

Crop Economics Outlook 2014

Gary Schnitkey
University of Illinois

Presentation Materials

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PDF of slides available now

Video available tomorrow

Questions

Please submit questions during the presentation

Tasks Today

Handbook Chapters
Expand All Categories ▼
Collapse All Categories ▲

- ⊕ Illinois Crop Budgets
- ⊕ Historic Corn and Soybean Returns
- ⊕ Machinery Costs
- ⊕ Illinois Farmland Price and Rent Data
- ⊕ Farm Leasing and Rent Forms
- ⊕ Costs of Production, Family Living Expenses, and Other Reports
- ⊕ Yield and Price Tools
- ⊕ Previous Illinois Farm Economic: Facts and Opinions Articles
- ⊕ AgLinks: Management (selected external weblinks)

Handbook Search Tool

Type your keyword and click the submit button. The search return page will show resource link titles that include your keyword.

Management section of *farmdoc* includes budgets and historic corn and soybean returns

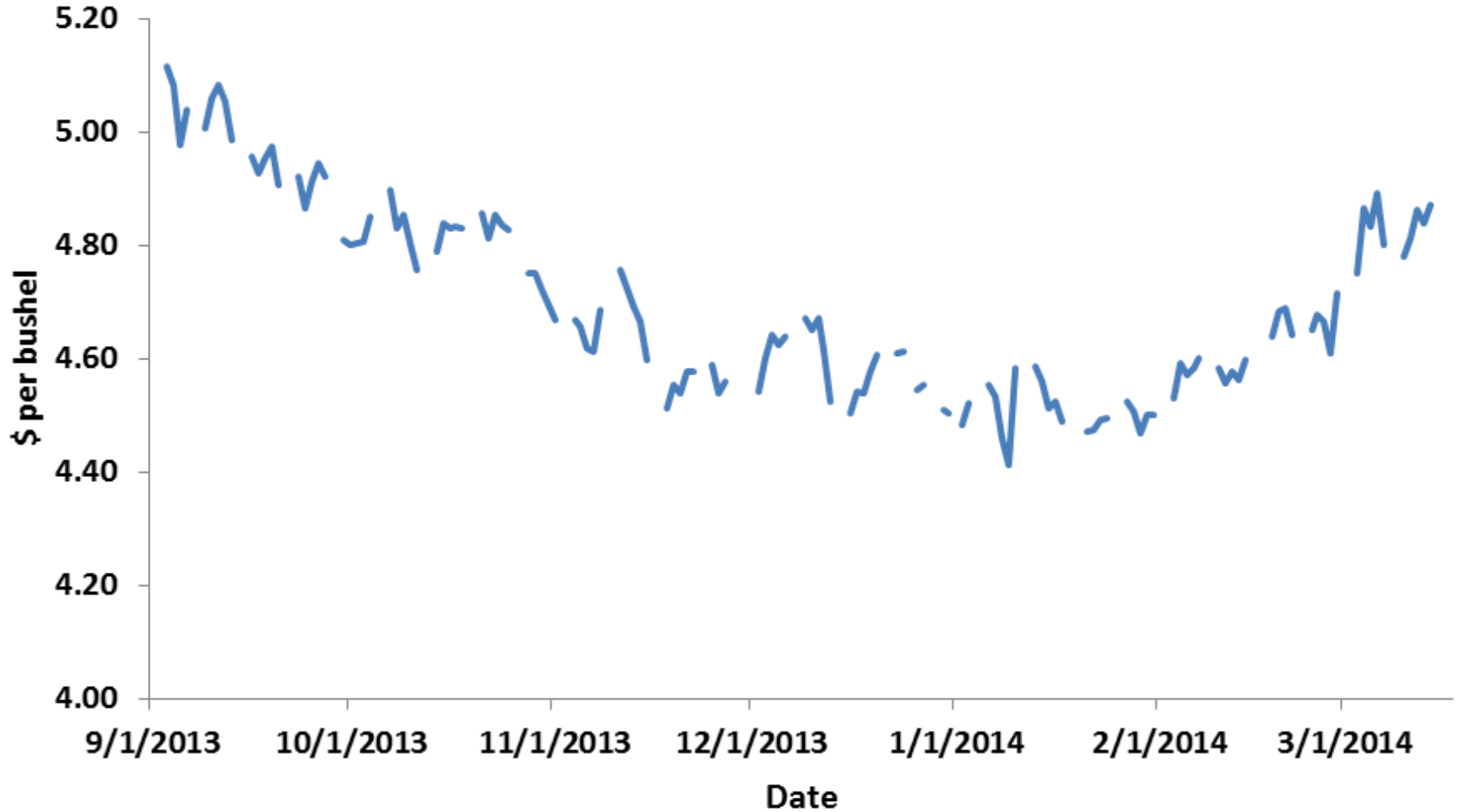
1. Outlook for corn and soybeans

- Prices
- Costs
- Returns by crop

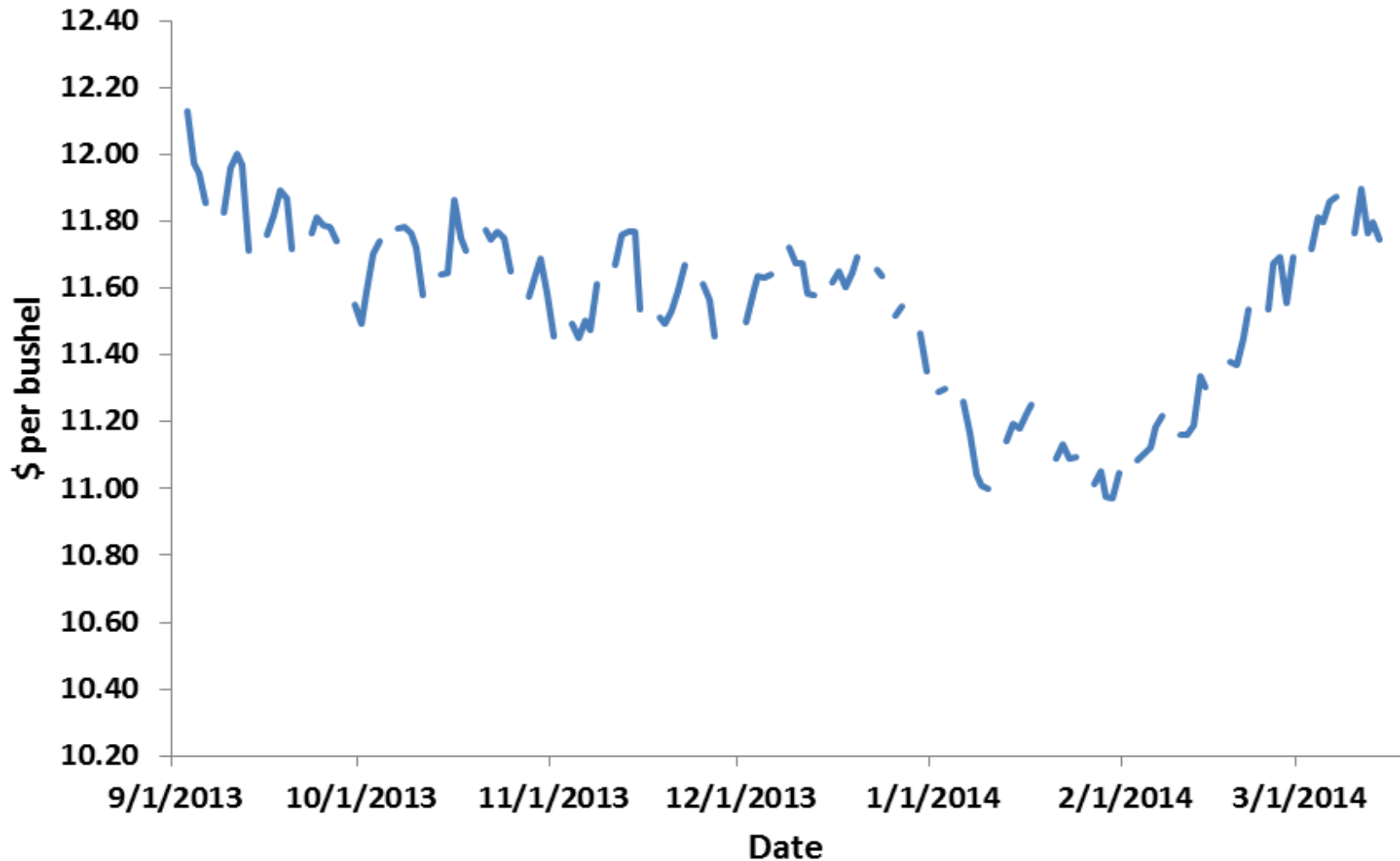
2. Decisions

- Late planting
- Prevented planting
- Input recalibrations
- Capital purchases
- Cash rent

