



## Evaluating the New Century Go-Go Farmer

Bob Craven  
Center for Farm Financial Management  
University of Minnesota

612-625-6701  
rcraven@umn.edu  
www.cffm.umn.edu



[Contact](#)

HOME GETTING STARTED GRAPH LIBRARY ABOUT FINBIN ABOUT THE DATA

### FINBIN Farm Financial Database

#### WELCOME TO FINBIN

Welcome to FINBIN, one of the largest and most accessible sources of farm financial and production benchmark information in the world. FINBIN places detailed reports on whole farm, crop, and livestock financials at your fingertips.

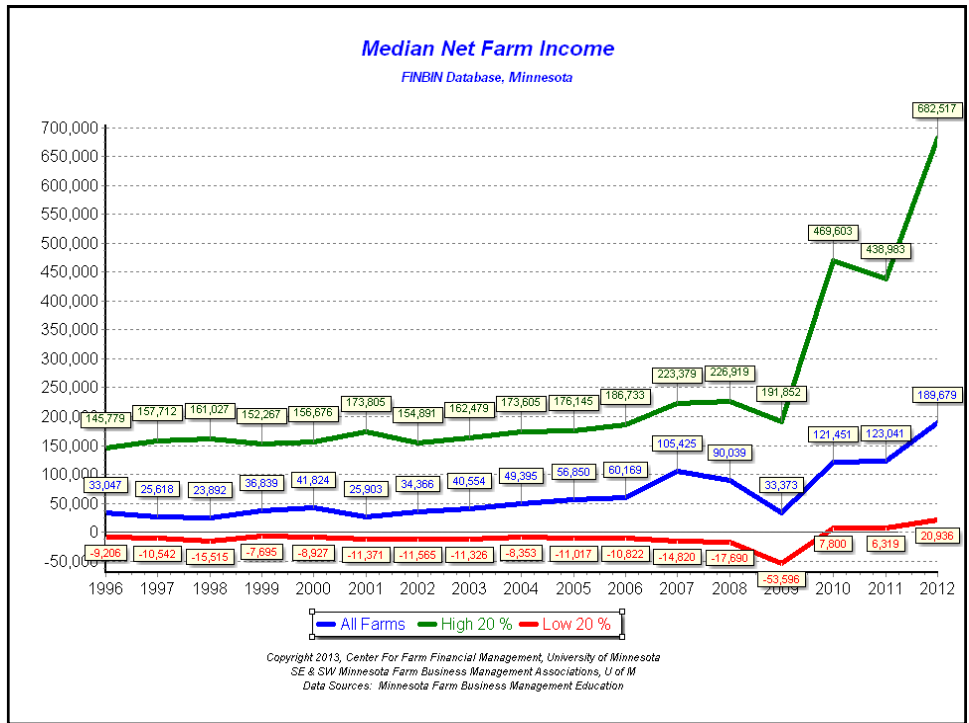
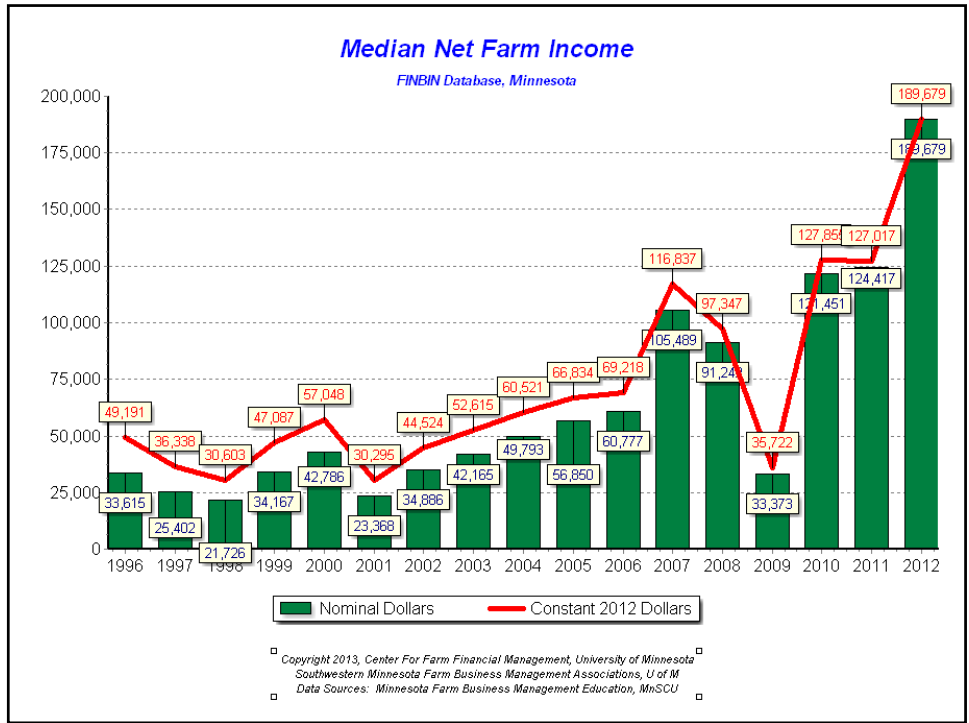
With just a few clicks of the mouse, you can see reports such as:

