



Farmer Mac Refresh: Managing Expectations

Dr. Dave Kohl

Road Show 2019

Topics to be covered:

- capital, liquidity, and credit risk management options for ag lenders,
- U.S. agricultural outlook – 2019 and beyond,
- new Farm & Ranch loan products and pricing options,
- ag real estate financing case studies,
- meet your underwriter – tips for successful loan originations,
- utilizing AgXpress – our new scorecard underwriting option, and
- working with USDA Rural Development, Farm Service Agency, and the secondary market.



www.farmermac.com/news-events/road-show



MANAGING EXPECTATIONS

Dr. David M. Kohl

Professor Emeritus, Agricultural and Applied Economics
Member of Academic Hall of Fame, College of Agriculture & Life Sciences
Virginia Tech, Blacksburg, VA



(540) 961-2094 (Alicia Morris) | (540) 719-0752 (Angela Meadows) | sullylab@vt.edu

July 29, 2019

Macro Clinic Video Blog: www.compeer.com/education

Road Warrior of Agriculture: www.cornandsoybeandigest.com

Ag Globe Trotter: www.northwestfcs.com

Dave's GPS & Dashboard Indicators: www.farmermac.com

Low Margin Era

- technology- supply exceeds demand
- worldwide- new resources in production
- weather and climate changes
- base hits vs. home run profits & cash flow
- managing expectations
- focus on fiduciary fundamentals

Volatility of Profits/Cash Flow

- trade negotiations and expectations
- weather/African swine flu
- political uncertainty
- consumer demand shifts
- structural changes in industry



Worst Lending Experiences

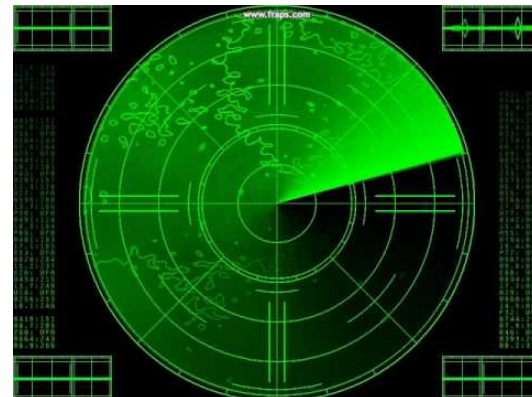
- fraud: missing grain, livestock and/or machinery
- excessive family living based upon good times
- attempting to bash an existing customer
- didn't follow the plan
- continued refinances, switched lenders
- hidden account payables
- didn't use line of credit properly
- rumors that were verified
- inherited business debt free/next generation broke

Best Lending Experiences

- family business, transition old to young- lender transition at the same time
- young producer FSA/bank now 10 years later, million in equity 5-45-50 program
- successfully developed and executed marketing plan
- followed a business plan, very successful advocate for other producers
- used financial benchmarking as a tool to improve the business
- developed a young producer educational program- investment paying off a decade later
- assist a customer work out of the business without losing all the equity

Economic Radar Screen

- international trade
 - USMCA
 - China's Belt & Road Initiative
- synchronized global economic moderation
 - China- slowest growth rate in 28 years
 - Japan- negative growth rate
 - Germany – negative growth rate
 - Central Bank's stimulus in China
 - high debt levels in urban real estate in China
- political uncertainty
 - Brazil
 - Venezuela
 - Mexico
 - Argentina
 - Germany, Britain & Euro Sector
 - U.S.

