

# Understanding Cooperative Financials and Impacts to Your Farm

## **Production & Marketing Risk Seminar**

Iowa State Bank and Sac Realty & Insurance

Sac City, Iowa

January 23, 2018

**Keri L. Jacobs, Asst. Professor and Extension Economist**

Iowa Institute for Cooperatives Endowed Economics Professor

# Why (Co-op) Financials Matter to Producers

- Co-op members are impacted by co-op financial performance via **equity** and **patronage**
- **Cash patronage** changes per bushel net marketing
- Producers who sell grain on credit sale contracts are **unsecured creditors**—this holds for sales to co-ops and independents

# Four Basic Conditions to Know About Your Co-op

- Is my co-op profitable?
- Does it have sufficient working capital to meet its obligations, including CSCs?
- How are we capitalized / leveraged?
- What is the company's allocation strategy?



## Evaluating A Company's Financial Position before Selling Grain on Deferred Price Contracts: A Simple Calculator

The following template will calculate the key financial indicators used to assess the financial position of a company for purposes of establishing a short-term credit relationship. **Users can enter the values from a firm's recent audited financial statements in the yellow highlighted cells. Financial measures in table 1 of FMR 1893 are calculated automatically and displayed in the 'Output Values' table (below right). Please refer to that publication for an explanation of these values.**

**START HERE: Is the firm you wish to evaluate a cooperative?**

### From the Balance Sheet

#### Assets

Current Assets

Net Fixed Assets (NFA)

\*intentionally blank\*

#### Liabilities and Equities

Current Liabilities

Long-Term Debt

Total Equity

### From the Operating (Income) Statement

Grain Sales

Total Sales

\*intentionally left blank\*

Net Income (Pre-tax)

Calculated value are formatted to indicate strength: **green = above recommendation;** **yellow = at or near recommendation;** **red = below recommendation.**

Output Values			
Measures	Calculated Value	Guideline	Qualifier
Working Capital	\$0	\$0	<i>approx. minimum</i>
Current Ratio	#DIV/0!	≥ 1.0	<i>varies</i>
Working Capital to Sales	#DIV/0!	#DIV/0!	<i>approx. minimum</i>
Leverage	#DIV/0!	≤ 50%	<i>varies</i>
Term Debt to NFA	#DIV/0!	≤ 50%	<i>varies</i>
Income to Sales	#DIV/0!	#DIV/0!	<i>approx. minimum</i>

*This file accompanies the publication, "Evaluating a Company's Financial Position before Selling Grain on Deferred Price Contracts" (FMR 1893)*

**Author: Keri L. Jacobs, Assistant Professor and Extension Economist**

*Department of Economics*

*Iowa State University*

*Last modified October 9, 2017*

Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran. Direct inquiries to Ross Wilburn, 515-294-1482, wilburn@iastate.edu

# Evaluating a Company's Financial Position before Selling Grain on Deferred Price Contracts

# Terminology - Profits

Profits / profitability – aka “savings”

**Local savings** = gross margins + other operating income – operating expenses

- ✓ Some of this is from member business, some from non-member business

**Net Savings** (before taxes) = local savings + other income

- ✓ Income from regional cooperatives, joint ventures, etc.

# Terminology – Uses of Profits

**Patronage** – a return of profits based on **use**

- Allocation of the net savings before taxes **from member business** to members in proportion to each member's use in that year.

**Retained Savings (Earnings)** – retaining non-member profits and designated portion of member profits; co-op pays the tax