- [Cost and returns from Roundup Ready soybeans](#)
- [Dairy cost and returns by size or location of herd](#)
- [Farm financial standards measures by type or size of farm](#)

The possibilities are endless. Select Whole Farm Reports, Crop Reports, or Livestock Reports to create your own custom report.

Data providers:  
MNSCU Farm Business Management  
U of MN Farm Management Associations

[www.finbin.umn.edu](http://www.finbin.umn.edu)



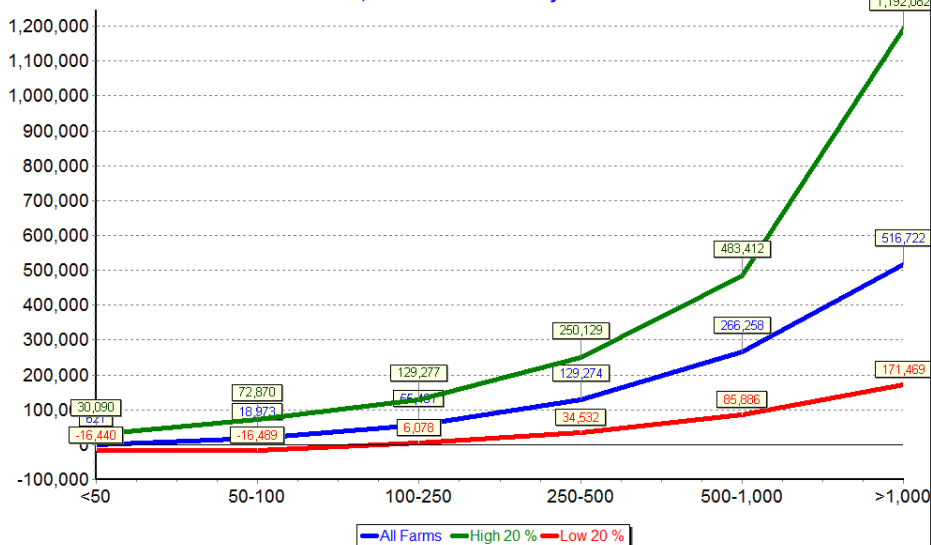
## Top 20% Characteristics

- Gross income \$2.0 M
- Assets \$5.6 M
- Debt to assets 38 %
- WC to gross 52%
- Owner withdrawal \$82,585
- Acres farmed 1,943
- Owned acres 493



