POSITIONING FOR SUCCESS IN THE ECONOMIC RESET

Dr. David M. Kohl

Professor Emeritus, Agricultural and Applied Economics Virginia Tech, Blacksburg, VA



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

July 6, 2017

Macro Clinic Video Blog: http://agstar.com/edge/ Road Warrior of Agriculture: www.cornandsoybeandigest.com Ag Globe Trotter: www.northwestfcs.com Dave's GPS & Dashboard Indicators: www.farmermac.com

Global & Domestic Economic Views

- worldwide surplus of most commodities
- wide spectrum of economic growth rates-BRICS & KIMT
- oil- the drive towards efficiency
- weather-July, August paradox
- Federal Reserve strong dollar
- elections in Europe
- international trade agricultural agreements
- NAFTA/Asian continent
- black swans

Strategic Shifts in U.S. Agriculture - Commodities

- massive consolidation
- use of technology
- drive towards efficiency
- outside money
- debt concentration
- 12%/65% rule
- potential issues in portfolio
- exit
- growth vs. business acumen

3

Strategic Shifts in U.S. Agriculture-Emerging Entrepreneurs

- organic, local, or natural
- diversified within agriculture
- diversified outside agriculture
- local, national, and international markets
- boomerangers
- youth, women, and minorities
- business plan emphasis
 - working capital
 - less core equity
- growth vs. business acumen

Strategic Shifts in U.S. Agriculture-Tweeners

- too big to be small and too small to be big
- 10-15% exit with equity
- 10-15% partial or total liquidation
- 10- 15% negative cash flow, net worth
- transitional customer / inter-generational
- exit planning / wealth preservation

5

State of Customers

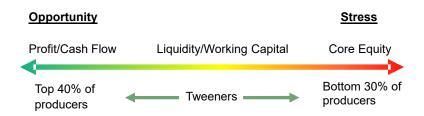
- deterioration in cash
- deterioration in working capital
- cash flow strategies/restructure
- less equity in collateral secured loans
- increasing loan balances
- more time and focus on loan monitoring
- 5 times rule: performing vs. non-performing

Producers' Decisions Misdirected

- focus on production management to profitability
- adverse commodities- somewhere else philosophy
- balance sheet complacency
- grow the operation out of problems
- cut the wrong costs
- drive-by financials at year end

7

Agricultural Economic Cycle Spectrum: Stages of the Financial Statements



Top 40% Proactive Producers

- 5 percent rule
- 10-25 percent marketing advantage
- lower rent cost \$20- \$50 per acre
- lower fertilizer cost \$20- \$50 per acre
- modest living expenses
- sound financial system
- systems approach



9

Bottom 30% of Producers

- marginal resources
- demographics cycling out
- rent & lease equity in devaluing machinery
- lack of financial/marketing systems skills
- operate using Schedule F with "minimize taxes" mentality
- rusted out, worn out or faded out assets
- high maintenance living
- undisciplined pursuit of more
- lack HUT principle
- know it all/victim mentality

Recent Views of Ag Lenders: Customers With Negative Profits 2016

<u>Percentage</u>	<u>Midwest</u>	Coast
<10%	0%	40%
10-25%	41%	13%
26-50%	38%	33%
>50%	22%	13%

11

Recent Views of Ag Lenders: Losing Equity on Balance Sheet

<u>Percentage</u>	<u>Midwest</u>	<u>Coast</u>
<10%	0%	33%
10-25%	16%	47%
26-50%	39%	20%
>50%	44%	0%

Recent Views of Ag Lenders: Refinancing/Restructure

Customers Sought Refinancing/Restructure in Last 2 years

<u>Percentage</u>	<u>Midwest</u>	<u>Coast</u>
<10%	27%	33%
10-25%	41%	47%
26-50%	27%	20%
>50%	5%	0%

13

Recent Views of Ag Lenders: Land Values Last 2 Years

<u>Change</u>	<u>Midwest</u>	<u>Coast</u>
Increasing	0%	33%
Stable	16%	53%
Decline 1-10%	62%	13%
Decline >10%	22%	0%

