  900,000</td>
</tr>
<tr>
<td>Local Net Savings</td>
<td>$  100,000</td>
</tr>
</tbody>
</table>
Factors Impacting Sales
- Weather and the farm economy
- Competitors efforts
- Cooperative’s marketing efforts
- Loss or gain in trade territory
- Products and service mix
- For long term growth your cooperatives sales should increase every year

Factors Impacting Cost of Sales
- Product availability
- Success in using pre-booking, volume and cash discounts
- Loss of product through shrink, breakage or theft

Factors Impacting Expenses
- Labor usage and wage structure
- Age and maintenance of buildings and equipment
- Amount of inventory
- Credit Policy and Accounts receivable
Common Size Analysis

- Express income statement as percent of sales or balance sheet as percent of total assets
- Highlights most important expense areas
- Controls for year-to-year sales variations

Example: Standard Income Statement for (OK, 02-03 yr.)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>11,205,483</td>
<td>10,314,068</td>
</tr>
<tr>
<td>COGS</td>
<td>10,004,235</td>
<td>9,144,271</td>
</tr>
<tr>
<td>Gross Income</td>
<td>1,990,800</td>
<td>1,966,273</td>
</tr>
<tr>
<td>Personnel Exp</td>
<td>910,718</td>
<td>878,843</td>
</tr>
<tr>
<td>S,G &amp; A Exp</td>
<td>198,031</td>
<td>191,748</td>
</tr>
<tr>
<td>Lease Exp</td>
<td>35,188</td>
<td>38,718</td>
</tr>
<tr>
<td>Depreciation</td>
<td>224,280</td>
<td>226,028</td>
</tr>
<tr>
<td>Total Exp</td>
<td>1,867,593</td>
<td>1,816,989</td>
</tr>
<tr>
<td>Net Opp Profit</td>
<td>123,207</td>
<td>149,285</td>
</tr>
</tbody>
</table>

Percent of Sales Emphasizes Improvements and Problems

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>COGS</td>
<td>89.2%</td>
<td>88.7%</td>
</tr>
<tr>
<td>Gross Inc</td>
<td>17.8%</td>
<td>19.1%</td>
</tr>
<tr>
<td>Personnel Exp</td>
<td>8.1%</td>
<td>8.5%</td>
</tr>
<tr>
<td>S,G &amp; A Exp</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Lease Exp</td>
<td>.31%</td>
<td>.37%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>2.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Total Exp</td>
<td>16.7%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Net Opp Profit</td>
<td>1.1%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
Ratio Analysis

- Highlights strengths and problem areas
- Allows for comparison with industry benchmarks
- Helps to highlight positive or negative trends

Operating Financial Ratios

- Turnover Ratios
- Efficiency Ratios
- Profitability Ratios
- Debt Ratios

Account Receivable Turnover

- Sales/Accounts Receivable
- Measures the number of times the average account is collected within a year
- Improved by tightening the credit policy, collecting past due accounts, writing off doubtful accounts, more cash sales
- Analyze age of your accounts (maximum of 5% over your credit policy).
Inventory Turnover

- Cost of Goods Sold/Average Inventory
- Measures the number of times the inventory is sold during the year
- Improved by reducing inventory levels, increasing sales, eliminating “dead inventory” coordinating inventory between branches

Efficiency Ratios

- Operating Expense/Sales
- Total Assets/Sales
- Labor/Gross Income

Operating Expenses/Sales

- Measures if operating expenses are appropriate given your cooperative’s business level
- Improve by reducing expenses or increasing sales
- In 2003 for OK coops this was 16.67% compared to 17.62% in 2002
- In 2003 Sales of OK coops increased
Total Asset/Total Sales
- Measures whether your cooperative is efficiently using its assets to generate sales
- Improve by increasing sales or reducing unproductive assets
- In 2003 for OK coops this was 37.72% compared to 48.49% in 2002.