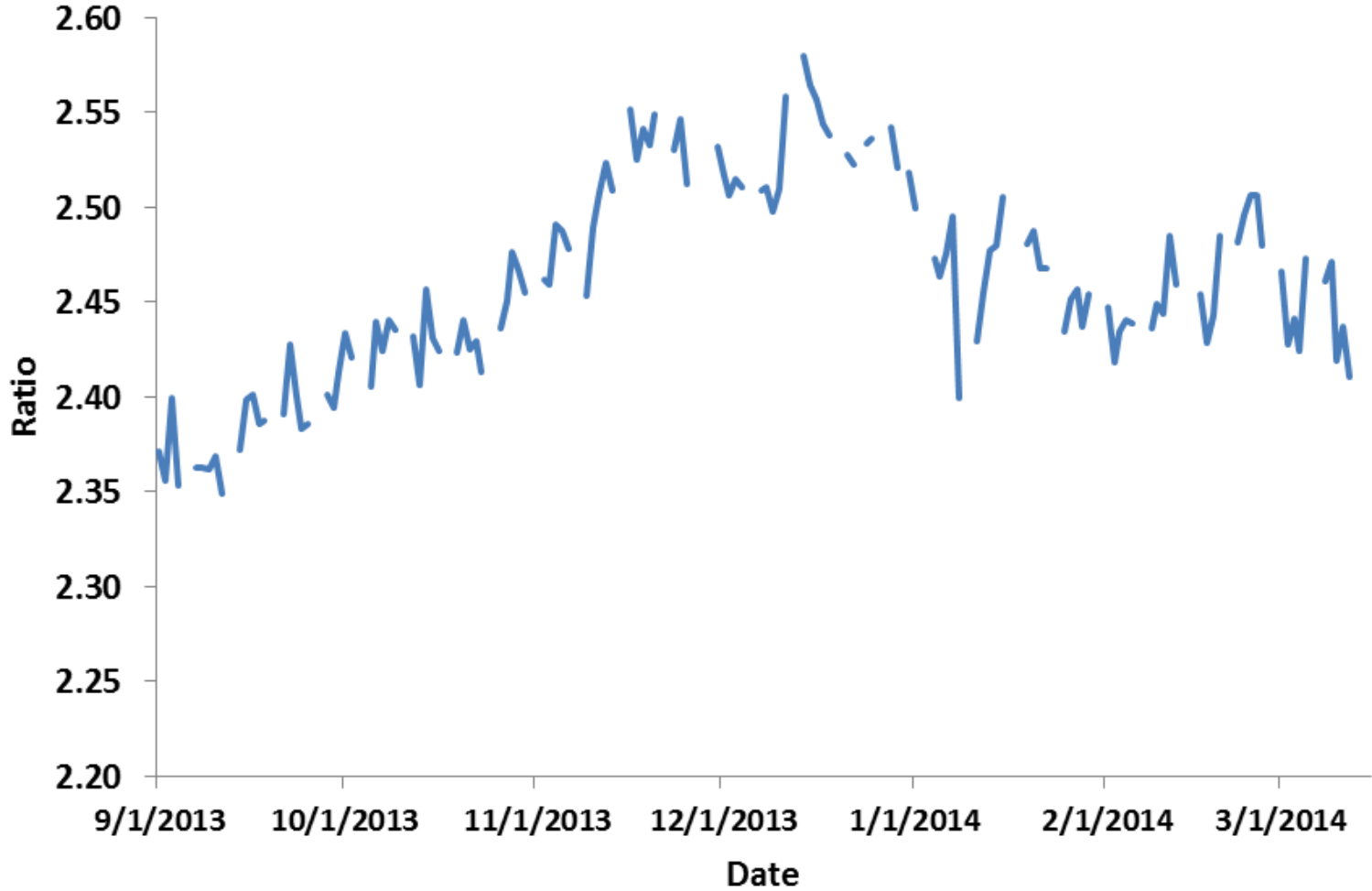
Dec 2014 CME Corn Price



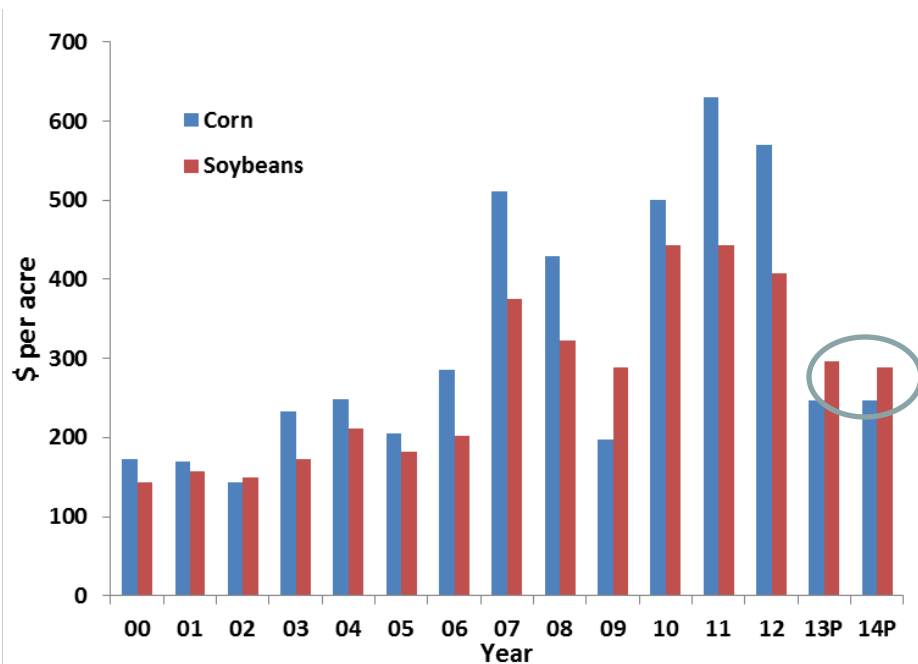
Nov 2013 CME Soybean Price



Soybean-Corn Price Ratio



Operator and Land Returns, Central Illinois – High productivity farmland



- Corn end up more profitable than soybeans (11 out 13 years between 2000 and 2012)
- Soybeans more profitable than corn in 2013
- Projected to be more profitable in 2014, however, little skill exists in predicting differences in profitability between crops

Planting Intentions

- **March 31st report can be key**
- **Could see changes in relative corn-soybean prices**
- **Farmdoc Webinar from 2 to 3 on March 31 (Darrel Good and Scott Irwin)**