**Dividends** – a return to **equity**

- Very few co-ops do this; dividends are to be subordinate to patronage



# Terminology – Designation of Patronage

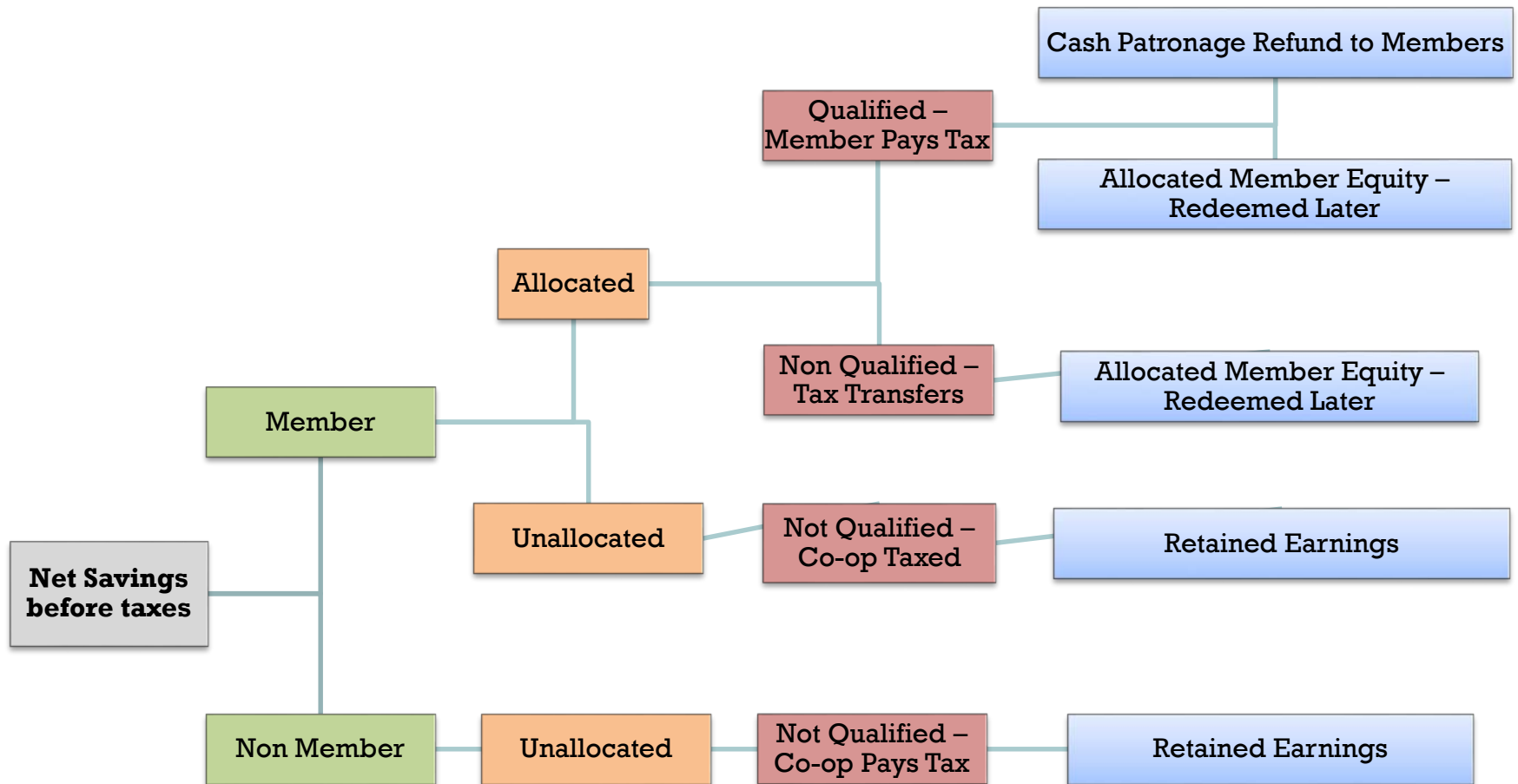
## Qualified Patronage Allocation

- Min 20% must be paid in cash, the remainder is retained as allocated member equity, member pays the tax when the allocation is made (no tax liability at redemption)

## Non-Qualified Patronage

- No cash, all is retained as allocated member equity, co-op pays the tax when the allocation is made, member pays the tax when redeemed (and co-op receives tax deduction)

