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**Riverland**  
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*A Technical & Community College*



**Minnesota Department of Education  
Department of Agriculture Education  
(University of Minnesota)**

**Minnesota State Colleges and  
Universities**

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(University of Minnesota)**

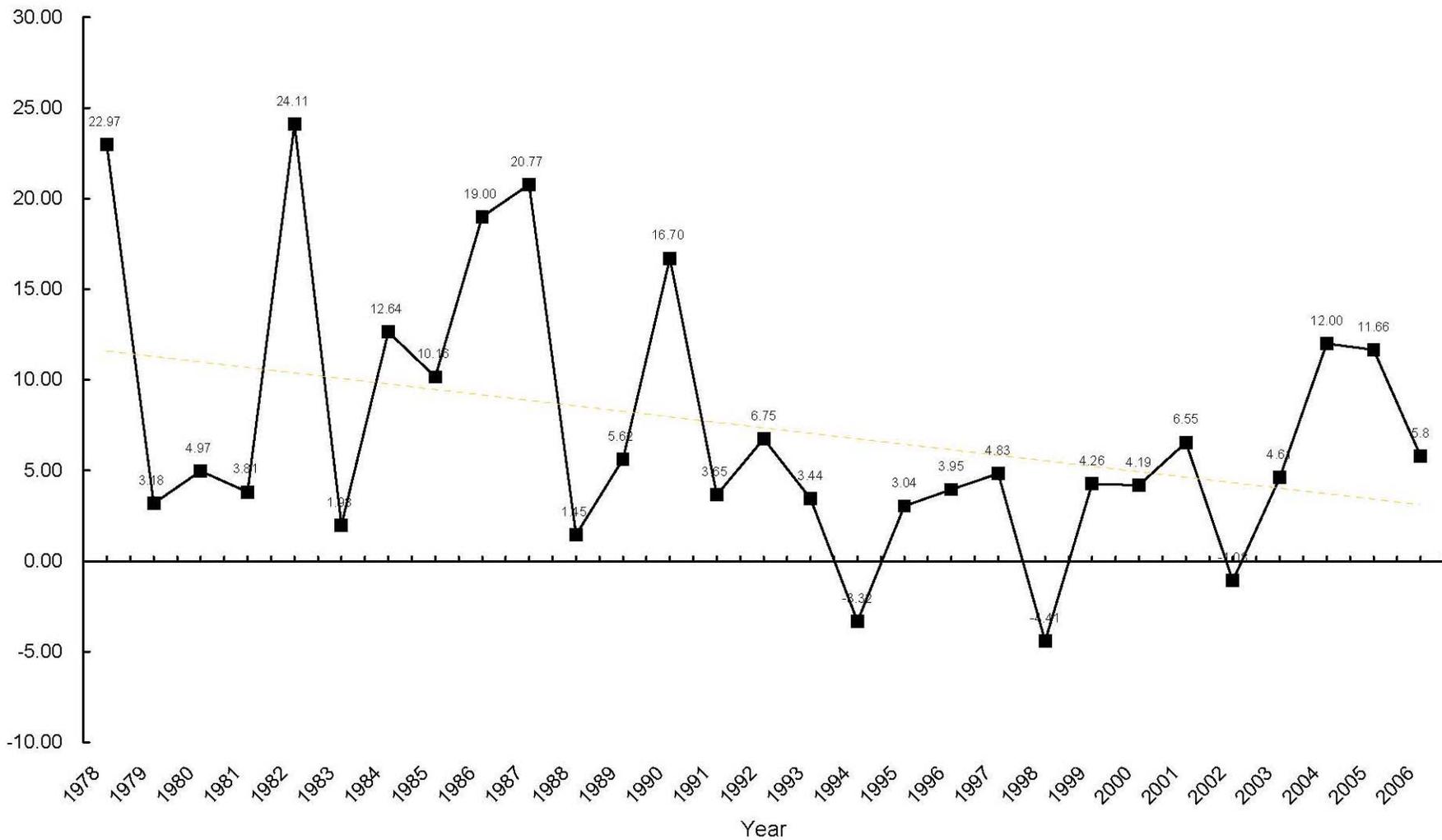
**Using the FinPack and RankEm Central**