Forecast

Forecasts based on 3/17/2014 CME futures prices

Dec corn \$4.82

**forecasts: \$4.50 Market-year-avg price for 2014
(\$3.50 to \$5.50 range)**

Nov soybean: \$11.75

**forecasts: \$11.10 MYA price for 2014
(\$9.85 to \$13.75 range)**

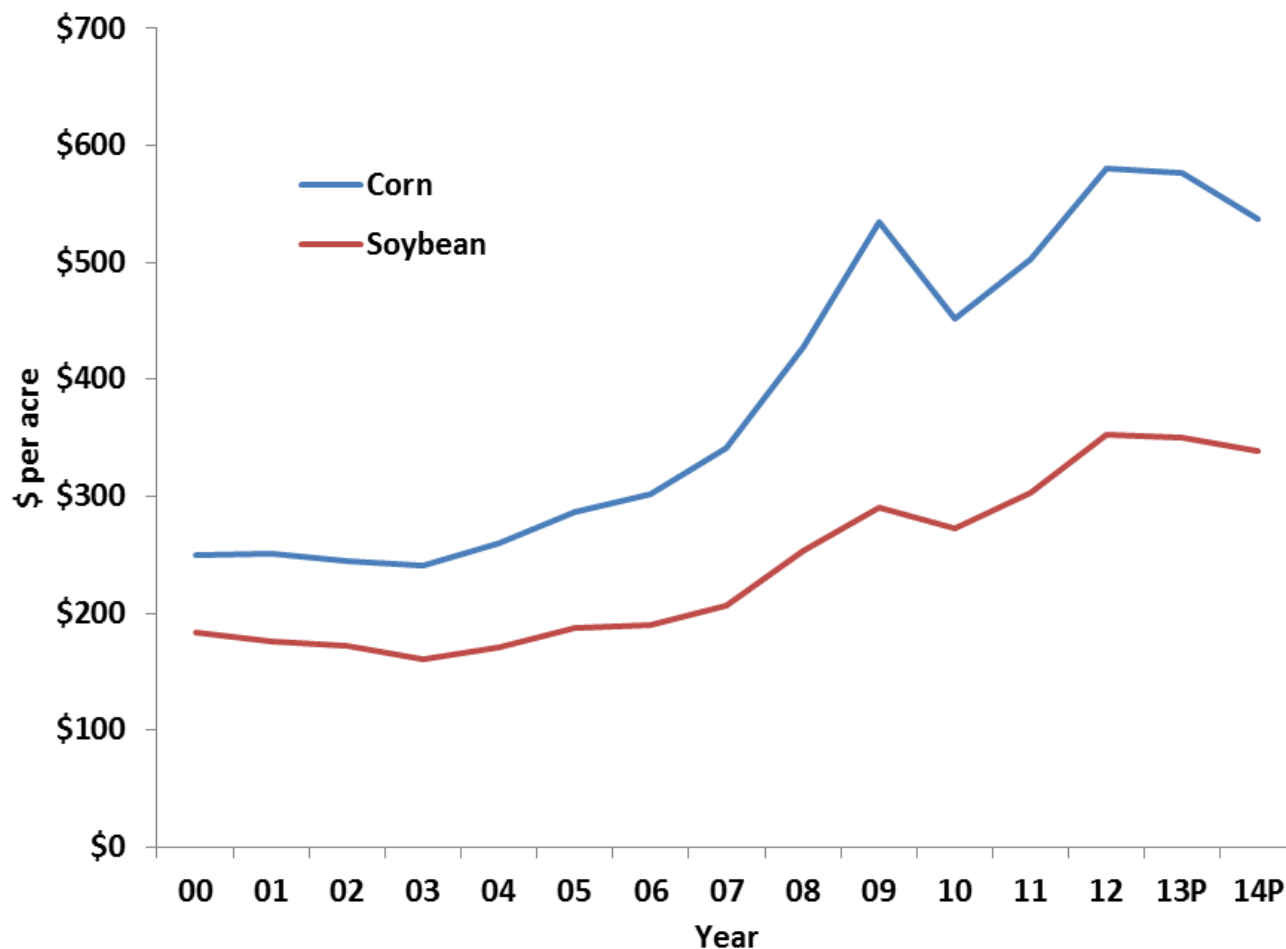
USDA forecast

\$3.90 for corn; \$9.65 for soybeans

Use in budgets

\$4.00 for corn; \$11.00 for soybeans

Non-land Costs, Corn and Soybeans, Central Illinois

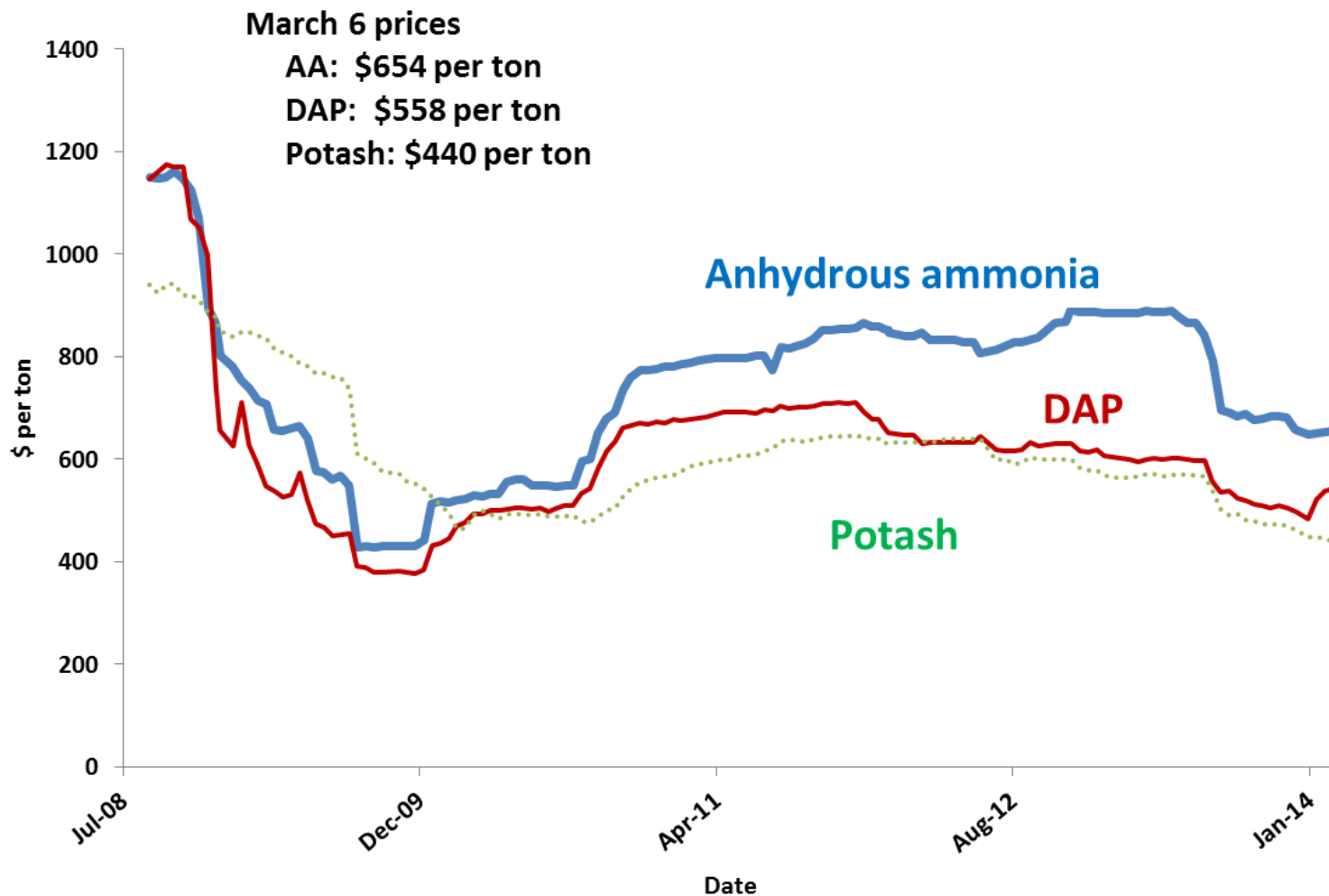


Cost Changes Between 2006 and 2012, Central Illinois, Corn

	2012 Cost \$ per acre	Increase Since 2006 \$ per acre	Percent of Total Costs
Fertilizer	\$200	\$83	34%
Seed	\$108	\$63	19%
Mach Depreciation	\$55	\$35	9%
Crop Insurance	\$25	\$14	4%
Drying	\$16	\$5	3%
Fuel	\$23	\$9	4%
Interest (non-land)	\$11	-\$6	2%
Non-land costs	\$581	\$279	



Fertilizer Prices, Illinois



Corn, Central Illinois – High Productivity

	Year							
	2007	2008	2009	2010	2011	2012	2013P	2014P
Yield per acre	201	199	192	168	174	126	182	196
Price per bu	\$4.12	\$4.07	\$3.62	\$5.34	\$6.24	\$6.60	\$4.40	\$4.00
Crop revenue	\$828	\$810	\$695	\$897	\$1,086	\$832	\$801	\$784
Other govt payments	25	25	24	24	24	24	22	0
Crop insurance proceeds	0	22	5	32	23	295	30	0