### Net Farm Income, 2012

FINBIN Database, Minnesota Median by Gross Income



## **Bottom 20% -- Gross > \$1 M**

- **Gross income** \$1.9 M
- **Assets** \$2.5 M
- **Debt to assets** 54 %
- **WC to gross** 16.2%
- **Owner withdrawal** \$82,585
- **Acres farmed** 930
- **Owned acres** 256



## **Bottom 20% -- Gross > \$1 M**

- **Gross income** \$2.6 M
- **Assets** \$4.4 M
- **Net farm income** **\$-212,991**
- **Debt to assets** 47 %
- **WC to gross** 5.4%
- **Acres farmed** 1,444
- **Owned acres** 329



*Flash-back  
2009*

# Go-Go Culture

- Hard charging
- Focused on expansion
- Willing to take risks
- Liquidity usually an issue
- Often gross income approaching or greater than total assets.



**Illinois Family Farms**

Home About Us Gallery Landowners Employment Contact Us

### Contact Us @ Illinois Family Farms

**Management And Support Staff Emails:**  
[Rick Rosentreter](#) - Capital Management & Sales  
[Amy Rosentreter](#) - General & Administrative Manager  
[Erica Broadbuss](#) - Accounts Payable  
[Doug Rosentreter](#) - Agronomy  
[Gary Darden](#) - Shop Foreman  
[Adam Link](#) - IT & Web Administration  
[Support](#) - For Information or Assistance

We will respond to you within 24 hours, during regular business hours. All email correspondence is completely confidential.

**Telephone / Fax**  
Telephone: (866) 504-5533  
Telephone: (217) 854-9017  
Fax (Call First): (217) 854-9017

Monday to Friday 8:00am to 5:00pm (CST)  
On Saturdays, Sundays and federal holidays please leave a message.

**Mailing Address**  
Illinois Family Farms  
21814 Route 4  
Carlinville, IL 62626  
[Main Office Location : View Map](#)

Copyright © 2010 Illinois Family Farms. All Rights Reserved.

## ***Rick Rosentreter***

- **Grew from 2,000 to 30,000 acres 13 yrs**
- **Chapter 11 Bankruptcy filing Nov 2011**
  - **Illinois Family Farms, LLC**
    - **Assets: \$1,728,367.69**
    - **Liabilities: \$31,039,418.79**
  - **Illinois Family Farms Leasing Company**
    - **Assets: \$773,784.60**
    - **Liabilities: \$17,519,155.90**
- **IL community bank, \$15 M, mostly unsecured**



» Source: AGWEB, Top Producer Article, January 11, 2012

## ***Tools for Credit Analysis***

- **In a perfect world**
  - **Financial Soundness**
    - **Balance sheets with cost and market values**
  - **Financial Performance**
    - **Accrual income statement**



## ***Tools for Credit Analysis***

- **In the real world**
  - Financial Soundness
    - Balance sheets at mixed market/cost values
  - Financial Performance
    - Schedule F tax statement
  - ***How can we measure financial performance in the real world?***



Center for Farm Financial Management  
Copyright © 2013 University of Minnesota

## ***Income Statement***

- **Problems with Schedule F**
  - Cash based
  - Tax rules that distort income
  - Fast depreciation



Center for Farm Financial Management  
Copyright © 2013 University of Minnesota

## **Sch F vs. Accrual Net Income**


**% difference for years averaged**

<b>Years Averaged</b>	<b>All farms</b>	<b>20-40% in debt</b>	<b>&gt;40% in debt</b>
2002-04	67%	56%	60%
2003-05	41%	56%	61%
2004-06	63%	57%	63%
5-Year			
2002-06	66%	55%	60%

*Source: Barnard, F. L., Ellinger, P. N., & Wilson, C. (2010). Measurement Issues in Assessing Profitability through Cash Tax Returns. Journal of American Society of Farm Managers and Rural Appraisers, 2010(1), 207-217.*

## **Which Way Did They Go?**

**Source: FINBIN 2009-2012**

	<b>Low Income Farms</b>	<b>High Income Farms</b>
<b>Cash net farm income</b>	<b>30,708</b>	<b>385,979</b>
<b>Accrual net farm income</b>	<b>-31,661</b>	<b>596,131</b>



## Tools To Use

- Can you get fiscal year end balance sheets?