**Program Serves over 4000 Farm  
Businesses Each Year**

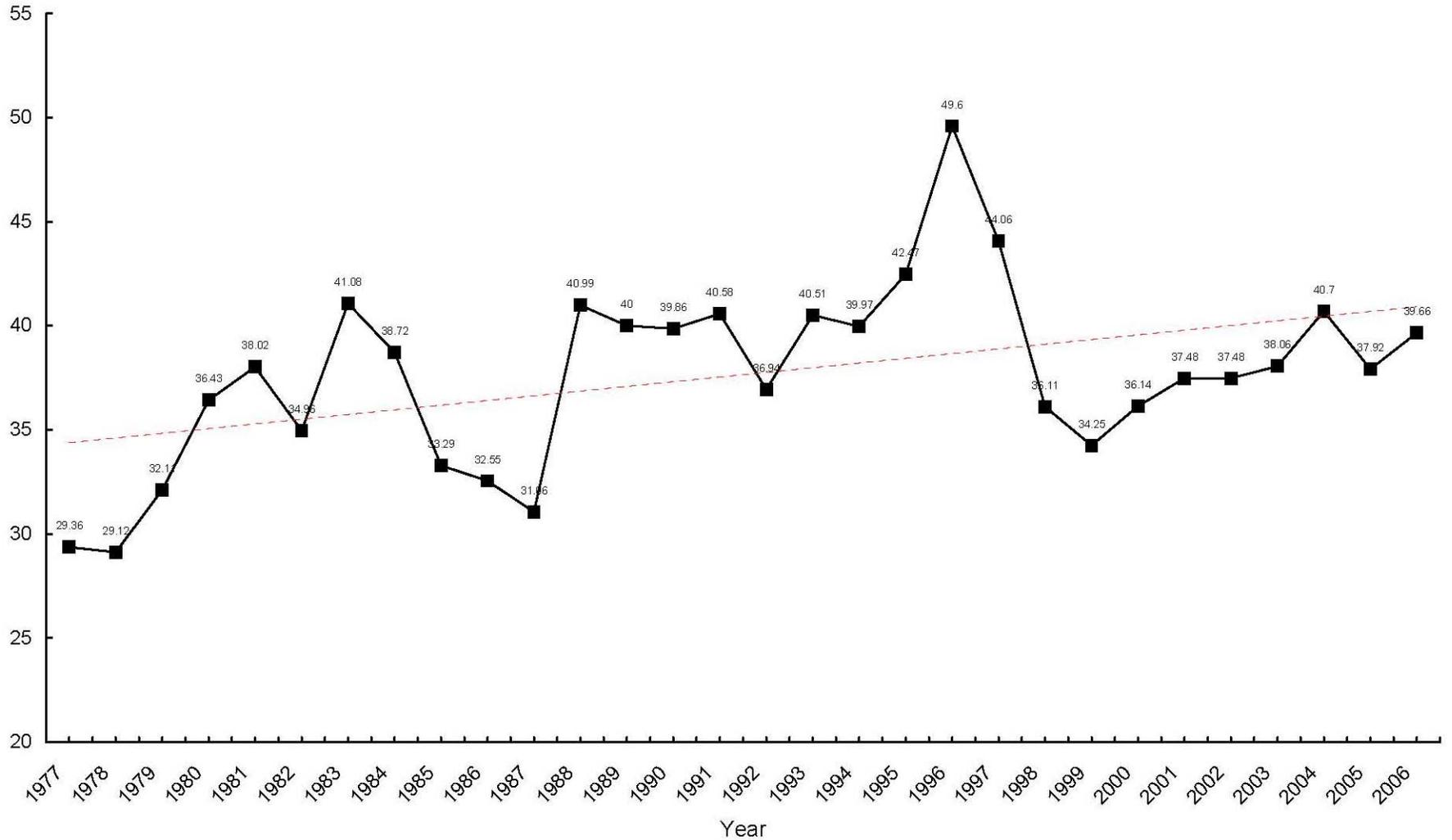
**Six Regional Analysis Centers  
In Minnesota**



