

12. Managing Risk in Today's Environment

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Abstract/Summary

Risk management is central to successful farm management. Traditionally, most farms have focused their attention on one particular aspect of risk, namely price and yield risk. In reality, farms face countless risks to their operations including prices and yields, but also including weather, operation, human resource, legal, and other risks. Understanding the interactions and management of these risk is no small task. This interactive session will guide you to think about risk on the farm more holistically as well as provide strategies for managing in times of financial stress.

Managing Risk in Today's Environment

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Thinking about Risk

- Risk can be difficult to discuss
 - Overconfidence in forecasts and ability to influence events
 - Challenging to assess range of possible outcomes
- Important to
 - Recognize sources of vulnerability
 - Ways to manage risk
 - Agriculture is in the midst of unprecedented volatility
 - High income and increased wealth to protect

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Types of Risk

Business Risk

Financial Risk

Strategic Risk

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Potential Loss Exposures



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The Paradox of Uncertainty

- Uncertainty Creates Risk (Loss Exposures)
BUT
- Uncertainty Creates Opportunities

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The Fundamental Challenge

- Minimize the Downside
- Capture the Upside

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Vulnerabilities to Continued Prosperity

- Margin Compression
- Weak Working Capital Positions
- Excess and/or Poorly Structured Debt
- Asset Value Declines
- Availability of Credit
- Increased Tax Burdens/Reduced Preferences

Strategies To Use In This Environment

- Lock in Margins
- Buy Crop Insurance
- Consider Fixing some Interest Rates
- De-leverage – Pay Down Debt

Strategies To Use In This Environment

(cont'd)

- Hold Financial Reserves
- Conservative Bidding & Buying
- Slow Growth & Fund with Equity
- Make Investments in Operational Excellence

Changing Business Climate in Agriculture

- Crop agriculture is transitioning out of an extraordinarily profitable era
- Long-run future in crop agriculture is still bright, but the next several years will test managerial skills
- Aggressively manage all input costs
- Look for both cash rents and land prices to adjust downward the next several years
- Livestock sector will rebound and expand

Budgeting for \$4.00 corn



Table 1. 2016 Budgets for Central Plains Farmland with Lower Productivity

	2016 Budget*		2016 \$100 of Corn ¹	
	Corn	Wheat	Corn	Wheat
Yield per acre	154	53	154	53
Price per bu	\$4.00	\$9.25	\$4.00	\$9.25
Crop revenue	\$756	\$480	\$756	\$480
ARC-PLC	20	10	20	10
Crop insurance proceeds	0	0	0	0
Gross revenue	\$776	\$490	\$776	\$490
Fertilizer	\$100	\$30	\$100	\$30
Pesticides	50	40	50	40
Seed	120	70	120	60
Drying	10	1	10	1
Storage	0	0	0	0
Crop insurance	20	10	20	10
Total direct costs	\$190	\$150	\$190	\$150
Harvest labor	\$10	\$10	\$10	\$10
Machine fuel/lease	\$13	\$9	\$13	\$9
Utilities	0	0	0	0
Machine repair	20	20	20	20
Fuel and oil	20	20	20	20
Light vehicle	2	1	2	1
Mach. depreciation	80	60	80	60
Total gross costs	\$135	\$130	\$135	\$130
Head labor	\$10	\$10	\$10	\$10
Building repair and maint	11	5	11	5
Building depreciation	13	11	13	11
Insurance	10	10	10	10
Misc.	0	0	0	0
Interest (30-day)	10	11	10	11
Total overhead costs	\$53	\$57	\$53	\$57
Total non-land costs	\$243	\$207	\$243	\$207
Operator and land return	\$533	\$283	\$533	\$283
Cash cost	\$236	\$236	\$236	\$236
Net Farm Income	\$540	\$254	\$540	\$254

* The first two columns are from the 2016 Crop Budgets. The first two columns exclude inputs with \$100 per acre of costs.

