

Long-Term Cash Rent Decisions Using a Cash Rent Decision Tool

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Center for
Commercial Agriculture

Long-Term Cash Rent Decisions Webinar
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**Need more information
regarding cash rents?**

**Look for this article on
home page of the
Center for Commercial
Agriculture's website**

ag.purdue.edu/commercialag



Featured Publications

Resources for Managing in a
Financial Downturn

2015 Purdue Crop Cost & Return
Guide

The Bears Control the 2015
Indiana Farmland Market

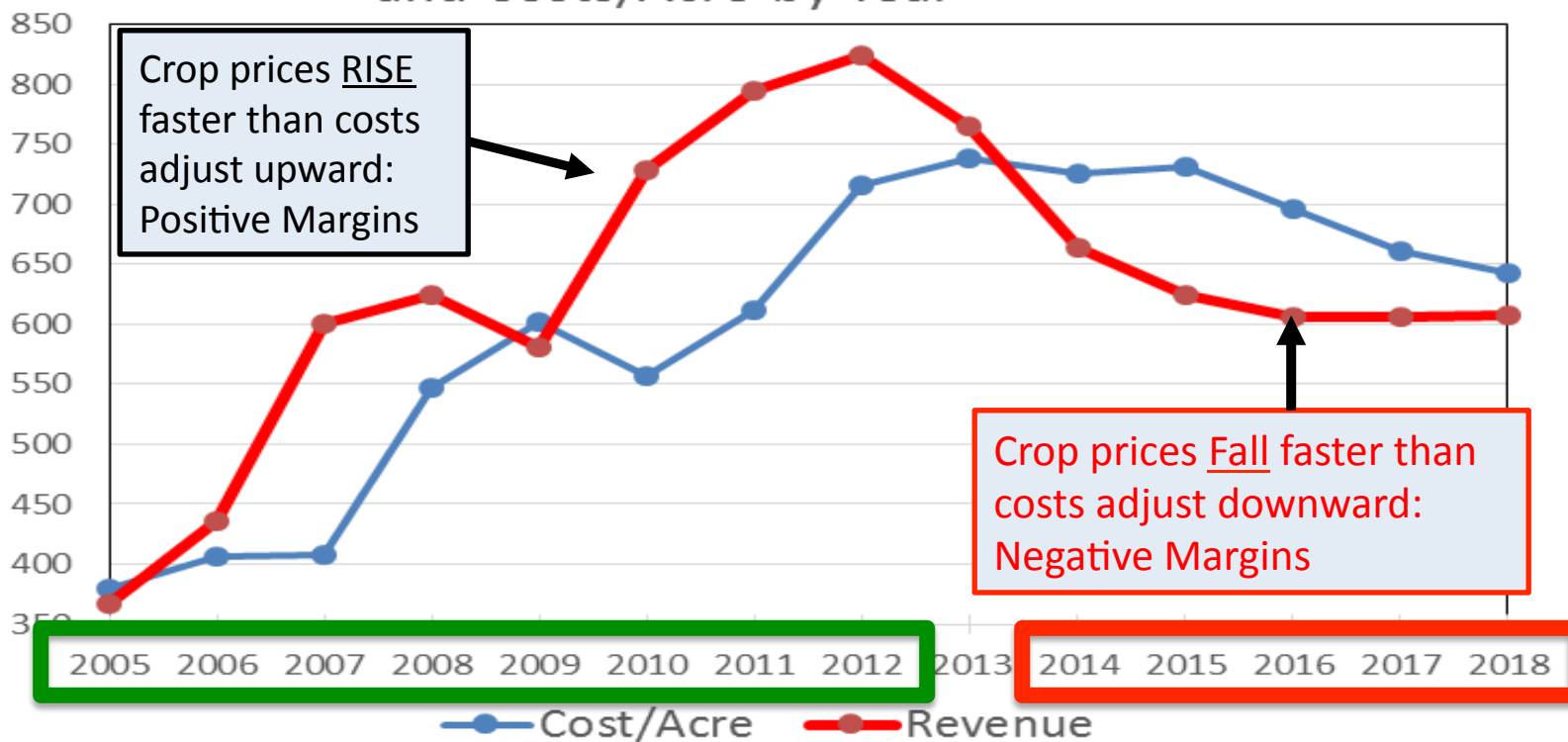
Is Farmland Still an Attractive
Investment? An Update