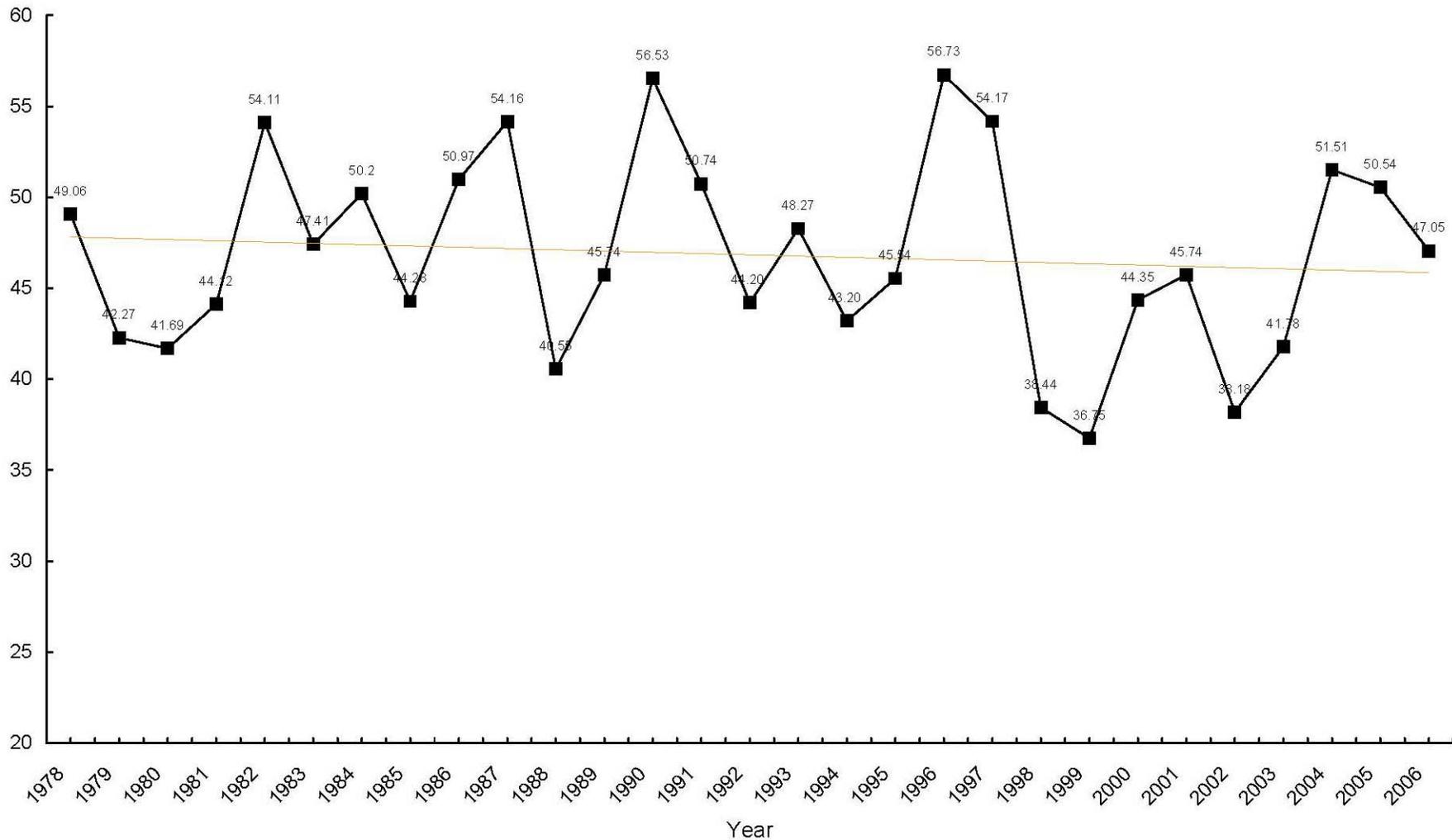
### Returns Farrow To Finish Per Cwt, Minnesota