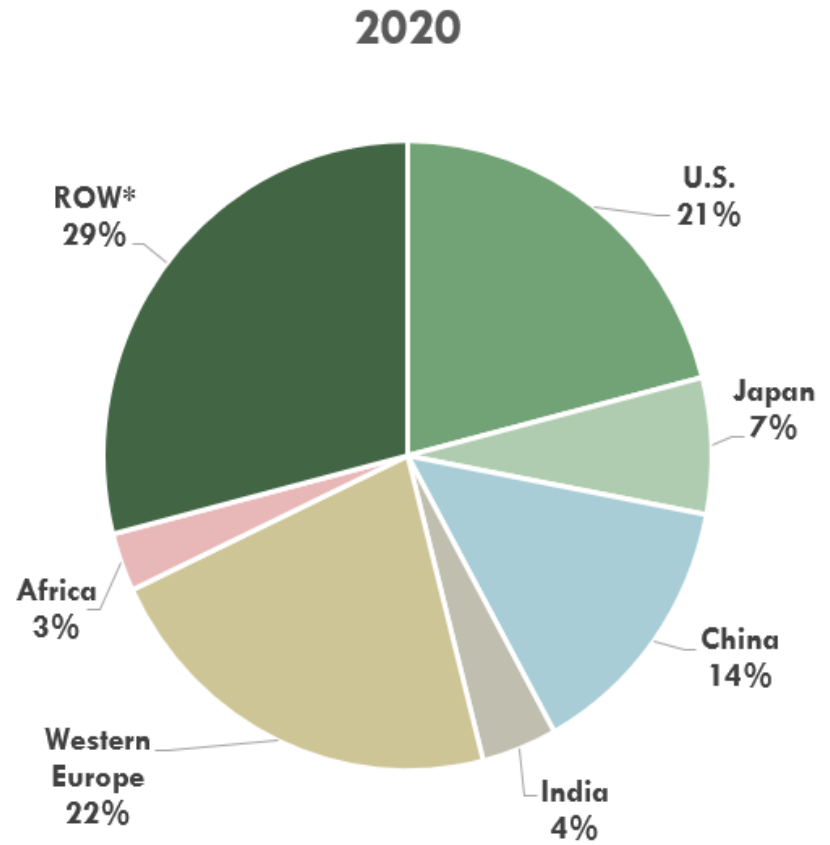
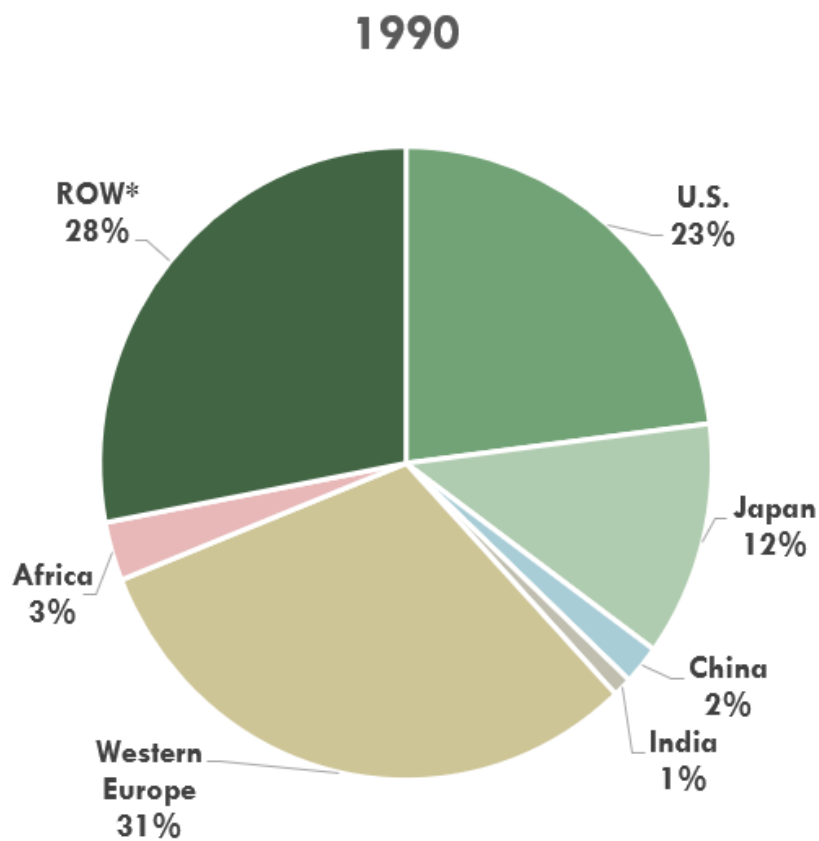


North America's Economic Power Block

- 28% of the global economy's GDP
- energy & oil
 - U.S. #1
 - Canada #4
 - Mexico #8
- 450+ million people
- 47% of Mexico's population is under 25
- ag trading partners:
 - Canada #1
 - Mexico #3



Rising of Asia



* ROW- Rest of World

Source: Global Insights, August 2018

Volatility on Balance Sheet

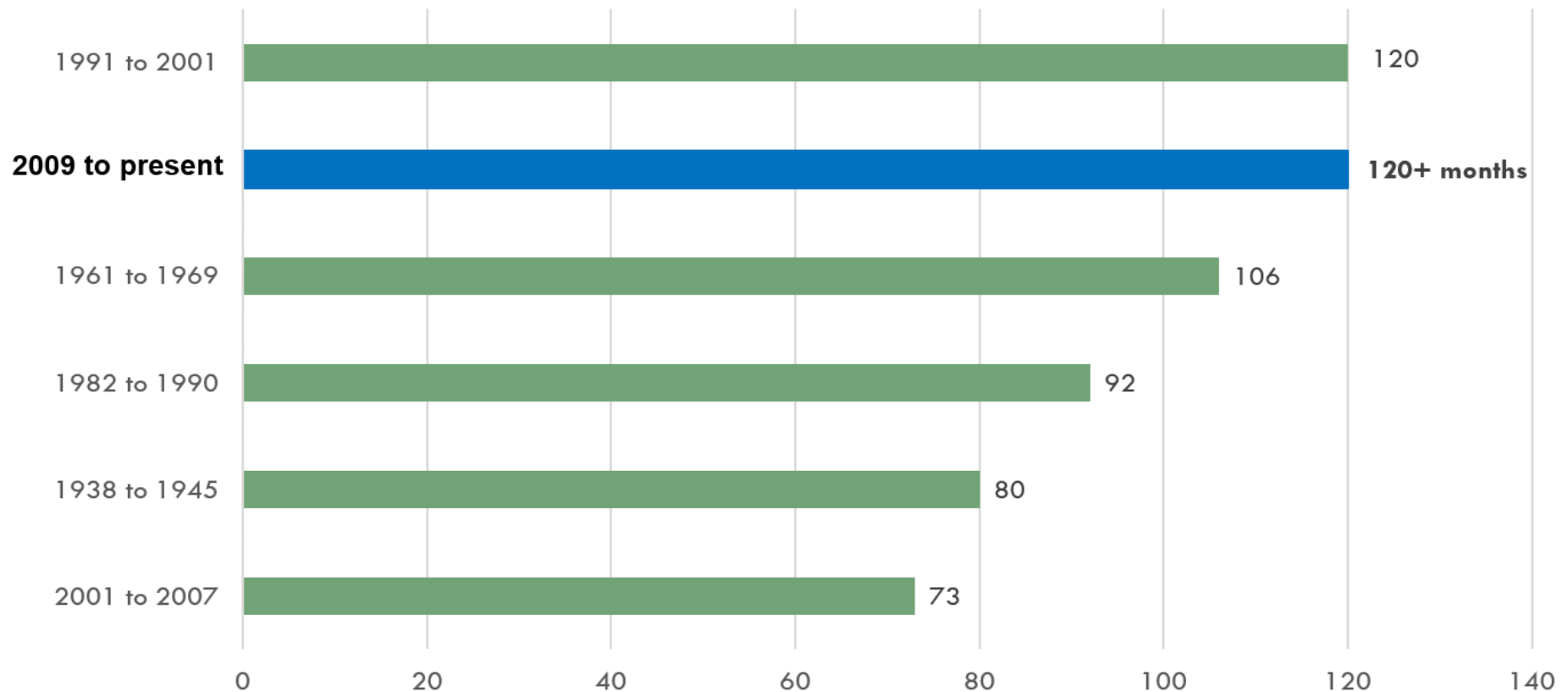
- lender appetite for refinances/restructure
- customer appetite for refinances/restructure
- supply/demand- real estate, equipment and/or livestock
- regulators
- suppliers of operating credit



By Mid-June, Longest Economic Expansion in the U.S.