– Yes

- ~~Scheduled F Accrual Analysis~~

– No

- Earned Net Worth Analysis



## Earned Net Worth Analysis

Farm Business	
Beginning net worth	
+ Net farm income (accrual)	
+ Non-farm income	
- Family living expense	
- Income taxes	
<b>+/- Valuation changes</b>	
= Ending net worth	

# Earned Net Worth Analysis

- Start with net worth change (market)
- Back out valuation changes
- To arrive at earned net worth change
- Valuation changes — not just LAND
  - If machinery and building depreciation is not reasonable, valuation changes creep into these assets too

## Earned Net Worth Analysis

Ending net worth (mkt)	_____
Beginning net worth (mkt)	- _____
Change in net worth (mkt)	= _____
Change in market valuation (G)	- _____
Inheritance, gifts, capital contributions	- _____
Gifts given	+ _____
<b>A. Change in earned net worth</b>	= _____
Change in earned net worth (A)	_____
Family living / owner withdrawals	+ _____
Income and social security taxes	+ _____
Personal income	- _____
Personal asset depreciation	+ _____
Change in personal accounts payable	+ _____
<b>B. Net Farm Income</b>	= _____

### Change in Market Valuation/Depreciation Worksheet

	Machinery	Buildings	Land	Total
Beginning balance sheet value	_____	_____	_____	_____
Purchases	+ _____	_____	_____	_____
Sales	- _____	_____	_____	_____
<b>C. Total value to depreciate</b>	= _____	_____	_____	_____
Depreciation rate	* _____	_____	_____	_____
<b>D. Depreciation</b>	= _____	_____	_____	_____
<b>E. Ending depreciated value (C - D)</b>	_____	_____	_____	_____
<b>F. Ending balance sheet value</b>	_____	_____	_____	_____
<b>G. Change in market valuation (F - E)</b>	_____	_____	_____	_____

### Change in Market Valuation/Depreciation Worksheet

	Machinery	Buildings	Land	Total
Beginning balance sheet value	_____	_____	_____	
Purchases	+ _____	_____	_____	
Sales	- _____	_____	_____	
C. Total value to depreciate	= _____	_____	_____	
Depreciation rate	* _____	_____	_____	
D. Depreciation	= _____	_____	_____	_____
E. Ending depreciated value (C - D)	_____	_____	_____	
F. Ending balance sheet value	_____	_____	_____	
G. Change in market valuation (F - E)	_____	_____	_____	_____

### Earned Net Worth Analysis

Ending net worth (mkt)				_____
Beginning net worth (mkt)		-		_____
Change in net worth (mkt)		=		_____
Change in market valuation (G)		-		_____
Inheritance, gifts, capital contributions		-		_____
Gifts given		+		_____
<b>A. Change in earned net worth</b>		=		_____
Change in earned net worth (A)				_____
Family living / owner withdrawals		+		_____
income and social security taxes		+		_____
Personal income		-		_____
Personal asset depreciation		+		_____
Change in personal accounts payable		+		_____
<b>B. Net Farm Income</b>		=		_____

<b>Repayment Capacity: Term Debt Coverage Ratio</b>		
Earned net worth change (A)		
Depreciation expense (D)	+	
Interest on term debt	+	
Capital debt repayment capacity	=	
Scheduled payments on term debt	÷	
Term debt coverage ratio	=	

## ***Tools To Use***

- **Can you get fiscal year end balance sheets?**

- Yes

- **Scheduled F Accrual Analysis**

- No

- Earned Net Worth Analysis



# Accrual Adjusted Income Statement

- Includes all income actually produced during the accounting period, whether sold or not
- Includes all expenses incurred during the accounting period – whether paid or not



# Balance Sheet Timing



## Income Statement Worksheet

Use this worksheet to convert Schedule F tax information to an accrual adjusted income statement.