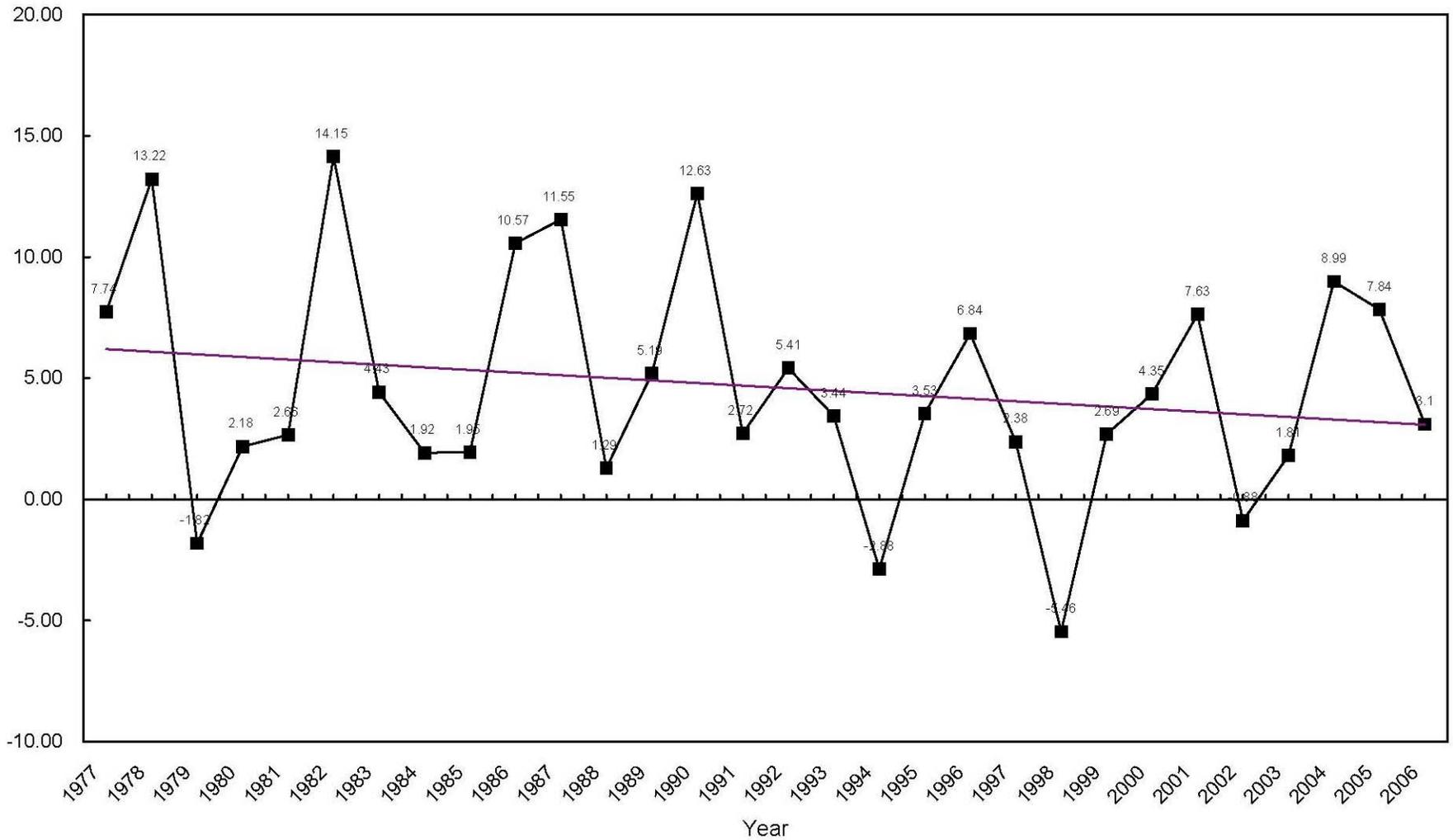
# Farrow To Finish Total Listed Costs/Cwt., Minnesota



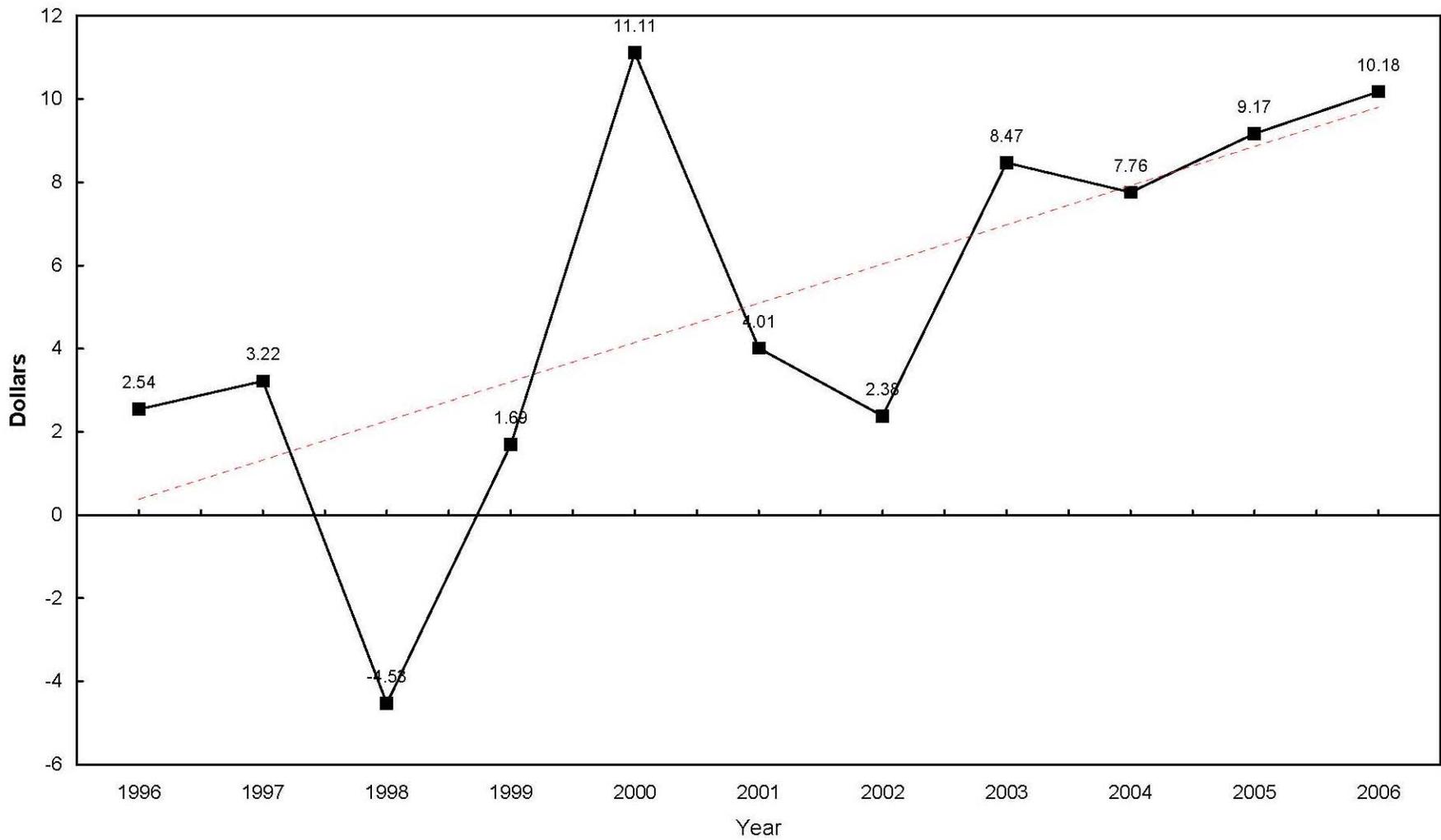
### Farrow To Finish Average Price Received, Minnesota