Longest economic expansions in modern U.S. history

(As of June 2019)



Source: NBER, Economic Cycle Research Institute (Note: current expansion still in progress)

GSBC Survey Results

**SURVEY
RESULTS ARE IN!**



Graduate School of Banking at Colorado

Hot Off the Press – When Will the Next Recession Begin?

Estimated Start Date	Percent
First Half of 2020	8%
Second Half of 2020	36%
2021	38%
2022	8%
2023	10%



Hot Off the Press – When the Next Recession Occurs, It Will Be....

Recession Type	Percent
Very mild and short like recession in early 2000	72%
Similar to Great Depression in 2009 Era	10%
Possible depression in U.S. similar to the 1930's	0%
Great Recession in the U.S. and globally	18%



Hot Off the Press – Cause of Next Recession (More than 1 selected)

Cause of Next Recession	Percent
Trade issues	40%
2020 U.S. Presidential Election results	10%
2020 U.S. Presidential, Congress, and Senate results	25%
Debt issues: personal, corporate, government and student	45%
Asset price bubbles	19%
Stock market crash, more than 40%	8%



Hot Off the Press — How Would You Resolve the U.S. Federal Debt Issue?

Solution	Percent
Raise taxes	1%
Cut the budget	22%
Combination of tax increases and budget cuts	35%
Cut taxes	1%
Cut entitlements and spending	15%
Implement fiscal and monetary policy designed to grow the economy	16%
Other	10%



Hot Off the Press – Will the U.S. and China Sign Meaningful Trade Deal in the Next 12 Months?

Answer	Percent
Yes	52%
No	48%



Hot Off the Press – Will a Meaningful USMCA Trade Deal be Passed Within the Next 12 Months?