Budgeting for \$4.00 corn

	Yield and Price			New
	bu	\$/bu	\$/acre	
REVENUE PER ACRE				
A. Yield per acre	154	\$4.00	\$616	
B. Price per bushel		\$4.00	\$616	
C. Net government payment		\$0.00	\$0.00	
D. Marketing proceeds		\$0.00	\$0.00	
E. Miscellaneous income		\$0.00	\$0.00	
F. Revenue (A + B + C + D + E)			\$616	
COSTS PER ACRE				
1. Fuel	\$100	\$0.65	\$65.00	
2. Harrow	30	\$0.30	\$9.00	
3. Seedbed/Prep	30	\$0.30	\$9.00	
4. Fertilizer and Lime	100	\$0.30	\$30.00	
5. Crop Insurance	20	\$0.50	\$10.00	
6. Crop Insurance	20	\$0.50	\$10.00	
7. Drying	10	\$1.00	\$10.00	
8. Miscellaneous	100	\$0.10	\$10.00	
9. Custom Hire/ Machine Expense	100	\$0.10	\$10.00	
10. New machine/ Labor	100	\$0.10	\$10.00	
11. Irrigation	100	\$0.10	\$10.00	
12. Labor	100	\$0.10	\$10.00	
13. Fuel and Oil	100	\$0.10	\$10.00	
14. Repair and Maintenance and Misc.	100	\$0.10	\$10.00	
15. Depreciation on Equipment and Misc.	100	\$0.10	\$10.00	
16. Land Charge/ Misc.	100	\$0.10	\$10.00	
17. Interest on Nonland Costs	100	\$0.10	\$10.00	
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What is working capital?

Working Capital =
Current Assets - Current Liabilities

To make it scale neutral, it's best examined as a ratio

Working Capital/Gross Revenue

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Today's Scenario

- 3,600 acres corn/soybean operation
- Cash rent 1,800 acres at \$175/acre average
- Purchased 100 acres at \$2,400/acre in 2012
 - 50% financed with debt
- Total Assets = \$2.5 million
- Total Liabilities = \$0.5 million
- Taxable Income in 2014 = \$50,000
- Recently updated machinery lineup

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Additional Information

- Debt to Asset Ratio = 0.2
- Working Capital = \$750,000
- Working Capital to Gross Revenue = 0.7

- Anticipate losing \$100/acre this year
 - \$360,000
- Burn rate = 2.08 years

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Wait! How Do I Calculate my Burn Rate?

Working Capital = Current Assets - Current Liabilities

Burn Rate = Working Capital/Net Income Loss

Example: Working Capital = \$500,000
& Net Income Loss = \$200,000

Burn Rate = \$500,000/\$200,000 = 2.5 years

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Why should I worry about "burn rate"?

- Working capital is a buffer to absorb short-run losses
- Burn rate helps us visualize how much "buffer capacity" we have...
- Burn rate tells us how long we can continue at our current pace before our working capital is exhausted
- Increasing working capital buys time to make improvements

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How can I learn more?

- Farmriskresources.com
 - Integrated Risk Management Initiative
 - Advance the use of sound risk management
 - Assist farmers in identifying and managing risks on their businesses
 - Create and deliver education experiences
 - Resources include risk assessments, scenario analysis, potential loss exposure, risk perception, and contingency planning
 - Examples and illustrations demonstration how various risks impact farms
 - How tools can be used to manage risks
 - Key: Producers will be able to *assess and manage risks and implement* risk management plans

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Farmriskresources.com



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Managing Relationship Risks: Huffman & Hawbaker Farms

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The Farm

- Acreage - 3100 Total
 - 2650 corn and soybeans
 - 450 specialty vegetable crops
 - (tomatoes and peppers primarily)
 - Lease 85% of land
- Livestock - 3050 pig spaces
 - Contract production
- Workforce - 4 family members and 4 full time employees

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The Family

- Levi - General Manager
- Norma - Co-General Manager and Bookkeeper
- Aaron - Grain and Livestock Manager
- Jim - Vegetable Crop Manager

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The Relationships

- Buyers
 - Grain - Andersons for both cash and futures
 - Hogs - pig space contract with Signature Farms
 - Tomatoes - Red Gold and two salsa companies
- Suppliers
 - Loyal to machinery and agronomic suppliers
- Landlords
 - 17 landowners (many long term)
 - 5 formal contracts

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The Relationships (cont.)

- Lenders
 - Switched 10 years ago
 - New lender understand specialty crops
- Family/Employees
 - 4 family members with explicit responsibilities
 - 4 full time employees
 - Professional migrant workers - up to 120

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For more information, please contact me at
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