## Returns Finishing Hogs Per Cwt, Minnesota



### Returns Feeder Pig Production Per Pig, Minnesota





#08184

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**\$100**  
RETAIL VALUE

# Financial Analysis Tool

## System Requirements:

Windows 98/NT or higher  
200Mhz Intel Processor or higher  
32MB RAM or higher  
18-bit color depth or higher  
Sound Blaster compatible sound card



To view this e-Learning program optimally on your computer, you will need the following:

Screen Resolution: 800x600 (Recommended)

Browser: Internet Explorer 5.0 or higher

Macromedia Flash Player 5 or higher (for a free download of the current version, visit [http://www.macromedia.com/shockwave/download/download.cgi?P1\\_Prod\\_Version=ShockwaveFlash](http://www.macromedia.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash))

Adobe Reader 5 or higher (for a free download of the current version, visit <http://www.adobe.com/products/acrobat/readstep2.html>)

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# Financial Analysis Tool

[Main Menu](#)



[Main Menu](#)

## Welcome to Business Unit Financial Measures

This tool is meant to help you calculate and understand the financial measures by which your business will be evaluated by bankers, investors, and others in the financial community.

This tool will also provide data which you can use in making important decisions such as deciding whether or not to expand your business.

If you are already familiar with financial measures, start a new set of finances or view any of your old sets of finances.

To learn the basics of Business Unit Financial Measures and how it affects decisions about future business growth, click the "Finance Measures Tutorial".

[Finance Measures Tutorial](#)

[New Scorecard](#)

[Open Previous Scorecard](#)

[Answers To Your Questions](#)

[Ask Yourself These Questions](#)



[Glossary](#)

Save a New Scorecard





# Financial Analysis Tool

Main Menu



[Main Menu](#) > [Scorecard](#) > Your Numbers

## Your Numbers

\$ <input type="text" value="0"/>	<a href="#">Total Ending Farm Assets</a>	\$ <input type="text" value="0"/>	<a href="#">Depreciation Expense</a>
\$ <input type="text" value="0"/>	<a href="#">Total Ending Farm Liabilities</a>	\$ <input type="text" value="0"/>	<a href="#">Farm Interest Expense</a>
\$ <input type="text" value="0"/>	<a href="#">Total Ending Current Farm Assets</a>	\$ <input type="text" value="0"/>	Interest On Term Debt
\$ <input type="text" value="0"/>	<a href="#">Total Ending Current Farm Liabilities</a>	\$ <input type="text" value="0"/>	<a href="#">Principle Payment Term Debt</a>
\$ <input type="text" value="0"/>	<a href="#">Total Beginning Farm Assets</a>	\$ <input type="text" value="0"/>	<a href="#">Value Of Farm Production</a>
\$ <input type="text" value="0"/>	<a href="#">Total Beginning Farm Liabilities</a>	\$ <input type="text" value="0"/>	<a href="#">Owner Withdrawals</a>
\$ <input type="text" value="0"/>	<a href="#">Net Farm Income From Operations</a>	\$ <input type="text" value="0"/>	<a href="#">Income Taxes Paid</a>
\$ <input type="text" value="0"/>	<a href="#">Misc Non Farm Income</a>	\$ <input type="text" value="0"/>	<a href="#">Total Farm Operating Expenses</a>
\$ <input type="text" value="0"/>	<a href="#">Off Farm Employment Income</a>	\$ <input type="text" value="0"/>	<a href="#">Principle Payment Non Farm</a>
		\$ <input type="text" value="0"/>	<a href="#">Current Portion Capital Leases</a>