Answer	Percent
Yes	74%
No	26%

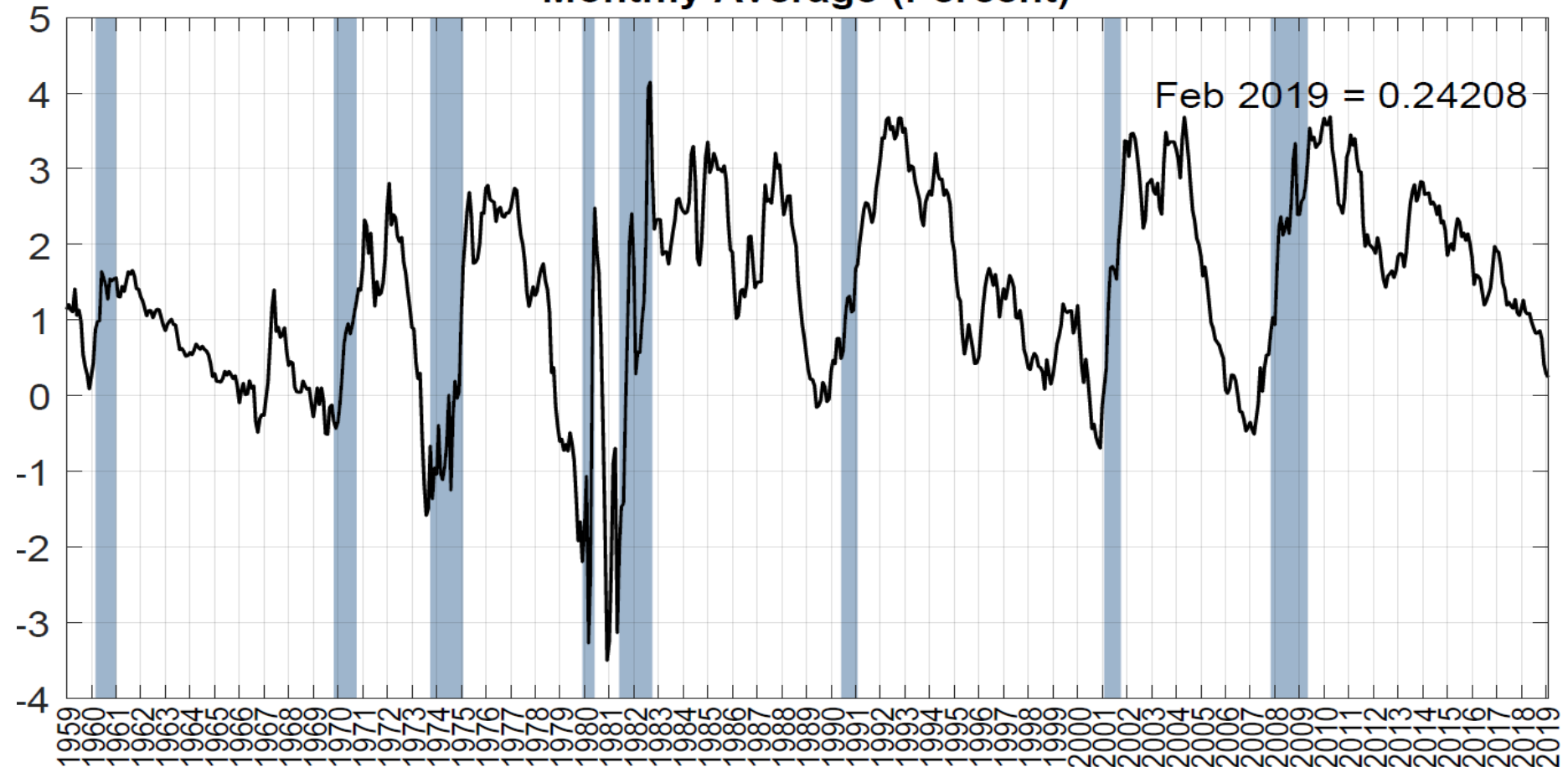


Top Five Economic Indicators

<u>Indicator</u>	<u>Growth</u>	<u>Neutral</u>	<u>Recession</u>
LEI/Diffusion Index	Positive	Flat/Decline	Decline 0.3% for 3 consecutive months AND >1% overall
Consumer Sentiment	>90	80-90	<80
Housing Starts	1.5 Million	1.0-1.5 Million	<1.0 Million
PMI	>50	41.7-50	<41.7
Stock Market	10% increase	Flat	>30% decrease

Yield Curves and Recessions

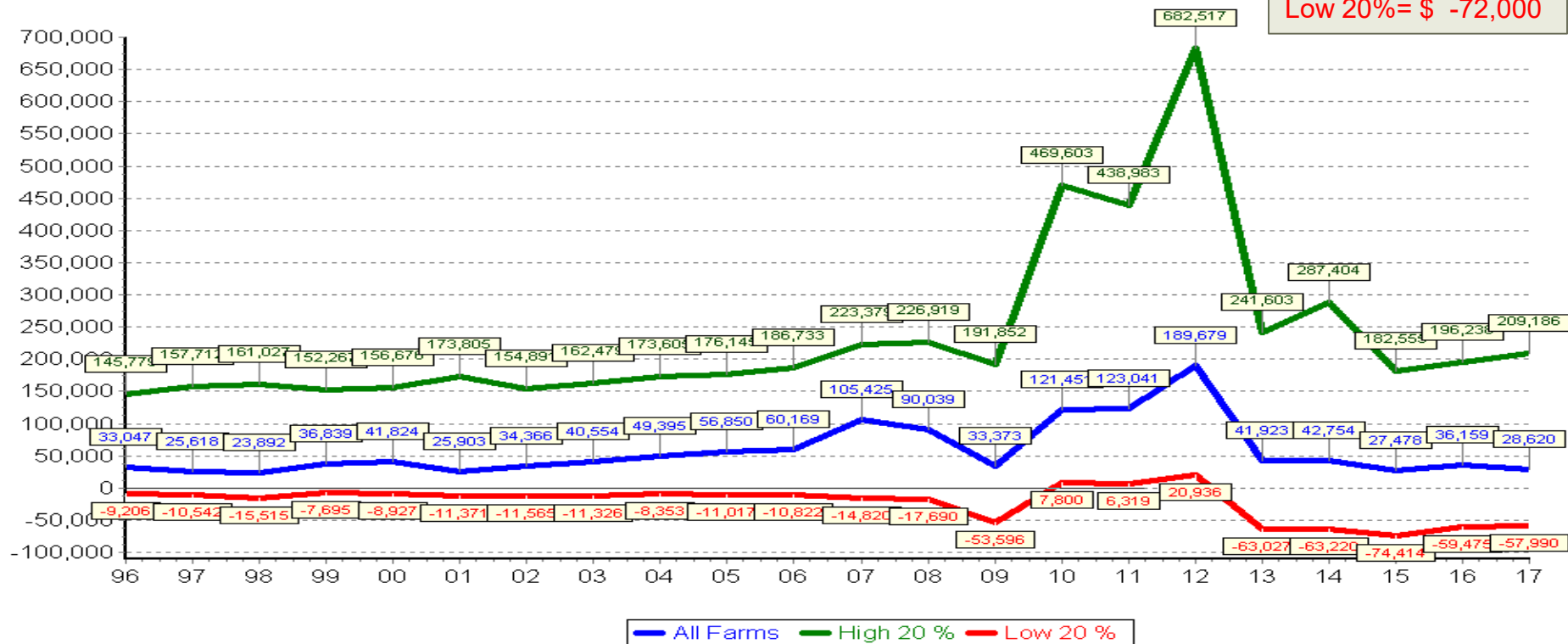
Treasury Spread: 10 yr bond rate-3 month bill rate
Monthly Average (Percent)