Gross Income (Schedule F Line 11)			409,190	
Cost of Feeder Livestock Sold (Line 2)				+
Crop Insurance Reported (Line 8b)				-
Crop Insurance Received (Line 8a)				+
Crop Insurance Deferred from Previous Year (Line 8d)				-
Cull Livestock Income			11,043	+
<b>Gross Cash Income</b>		<b>(A)</b>	<b>420,233</b>	
End Invent - Beg Invent				
Crops & Feed	63,390	58,385	5,005	+
Livestock Held For Sale	900	1,400	-500	+
Accounts Receivable	1,100	0	1,100	+
Hedging Accounts			0	+
Other Inventory			0	+
<b>Gross Farm Income (Accrual)</b>		<b>(B)</b>	<b>425,838</b>	

Total Expense (sched F, line 35)			398,769	
Purchases of livestock & other items for resale			0	+
Depreciation (line 16)			62,562	-
<b>Account</b>	Beg Invent - End Invent			
Prepaid Expenses & Supplies	13,985	2,400	11,585	+
Growing Crops			0	+
<b>Account</b>	End Invent - Beg Invent			
Accounts Payable	41,218	29,167	12,051	+
Accrued Interest	184	1,104	-920	+
<b>Total Operating Expense (Accrual)</b>		<b>(C)</b>	<b>358,923</b>	

Depreciation	Begin value	+ Purchases	- Sales	= Value	* % Depr		
Machinery	230017	68579	7365	291,231	10	29,123	
Vehicles				0	15	0	+
Buildings	423473			423,473	5	21,174	+
Breeding Livestock Replacements							+
<b>Total Depreciation</b>					(D)	<b>50,297</b>	
<b>Total Expense (accrual)</b>					(E)	<b>409,220</b>	C + D
<b>Net Farm Income (accrual)</b>					(F)	<b>16,618</b>	B - E

Center for Farm Financial Management  
Copyright © 2013 University of Minnesota

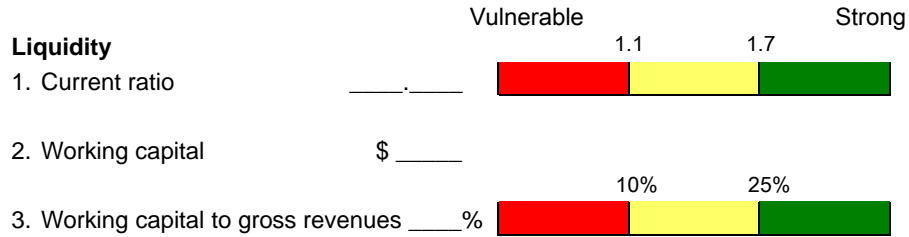
## Working Capital

- **Liquidity (working capital) is the first line of defense in an volatile environment**
- **Collateral is the second line defense**



# Farm finance scorecard

Year \_\_\_\_\_



Source: University of Vermont Extension and Center for Farm Financial Management

## Who Has More Liquidity?

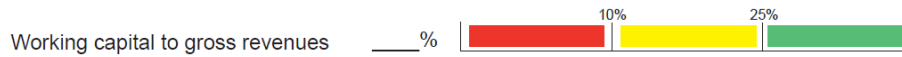
	Farm A	Farm B
<b>Current Assets</b>	<b>\$75,000</b>	<b>\$200,000</b>
<b>Current Debt</b>	<b>25,000</b>	<b>100,000</b>
<b>Current Ratio</b>	<b>3:1</b>	<b>2:1</b>
<b>Working Capital</b>	<b>50,000</b>	<b>100,000</b>
<b>Gross Income</b>	<b>500,000</b>	<b>500,000</b>
<b>Working Cap/Gross</b>	<b>10 %</b>	<b>20 %</b>