Please save your numbers before going on.

Save

Calculate



Glossary

Save a New Scorecard





# Financial Analysis Tool

[Main Menu](#)

[Main Menu](#) > Tutorial Introduction

## Welcome to Business Unit Financial Measures

This Financial Analysis Tool rates your farm finances according to the "Sweet 16" business measures. In this tutorial, we'll explain how each of these measures is calculated.

Along the way, you'll get a chance to enter information used to calculate each of the measures.

When you're done, you'll be able to save all your information in a scorecard. You can then open your scorecard to check your ratings.

If you'd like, you can skip the Tutorial and start a new scorecard by clicking the "New Scorecard" Icon or button.

Categories	Score
<a href="#">Liquidity</a>	★★★
<a href="#">Solvency(Market)</a>	★★★
<a href="#">Profitability</a>	★★★★
<a href="#">Repayment Capacity</a>	★★
<a href="#">Financial Efficiency</a>	★★★★


[New Scorecard](#)

[Glossary](#)



[Main Menu](#) > [Tutorial Index](#) > Liquidity

## Liquidity

Liquidity is the ability of the business to generate cash to meet its financial obligations as they come due during the year. Liquidity implies the ability to convert assets into cash or obtain cash.

The business should generate enough cash flow to pay family living, business expenses, taxes, capital items, and debt payments on time.

Working capital and the Current Ratio are the two most common measures of liquidity.

[1. Current Ratio](#)

[2. Working Capital](#)

[Glossary](#)

[Main Menu](#) > [Tutorial Index](#) > [Liquidity](#) > Current Ratio**Purpose**

Shows the value of current assets relative to current liabilities

**Formula**

$$\text{Current Ratio} = \frac{\text{Total Ending Current Farm Assets}}{\text{Total Ending Current Farm Liabilities}}$$

$$\text{[Input Box]} = \frac{\$ \text{[Input Box]}}{\$ \text{[Input Box]}}$$

**Example**

$$1.305 = \frac{\$322,014}{\$246,712}$$

[View Analysis](#)[Glossary](#)[Save a New Scorecard](#)



## Financial Analysis Tool

[Main Menu](#)

[Main Menu](#) > [Tutorial Index](#) > [Liquidity](#) > Working Capital

### Purpose

Adequate Working Capital varies by type and size of farm enterprise. Working Capital measures the purchasing power of a business after the sale of all current assets and the payment of all current debts. This measure tells us the amount of short term working capital available.

### Formula

$$\text{Working Capital} = \frac{\text{Total Ending Current Farm Assets}}{\text{Total Ending Current Farm Liabilities}}$$

= \$  - \$

### Example

$$\$75,302 = 322,014 - 246,712$$

[View Analysis](#)[Glossary](#)