Median Net Farm Income- All, High 20% and Low 20%

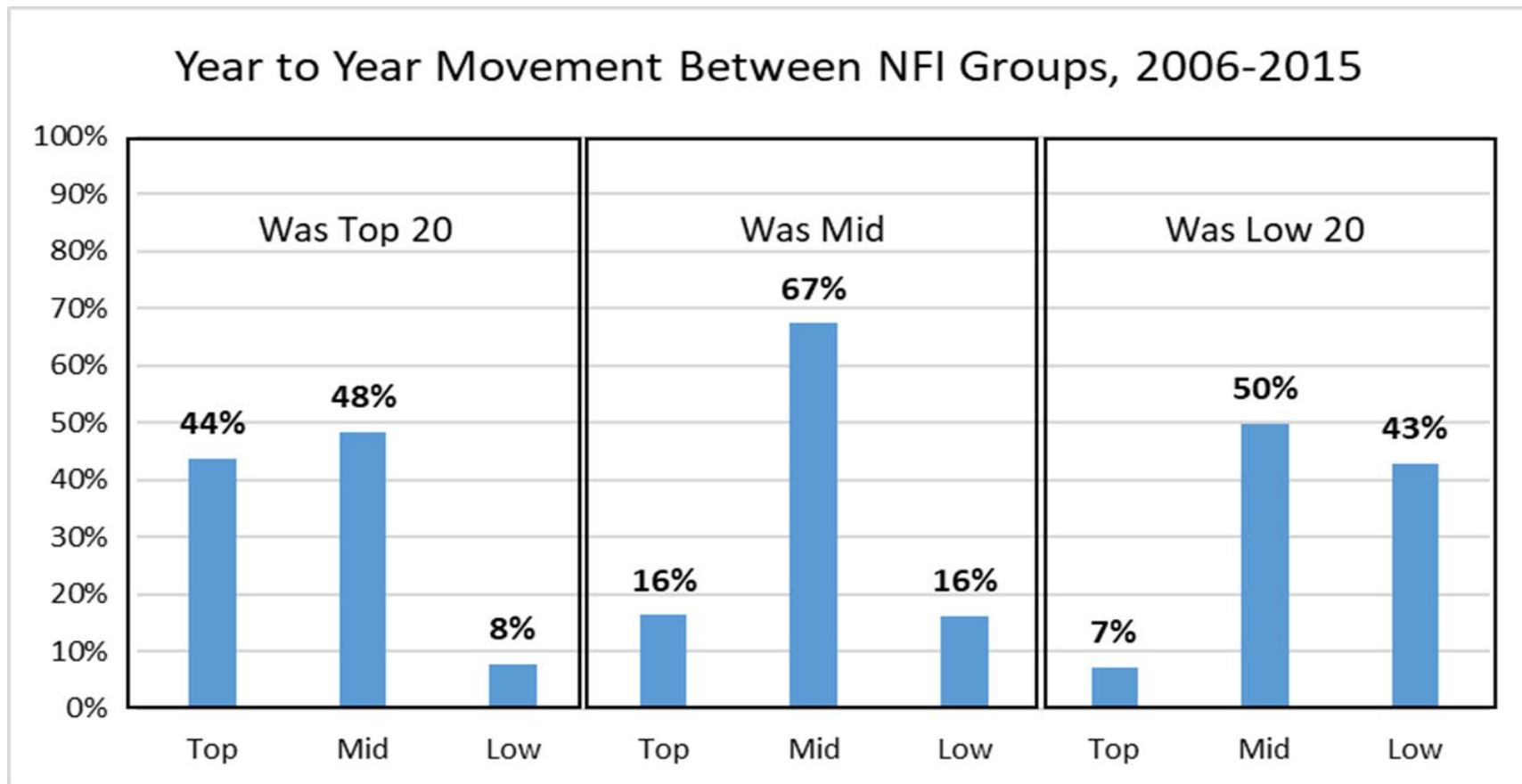
Median Net Farm Income
FINBIN Database, Minnesota

2018 Update:
High 20% = \$184,000
Low 20% = \$ -72,000



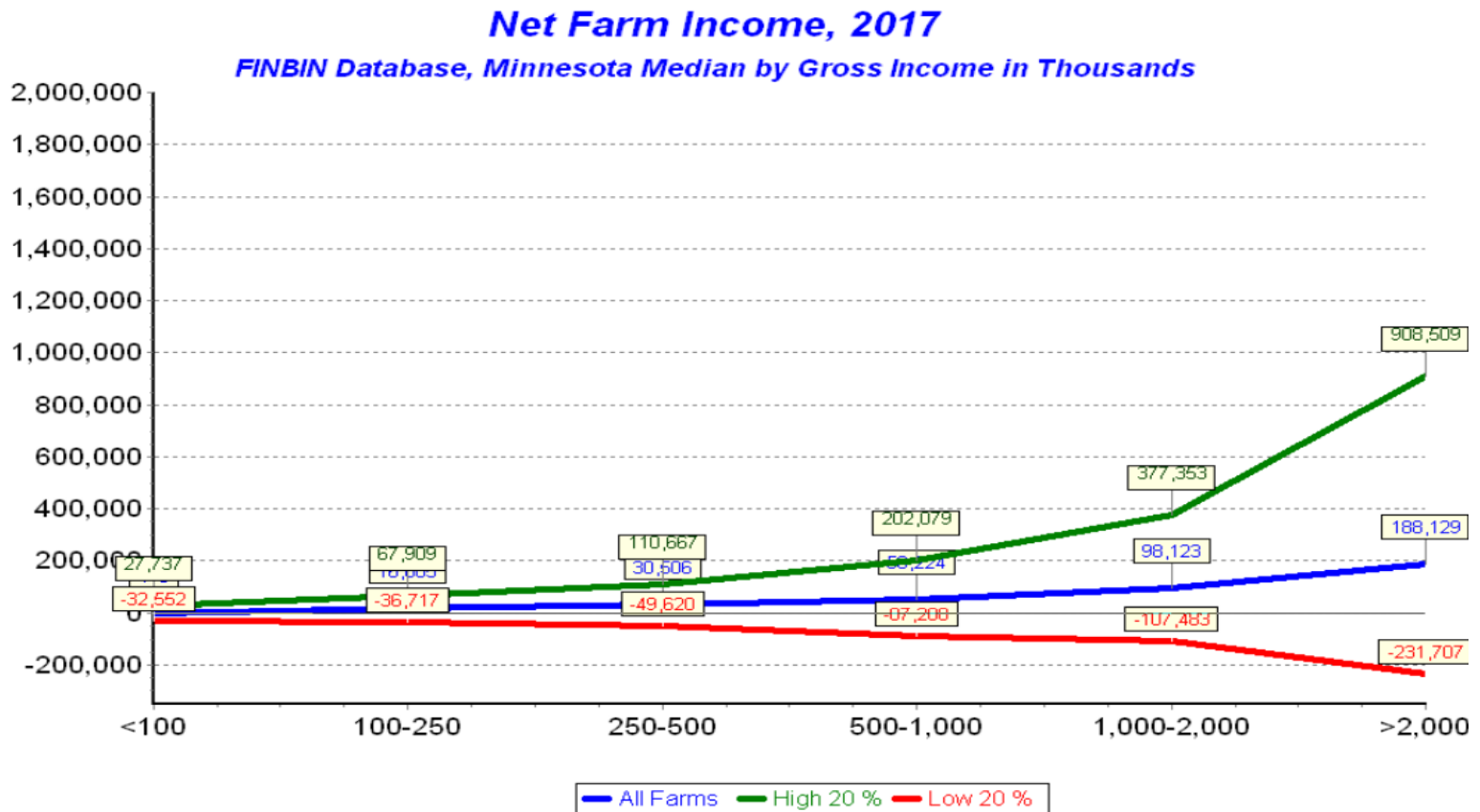
Copyright 2018, Center For Farm Financial Management, University of Minnesota
SW Minnesota Farm Business Management Association, U of M
Data Sources: Minnesota Farm Business Management Education