## **FINBIN Liquidity Measures by Profit Group, Minnesota, 2012**

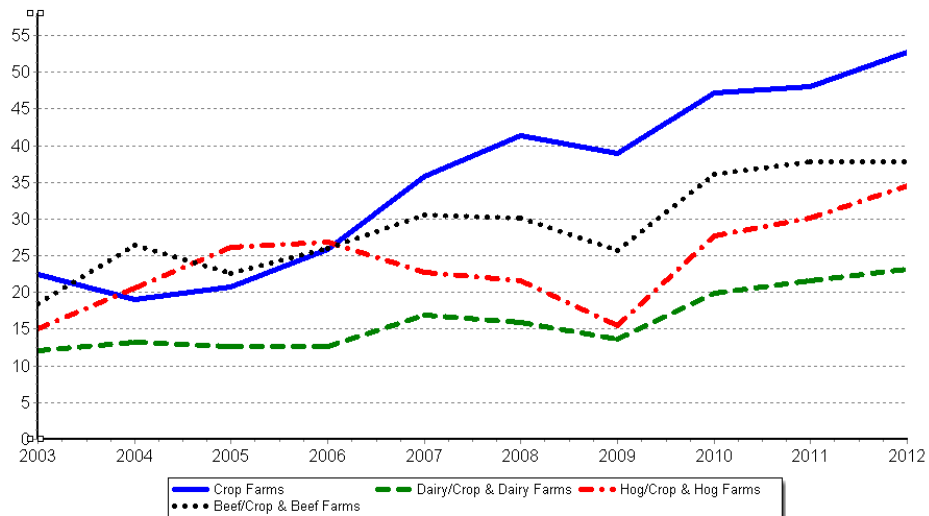
	<b>Low 20%</b>	<b>Medium 20%</b>	<b>High 20%</b>
<b>Current ratio</b>	<b>1.50</b>	<b>2.28</b>	<b>3.02</b>
<b>Working capital</b>	<b>52,909</b>	<b>268,234</b>	<b>1,254,278</b>
<b>Working capital to gross revenue</b>	<b>16.7 %</b>	<b>35.2 %</b>	<b>51.6 %</b>



Center for Farm Financial Management  
Copyright © 2013 University of Minnesota

### **Working Capital as Percent of Gross Income**

*FINBIN Database, Minnesota Average*



Copyright 2013, Center For Farm Financial Management, University of Minnesota  
SW Minnesota Farm Business Management Association, U of M  
Data Sources: Minnesota Farm Business Management Education

## ***Working Capital Not All Created Equal***

- **Cash conversion cycle**
- **Prepaid expenses, 1-2 years**
- **Feed, up to 1 year**
- **Grain, delivery contracts up to 9 months**



## ***Corn, Cash Rented, 2012***

*FINBIN Database, So MN*

<b>Cost of production</b>	<b>High Cost 20 %</b>	<b>Middle 20%</b>	<b>Low Cost 20%</b>
Yield	155	182	189
Gross return	\$1,090	\$1,197	\$1,231
Seed	120.61	116.44	111.77
Fertilizer	210.14	206.34	160.96
Chemicals	32.92	30.02	27.37
Rent	243.16	233.14	172.81
Total costs	820.26	726.24	580.01
Net return to operator lbr & mgt	189.60	382.60	581.82
Cost of production	5.71	4.77	3.75

## **Corn, Cash Rented**

*FINBIN Database, Southern MN*

	2008	2009	2010	2011	2012	2013 Projected
Seed	73.92	89.94	98.58	104.58	115.88	121.67
Fertilizer	116.24	158.35	118.28	153.58	194.49	184.77
Chemicals	24.73	28.43	23.75	27.51	31.54	34.69
Fuel & drying	57.98	58.36	33.62	38.59	41.22	43.28
Crop insur.	26.96	18.90	15.76	24.67	24.29	25.50
Rent	146.68	158.86	168.74	191.29	227.07	249.78
Other	137.52	149.18	168.13	184.52	190.36	199.88
Total cost	584.03	662.02	626.86	724.74	824.85	859.57