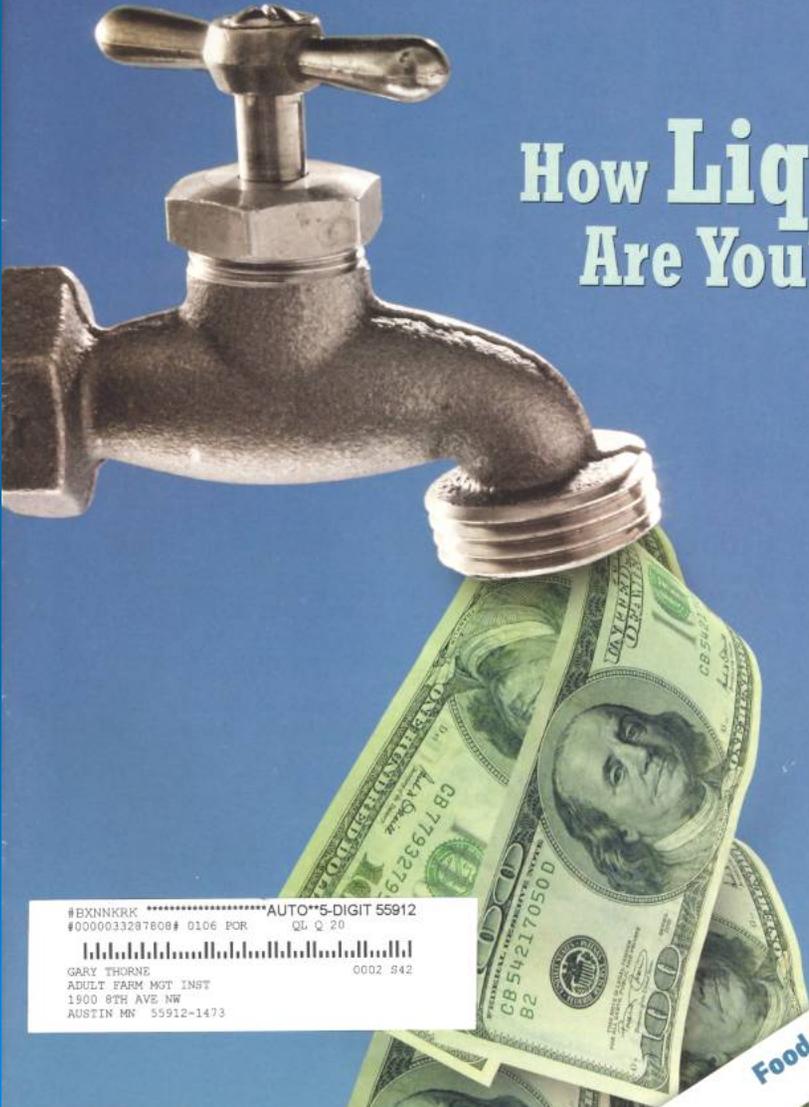
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Vance

September 2006



## How Liquid Are You?...14

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|||||

GARY THORNE  
ADULT FARM MGT INST  
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AUSTIN MN 55912-1473

0002 S42

**Food Systems Insider**  
in this issue

\$6.95

# Financial Warning Signs



# Credit Score

60% of people are 650 and higher

Scale	% Delinquent Payments
800 and above	<1%
700 to 800	5% or less
600 to 650	31%
500 and below	87%

Return		Summary of Key Ratio Calculations and Benchmarks		
<b>Repayment Analysis</b>				
	Calculation	Green	Yellow	Red
Term Debt and Lease Coverage Ratio	$[(NFIFO^* + \text{Gross Non-Farm Revenue} + \text{Depreciation Expense} + \text{Interest on Term Debts and Capital Leases}) - \text{Income Tax Expense} - \text{Family Living Withdrawals}] / \text{Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases}$	>150%	110% to 150%	<110%
Debt Payment / Income Ratio	$\text{Scheduled Annual Principal and Interest Payments on Term Debt and Capital Leases} / (NFIFO^* + \text{Gross Non-Farm Revenue} + \text{Depreciation Expense} + \text{Interest on Term Debts and Capital Leases})$	<25%	25% to 50%	>50%
<b>Liquidity Analysis</b>				
Current Ratio	Total Current Farm Assets / Total Current Farm Liabilities	> 1.50	1.00 to 1.50	< 1.00
Working Capital	Total Current Farm Assets - Total Current Farm Liabilities	compare to business expenses, absolute amount depends on scope of operation		
Working Capital/VFP	Working Capital / Value of Farm Production	> 30%	10% to 30%	<10%
<b>Solvency Analysis</b>				
Debt / Asset Ratio (mostly owned)	Total Farm Liabilities / Total Farm Assets	<20%	20% to 60%	>60%
Debt / Asset Ratio (mostly rented/leased)	Total Farm Liabilities / Total Farm Assets	<30%	30% to 70%	>70%
Equity / Asset Ratio (mostly owned)	Total Farm Equity / Total Farm Assets	>80%	40% to 80%	<40%
Equity / Asset Ratio (mostly rented/leased)	Total Farm Equity / Total Farm Assets	>70%	30% to 70%	<30%
Debt / Equity Ratio (mostly owned)	Total Farm Liabilities / Total Farm Equity	<25%	25% to 150%	>150%
Debt / Equity Ratio (mostly rented/leased)	Total Farm Liabilities / Total Farm Equity	<42%	42% to 230%	>230%
<b>Profitability Analysis</b>				
Rate of Return on Farm Assets (ROA) (mostly owned)	$(NFIFO^* + \text{Farm Interest Expense} - \text{Operator Management Fee}) / \text{Average Total Farm Assets}$	>5%	1% to 5%	<1%
Rate of Return on Farm Assets (ROA) (mostly rented / leased)	$(NFIFO^* + \text{Farm Interest Expense} - \text{Operator Management Fee}) / \text{Average Total Farm Assets}$	>11%	3% to 11%	<3%
Rate of Return on Farm Equity (ROE)	$(NFIFO^* - \text{Operator Management Fee}) / \text{Average Total Farm Equity}$	look at trends and compare to other farm and non-farm investments		
Operating Profit Margin Ratio	$(NFIFO^* + \text{Farm Interest Expense} - \text{Operator Management Fee}) / VFP$	>25%	10% to 25%	<10%
<b>Financial Efficiency</b>				
Asset Turnover Ratio	$VFP / \text{Average Total Farm Assets}$	depends heavily on type of operation and whether it is owned / leased		
Operating Expense / VFP Ratio (mostly owned)	Operating Expenses [excluding interest and depreciation] / VFP	<55%	55% to 65%	>65%
Operating Expense / VFP Ratio (mostly rented / leased)	Operating Expenses [excluding interest and depreciation] / VFP	<65%	65% to 75%	>75%
Depreciation Expense Ratio	Depreciation Expense / VFP	compare to capital replacement and term debt repayment margin		
Interest Expense Ratio	Interest Expense / VFP	<10%	10% to 20%	>20%
Net Farm Income From Operations Ratio	$NFIFO^* / VFP$	look at trends, varies due to cyclical nature of agricultural prices and incomes		
<small>Modified from David Kohl  * NFIFO = Net Farm Income From Operations excluding gains or losses from the disposal of farm capital assets  These are very general benchmarks. You should use Financial Characteristics of Illinois Farms for more detailed peer groups and the respective financial ratios (<a href="http://www.farmdoc.uiuc.edu/finance/">www.farmdoc.uiuc.edu/finance/</a>).  Value of Farm Production (VFP) = Gross Revenue - Purchased Feed - Purchased Market Livestock</small>				