# David Barton's Savings Distribution Tree





**Enterprise Mix** - proportion of grain and non-grain sales matters to working capital and profitability

**Gross Margins** – what was made on marketing grain and resale of inputs

**Local Savings** – profits generated from the co-op's own operations.

**Patronage Received** – income from regional co-ops (CIPCO, CHS, LOL, AGP, CoBank), combination of equity and cash.

	2015	2016
<b>Sales</b>		
Grain	\$110,898,520	\$72,721,940
Farm Supplies	\$36,995,170	\$40,077,100
<b>Total Sales</b>	<b>\$147,893,690</b>	<b>\$112,799,040</b>
<b>Cost of Goods Sold</b>		
	<b>\$140,314,000</b>	<b>\$105,545,570</b>
<b>Gross Margins</b>	<b>\$7,579,690</b>	<b>\$7,253,470</b>
<b>Other Income</b>		
Service Income	\$5,527,810	\$5,142,900
Finance Charges	\$702,040	\$566,220
<b>Total Other Income</b>	<b>\$6,229,850</b>	<b>\$5,709,120</b>
<b>Gross Income</b>	<b>\$13,809,540</b>	<b>\$12,962,590</b>
<b>Expenses</b>		
Personnel Expense	\$4,497,100	\$4,589,870
<b>Fixed Expenses</b>		
Interest	\$1,628,210	\$1,758,740
Depreciation	\$1,813,240	\$1,740,870
Insurance	\$261,130	\$251,400
Property Taxes	\$504,100	\$565,500
<b>Variable Expenses</b>	<b>\$2,066,520</b>	<b>\$3,338,980</b>
<b>Total Expenses</b>	<b>\$10,770,300</b>	<b>\$12,245,360</b>
<b>Local Savings (Loss)</b>	<b>\$3,039,240</b>	<b>\$717,230</b>
<b>Patronage Refunds Received</b>	<b>\$239,900</b>	<b>\$477,700</b>
<b>Net Savings (Loss)</b>	<b>\$3,279,140</b>	<b>\$1,194,930</b>

	<u>2015</u>	<u>2016</u>
<b>ASSETS</b>		
Current Assets		
Cash on hand	\$1,542,630	\$4,971,560
Accts Receivable	\$5,792,150	\$4,178,530
Inventories	\$6,090,410	\$4,697,820
Others	<u>\$2,362,500</u>	<u>\$777,560</u>
<b>Total Current Assets</b>	<b>\$15,787,690</b>	<b>\$14,625,470</b>
Fixed (Long Term) Assets		
Land	\$1,751,110	\$1,751,110
Building & Equipment	\$35,245,720	\$35,608,220
Less: Accum Depreciation	<u>\$13,930,270</u>	<u>\$15,605,890</u>
<b>Total Fixed Assets</b>	<b>\$23,066,560</b>	<b>\$21,753,440</b>
Other Assets		
Investments in Co-ops	<u>\$8,774,160</u>	<u>\$9,078,390</u>
<b>Total Assets</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>

## Assets: Investments in Regional Co-ops

This is the paper value of your co-op's equity in the regional (e.g., CHS, AGP, LOL, CoBank, CIPCO, etc.)

No control over when it is redeemed

Lenders discount this when calculating borrowing ability

This is net of newly allocated equity and the annual redemption (if any).

## Payables

- Customer prepays and grain payables
- These are the unsecured obligations of the co-op to producers
- CSCs not covered by the IA grain indemnity fund

	<u>2015</u>	<u>2016</u>
<b>LIABILITIES</b>		
Current Liabilities		
Accts Payable	\$1,887,010	\$82,530
Operating Line	\$0	\$0
Current portion of long-term note	\$1,420,000	\$1,420,000
Accrued Expenses	\$2,118,930	\$2,945,680
<b>Total Current Liabilities</b>	<u>\$5,425,940</u>	<u>\$4,448,210</u>
Term (Long Term) Liabilities		
Mortgages / Term Notes	\$9,219,800	\$7,799,800
Member Notes	\$0	\$0
<b>Total Long Term Liabilities</b>	<u>\$9,219,800</u>	<u>\$7,799,800</u>
<b>EQUITY</b>		
Common Stock	\$156,500	\$156,500
Deferred Patronage Refunds	\$24,046,010	\$23,980,270
Retained Earnings	\$8,780,160	\$9,072,520
<b>Total Equity</b>	<u>\$32,982,670</u>	<u>\$33,209,290</u>
<b>Total Liabilities and Equity</b>	<u>\$47,628,410</u>	<u>\$45,457,300</u>