Gross revenue	\$853	\$857	\$732	\$953	\$1,133	\$1,151	\$853	\$784
Total direct costs	\$222	\$294	\$404	\$314	\$362	\$405	\$398	\$357
Total power costs	\$71	\$82	\$80	\$86	\$87	\$117	\$119	\$121
Total overhead costs	\$48	\$52	\$50	\$52	\$54	\$59	\$59	\$59
Total non-land costs	\$341	\$428	\$534	\$452	\$503	\$581	\$576	\$537
Operator and land return	\$512	\$429	\$198	\$501	\$630	\$570	\$277	\$247

In management section of *farmdoc*

Soybeans, Central Illinois – High Productivity

	Year							
	2007	2008	2009	2010	2011	2012	2013P	2014P
Yield per acre	55	50	55	60	56	50	52	57
Price per bu	\$10.13	\$10.51	\$10.03	\$11.47	\$12.71	\$14.20	\$12.00	\$11.00
Crop revenue	\$557	\$526	\$552	\$688	\$712	\$710	\$624	\$627
Other gov't payments	25	25	24	24	24	24	22	0
Crop insurance proceeds	0	25	3	5	11	26	11	0
Gross revenue	\$582	\$576	\$579	\$717	\$747	\$760	\$657	\$627
Total direct costs	\$102	\$137	\$175	\$149	\$173	\$198	\$193	\$180
Total power costs	\$61	\$70	\$72	\$76	\$80	\$101	\$103	\$105
Total overhead costs	\$44	\$46	\$43	\$48	\$50	\$54	\$54	\$54
Total non-land costs	\$207	\$253	\$290	\$273	\$303	\$353	\$350	\$339
Operator and land return	\$375	\$323	\$289	\$444	\$444	\$407	\$307	\$288