Recent Views of Ag Lenders: Factors Creating Financial Stress to Portfolio

<u>Factors</u>	Midwest Ranking	Coast Ranking
Negative Profits	1	1
Growing/Expanding	6	4
Land Value Decline	3	6
High Family Living	2	3
Loss of Staff	5	2
Competition/Financing	4	5

Ranking Scale: 1= Highest Concern 6= Lowest Concern

	Avg. Of All Farms	Low 33%	33 - 66%	High 34%
Number of farms	37	12	13	12
Average family size	3.6	3.4	2.9	4.6
,				
Family Living Expenses	0.700	0.000	7.462	40.540
Food and meals expense	9,708	9,302		12,548
Medical care	5,354	4,802	5,094	6,187
Health insurance	7,594	8,193	6,401	8,286
Cash donations	3,636	3,075	2,350	5,590
Household supplies	5,023	5,875	3,351	5,982
Clothing	2,722	1,311	2,449	4,429
Personal care	5,953	8,121	5,233	4,565
Child / Dependent care	653	478	542	948
Alimony and child support				
Gifts	3,839	3,829	6,154	1,341
Education	1,930	244	930	4,699
Recreation	5,187	4,931	3,344	7,438
Utilities (household share)	2,952	2,930	2,251	3,734
Personal vehicle operating exp	3,832	6,154	2,521	2,931
Household real estate taxes	1,196	456	1,582	1,520
Dwelling rent	101		286	
Household repairs	2,403	3,695	1,337	2,267
Personal interest	3,167	4,025	1,303	4,328
Disability / Long term care ins	242	254	228	245
Life insurance payments	6,005	7,140	4,916	6,049
Personal property insurance	488	332	927	167
Miscellaneous	11,225	13,531	8,883	11,457
Total cash family living expense	83,210	88,680	67,545	94,710
Family living from the farm				
Total family living	83,210	88,680	67,545	94,710
Other Nonfarm Expenditures				
Income taxes	33,212	12,566	38,841	47,759
Furnishing & appliance purchases	1,791	5,524	-	-
Nonfarm vehicle purchases	2,183	-	3,775	2,639
Nonfarm real estate purchases	18,116	15,831	-731	40,818
Other nonfarm capital purchases	12,412	-956	35,584	679
Nonfarm savings & investments	-3,207	8,739	-20,409	3,482
Total other nonfarm expenditures	64,507	41,704	57,061	95,377
Total cash family living				
investment & nonfarm capital purch	147,717	130,383	124,605	190,088