## Equity

- Member-provided
- Member equity – capital in an individual’s name, will eventually be paid back (redeemed)
  - Revolving equity (aka “Age of Equity”)
  - Age of Patron
- Retained savings – not allocated; permanent equity

	<u>2015</u>	<u>2016</u>
<b>LIABILITIES</b>		
Current Liabilities		
Accts Payable	\$1,887,010	\$82,530
Operating Line	\$0	\$0
Current portion of long-term note	\$1,420,000	\$1,420,000
Accrued Expenses	<u>\$2,118,930</u>	<u>\$2,945,680</u>
<b>Total Current Liabilities</b>	<b>\$5,425,940</b>	<b>\$4,448,210</b>
Term (Long Term) Liabilities		
Mortgages / Term Notes	\$9,219,800	\$7,799,800
Member Notes	<u>\$0</u>	<u>\$0</u>
<b>Total Long Term Liabilities</b>	<b>\$9,219,800</b>	<b>\$7,799,800</b>
<b>EQUITY</b>		
Common Stock	\$156,500	\$156,500
Deferred Patronage Refunds	\$24,046,010	\$23,980,270
Retained Earnings	<u>\$8,780,160</u>	<u>\$9,072,520</u>
<b>Total Equity</b>	<b><u>\$32,982,670</u></b>	<b><u>\$33,209,290</u></b>
<b>Total Liabilities and Equity</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>

## Local Equity

- The amount of equity that the co-op **controls**
- Calc: **Local Equity = Total Equity – Investments in Other Co-ops**

Potential issues of allocating more equity than is controlled

### Fixed (Long Term) Assets

Land	\$1,751,110	\$1,751,110
Building & Equipment	\$35,245,720	\$35,608,220
Less: Accum Depreciation	<u>\$13,930,270</u>	<u>\$15,605,890</u>
<b>Total Fixed Assets</b>	<b>\$23,066,560</b>	<b>\$21,753,440</b>

### Other Assets

Investments in Co-ops	<u>\$8,774,160</u>	<u>\$9,078,390</u>
-----------------------	--------------------	--------------------

<b>Total Assets</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>
---------------------	---------------------	---------------------

### Term (Long Term) Liabilities

Mortgages / Term Notes	\$9,219,800	\$7,799,800
Member Notes	\$0	\$0
<b>Total Long Term Liabilities</b>	<u>\$9,219,800</u>	<u>\$7,799,800</u>

### EQUITY

Common Stock	\$156,500	\$156,500
Deferred Patronage Refunds	\$24,046,010	\$23,980,270
Retained Earnings	<u>\$8,780,160</u>	<u>\$9,072,520</u>
<b>Total Equity</b>	<u>\$32,982,670</u>	<u>\$33,209,290</u>

<b>Total Liabilities and Equity</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>
-------------------------------------	---------------------	---------------------



# IS MY CO-OP PROFITABLE?



Center for Agricultural and Rural Development

IOWA STATE UNIVERSITY  
Department of Economics / Extension and Outreach

# Local Return on Sales

✓ Indicates degree to which co-op is generating profits at the local level from its sales

Calc: = Local savings ÷ Total sales

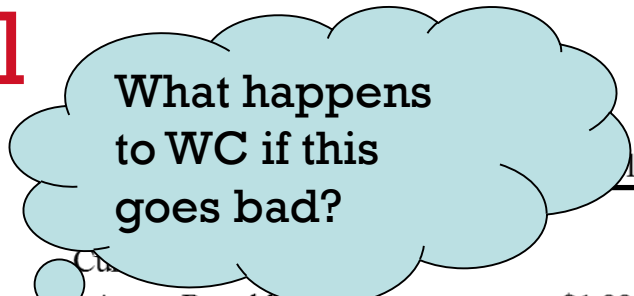
- =  $\$.7 \div \$112.8 = 0.6\%$
- Guideline: 1% of grain sales + 2.5% of non-grain sales