Labor/Gross Income Ratio
- =Salary plus fringe benefits/Gross Income
- Measures how efficiently your cooperative is using its human resources
- Improve by reducing hours or overtime, reducing employees, or increasing margins and income with no increase in employees
- One of the Key Ratios for Many Cooperatives
- In 2003 this was 45.75% for OK coops compared to 44.70% in 2002

Profitability Ratios
- Local Savings Margin
- Local Savings/Local Assets
- Return on Assets
- Return on Net Worth
Local Savings Margin
- \( n \) = (Profit before tax - non cash patronage income - cash patronage income - gain (loss) on asset sales - income from joint ventures) divided by Total Sales
- Improve by increasing margins, increasing service fees or reducing expenses

Local Savings/Local Assets
- Summarizes the return your cooperative is generating from its assets
- Controls for the ups and downs of regional patronage refunds
- Improve by increasing margins, eliminating unproductive assets or reducing expenses
- In 2003 Oklahoma coops were at 2.56% compared to 3.57% in 2002.

Return on Assets
- \( \text{Return on Assets} = \frac{\text{Pre-Tax Profits}}{\text{Local Assets}} \)
- Indicates if assets are being used efficiently
- Improve by improving profits or reducing unproductive assets
- In 2003 OK coops this was (9.53%) compared to (2.03%) in 2002
Return on Equity

- Pre-tax Profit/Total Net Worth
- The “bottom line” measurement of how your cooperative is providing returns to your member/owners
- Improve by improving profits or changing debt structure
- In 2003 for Oklahoma cooperatives this was (17.04%) compared to (3.57%) in 2002.

The Du-pont Formula

- Shows the relationship between ratios

\[ \text{ROE} = \text{Profit Margin} \times \text{Total Asset Turnover} \times \text{Leverage} \]

- ROE improves by increasing margins, using assets more effectively or prudently increasing leverage

Debt Ratios

- Debt Service Coverage
- Debt to Asset Ratio
- Local Leverage
Debt Coverage Ratio
- Available cash flow/Debt payments
- Measures ability of cooperative to generate cash flow to cover long term obligations
- Improve by increasing savings or reducing debt
- In 2003 Oklahoma coops was 2.75 compared to 2.52 in 2002.

Local Leverage
- Long Term Debt/Net Worth-Regional Investments
- Principal measure of leverage
- Improve by reducing debt load, reduce equity retirements or increasing equity by issuing stock
- In 2003 Oklahoma cooperatives was 16.49% compared to 14.92% in 2002

Liquidity Measures
- Working Capital
- Working Capital/Sales
- Days Accounts Receivable Outstanding
Working Capital

- = Current Assets - Current Liabilities
- Principal measure of liquidity
- Minimum requirements specified in loan covenants
- Improve by reducing accounts receivable, reducing short term debt, retaining a greater portion of allocated savings or avoiding financing long-term assets with current liabilities
- In 2003 Oklahoma cooperatives had $853,654 of W.C. compared to $839,314 in 2002

Days Accounts Receivable

- = Average accounts receivable / Average daily credit sales
- Measures the effectiveness and administration of the credit policy
- Improve by tightening credit policy, encouraging cash sales, collecting past due accounts, writing off doubtful accounts
- In 2003 Oklahoma cooperatives was 40.76% compared to 43.2% in 2002.

Peer Analysis

- Comparison of the firm with cooperatives of similar size and similar business types
- Excellent tool for highlighting your cooperatives strengths and weaknesses
Today's Directors Need a Full Toolbox

- Common sense analysis
- Common size analysis
- Ratio analysis
- Peer analysis

Outside Help is Available

- Auditor
- Banker
- OSU
- Regional Cooperatives

Financial Targets

- For a successful company
  - Local savings = 1% of Grain sales and 2.5% of Supply sales
  - Working capital = 1.5% of Grain sales and 7% of Supply sales
  - Local leverage = Less then 50%
  - Debt Service Coverage = More then 2.00 (this is based on cash flow/current debt payments)
OSU Financial Ratio Software

Enter your financial data

The program calculates ratios

The standards are shown
Red Flag - Green Flag shows your problem areas

Graphs of ratios are also provided