# The January 1, 2007 Balance Sheet

	SE	SC&SW	Statewide (Hog)	Statewide (Hog and Crop)
Number of farms	453	810	93	207
Current Ratio	1.63	1.61	2.11	2.01
Working Capital	132,535	135,625	454,187	341,283

# 2006 Farrow to Finish Average Per Cwt Produced

Feed Cost	22.43
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Lbs. Feed/Lbs. Grain	3.31
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Avg. weight sold	258
------------------	-----

Avg. price/cwt	47.05
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# 2006 Feed Cost/Cwt Farrow to Finish

Item	Quantity	Cost/Cwt
Corn	3.39 bu	6.97
Complete	85.10 lbs	7.68
Pro/Vit/Min	53.25 lbs	7.54
Other Feed Stuff	.89 lbs	.24

# 2006 Farrow to Finish/Cwt

**Feed Cost**                      **\$ 22.43**

**Total Cost\***                      **\$ 39.66**

**\*56.56% of Total Cost was Feed**

# 2006 Finish Feeder Pigs Per Cwt Produced

Item	Quantity	Cost
Corn	2.12 bu	4.34
Complete Feed	147.09 lbs	9.15
Pro/Vit/Min	36.98 lbs	4.49
Other Feed Stuff	.94	.15



# **Feed Cost May Not Drive the Industry as it Once Did**

**Hog – Corn Ratio?**

**Given**

**Near record hog futures?**

**A ratio of only 16 to 18?**

**Producers reaction?**

# Finisher Analysis



# Iowa State University (ISU)

**Estimated Cost and Returns to livestock feeding enterprises have been a source of cost and profit since the 1960's.**

**Dr. John Lawrence and staff have just completed a major overhaul to the estimates.**

# **New Base**

**1200 head sow herd**

**Modern Buildings and Equipment**

**Pigs weaned at 17 days of age**

**Grow / Finish for 165 days**

**Litter size = 9 weaned**

**Market Weights at 270 lbs**

**Labor \$7.00/hr to \$22.00/hr**

**Detailed description of the new assumptions, and a comparison of cost and returns since 2001 can be found at**

**[http://www.econ.iastate.edu/faculty/lawrence/lawrence\\_website/livestock\\_returns.htm](http://www.econ.iastate.edu/faculty/lawrence/lawrence_website/livestock_returns.htm)**

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# **My Vision Statement**

**List four dreams or visions you have for your farm.**

**Ask yourself this question: What will my farm to be like in the future?**

**Using these dreams, write a vision statement for your farm.**

# Mission Statement

## Why are you Farming?

List 4 reasons why you want to continue operating a farm business.

What are 4 priorities you have for your farm business as you make daily management decisions?

Using the above information, write a mission statement for your farm.