**Evaluating Your Farmland
Rental "Options"**

More Resources

- More information & sample lease forms available on Purdue Center for Commercial Ag's website:
 - ag.purdue.edu/commercialag
 - Click on “Farmland” & Look for “Rental Arrangements”

50/50 Corn/Soybean Indiana Average Revenue and Costs/Acre by Year



Crop prices RISE faster than costs adjust upward: Positive Margins

Crop prices Fall faster than costs adjust downward: Negative Margins

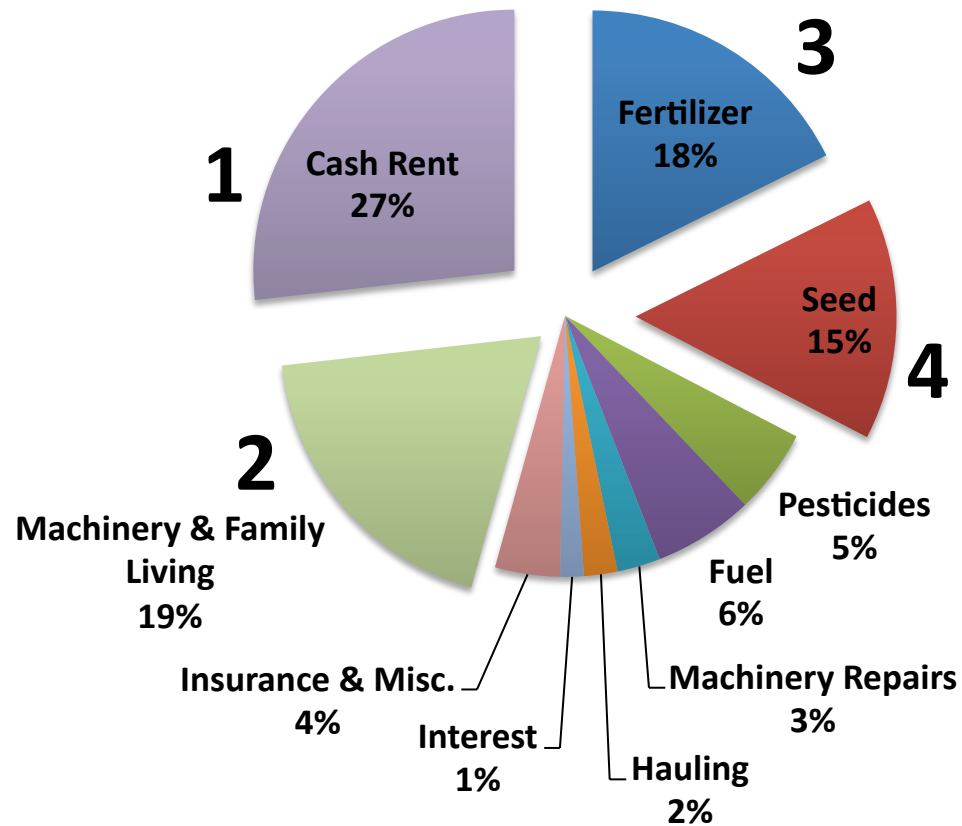
2005 2006 2007 2008 2009 2010 2011 2012

2013 2014 2015 2016 2017 2018

—●— Cost/Acre —●— Revenue

What's are the biggest cost issues facing crop agriculture this year?

2016 Estimated Indiana Corn Production Costs



The Cash Rent Dilemma

Making Long-Run Decisions

- Farmers decision to rent farmland is complicated by
 - ✓ Downturn in expected net returns for corn and soybeans
 - ✓ Landowner's reluctance to reduce cash rents

- Questions that Need to be Addressed
 1. If you expect to lose money in 2016 on a tract of rented land, should you continue to rent the tract?
 2. How much of a premium can you pay to retain control of a tract until net return prospects improve?
 3. How does paying a premium affect your farm's liquidity?