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	201
No. of Families Included	60	47	48	38	49	39	25	40	48	43	3
Average Family Size	2.9	2.9	3.0	3.3	3.3	3.3	3.7	3.7	3.4	3.4	3.
Expense Item											
Food & Meals	\$6,273	\$7,063	\$7,007	\$8,386	\$8,688	\$9,167	\$10,037	\$10,069	\$9,927	\$8,322	\$9,70
Medical Care	4,522	5,306	5,068	5,037	6,728	5,966	7,060	6,699	5,066	5,275	5,35
Health Insurance	3,358	3,364	4,860	5,283	6,966	6,628	7,506	6,996	6,634	7,530	7,59
Cash Donations	2,983	2,781	3,392	3,592	4,360	6,259	5,545	5,130	5,401	5,431	3,63
Household Supplies	2,053	3,015	2,756	3,189	3,763	6,376	8,789	7,078	6,304	5,456	5,02
Clothing	1,639	2,130	2,272	2,616	2,893	2,803	3,706	4,119	3,979	2,440	2,72
Personal Care	1,778	1,286	1,969	1,555	3,234	7,137	11,792	7,471	7,711	8,414	5,95
Child/Dependent Care	804	820	1,081	1,055	981	1,023	958	1,293	1,577	1,045	65
Alimony and Child Support	0	0	528	421	1,147	235	0	0	103	0	
Gifts	2,833	2,418	3,480	2,185	5,753	4,839	3,690	4,674	4,138	4,097	3,83
Education	1,041	852	1,183	1,986	1,861	2,836	2,439	3,237	1,892	2,441	1,93
Recreation	2,129	2,759	4,313	3,579	5,155	5,308	7,151	9,081	8,126	7,860	5,18
Utilities (household share)	2,201	2,305	2,767	3,347	2,854	2,721	2,576	2,952	3,129	2,935	2,95
Personal Auto	3,322	2,822	3,327	2,629	3,010	3,264	3,627	4,185	4,382	3,456	3,83
Household Real Estate Taxes	292	384	603	1,238	1,093	1,113	1,151	1,372	1,489	925	1,19
Dwelling Rent	228	224	60	234	367	856	1,273	514	224	212	10
Household Repairs	2,946	2,109	4,692	3,022	4,340	5,457	4,040	3,529	7,086	3,648	2,40
Personal Interest	1,000	2,043	1,972	1,668	2,204	1,638	2,125	1,909	2,187	2,513	3,16
Disability/Long Term Care Ins	184	196	679	461	676	394	382	612	779	696	24
Life Insurance Payments	3,161	2,126	3,483	4,324	3,981	4,672	6,662	5,606	5,444	5,486	6,00
Personal Property Insurance	179	99	210	229	183	47	68	175	83	143	48
Miscellaneous	7,240	7,590	9,924	8,927	8,691	6,260	9,429	9,979	10,956	13,666	11,22
Total Family Living Expense	\$50,166	\$51,692	\$65,626	\$64,963	\$78,928	\$84,999	\$100,006	\$96,680	\$96,617	\$91,991	\$83,21
Furnishing & Appliance Purchases	106	72	500	250	322	734	0	523	649	1,121	1,79
Nonfarm Vehicle Purchases	3,293	2,536	4,650	5,639	2,606	3,860	6,521	5,170	2,266	4,402	2,18
Nonfarm Real Estate Purchases	10,579	14,937	16,599	12,188	735	25,719	33,551	27,932	9,152	17,772	18,11
Other Nonfarm Capital Purchases	1,178	1,293	6,688	627	6,887	9,799	120,159	9,847	3,321	2,767	12,41
Nonfarm Savings & Investments	9,381	9,933	14,974	13,269	19,205	14,247	16,728	11,357	6,992	15,166	-3,20
Total Non Farm Costs	\$74,703	\$80,463	\$109,037	\$96,936	\$108,683	\$139,358	\$276,965	\$151,509	\$118,997	\$133,219	\$114,50
Income, Soc. Sec. Taxes	\$11,648	\$12,887	\$26,078	\$27.844	\$30.059	\$40,354	\$43,740	\$56,269	\$48,855	\$30,727	\$33,21
Total Taxes & Family Living	\$86,351	\$93,350	\$135,115	\$124,780	\$138,742	\$179,712	\$320,705	\$207,778	\$167.852	\$163,946	\$147.71

Source: Nebraska Farm Business, Inc. www.nfbl.net

17

Thoughts on Financial & Credit Analysis

- Schedule F (cash basis) will postpone issues two to three years
- conducting an accrual analysis requires one to ask critical questions
- the stress shows in the current section of the balance sheet first
- 96-4-50 rule of downcycle
- drive-by financials producer/lender

What the Schedule F Doesn't Tell You

- disguises potential problems forward at least two years
- postpones crucial conservations concerning adjustments- i.e. payables, receivables, inventory
- failure to recognize potential deferred tax obligations
- producers in the tax minimization vs. tax management mode
- potential disaster in partial/total liquidation