Year to Year Movement Between NFI Groups, 2006-2015



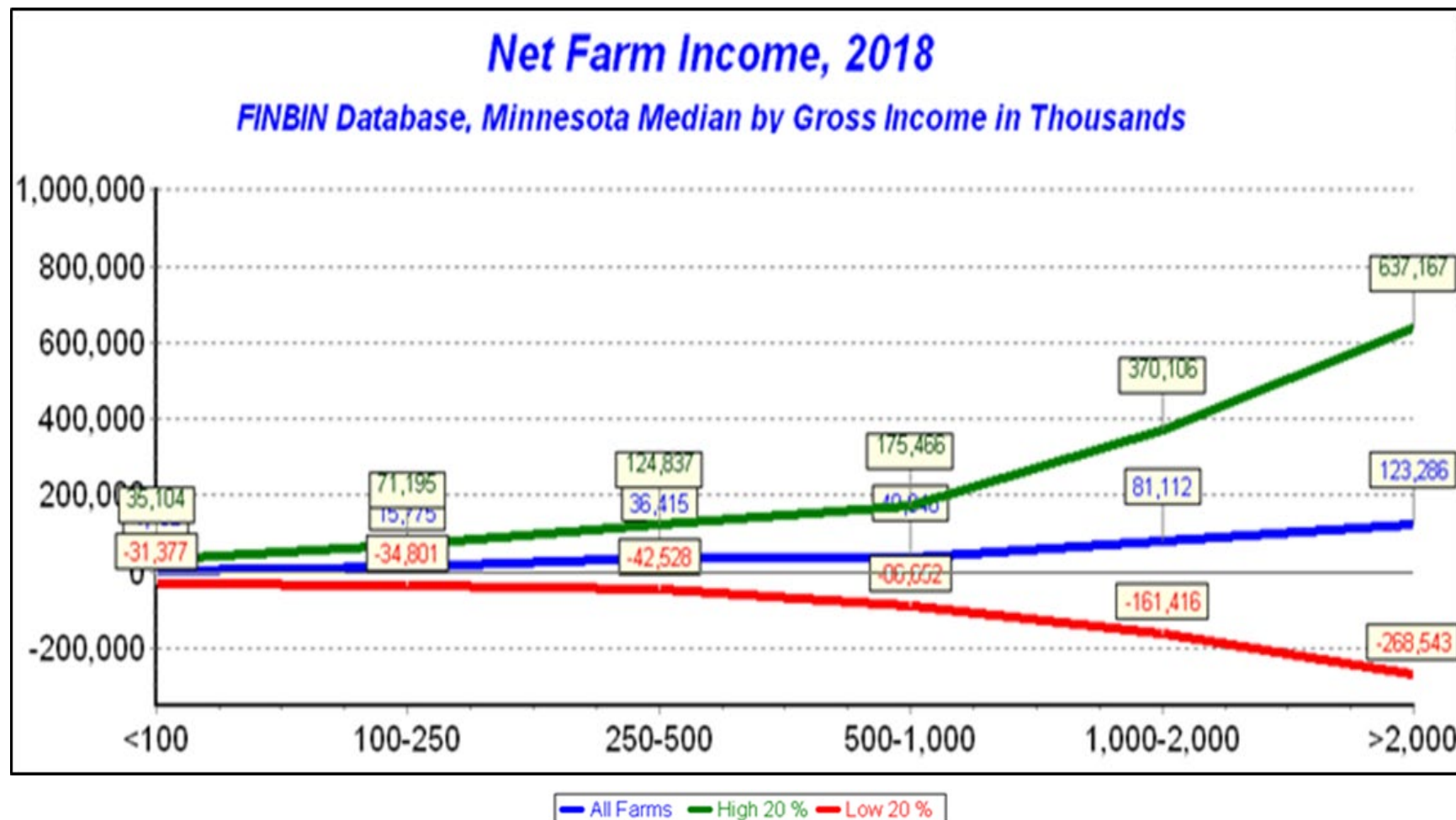
Sources: Minnesota Farm Business Management Education
SW Minnesota Farm Business Management Association, U of M
Copyright 2018, Center For Farm Financial Management, University of Minnesota

Net Farm Income, 2017



Data Sources: Minnesota Farm Business Management Education
SW Minnesota Farm Business Management Association, U of M
Copyright 2018, Center For Farm Financial Management, University of Minnesota