## **Corn, Cash Rent, Net Income Per Acre**

*Assumes 2013 projected expenses, \$20 Direct Payment*

### Yield per Acre

Price/Bu	140	157.5	175	192.5	210
4.00	<b>-280</b>	<b>-210</b>	<b>-140</b>	<b>-70</b>	<b>0</b>
4.75	<b>-175</b>	<b>-91</b>	<b>-8</b>	<b>75</b>	<b>158</b>
5.50	<b>-70</b>	<b>27</b>	<b>123</b>	<b>219</b>	<b>315</b>
6.25	<b>35</b>	<b>145</b>	<b>254</b>	<b>364</b>	<b>473</b>
7.00	<b>140</b>	<b>263</b>	<b>385</b>	<b>508</b>	<b>630</b>

## **Corn, Cash Rent, Cost of Production**

*2013 expenses with a \$20 direct payment and  
\$55 labor & management charge /acre*

### Yield per Acre

Rent/Acre	150	175	200
250	5.96	5.11	4.47
300	6.30	5.40	4.72
350	6.63	5.68	4.97
400	6.97	5.97	5.22

## **Net Income, Corn, 10,000 Acres**

*Assumes \$400 cash rent*

### Yield per Acre

Price/Bu	140	157.5	175	192.5	210
4.00	-4,497,970	-3,797,970	-3,097,970	-2,397,970	-1,697,970
4.75	-3,447,970	-2,616,720	-1,785,470	-954,220	-122,970
5.50	-2,397,970	-1,435,470	-472,970	489,530	1,452,030
6.25	-1,347,970	-254,220	839,530	1,933,280	3,027,030
7.00	-297,970	927,030	2,152,030	3,377,030	4,602,030

**Net Income, Corn, 10,000 Acres**  
*Assumes \$400 cash rent, with 80% RP*

**Yield per Acre**

Price/Bu	140	157.5	175	192.5	210
4.00	-2,187,970	-2,187,970	-2,187,970	-2,187,970	-1,697,970
4.75	-2,187,970	-2,187,970	-1,785,470	-954,220	-122,970
5.50	-2,187,970	-1,435,470	-472,970	489,530	1,452,030
6.25	-1,347,970	-254,220	839,530	1,933,280	3,027,030
7.00	-297,970	927,030	2,152,030	3,377,030	4,602,030

## **Go-Go Analysis**

- Is your credit analysis adequate?
- Trust but verify
- Sensitivity analysis
- Need for more frequent interaction
- Analyze counter-party risk



# Go-Go Analysis

- **Respect your input?**
- **Provide documents when asked?**
- **Appear to understand their financials?**
- **Willing to walk for 50 basis points?**
- **Is your bank team in sync with their management style?**



 Center for Farm Financial Management  
Copyright © 2013 University of Minnesota

## Interpreting Financial Statements And Measures

### Use your financial statements effectively

- **Learn** to use your financial statements in day-to-day management
- **Understand** how to interpret common financial statements
- **Acquire** a powerful skill set to enhance your farm business
- **Gain** self confidence in the area of finance

[Click Here to Begin](#)

[ifsam.cffm.umn.edu](http://ifsam.cffm.umn.edu)



Learn more about Interpreting Financial Statements and Measures



**Helping those in need**  
This site was created to help producers understand how to interpret common financial statements.



**Teaching across the country**  
Our video training can be accessed by anyone with an internet connection, anywhere.



**Leveraging financial statements**  
Learn to use your financial statements in day-to-day management of your farm businesses.



**North Central Risk Management Education Center**  
IFSAM was made possible with funding from the North Central RME Center.