	2015	2016
<b>Sales</b>		
Grain	\$110,898,520	\$72,721,940
Farm Supplies	\$36,995,170	\$40,077,100
Total Sales	\$147,893,690	\$112,799,040
Cost of Goods Sold	\$140,314,000	\$105,545,570
Gross Margins	\$7,579,690	\$7,253,470
<b>Other Income</b>		
Service Income	\$5,527,810	\$5,142,900
Finance Charges	\$702,040	\$566,220
Total Other Income	\$6,229,850	\$5,709,120
Gross Income	\$13,809,540	\$12,962,590
<b>Expenses</b>		
Personnel Expense	\$4,497,100	\$4,589,870
Fixed Expenses		
Interest	\$1,628,210	\$1,758,740
Depreciation	\$1,813,240	\$1,740,870
Insurance	\$261,130	\$251,400
Property Taxes	\$504,100	\$565,500
Variable Expenses	\$2,066,520	\$3,338,980
Total Expenses	\$10,770,300	\$12,245,360
Local Savings (Loss)	\$3,039,240	\$717,230
Patronage Refunds Received	\$239,900	\$477,700
<b>Net Savings (Loss)</b>	<b>\$3,279,140</b>	<b>\$1,194,930</b>

**DOES IT HAVE SUFFICIENT  
WORKING CAPITAL?**



# Working Capital



	<u>2015</u>	<u>2016</u>		<u>2015</u>	<u>2016</u>
<b>ASSETS</b>					
<b>Current Assets</b>					
Cash on hand	\$1,542,630	\$4,971,560	Accts Payable	\$1,887,010	\$82,530
Accts Receivable	\$5,792,150	\$4,178,530	Operating Line	\$0	\$0
Inventories	\$6,090,410	\$4,697,820	Current portion of long-term note	\$1,420,000	\$1,420,000
Others	\$2,362,500	\$777,560	Accrued Expenses	\$2,118,930	\$2,945,680
<b>Total Current Assets</b>	<b>\$15,787,690</b>	<b>\$14,625,470</b>	<b>Total Current Liabilities</b>	<b>\$5,425,940</b>	<b>\$4,448,210</b>

- Indicates availability of funds to meet current obligations in a timely manner

Calculation: **Current Assets – Current Liabilities**

- ✓ **Grain guideline:** seasonal operating line 5 – 7 times WC
- ✓ **FS guideline:** seasonal operating line 3 – 5 times WC

Alternative (adjusted) Calculation: **WC ÷ Sales = \$10.2 / \$112.8 = 9%**

- ✓ **Guideline:** 7% of non-grain sales + 1.5% of grain sales

# **HOW ARE WE CAPITALIZED / LEVERAGED?**

# Local Leverage

✓ Indicates ability to meet long-term financial obligations

Calculation: **Long Term Debt ÷ Local Equity = \$7.8 ÷ (\$33.2 - \$9) = 32%**

- Guideline: < 50% (<0.50), but depends on revenues generated

## Fixed (Long Term) Assets

Land	\$1,751,110	\$1,751,110
Building & Equipment	\$35,245,720	\$35,608,220
Less: Accum Depreciation	<u>\$13,930,270</u>	<u>\$15,605,890</u>
<b>Total Fixed Assets</b>	<b>\$23,066,560</b>	<b>\$21,753,440</b>

## Other Assets

Investments in Co-ops	<u>\$8,774,160</u>	<u>\$9,078,390</u>
-----------------------	--------------------	--------------------

<b>Total Assets</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>
---------------------	---------------------	---------------------

## Term (Long Term) Liabilities

Mortgages / Term Notes	\$9,219,800	\$7,799,800
Member Notes	<u>\$0</u>	<u>\$0</u>
<b>Total Long Term Liabilities</b>	<b>\$9,219,800</b>	<b>\$7,799,800</b>

