

2019 ILLINOIS FARM ECONOMICS SUMMIT

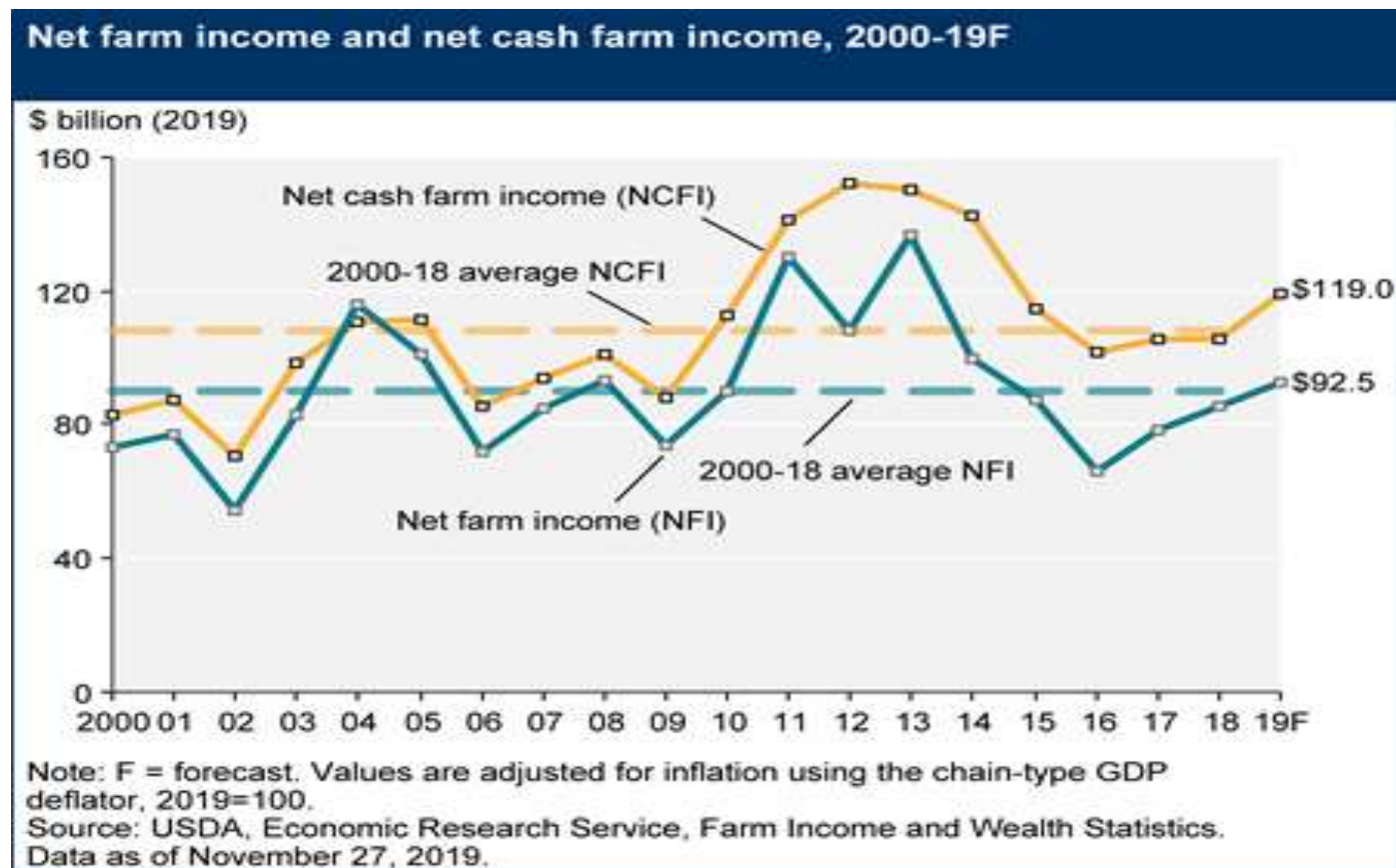
Illinois Farm Income: 2019 Projections and Outlook for 2020

Dale Lattz and Gary Schnitkey

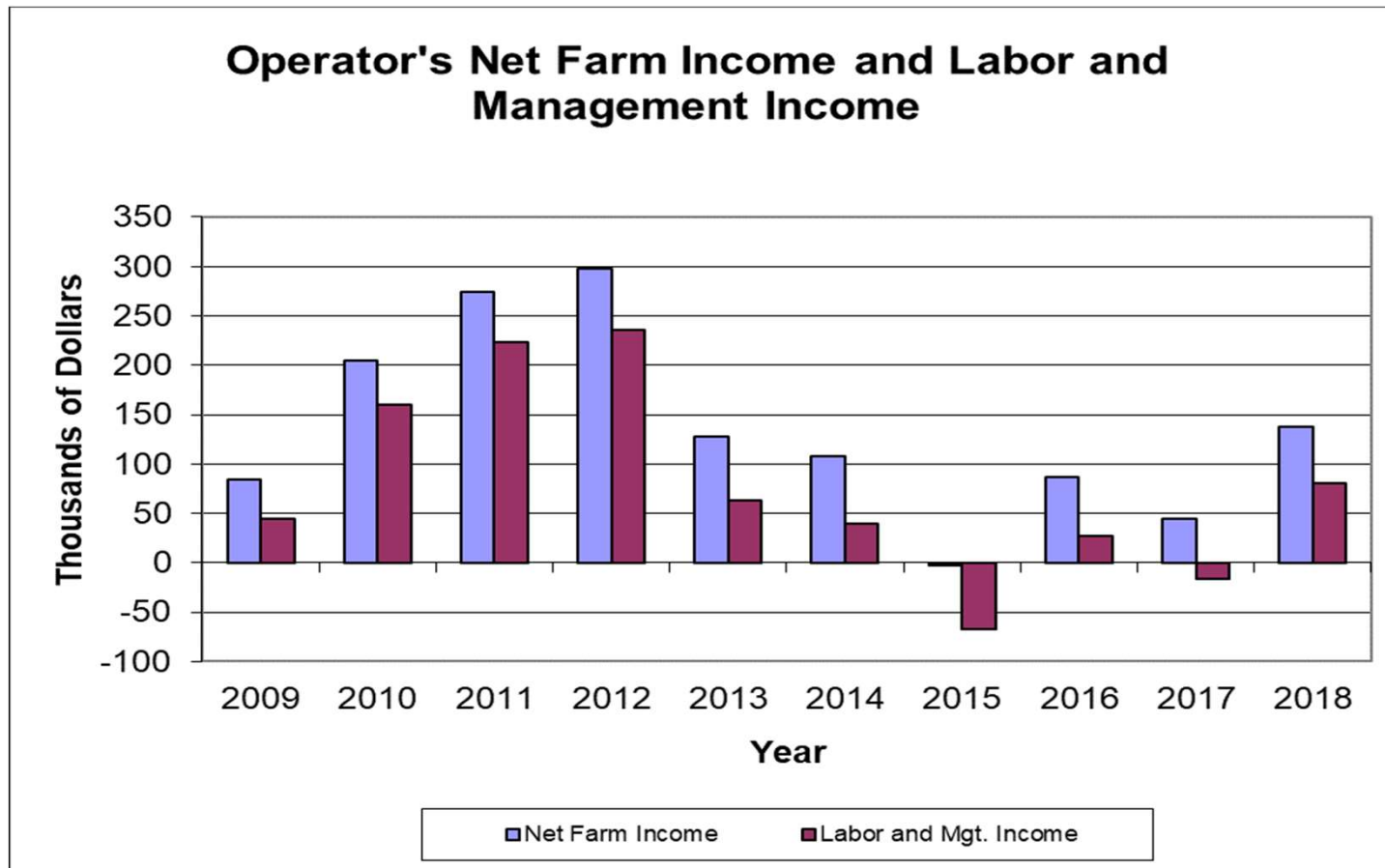
Topics

- 1. 2019 and 2020 Illinois Farm Income Outlook**
- 2. Cash Rent Trends**
- 3. Land Value Trends**

USDA Net Farm Income Forecast



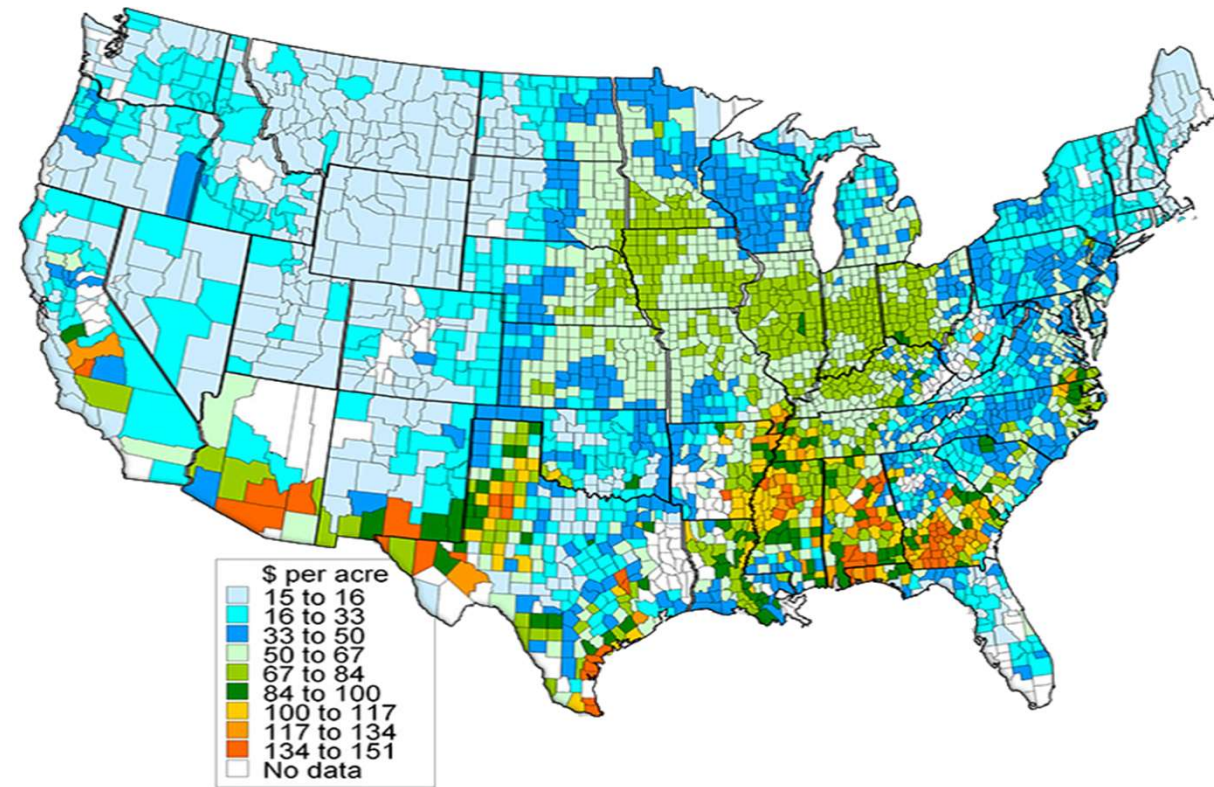
FBFM Farm Incomes



Items Effecting 2019 Incomes

- Weather – Prevent plant, Higher drying costs, Other harvest issues
- Government Policy – MFP, WHIP, ARC/PLC-very few 2018 payments, Trade Issues
- Crop Insurance – prevent plant, crop revenue payments in some areas

