Wisconsin Dairy Ratio Benchmarking

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Benchmarking

- Monitor relationships of:
  - Income generation
  - Investment control
  - Debt control
  - Operating cost control

- Underlies important financial strengths and weaknesses
- Advisable not to use a single benchmark
- Important comparisons could be done using ROROA, ROROE, ATO, OPM, DuPont Analysis
Financial Indicators

- Sweet-15 financial measures: some people may use more, some people may use less
- Five clusters of financial indicators are always needed
  1. Liquidity
  2. Solvency
  3. Profitability
  4. Repayment Capacity
  5. Financial Efficiency
Wisconsin Dairy Farm Ratio Benchmarking Tool

- Sweet-15 financial analysis measures
- Benchmarking with +500 Wisconsin farms (AgFA)

Cluster analysis
- Year
- Herd size: 50, 100, 150, 300, >300
- Income/cow: $4,000, $4,500, $5,000, >$5,500
- Milk/cow: 16,000, 19,000, 22,000, >25,000

DuPont analysis
- ROROA = ATO * OPM
Wisconsin Dairy Farm Ratio Benchmarking Tool

Liquidity

Current Ratio

Your Current Ratio: 1.5

Net Working Capital (NWC)
Wisconsin Dairy Farm Ratio Benchmarking Tool
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Specific Farm Ratio

Industry Minimum Recommended Level

Distribution for Wisconsin Industry

Industry Better Recommended Level
**Wisconsin Dairy Farm Ratio Benchmarking Tool**

![Graphs showing the relationship between different farm ratios](image)

**Du Pont Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Rate of Return on Assets (ROROA)</th>
<th>Asset Turnover Ratio (ATO)</th>
<th>Operating Profit Margin (OPM) %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wisconsin Farms</strong></td>
<td>2.18</td>
<td>0.369</td>
<td>5.92</td>
</tr>
<tr>
<td><strong>Your Farm</strong></td>
<td>6</td>
<td>0.4</td>
<td>15</td>
</tr>
</tbody>
</table>

For every dollar invested in assets you had $0.06 of profit, for every dollar invested in assets you had $0.4 of revenue and for every dollar of total revenue you had $0.15 of profit. Consequently your rate of return of 6% is 0.4 of total revenue times 0.15 of profit.
# Wisconsin Dairy Farm Ratio Benchmarking Tool

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Wisconsin Ratio</th>
<th>Your Ratio</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio (CR)</td>
<td>5.56</td>
<td>1.5</td>
<td>22</td>
</tr>
<tr>
<td>Net Working Capital (NWC)</td>
<td>141797.08</td>
<td>50000</td>
<td>26</td>
</tr>
<tr>
<td>Debt/Asset Ratio (D/A)</td>
<td>24.16</td>
<td>35</td>
<td>28</td>
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<tr>
<td>Equity Asset Ratio (E/A)</td>
<td>77.86</td>
<td>65</td>
<td>24</td>
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<tr>
<td>Net Farm Income (NFI)</td>
<td>28614.42</td>
<td>50000</td>
<td>86</td>
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<tr>
<td>Return on Farm Assets (ROROA)</td>
<td>5.14</td>
<td>6</td>
<td>74</td>
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<tr>
<td>Return on Farm Equity (ROROE)</td>
<td>1.6</td>
<td>5</td>
<td>76</td>
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<tr>
<td>Operating Profit Margin (OPM)</td>
<td>5.92</td>
<td>15</td>
<td>70</td>
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<tr>
<td>Term Debt Coverage Ratio (TDCR)</td>
<td>152.34</td>
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<td>58</td>
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<tr>
<td>Replacement Margin (RM)</td>
<td>18381.32</td>
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<tr>
<td>Asset Turnover Ratio (ATO)</td>
<td>36.9</td>
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<td>80</td>
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<tr>
<td>Operating Expenses Ratio (OER)</td>
<td>67.7</td>
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<td>Depreciation Expenses Ratio (DER)</td>
<td>11.1</td>
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<td>Interest Expense Ratio (IER)</td>
<td>3.48</td>
<td>8</td>
<td>16</td>
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<tr>
<td>Net Farm Income Ratio (NFIR)</td>
<td>18.94</td>
<td>15</td>
<td>36</td>
</tr>
</tbody>
</table>
Financial

The Wisconsin Dairy Farm Ratio Benchmarking Tool

The Wisconsin Dairy Farm Ratio Benchmarking is a spreadsheet based tool especially created for this project. It computes dairy farm's financial status with +466 dairy farms in the State of Wisconsin.

Excel Spreadsheet (Download)
Web Based (Online)

WI Dairy Ratio Benchmarking Tool.mov

Wisconsin Dairy Farm Ratio Benchmarking Tool

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- Loan Calculator
- LGM Dairy Feed Equivalent Calculator