## EQUITY

Common Stock	\$156,500	\$156,500
Deferred Patronage Refunds	\$24,046,010	\$23,980,270
Retained Earnings	<u>\$8,780,160</u>	<u>\$9,072,520</u>
<b>Total Equity</b>	<b>\$32,982,670</b>	<b>\$33,209,290</b>

<b>Total Liabilities and Equity</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>
-------------------------------------	---------------------	---------------------

# Term Debt to Net Fixed Assets

- ✓ Indicates degree to which term debt is financing NFA and whether it matches life expectancy of assets – collateralization factor

Calculation: **Long Term Debt ÷ Net Fixed Assets = \$7.8 ÷ \$21.7 = 36%**

- **Guideline: < 50% (<0.50), but depends on revenues generates from assets**

Land	\$1,751,110	\$1,751,110	Mortgages / Term Notes	\$9,219,800	\$7,799,800
Building & Equipment	\$35,245,720	\$35,608,220	Member Notes	\$0	\$0
Less: Accum Depreciation	\$13,930,270	<del>\$15,605,890</del>	<b>Total Long Term Liabilities</b>	\$9,219,800	<b>\$7,799,800</b>
<b>Total Fixed Assets</b>	\$23,066,560	<b>\$21,753,440</b>			
Other Assets			<b>EQUITY</b>		
Investments in Co-ops	\$8,774,160	\$9,078,390	Common Stock	\$156,500	\$156,500
			Deferred Patronage Refunds	\$24,046,010	\$23,980,270
			Retained Earnings	\$8,780,160	\$9,072,520
			<b>Total Equity</b>	<b>\$32,982,670</b>	<b>\$33,209,290</b>
<b>Total Assets</b>	\$47,628,410	\$45,457,300	<b>Total Liabilities and Equity</b>	\$47,628,410	\$45,457,300

# WHAT IS THE ALLOCATION STRATEGY?

# Equity

How much equity is allocated to members?

$$= \$24.1 \div \$33.2 = 73\%$$

Have they allocated “too much”—was regional equity allocated (member equity divided by local equity)?

$$= \$24.1 \div (\$33.2 - \$9.0) = 99.5\%$$

Other Assets

Investments in Co-ops	<u>\$8,774,160</u>	<u>\$9,078,390</u>
-----------------------	--------------------	--------------------

<b>Total Assets</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>
---------------------	---------------------	---------------------

	<u>2015</u>	<u>2016</u>
<b>LIABILITIES</b>		
<b>Current Liabilities</b>		
Accts Payable	\$1,887,010	\$82,530
Operating Line	\$0	\$0
Current portion of long-term note	\$1,420,000	\$1,420,000
Accrued Expenses	<u>\$2,118,930</u>	<u>\$2,945,680</u>
<b>Total Current Liabilities</b>	<b>\$5,425,940</b>	<b>\$4,448,210</b>
<b>Term (Long Term) Liabilities</b>		
Mortgages / Term Notes	\$9,219,800	\$7,799,800
Member Notes	<u>\$0</u>	<u>\$0</u>
<b>Total Long Term Liabilities</b>	<b>\$9,219,800</b>	<b>\$7,799,800</b>
<b>EQUITY</b>		
Common Stock	\$156,500	\$156,500
Deferred Patronage Refunds	\$24,046,010	\$23,980,270
Retained Earnings	<u>\$8,780,160</u>	<u>\$9,072,520</u>
<b>Total Equity</b>	<b><u>\$32,982,670</u></b>	<b><u>\$33,209,290</u></b>
<b>Total Liabilities and Equity</b>	<b>\$47,628,410</b>	<b>\$45,457,300</b>

# Parting Thoughts

- Financials best viewed as **trends over time**
- Makes sense to know **who you are doing business with** (co-op or not)
- Overall, co-op financials still suggest strong balance sheets and available WC for short-term deficits.



Keri L. Jacobs

e: [kljacobs@iastate.edu](mailto:kljacobs@iastate.edu)

[www.econ.iastate.edu/people/keri-jacobs](http://www.econ.iastate.edu/people/keri-jacobs)