MFP Per Acre Rates for 2019



Source: Farm Services Agency, USDA

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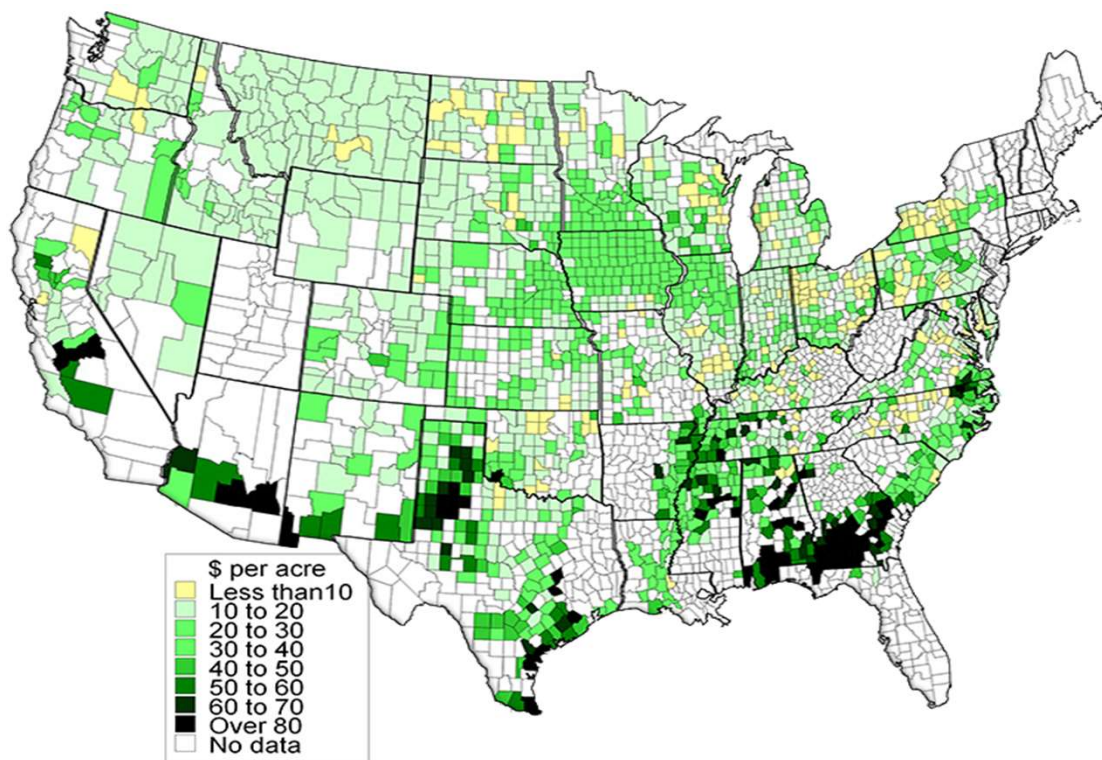
MFP in 2019

- Rate per county in Illinois ranged from \$53 per planted acre to \$87 per planted acre
- Received one-half the payment in summer, and other half in two-installments: Oct-Nov and January, 2020
- Last 25% not assured

\$15 per acre payment for prevent plant if planted to a cover crop by August 1

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Change in 2019 MFP Rates from 2018 Implied MFP Rates



MFP in 2019

Between \$20 and \$30 per acre higher in Midwest than 2018 payment when averaged over all corn, soybeans, wheat, and other MFP crops

2018 paid based on bushels produced:

- **\$0.01 per bushel for corn**
- **\$1.65 per bushel for soybeans**
- **\$0.14 per bushel for wheat**

Source: Farm Services Agency, USDA

WHIP Plus – Prevent Plant

- 15% higher indemnity payment for RP (\$400 prevent plant payment x .15 = \$60 per acre)
 - 10% for all other policies
- Comes from crop insurance companies and has been paid

Figure 1. Illinois Corn Yields, 1970 to 2019P

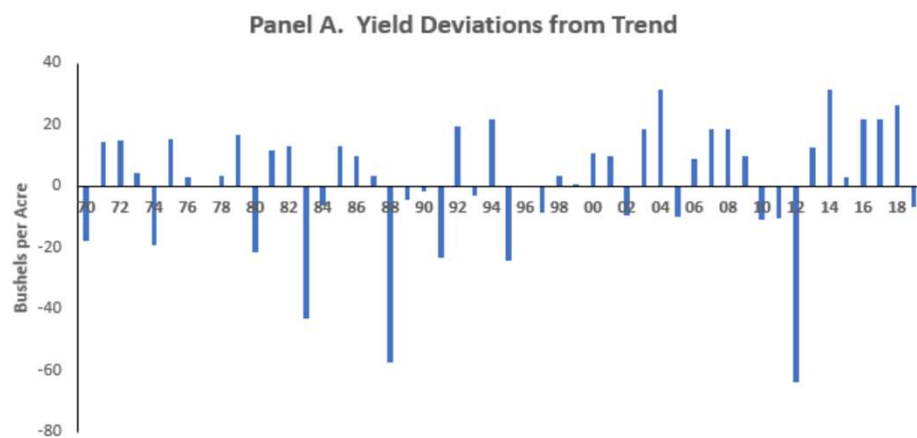
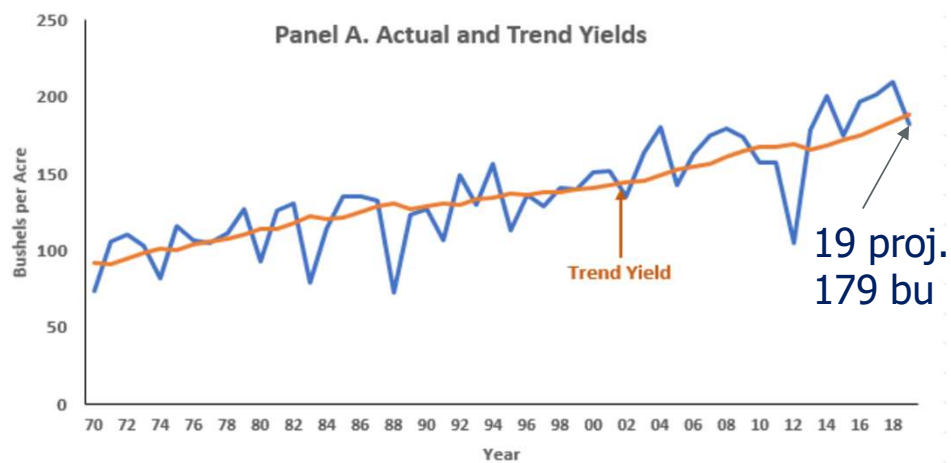
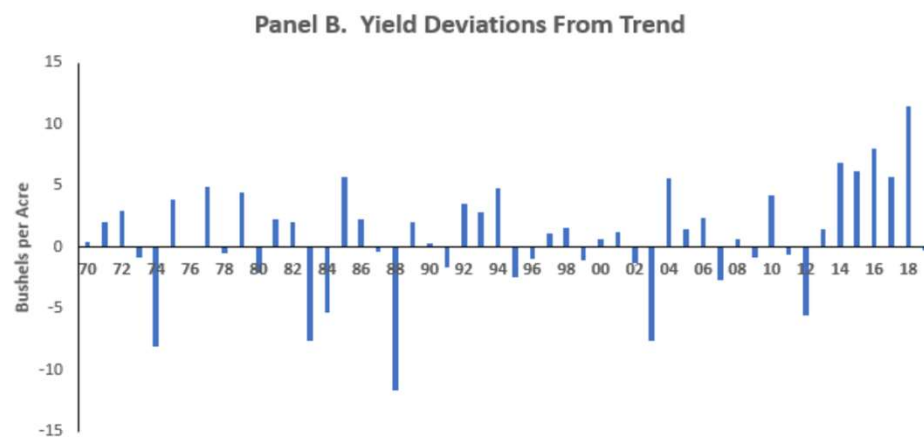
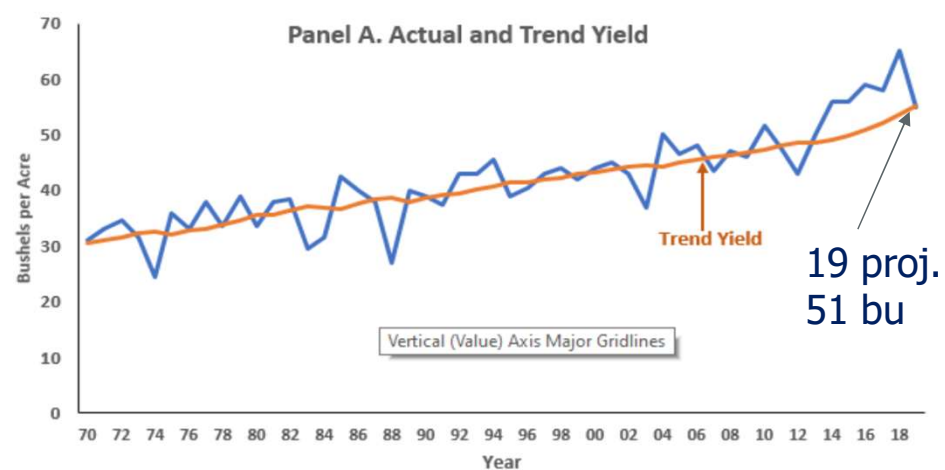
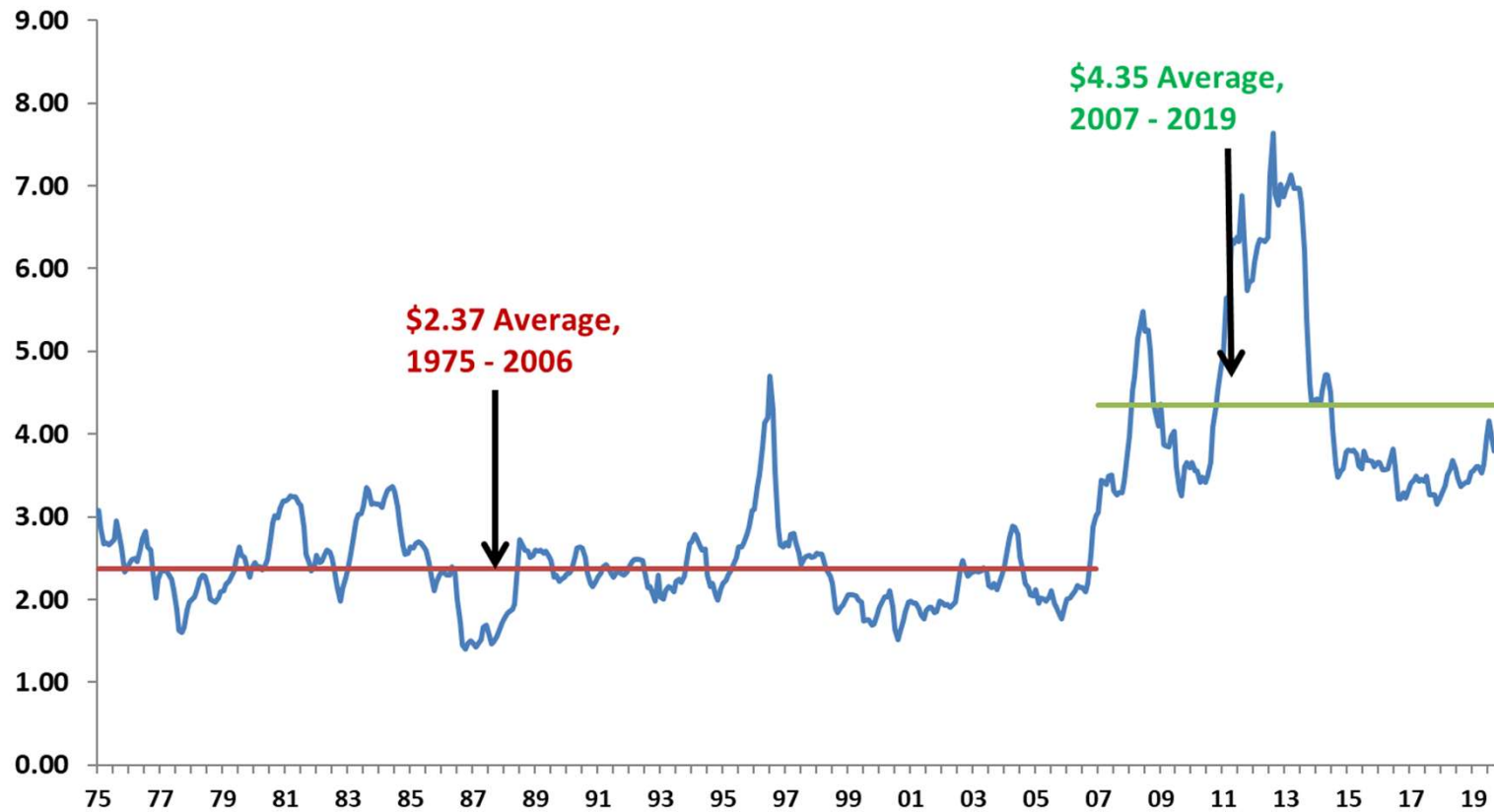