In management section of *farmdoc*

Budgets, Central Illinois – High Productivity

	Corn- after- Soybeans	Corn- after- Corn	Soybeans- after- Corn	Soybeans- after-Two Years-Corn
Yield per acre	199	189	57	59
Price per bu	\$4.00	\$4.00	\$11.00	\$11.00
Crop revenue	\$796	\$756	\$627	\$649
Other gov't payments	0	0	0	0
Crop insurance proceeds	0	0	0	0
Gross revenue	\$796	\$756	\$627	\$649
Total direct costs	\$357	\$372	\$180	\$180
Total power costs	\$121	\$121	\$105	\$105
Total overhead costs	\$59	\$59	\$54	\$54
Total non-land costs	\$537	\$552	\$339	\$339
Operator and land return	\$259	\$204	\$288	\$310

In management section of *farmdoc*

Returns for Crops

(\$4.00 corn, \$11.00 soybeans)

	Northern	Central - High	Central-Low	Southern
Corn Yield	190	196	184	159
Soybean Yield	60	57	53	48
Operator and Farmland Returns (\$ per acre)				
Corn-after-corn	203	259	197	118
Corn-after-corn	144	204	131	62
Soybeans-after-corn	337	288	264	193
Soybean-after-2-corn	359	310	286	215

Budgets in management section of *farmdoc*

Returns for Crops

(\$4.50 corn, \$11.10 soybeans)

	Northern	Central - High	Central-Low	Southern
Corn Yield	190	196	184	159
Soybean Yield	60	57	53	48
Operator and Farmland Returns (\$ per acre)				
Corn-after-corn	299	359	290	199
Corn-after-corn	235	299	229	138
Soybeans-after-corn	343	294	269	198
Soybean-after-2-corn	365	316	292	220

Budgets in management section of *farmdoc*

Planting Decision Model

Modules for

- Returns by planting date
- Corn-soybean rotations
- Corn-soybeans-wheat rotations
- Prevented planting
- Replant decisions

RETURNS ESTIMATED BY PLANTING DATE

Help Print

Region Central Illinois – High Prod.

(click "Use Defaults" to change inputs)

(items in blue can be changed)

Use Defaults

Main Menu



Yield by Planting Date				Yield Estimates (Bu. per acre)		
(Defaults from University of Illinois research)				Date	Corn	Soybeans
		Corn	Soybeans			
Maximum yield date		20-Apr	27-Apr	1-Apr	199	52
Maximum yield (bushels per acre)		204	57	8-Apr	202	54
Yield loss per day (bushels per acre per day)				15-Apr	204	56
	1-Apr 10-Apr	0.4	0.3	22-Apr	204	57
	11-Apr 20-Apr	0.1	0.2	29-Apr	203	57
	21-Apr Apr-31	0.1	0.0	6-May	201	56
	1-May 10-May	0.4	0.1	13-May	197	55
	11-May 20-May	0.6	0.2	20-May	193	54
	21-May 30-May	1.0	0.4	27-May	186	51
	1-Jun 10-Jun	1.2	0.5	3-Jun	178	48
				10-Jun	170	44

**FAST Microsoft Excel
Spreadsheet**

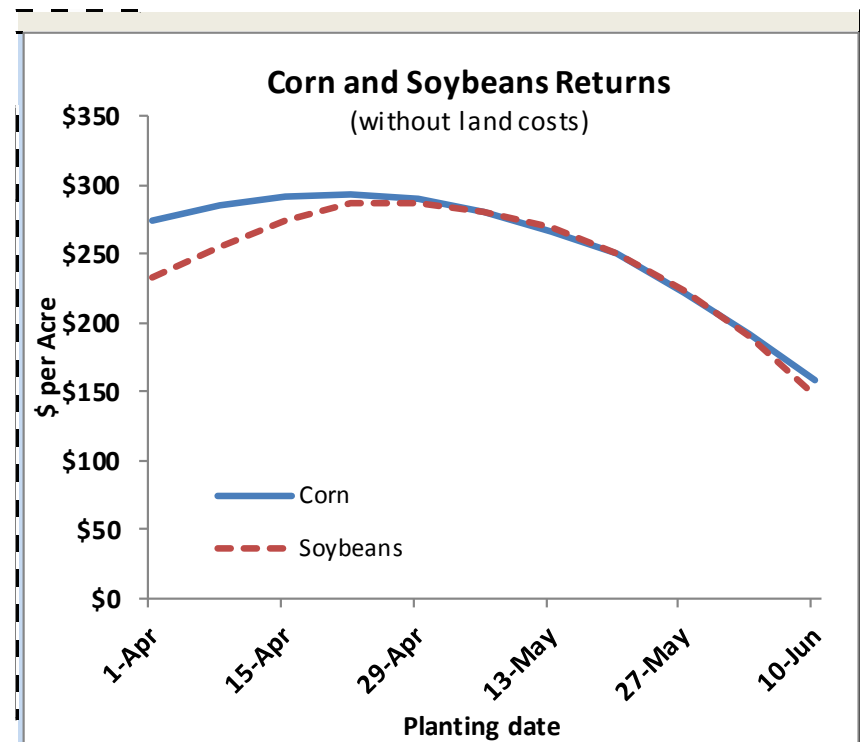
Download from *farmdoc*

Late Planting

Late planting may cause earlier switches to soybeans

Of course, depends on price responses

See *FAST* Planting Decision Model



Prevented Planting

Prevented planting payments are part of COMBO product (RP, YP, RPwExc)