An Options Based Decision Tool

Long Term Cash Rent Spreadsheet

- ✓ Inputs for the spreadsheet tool
 1. 2016 Budgets for Corn & Soybeans
 2. Prices and Yields for Next Five Years
 3. Working Capital at Beginning of the Year
- ✓ Outputs from the spreadsheet tool
 - Rent Analysis
 1. Market Cash Rent
 2. Breakeven Cash Rent
 3. Premium of Market over Breakeven Cash Rent
 - Working Capital Analysis

Your
Budget
Inputs
(in blue)

2016 Budgets			
Default budget:	Indiana - High		Use Default
Enter budget information in blue text cells. Clicking "Use Default" will replace all items.	Corn	Soybeans	Average
Percent of acres	50%	50%	100.0%
Yield per acre	198	60	
Futures price (\$/bu.)	\$4.35	\$10.30	
Basis (\$/bu.)	\$0.30	\$0.30	
Cash price (\$/bu.)	\$4.05	\$10.00	
Revenue			
Crop revenue	\$802	\$600	\$701
Other revenue	0	0	\$0
ARC/PLC payments	0	2	\$1
Crop insurance	0	0	\$0
Total revenue	\$802	\$602	\$702

Your Budget Inputs (in blue)

Expenses			
Fertilizer	\$156	\$67	\$112
Pesticide	43	28	\$36
Seed	123	74	\$99
Drying	37	0	\$19
Storage	6	6	\$6
Crop insurance	20	15	\$18
Other direct expenses	0	0	\$0
Total direct expenses	\$385	\$190	\$288
Machine hire/lease	\$0	\$0	\$0
Utilities	5	5	\$5
Machine repair	22	18	\$20
Fuel and oil	19	11	\$15
Light Vehicle	0	0	\$0
Machinery depreciation	48	38	\$43
Other power costs	0	0	\$0
Total power expenses	\$94	\$72	\$83
Hired labor	\$14	\$14	\$14
Building repair and rent	5	5	\$5
Building depreciation	10	10	\$10
Insurance	10	10	\$10
Misc.	10	10	\$10
Interest	12	7	\$10
Other overhead expenses	0	0	\$0
Total overhead expenses	\$61	\$56	\$59
Total expenses	\$540	\$318	\$429

Return to Budget

Use Defaults

Print



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Input -- Prices and Yields for Next Five Years

Yields for 2016 through 2020

	Bu Increase per Year	2016	2017	2018	2019	2020
Corn	2.0	183.0	185.0	187.0	189.0	191.0
Soybeans	0.5	54.3	54.8	55.3	55.8	56.3

Corn Price Scenarios

Price Scenario	Year				
	2016	2017	2018	2019	2020
FAPRI	3.71	3.96	4.09	4.14	4.13
Long-run	4.60	4.60	4.60	4.60	4.60
Low	3.50	3.50	3.50	3.50	3.50
High	4.50	4.50	4.50	4.50	4.50
User-defined	3.75	3.75	3.75	3.75	3.75
Price scenario	FAPRI	<< this scenario will be used in analysis			
Price per bushel	3.71	3.96	4.09	4.14	4.13
Revenue per acre	679	733	765	782	789

Long-Run Inputs



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**Input the
local
market
rate for
cash rent**

Projected Cash Flow Over the Next Five Years

	Year				
	2016	2017	2018	2019	2020
	\$ per acre				
Crop revenue	588	615	631	640	643
Other revenue	0	0	0	0	0
ARC/PLC payment	52	0	0	0	0
Crop insurance	0	0	0	0	0
Total revenue	\$640	\$615	\$631	\$640	\$643
Total expenses	\$397	\$397	\$397	\$397	\$397
Operator and land return	\$243	\$218	\$234	\$243	\$246
Cash rent	281	281	281	281	281
Farmer net income	-\$38	-\$63	-\$47	-\$38	-\$35
Operator labor, equity	32	32	32	32	32
Farmer net return	-\$70	-\$95	-\$79	-\$70	-\$67
Break-even rents					
Cash costs (no depreciation)	\$286	\$261	\$277	\$286	\$289
Non-land costs	\$243	\$218	\$234	\$243	\$246
All costs included	\$211	\$186	\$202	\$211	\$214

Analysis compares breakeven cash rent to market rate & impact on working capital

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Working capital analysis					
Beginning working cap.	\$/acre				
	\$500				
Full Loaded Costs Less Depr and Op Labor	505	485	481	486	494
Full Loaded Costs Less Depreciation	473	421	385	358	334
Full Loaded Cost Less Operator Labor	462	399	352	314	279
All Costs Included	430	335	256	186	119
Working capital to total expenses					
All Costs Included	63.4%	49.4%	37.8%	27.4%	17.6%
Rent analysis					
Market cash rent	281	281	281	281	281
Equitable cash rent	211	186	202	211	214
Premium	70	95	79	70	67

The Bottom Line

You can't accurately predict the future

so you must

position for the challenges & opportunities