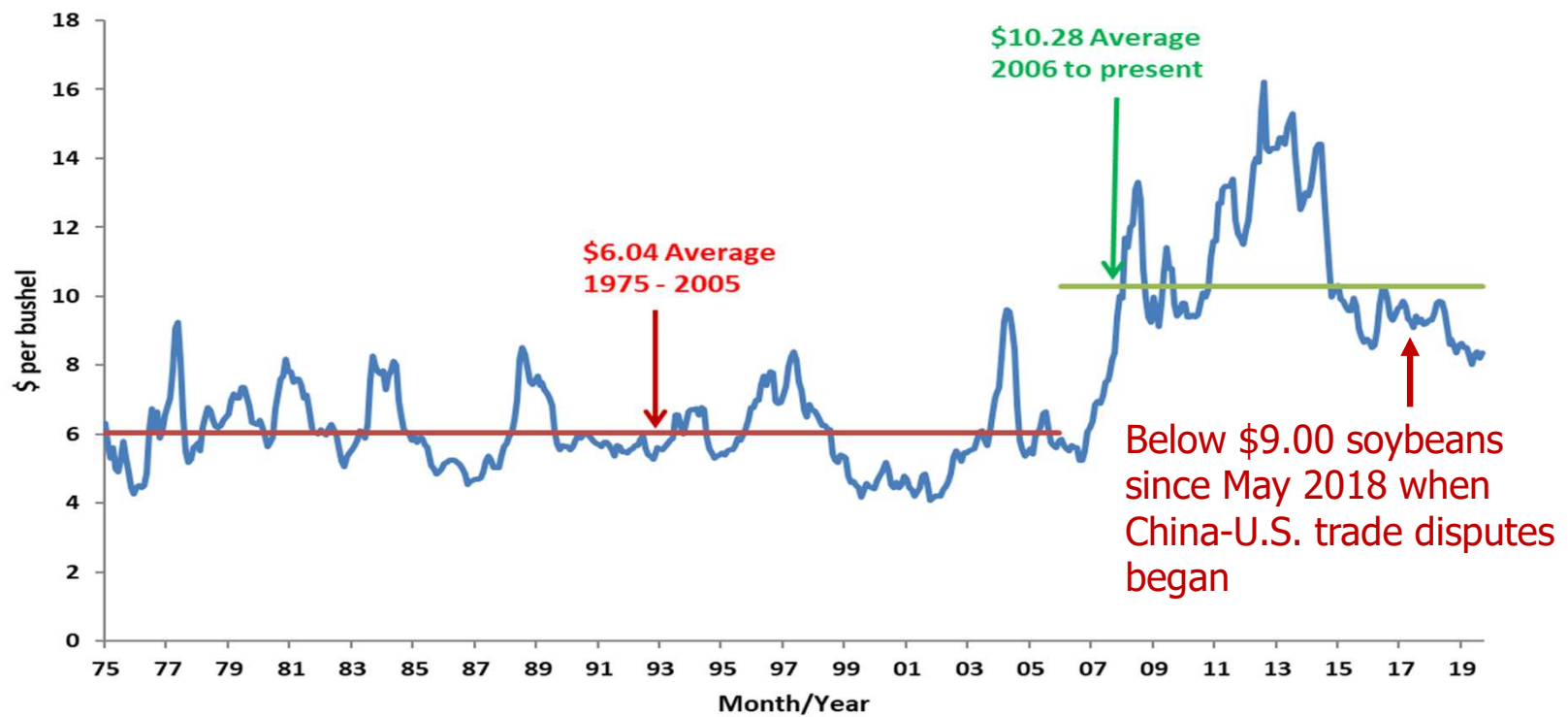
Figure 2. Illinois Soybean Yields, 1970 to 2019P



Corn Prices, US, Monthly



Soybean Prices, US, Monthly

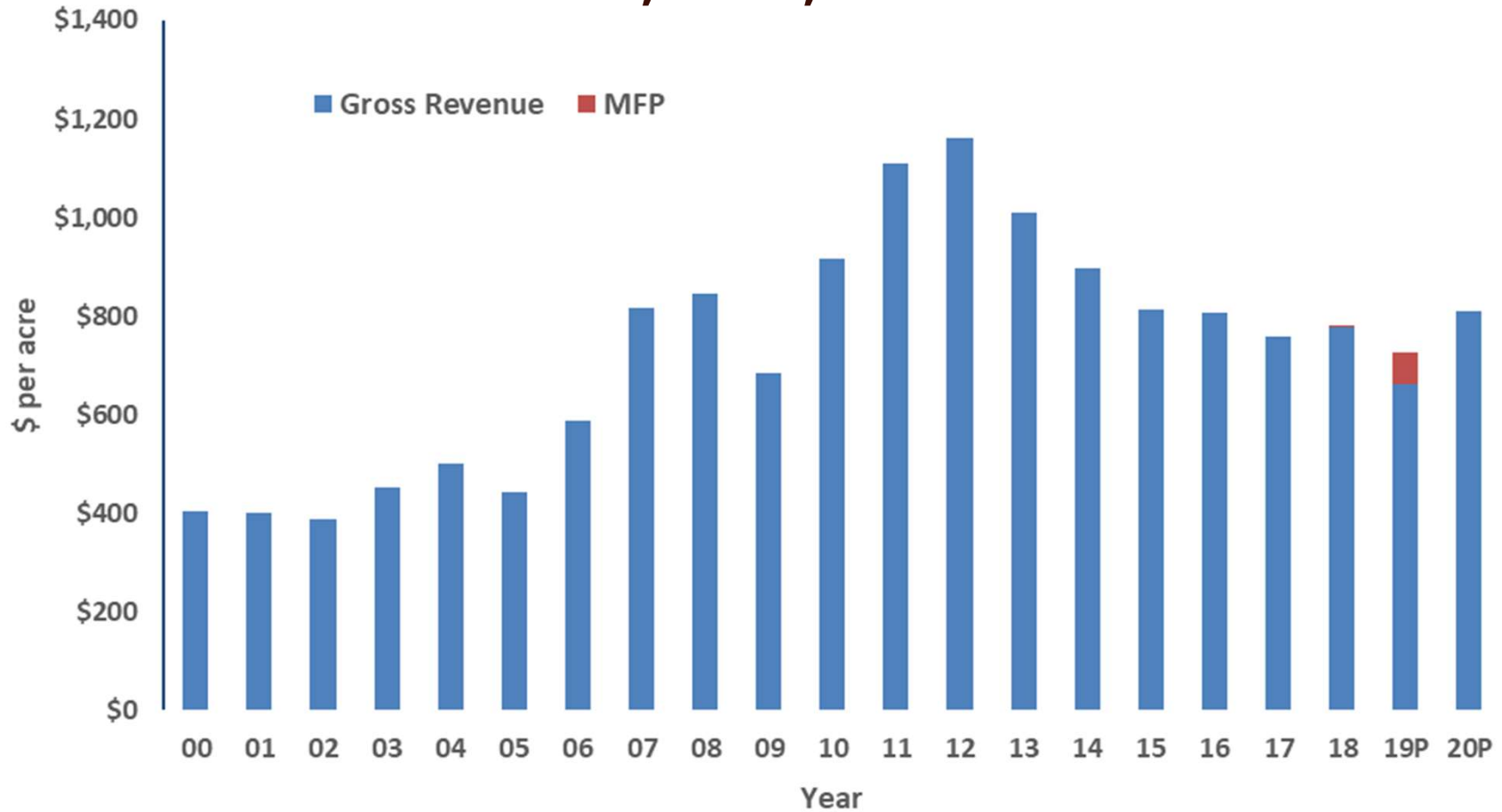


MYA Prices and Projections for 2019 and 2020

Market Year	Corn	Soybeans	Wheat
2013	4.46	13.00	6.87
2014	3.70	10.10	5.99
2015	3.61	8.95	4.89
2016	3.36	9.47	3.89
2017	3.36	9.33	4.72
2018	3.55	8.66	5.15
2019P	3.85	9.00	4.60
2020P	3.90	9.00	4.60