Can take prevented planting payments if final planting date has occurred and planting has been prevented by weather

Taking the prevented planting payment often is a economically competitive alternative

See *FAST* Planting Decision Model

Prevented Planting Comparison Tool



State:	Illinois
County:	Champaign

Net returns from prevented planting

	<u>Corn</u>	<u>Soybeans</u>
COMBO plan	RP	RP
Coverage level	80%	80%
APH yield (bu. per acre)	180	50
Projected price (\$ per bu.)	\$4.62	\$11.36
Prevented planting factor	60%	60%
Final planting date	6/5	6/20
Prevented planting payment	\$399	\$273
Weed control costs	15	15
Crop insurance premium	28	20
Net returns (\$ per acre)	\$356	\$238

Net returns on plant corn or soybeans

	<u>Corn</u>	<u>Soybeans</u>
Planting date	6/6	6/6
Insurance guarantee	784	512
Maximum yield (bu. / acre)	210	55
Percent of max	72%	90%
Expected yield	151	49
Expected harvest price	\$5.50	\$12.80
Basis	\$0.00	\$0.00
Expected cash price (\$/bu.)	\$5.50	\$12.80
Crop revenue	\$829	\$632
Crop insurance payment	0	0
Revenue (\$ per acre)	\$829	\$632

Use def

Recalibrate Input Decisions

More yield is needed to justify rescue sprays and other input decisions

\$20 input / \$5.00 requires 4 bushel to breakeven

\$20 input / \$4.00 requires 5 bushels to breakeven

Operator and Farmland Returns

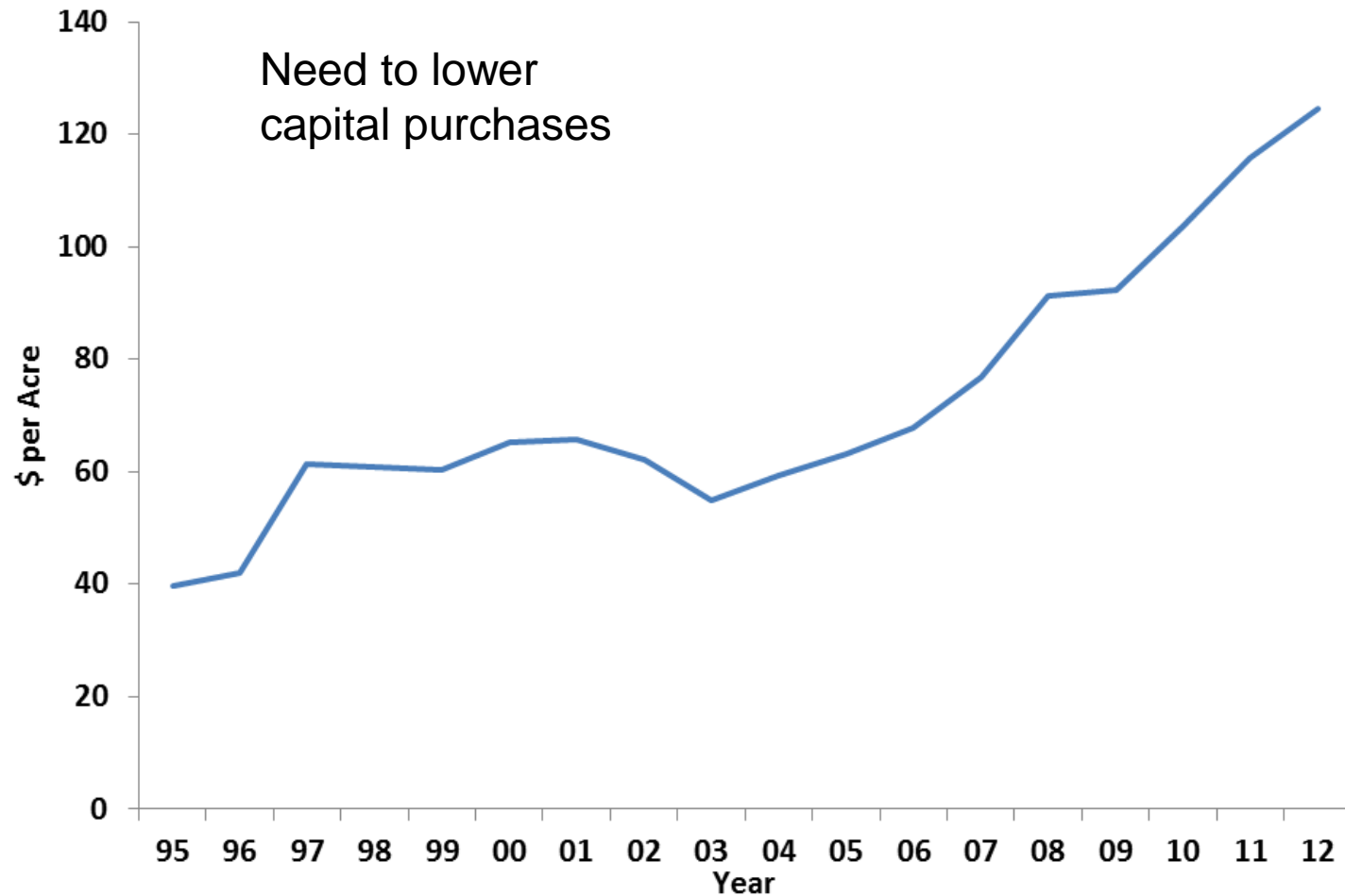
	2010	2011	2012	2013	2014P *	2014P **
Northern	426	540	491	284	245	310
Central-high	482	568	516	287	261	328
Central-low	386	459	424	225	227	275
Southern	292	369	271	205	154	184