Net Farm Income, 2018



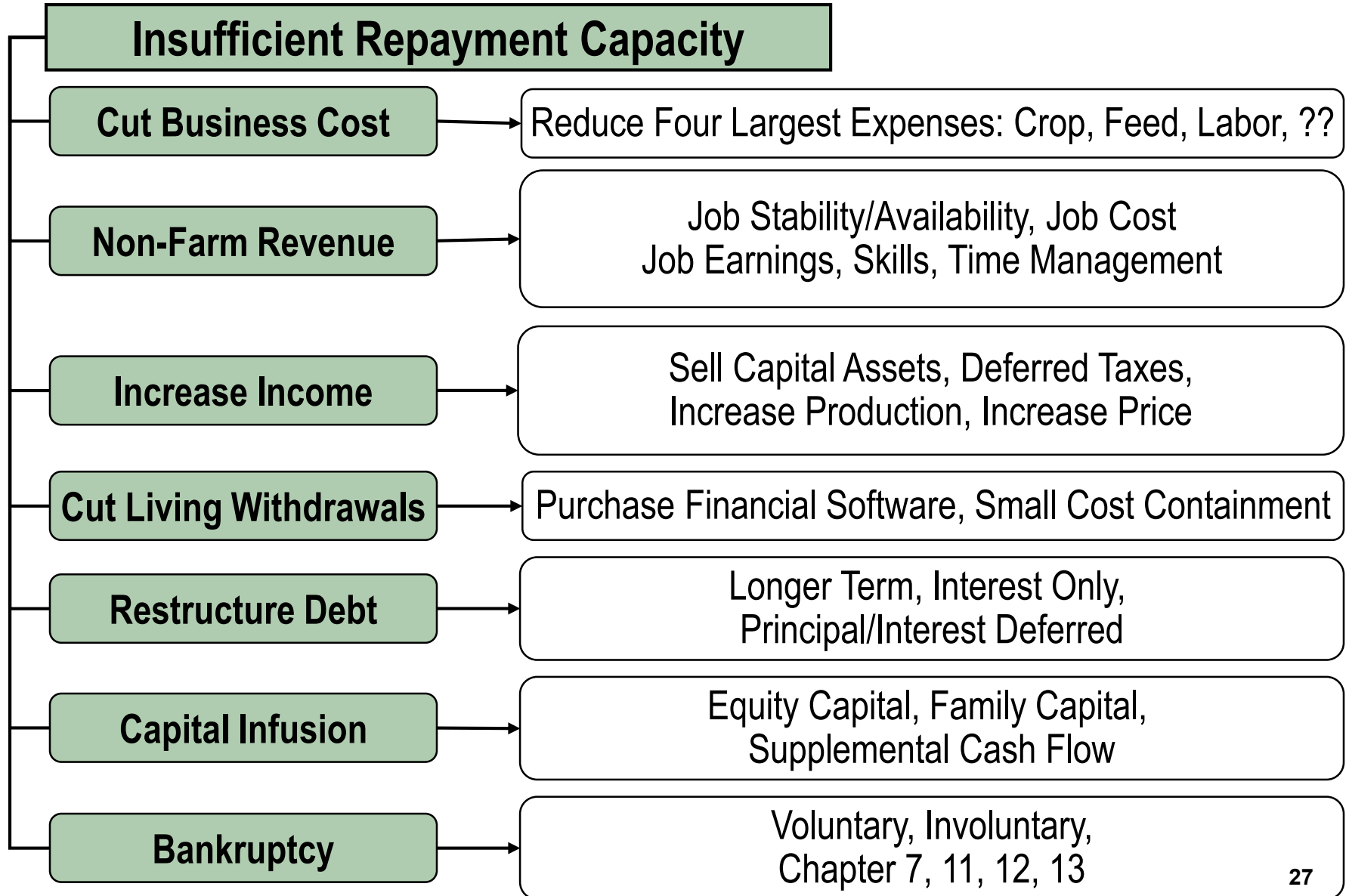
Data Sources: Minnesota Farm Business Management Education
SW Minnesota Farm Business Management Association, U of M
Copyright 2018, Center For Farm Financial Management, University of Minnesota

Tim's Triple Play

- cost control, right cost
- marketing and risk management
- asset, capital and human efficiencies



Trouble Shooting Matrix



The Burn Rate – Working Capital Adversity vs. Opportunity

Defensive “Adversity Oriented”

Current Assets: \$2,000,000

-Current Liabilities: \$1,000,000

= Working Capital: \$1,000,000

Projected Loss: \$500,000

Working Capital = 2 Years

Projected Loss

Red < 1.0 Year = Vulnerable

Yellow 1.0-3.0 Years = Resilient

Green >3.0 Years = Agile

Offensive “Opportunity Oriented”

Current Assets: \$2,000,000

-Current Liabilities: \$1,000,000

= Working Capital: \$1,000,000

**Debt Service(Existing & New)
Payments: \$200,000**

Working Capital = 5 Years

Total Debt Service Payments

Red < 2.5 Years = Vulnerable

Yellow 2.5-5.0 Years = Resilient

Green >5.0 Years = Agile

Burn Rate on Core Equity Adversity vs. Opportunity

(Assume \$500,000 Earnings Loss & 20% land value decline)

Assets- Market Value	Estimated Value	Loan Maximum	Collateral Position	Remaining Principal	Equity Excess Reserves
1. Long Term (20% Decline on Land)	\$6,000,000 \$4,800,000	X 70% X 70%	= \$4,200,000 = \$3,360,000	- \$2,200,000 - \$2,200,000	= \$2,000,000 = \$1,160,000
2. Intermediate	\$3,000,000	X 60%	= \$1,800,000	- \$800,000	= \$1,000,000
3. Current	\$1,650,000	X 80%	= \$1,320,000	- \$860,000	= \$460,000