- Corn prices continue to be below \$4.00
 - In current supply/demand climate it is difficult to sustain corn prices above \$4
- Soybean prices are near or below \$9.00
 - Lower soybean prices may continue because of:
 - Trade uncertainty
 - African Swine Fever
 - Potential for large acres and yields

Gross Revenue, Corn, Northern Illinois



	Year		
	2018	2019P	2020P
Yield per acre	214	175	208
Price per bu	\$3.60	\$3.85	\$3.90
Crop revenue	\$770	\$674	\$811
ARC/PLC	0	10	0
Other gov't payments	1	65	0
Crop insurance proceeds	6	17	0
Gross revenue	\$778	\$766	\$811
Total direct costs	\$348	\$378	\$348
Total power costs	\$144	\$145	\$145
Total overhead costs	\$88	\$88	\$89
Total non-land costs	\$580	\$611	\$582
Operator and land return	\$198	\$155	\$229
Land costs	253	253	250
Farmer return	-\$56	-\$98	-\$21

Corn, Northern Illinois

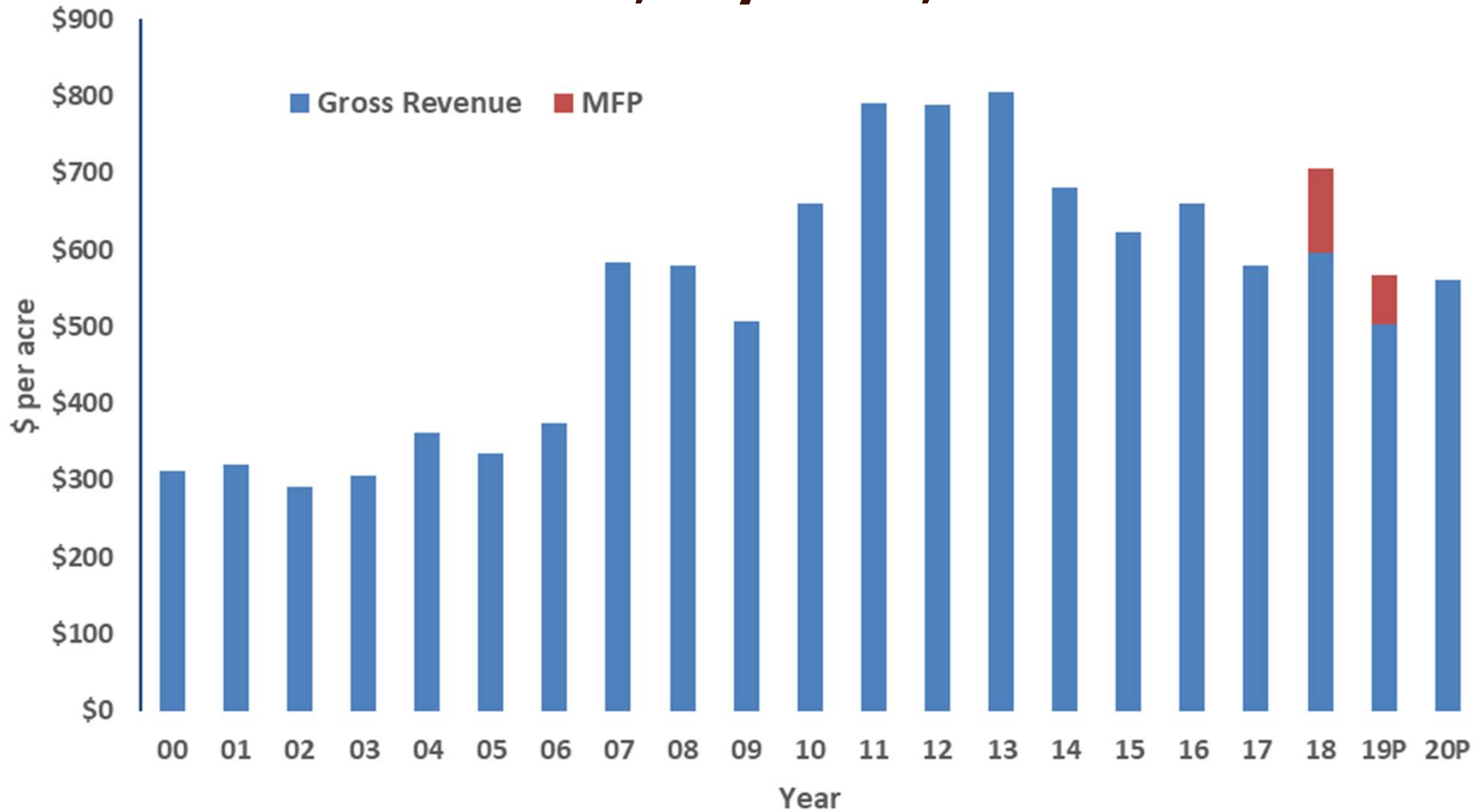
Notes:

There is \$65 of MFP payments in 2019

To get 2020 farmer return next year to \$0 at \$3.90 price need:

- **MFP or**
- **5 bushel higher yields**

Gross Revenue, Soybeans, Northern Illinois



	Year		
	2018	2019P	2020P
Yield per acre	67	50	61
Price per bu	\$8.80	\$9.00	\$9.00
Crop revenue	\$590	\$450	\$549
ARC/PLC	0	10	0
Other gov't payments	111	65	0
Crop insurance proceeds	6	28	0
Gross revenue	\$706	\$553	\$549
Total direct costs	\$154	\$162	\$163
Total power costs	\$123	\$123	\$123
Total overhead costs	\$70	\$73	\$73
Total non-land costs	\$347	\$358	\$359
Operator and land return	\$359	\$195	\$190
Land costs	253	253	250
Farmer return	\$106	-\$58	-\$60