19

The Burn Rate – Working Capital Defense

 Revenue
 \$2,000,000
 Current Assets
 \$2,000,000

 Expenses
 2,500,000
 Current Liabilities
 \$1,000,000

 Loss
 \$500,000
 Net Working Capital
 \$1,000,000

Net Working Capital \$1,000,000 = 2.0 Years
Projected Loss \$500,000

Green >3.0 Years
Yellow 1.0-3.0 Years
Red <1.0 Year

The Burn Rate – Debt Service Payments Offense

 Revenue
 \$2,000,000
 Current Assets
 \$2,000,000

 Expenses
 1,800,000
 Current Liabilities
 \$1,000,000

 Profit
 \$200,000
 Working Capital
 \$1,000,000

Debt Service Payments = \$200,000

Net Working Capital \$1,000,000 = 5.0 Years

Debt Service Payments \$200,000

Green >5.0 Years
Yellow 2.5-5.0 Years
Red <2.5 Years

21

The Burn Rate - Working Capital

Defensive

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

Green >3.0 Years Yellow 1.0-3.0 Years Red < 1.0 Year

Offensive

Current Assets: \$2,000,000

-Current Liabilities: \$1,000,000

= Working Capital: \$1,000,000

Debt Service Payments: \$200,000

Working Capital = 5 Years

Debt Service Payments

Green >5.0 Years Yellow 2.5-5.0 Years Red < 2.5 Years

Burn Rate on Core Equity

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

Assets- Market Value	Estimated Value	Loan Maximum	Collateral Position	Remaining Principal	Equity Excess Reserves
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	= \$800,000
3. Current	\$1,650,000	X 80%	=\$1,320,000	- \$860,000	= \$460,000

Burn Rate: Land & Long Term Equity Reserves = Excess Reserves = \$2,000,000 = 4.0 Years Earnings Loss¹ \$ 500,000

20% Decline

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

23

Five Factors Influencing Burn Rate on Core Equity

- asset value decline
- advance rate
- amount of losses cash/flow profits
- taxation of sale proceeds- deferred tax liability
- sense of urgency negotiations "101"

¹ Assume Earnings Loss of \$500,000

Agricultural Lending Crossroads

STRONG Collateral/Core Equity/Character

Refinancing

- cyclical downturn
- weather, disease, etc.
- personal/business issue
- growth/management issue
- plan for improvement

Acceptable

- resilience
- growth & agility
- business acumen with growth

WEAK *

Repayment Ability/Liquidity/Management

STRONG

- liquidation
- preservation of equity
- deferred tax issues
- reputation risk

Restructure

- plan for improvement
- partial liquidation
- restructure top balance sheet/bottom
- balanced approach to credit analysis

Adapted from Curt Covington, Sr. Vice President Agricultural Finance,

WEAK Collateral/Core Equity/Character

25

Agricultural Customer Crossroads

STRONG Collateral/Core Equity/Character

Refinancing

- term debt EBITDA > 3.5:1 to 6:1 erratic coverage ratios periodically <100%
- ROA 1-3%
- working capital/expenses 10 to 25%
- equity around 50% EBITDA/Revenue 10-25%hflaws in management planning & execution
- higher family living withdrawals
- flaws in resources
- victims/know it all personality flaws

- Acceptable term debt EBITDA <5:1
- equity > 50%
- coverage ratio>150%, three year average working capital/expenses >25% ROA > cost of capital/inflation EBITDA/Revenue >25%

- knows cost of production
- modest family withdrawals
- balanced 5% rule
- marketing risk management

Repayment Ability/Liquidity/Management

STRONG

WEAK 4

- Settle term debt EBITDA >8 to 1
- pattern of negative margins
- negative working capital
- coverage ratio significantly under 100% high maintenance/toys
- lack of focus/lack of management percent equity under 30%
- lack of communication/people skills
- fraudulent activities

Restructure

- term debt to EBITDA > 6:1
- equity percent under 50%
- working capital/expenses under 10%
- ROA zero or negative coverage ratio consistently under 100%
- high maintenance living/non productive capital expenses
- bigness on the brain/production focus
- multiple refinancing

below average financial reporting, management, and marketing

Adapted from Curt Covington, Sr. Vice President Agricultural Finance,

WEAK Collateral/Core Equity/Character

Questions Very large strain of the strain o