* Uses a \$4.00 corn price, \$11.00 soybean price

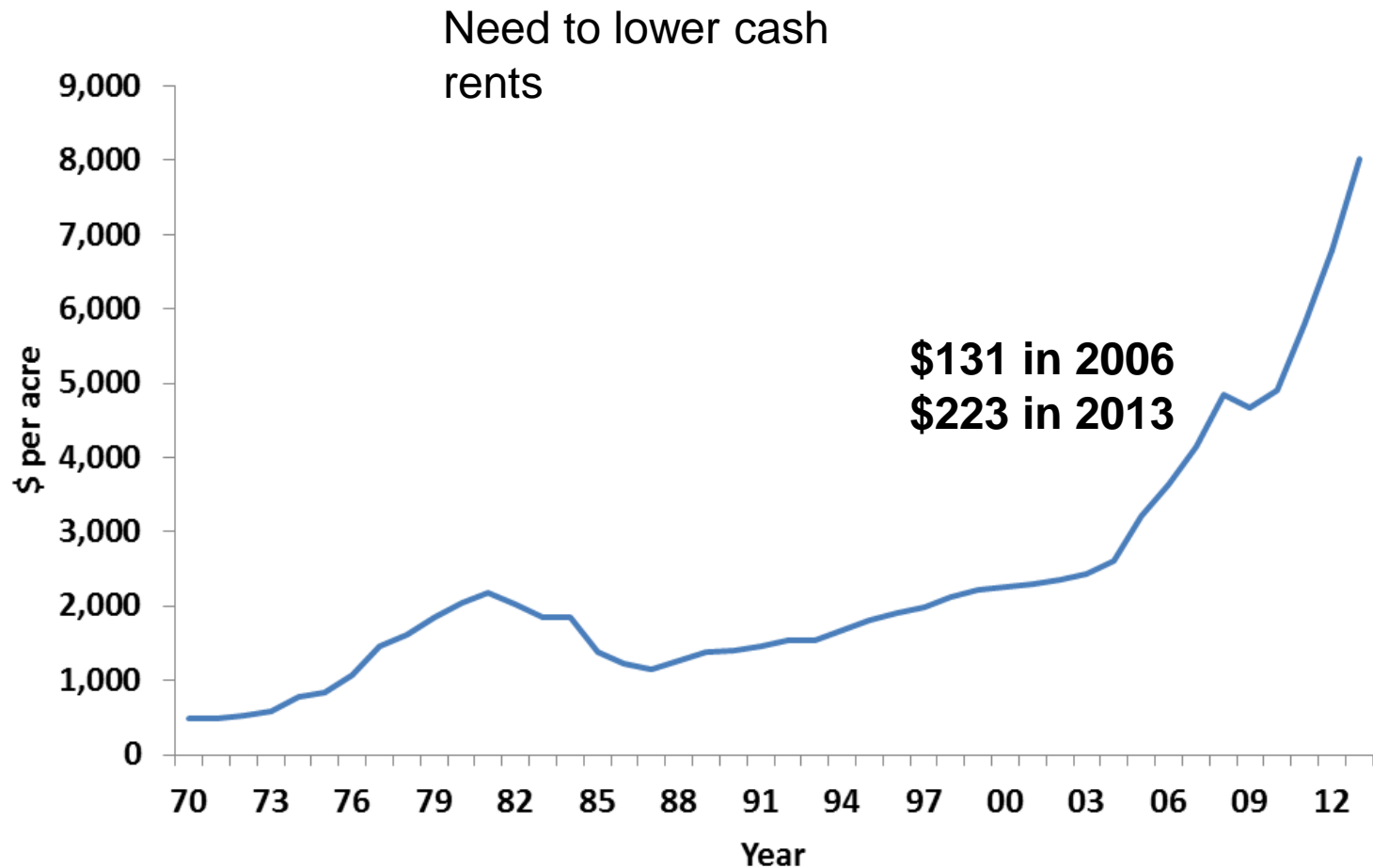
** Uses a \$4.50 corn price, \$11.10 soybean price

- 1) Lower capital expenditures
- 2) Lower cash rents for 2015

Power Costs, \$ per acre



Average Cash Rents, Illinois



Summary

- **Relative even returns between corn and soybeans**
- **Late planting – earlier switch to soybean**
- **Prevented planting – may be economical**
- **Input decision – recalibrate to lower prices**

- **Reduce capital expenditures**
- **Reduce cash rents**

Questions?

Please continue to submit questions during this part of the webinar

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