Soybeans, Northern Illinois

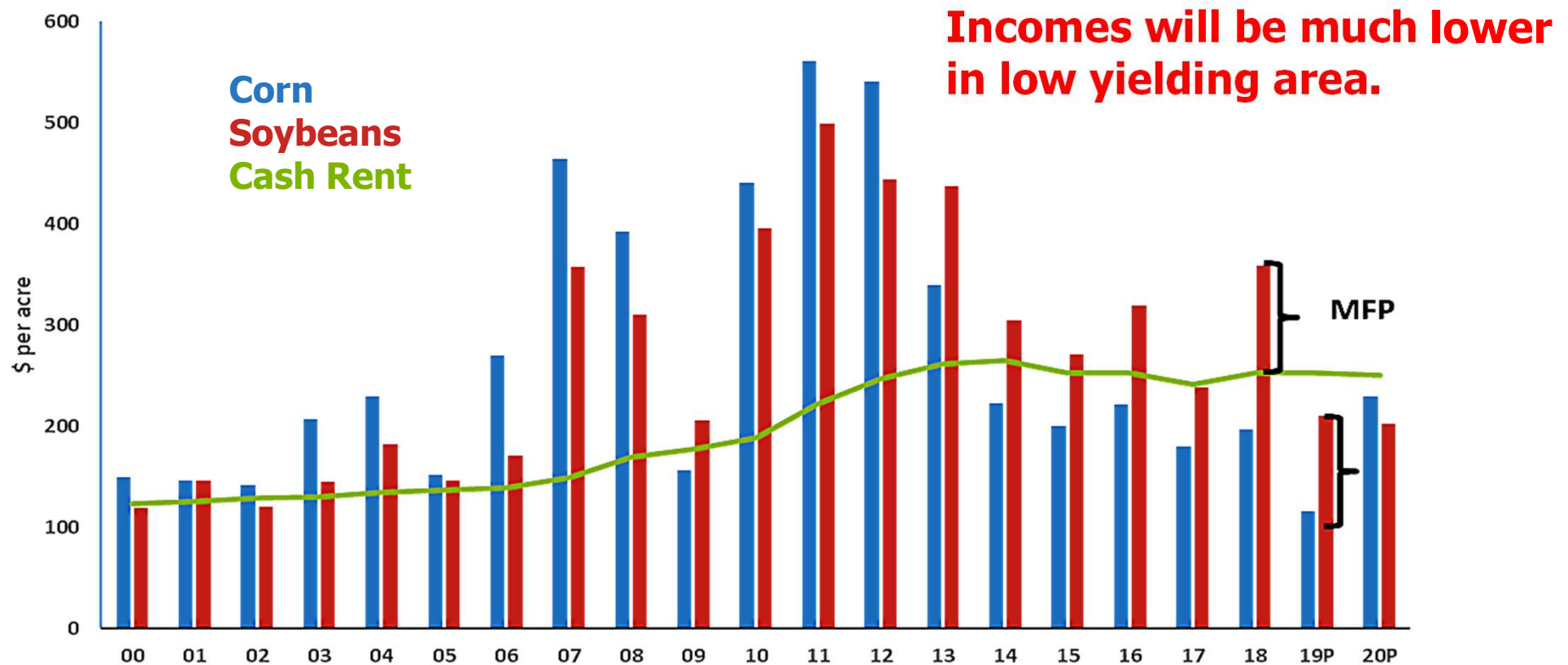
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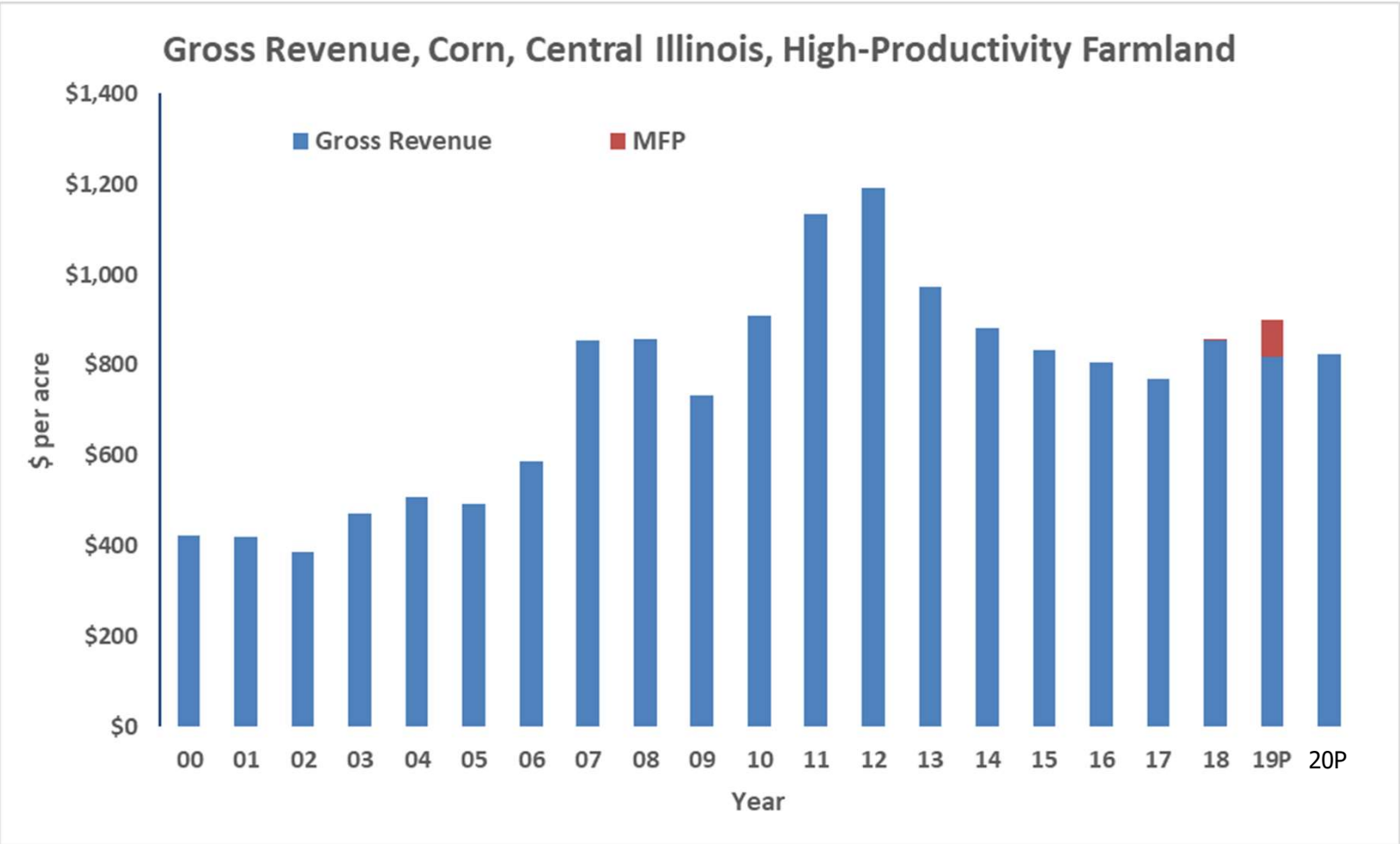
There is \$65 of MFP payments in 2019

To get 2020 farmer return next year to \$0 at \$9.20 price need:

- **MFP or**
- **7 bushel higher yields**

Operator and Land Returns (Bars) and Cash Rent Northern Illinois





	Year		
	2018	2019P	2020P
Yield per acre	237	205	211
Price per bu	\$3.60	\$3.90	\$3.90
Crop revenue	\$853	\$800	\$823
ARC/PLC	0	10	0
Other gov't payments	1	82	0
Crop insurance proceeds	2	10	0
Gross revenue	\$856	\$902	\$823
Total direct costs	\$373	\$393	\$371
Total power costs	\$128	\$125	\$125
Total overhead costs	\$73	\$74	\$74
Total non-land costs	\$574	\$592	\$570
Operator and land return	\$282	\$310	\$253
Land costs	274	274	270
Farmer return	\$8	\$36	-\$17

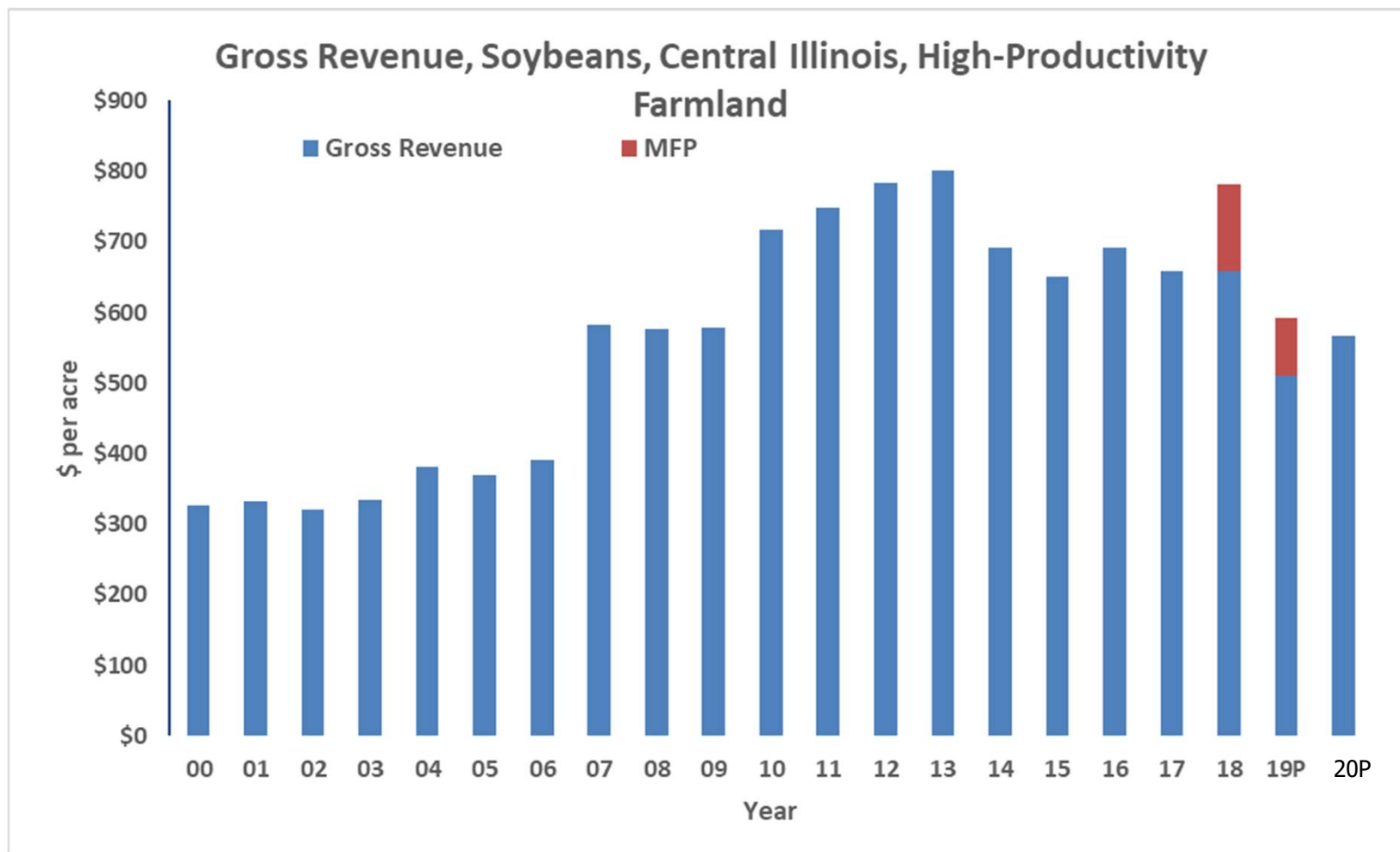
Corn, Central Illinois, High-Productivity

← Notes:

**There is \$82 of MFP
payments in 2019**

**To get 2020 returns to \$0
need:**

- MFP**
- 4 bushel higher yield**



	Year		
	2018	2019P	2020P
Yield per acre	74	55	63
Price per bu	\$8.85	\$9.00	\$9.00
Crop revenue	\$655	\$495	\$567
ARC/PLC	0	10	0
Other gov't payments	122	82	0
Crop insurance proceeds	4	5	0
Gross revenue	\$781	\$592	\$567
Total direct costs	\$184	\$183	\$184
Total power costs	\$102	\$104	\$103
Total overhead costs	\$67	\$68	\$68
Total non-land costs	\$353	\$355	\$355
Operator and land return	\$428	\$237	\$212
Land costs	274	274	270
Farmer return	\$154	-\$37	-\$58