Burn Rate: Land & Long Term Equity Reserves= $\frac{\text{Excess Reserves}}{\text{Earnings Loss}^1} = \frac{\$2,000,000}{\$ 500,000} = 4.0 \text{ Years}$

20% Decline

Burn Rate: Land & Long Term Equity Reserves= $\frac{\text{Excess Reserves}}{\text{Earnings Loss}^1} = \frac{\$1,160,000}{\$ 500,000} = 2.32 \text{ Years}$

¹ Assume Earnings Loss of \$500,000

Red < 4.0 Years = Vulnerable
Yellow 4.0-7.0 Years = Resilient
Green >7.0 Years = Agile

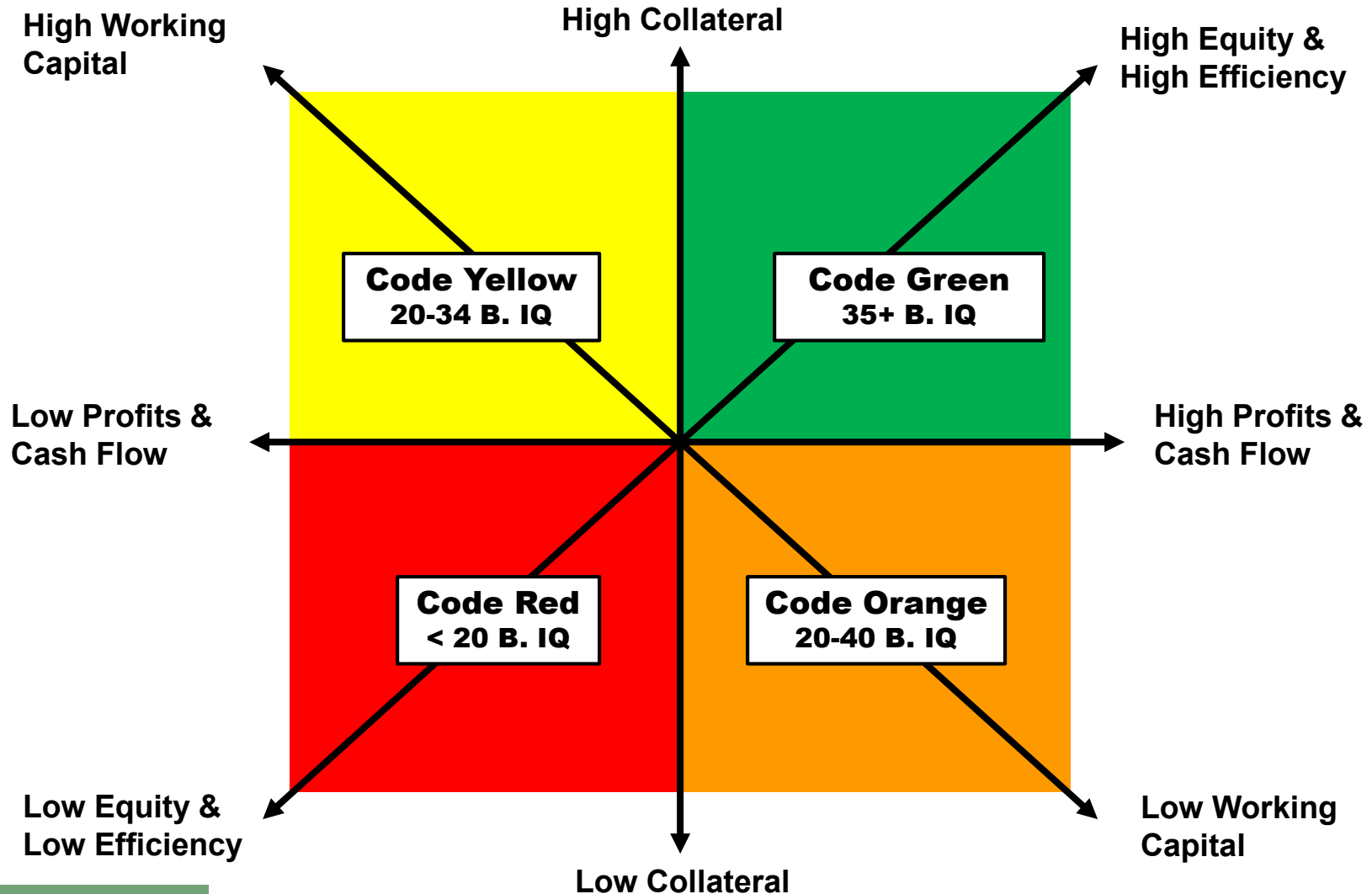
Bridge or Pier Concept

- before: $\frac{\text{Term Debt}}{\text{EBITDA}} = \frac{\$1,000,000}{\$250,000} = 4 \text{ to } 1$
- after: $\frac{\text{Term Debt}}{\text{EBITDA}} = \frac{\$1,250,000}{\$250,000} = 5 \text{ to } 1$
- no improvement in EBITDA
- refinancing using land equity
- debt levels higher
- owner equity loss, more debt service
- water is deeper near the end of pier
- the longer the pier, then the narrower the pier



Business IQ:

Spectrum of Performance Possibilities



Bottom of Cycle Perspectives

- monitor financials monthly or quarterly
- one page plan
- be careful of technology: lender liability
- large specialized farm issues
- DISC personality profile: know communication styles
- build better business in down cycle

Thriving Lenders/Lending Institutions

- use financial statements as a mode of communications
- trust and verify using a network of people
- education/personal development/training
- six C's
- A.R.E.'s