Financial Data Driven Decisions
Chris Bruynis, Assistant Professor & Extension Educator

Session Objectives
Learn how to take the information generated from the farm financial statements and the financial ratios to make business decisions for the farm.

Case Study
The following slides come from the Center for Farm Financial Management’s FINPACK training case study

Formulate Recommendation
Based on these measures, what advice would you give to this operator?
1. Exit farming
2. Find more off-farm income
3. Sell off assets
4. Increase acres
5. Reduce input costs
6. Add an alternative enterprise
7. Something else

Liquidity Measures

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Solvency Measures

Profitability Measures

Repayment Capacity Measures

Financial Efficiency Measures

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Looking Forward

Based on these measures, what advice would you give to this operator?

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Benchmarking

Calculate the

Current Ratio = CA/CL
Working Capital/Gross Revenues
Debt to Asset Ratio = Debt/Assets (market)

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Financial Troubleshooting

Efficiency – the observed relationship between input and outputs.
- Crop yields, pigs per litter, rate of gain
  Largely determined by a farmer’s managerial and technical skills

Scale – refers to the size of the business
- Problems usually occur when business is too small
  Determined by assessing the labor utilization

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<table>
<thead>
<tr>
<th></th>
<th>Farm A</th>
<th>Farm B</th>
<th>Farm C</th>
<th>Farm D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Cash Farm Income</td>
<td>1,304,598</td>
<td>374,405</td>
<td>669,464</td>
<td>146,793</td>
</tr>
<tr>
<td>Total Farm Cash Expenses</td>
<td>1,022,360</td>
<td>264,765</td>
<td>239,430</td>
<td>95,717</td>
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<tr>
<td>Net Cash Income from Operations</td>
<td>282,238</td>
<td>109,640</td>
<td>430,034</td>
<td>51,074</td>
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<tr>
<td>Current Assets</td>
<td>1,099,502</td>
<td>875,962</td>
<td>1,433,052</td>
<td>843,249</td>
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<tr>
<td>Current Liabilities</td>
<td>584,514</td>
<td>514,792</td>
<td>621,001</td>
<td>683,470</td>
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<tr>
<td>Working Capital</td>
<td>514,988</td>
<td>161,170</td>
<td>312,052</td>
<td>159,819</td>
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<tr>
<td>Total Assets (market)</td>
<td>3,461,428</td>
<td>1,613,646</td>
<td>3,445,713</td>
<td>2,489,914</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>1,545,209</td>
<td>1,000,658</td>
<td>1,777,355</td>
<td>1,374,635</td>
</tr>
</tbody>
</table>

Debt/Asset Ratio | 0.45 | 0.62 | 0.52 | 0.31 |

Financial Troubleshooting

Debt Structure – refers to the amount of outstanding debt, its term, and costs.

Too much debt forces untimely asset liquidation
Too little debt can limit size, efficiency, growth and earning capacity
**Financial Troubleshooting Diagnostic Tree**

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## Financial Troubleshooting Diagnostics

**A)** Efficiency OK, Scale OK, Debt OK
- 1) Review financial performance annually
- 2) Keep current on new technology
- 3) Tell them they are doing a good job
- 4) Potential for expansion
- 5) Also look at off-farm investments

**B)** Efficiency OK, Scale OK, Debt Not OK
- 1) Restructure debt—lengthen term or reduce interest rate to improve cash-flow
- 2) Sell assets to reduce debt
- 3) Reduce debt through "shelving" or write-off
- 4) Chapter 12 bankruptcy

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**C)** Efficiency OK, Scale Not OK, Debt OK
- 1) Cash flow problems will develop unless scale problem is addressed
- 2) Expand by adding an enterprise or expanding existing enterprises—use records to make expansion decision
- 3) Custom crop farming, Custom livestock feeding
- 4) Are they using their resources fully—machinery, labor?
- 5) Do they have the management ability and emotional stability to handle the additional stress of expansion?
- 6) Off-farm income—will this affect their efficiency in farming?
- 7) Retire

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**D)** Efficiency OK, Scale Not OK, Debt Not OK
- 1) Often a young farm family
- 2) Tell them they are doing a good management job
- 3) Least cost way of expansion—rent additional land or facilities or custom feed livestock—crop-share rent vs. cash rent, custom crop farming
- 4) Off-farm income—will this reduce their efficiency?
- 5) Scale back and obtain off-farm income

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**E)** Efficiency Not OK, Scale OK, Debt OK
- 1) Enterprise analysis—enterprise record keeping
- 2) Re-orient priorities—spend more time on management
- 3) Difficult to make a permanent improvement in management—may increase efficiency for short time
- 4) Use advisory services
- 5) Improve marketing
- 6) Is poor efficiency due to uncontrolled family living expenditures or due to high operation costs?
- 7) Do they like farming—should they quit while they still have good equity—are they afraid to make a change?
- 8) Establish a point where bank will not extend credit

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**F)** Efficiency Not OK, Scale OK, Debt Not OK
- 1) Must change two major factors to be successful—rather unlikely
- 2) Are the debt problems due to poor efficiency—will debt problem develop again if solved now?
- 3) Poor efficiency leads to other problems
- 4) Should they quit farming?

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**G)** Efficiency Not OK, Scale Not OK, Debt OK
- 1) Hobby farming
- 2) Should they leave before their equity is gone?
- 3) Can resources be employed better elsewhere?
- 4) Off-farm employment is vital

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Financial Troubleshooting Diagnostics

H) Efficiency *Not OK*, Scale *Not OK*, Debt *Not OK*
   1) Is it worth the hassle?
   2) What else is at risk—marriage, family, retirement?
   3) Get out while you can!

Questions?

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Summary

Even if everything is OK, there are still courses of action to take!

Troubleshooting a farm business requires an orderly approach, good data, and occasional intuitive leaps of faith.