Soybeans, Central Illinois, High-Productivity



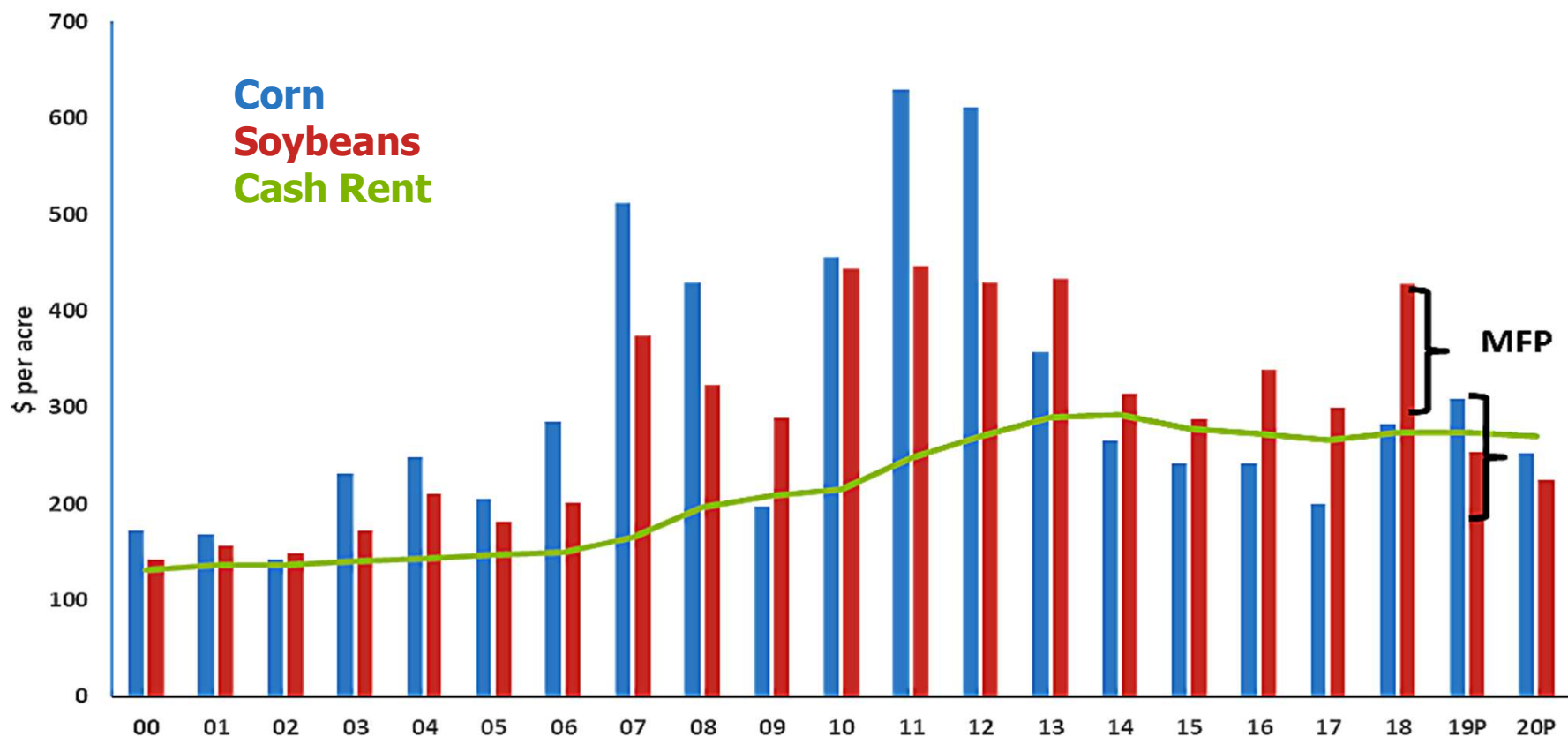
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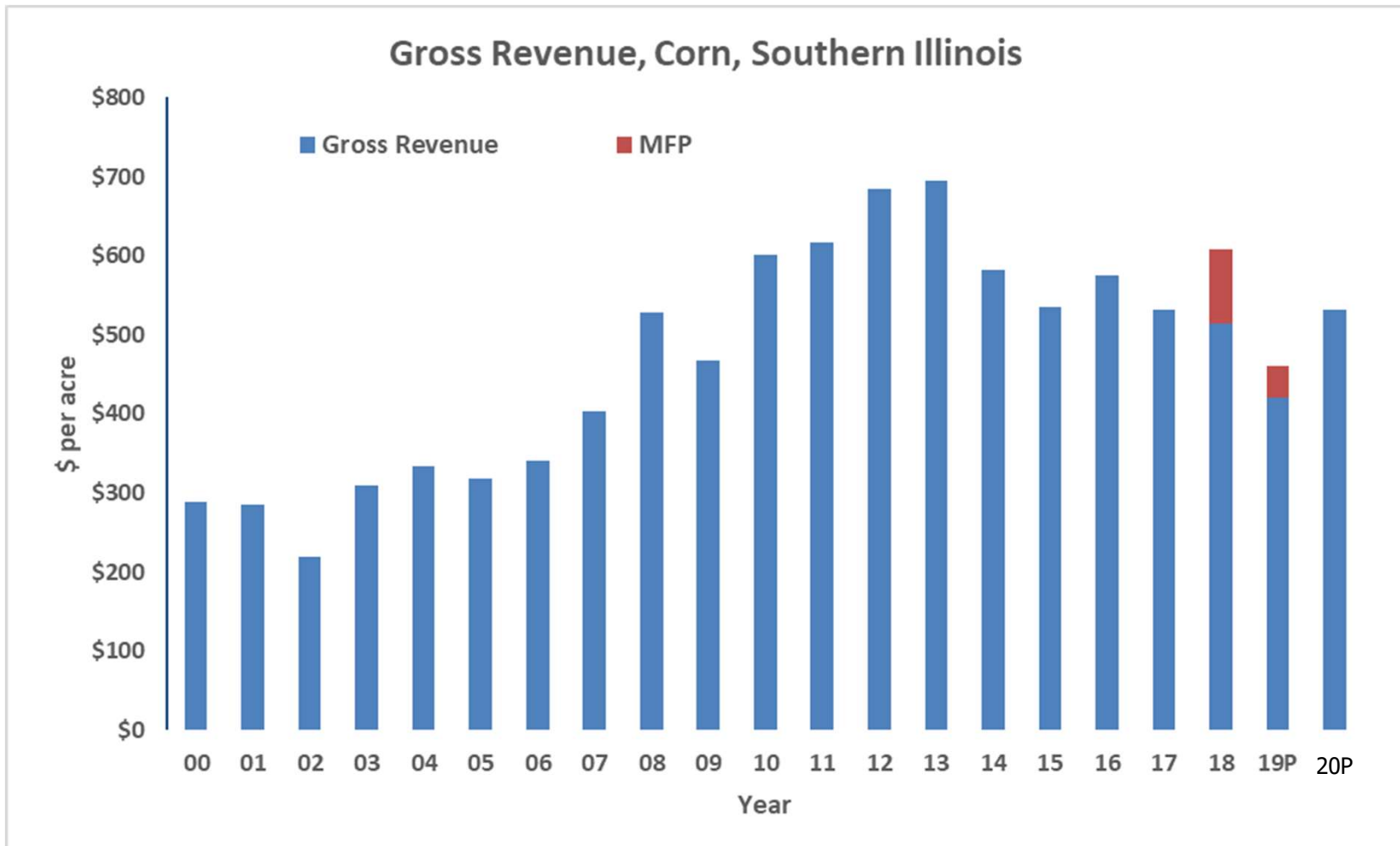
There is \$82 of MFP payments in 2019

To get 2020 returns to \$0 need:

- MFP**
- 6 bushel higher yield**

Operator and Land Returns (Bars) and Cash Rent Central Illinois, High-Productivity Farmland





	Year		
	2018	2019P	2020P
Yield per acre	188	160	180
Price per bu	\$3.55	\$3.90	\$3.90
Crop revenue	\$667	\$624	\$702
ARC/PLC	0	6	0
Other gov't payments	1	40	0
Crop insurance proceeds	6	10	0
Gross revenue	\$674	\$680	\$702
Total direct costs	\$331	\$356	\$338
Total power costs	\$144	\$141	\$141
Total overhead costs	\$92	\$95	\$95
Total non-land costs	\$567	\$592	\$574
Operator and land return	\$107	\$88	\$128
Land costs	160	160	157
Farmer return	-\$53	-\$72	-\$29

Corn, Southern Illinois

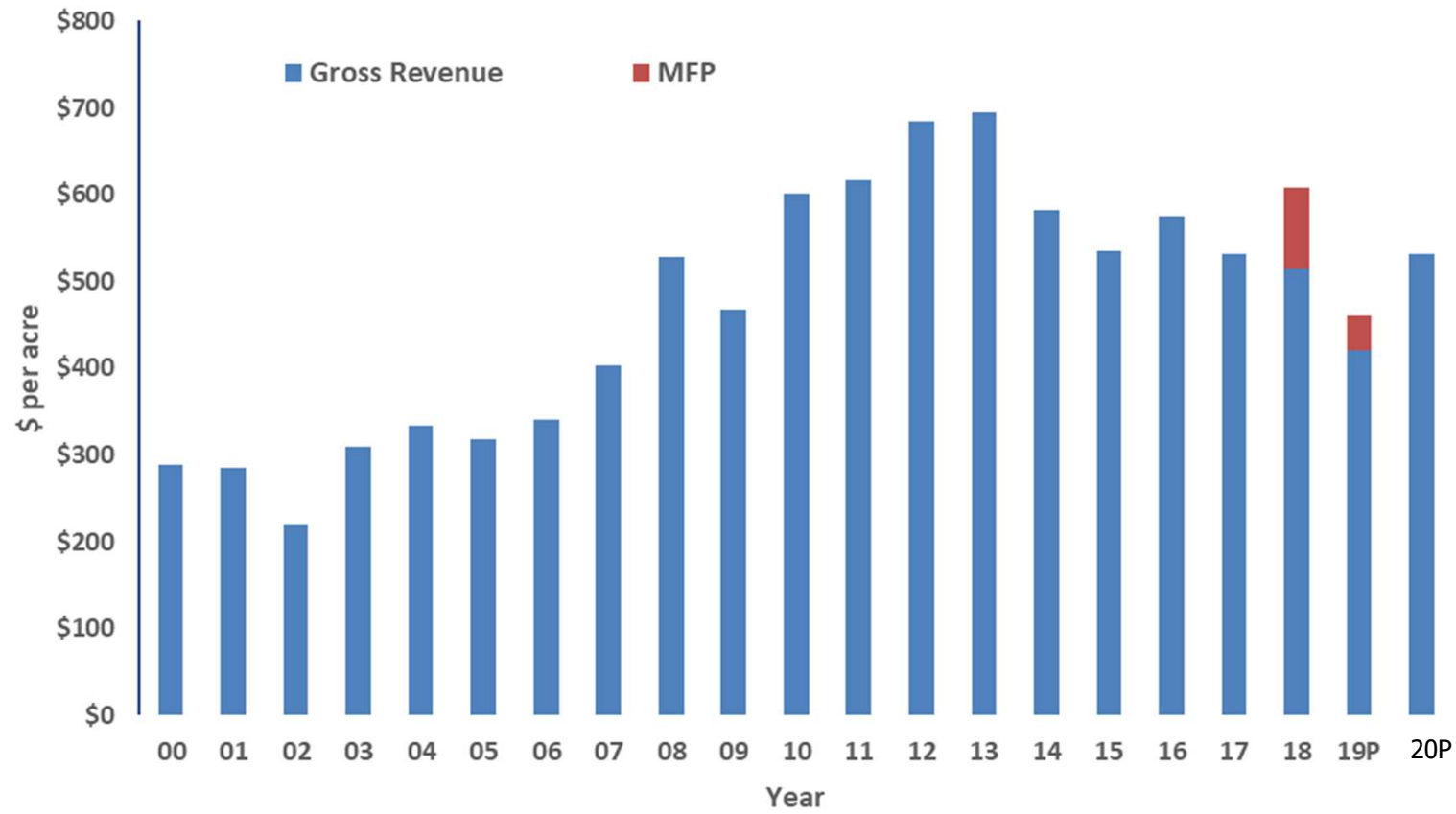
Notes:

There is \$40 of MFP payments in 2019

To get 2020 farmer return next year to \$0 at 3.9 price need:

- **MFP or**
- **7 bushel higher yields**

Gross Revenue, Soybeans, Southern Illinois



	Year		
	2018	2019P	2020P
Yield per acre	57	45	59
Price per bu	\$8.88	\$9.00	\$9.00
Crop revenue	\$506	\$405	\$531
ARC/PLC	0	6	0
Other gov't payments	94	40	0
Crop insurance proceeds	8	10	0
Gross revenue	\$608	\$461	\$531
Total direct costs	\$172	\$172	\$174
Total power costs	\$136	\$134	\$134
Total overhead costs	\$79	\$80	\$81
Total non-land costs	\$387	\$386	\$389
Operator and land return	\$221	\$75	\$142
Land costs	160	160	157
Farmer return	\$61	-\$85	-\$15

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Soybeans, Southern Illinois



Notes:

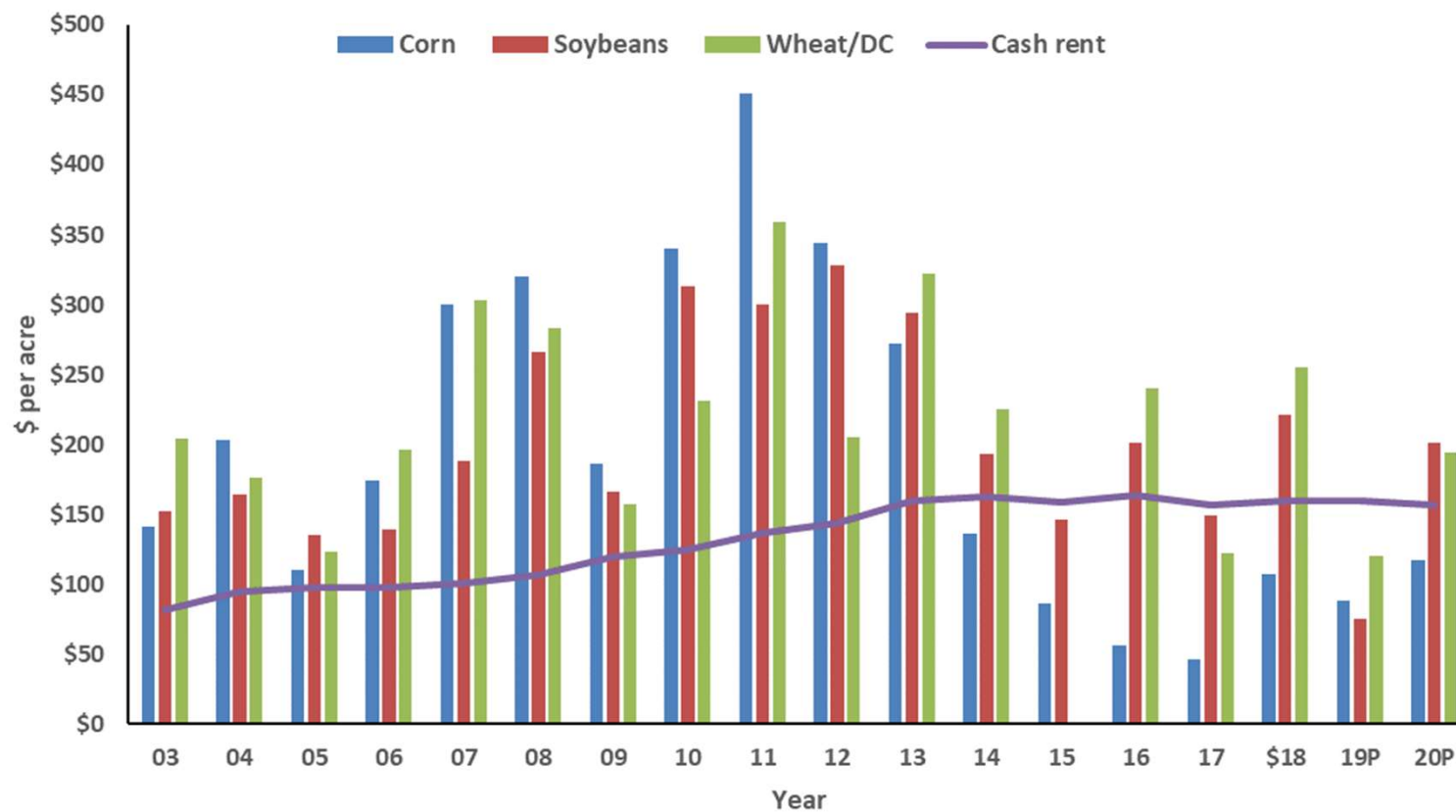
There is \$40 of MFP payments in 2019

To get 2020 returns to \$0 need:

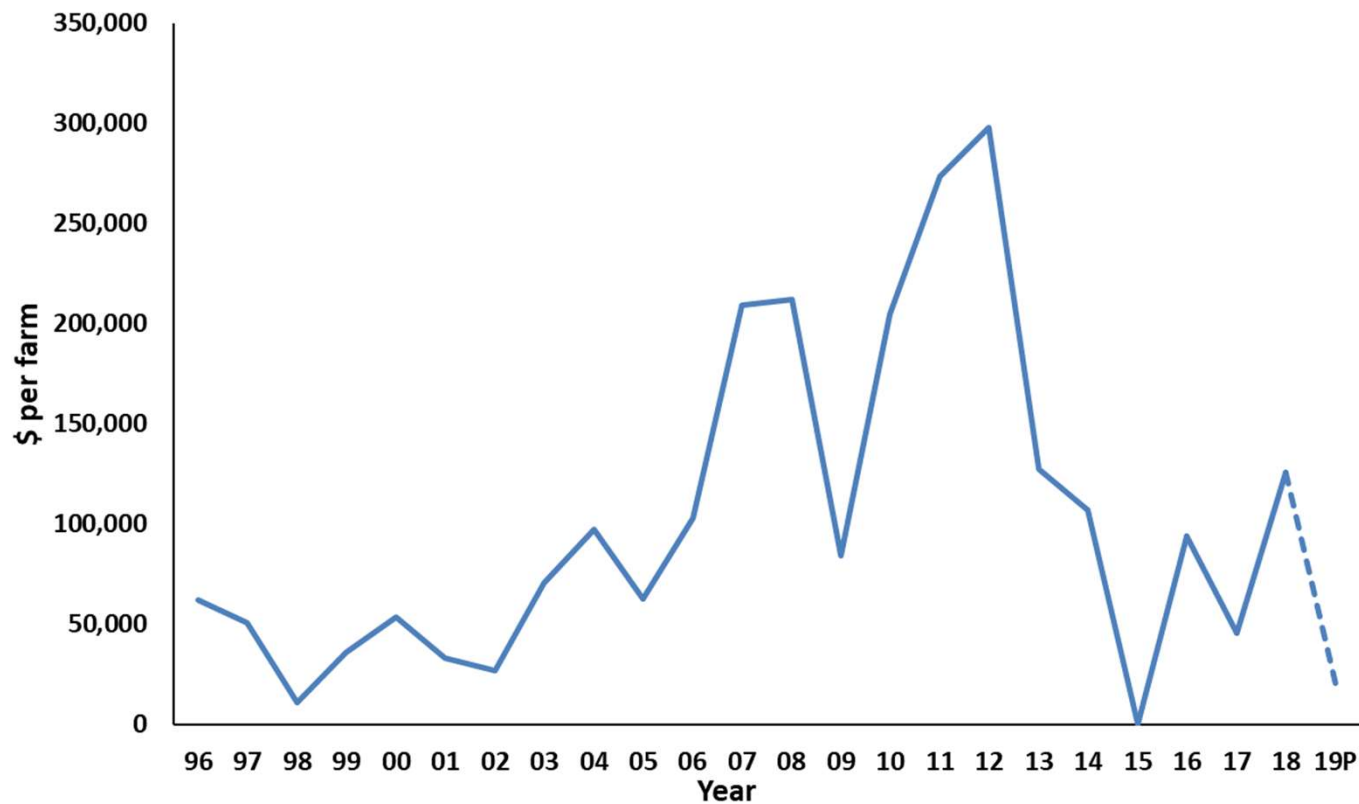
- MFP**
- 2 bushel higher yield**

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Operator and Land Returns (Bars) and Cash Rent Southern Illinois



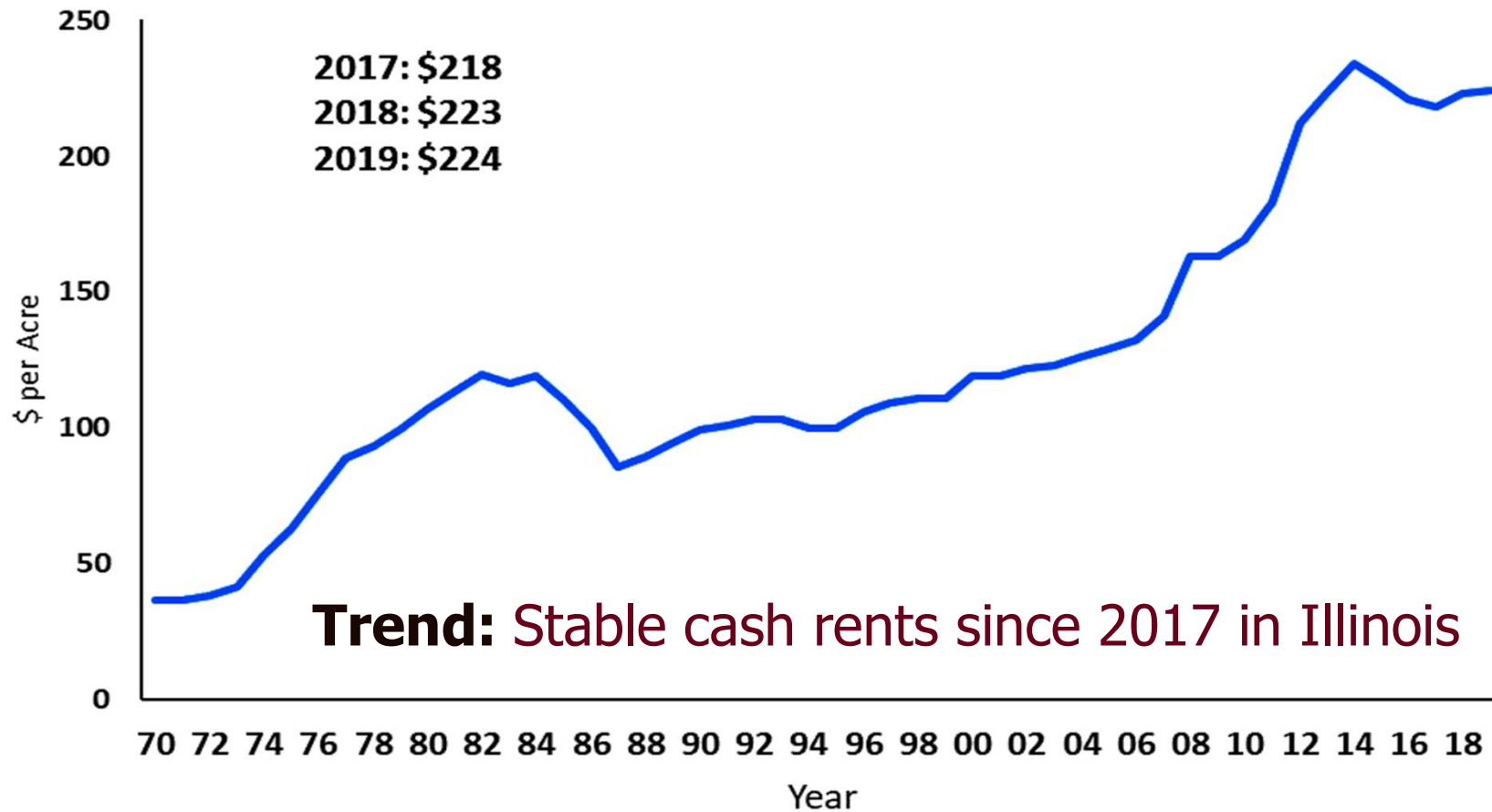
Averaged Net Income on Illinois Grain Farms Enrolled in FBFM



For 2020, what has to happen for incomes to be near \$0 per farm given \$3.90 corn price and \$9.00 soybeans price:

- **MFP payment again**
- or
- **Above trend yields (30 bushels per acre corn, 10 bushels per acre for soybeans)**

Illinois Cash Rents



We have not seen a lot of movement in cash rents in recent years



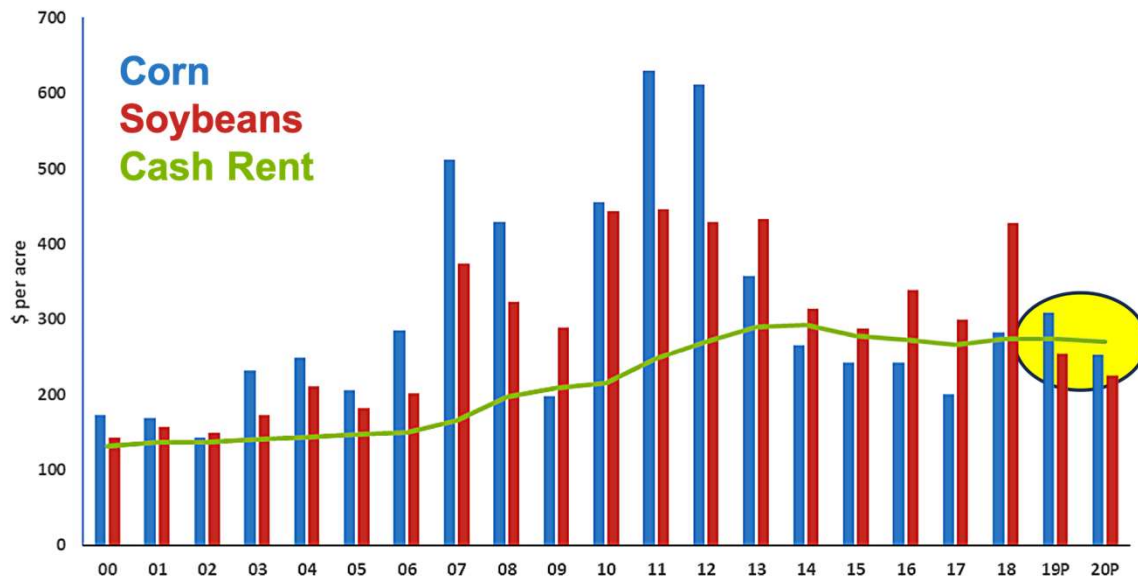
Illinois Society of Professional Farm Managers and Rural Appraisers indicate very slight decreases in 2020 cash rents

Land Productivity	Rent in \$/acre	
	Actual 2019 Rent	Expected 2020 Rent
Excellent	302	298
Good	261	254
Average	212	205
Fair	170	167

Values represent rents on professionally managed farmland

Agricultural returns suggests lower cash rents, but cash rents are sticky

Operator and Land Return for Corn and Soybeans and Cash Rent, Central Illinois, High- Productivity Farmland



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Pressures on rents

Decline in returns during 2014 to 2018, average cash rents have come down slightly.

2019 and 2020 represent another step down

Pressures on lowering cash rents are building because of:

- Extended period of lower returns (2013 on)
- Now expectations of \$8ish per bushel soybeans for the foreseeable future
- Reductions in working capital

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Variable Cash Leases (Parameters for Higher Productivity Farmland)

- **Base cash rent** (paid no matter what) -- \$200 per acre
- Pay a higher cash rent if crop revenue plus MFP times a rent factor exceed the **base cash rent**
- Rent factor (**33% for corn** and 40% for soybeans)
- Yield is from the farm, **Price is average on Wednesday from an agreed spot from Spring to Fall**

Yield = 210 bushels per acre, Price = \$3.60, Rent factor = .33,
Rent = 210 x \$3.60 x .33 = \$250 (Higher than \$200, \$50 plus)

Share rent arrangements

In northern and central Illinois, 50-50 prevail

Sometimes have a supplemental rent of \$20 to \$30 per acre paid by farmer to landowner

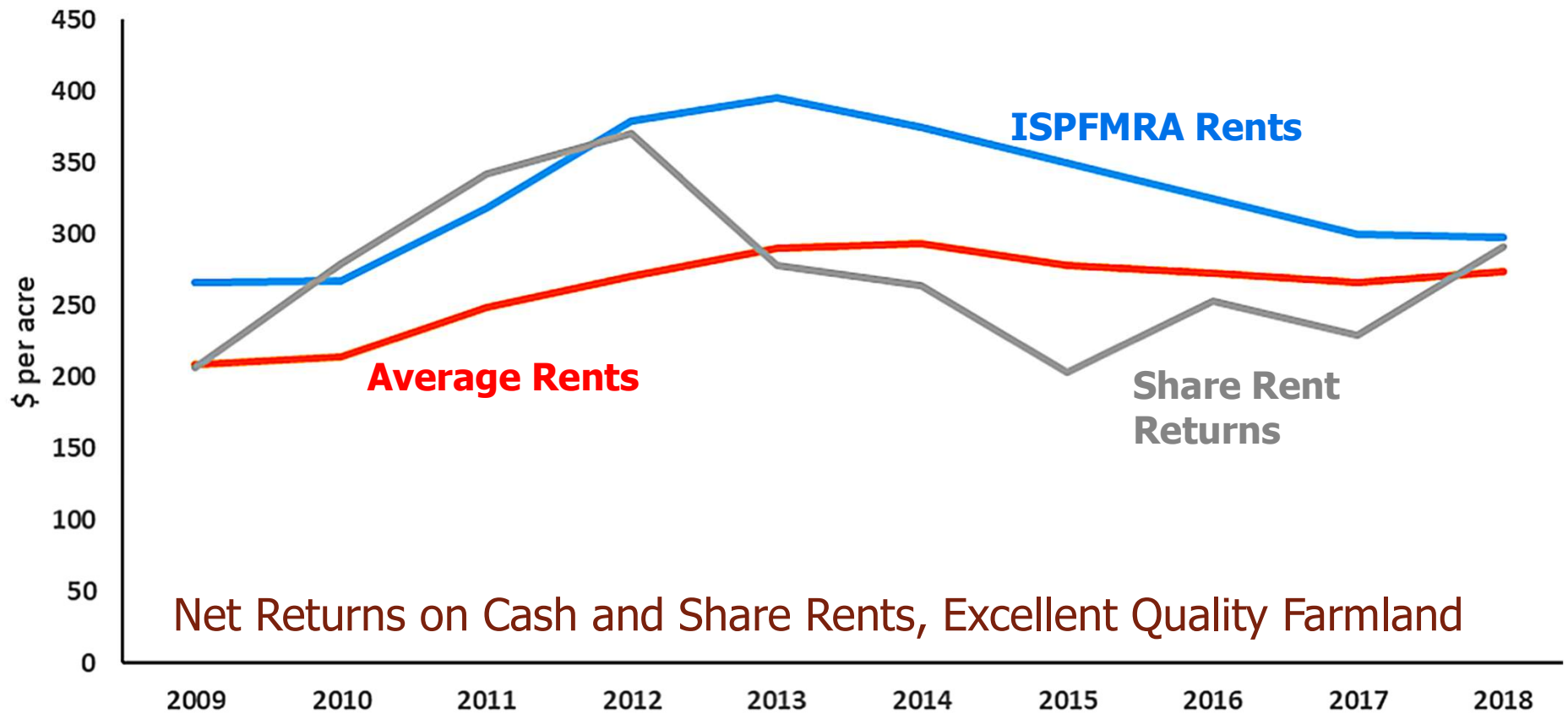
Farmer bears all the labor and machinery expenses

Land Owned and Rented, Grain Farms in Illinois

FBFM, 2018

	Northern	Central	Southern
Owned	19%	15%	24%
Share-rent	21%	42%	36%
Cash-rent	60%	43%	40%

Share Rents have Adjusted to Changing Returns in Agriculture

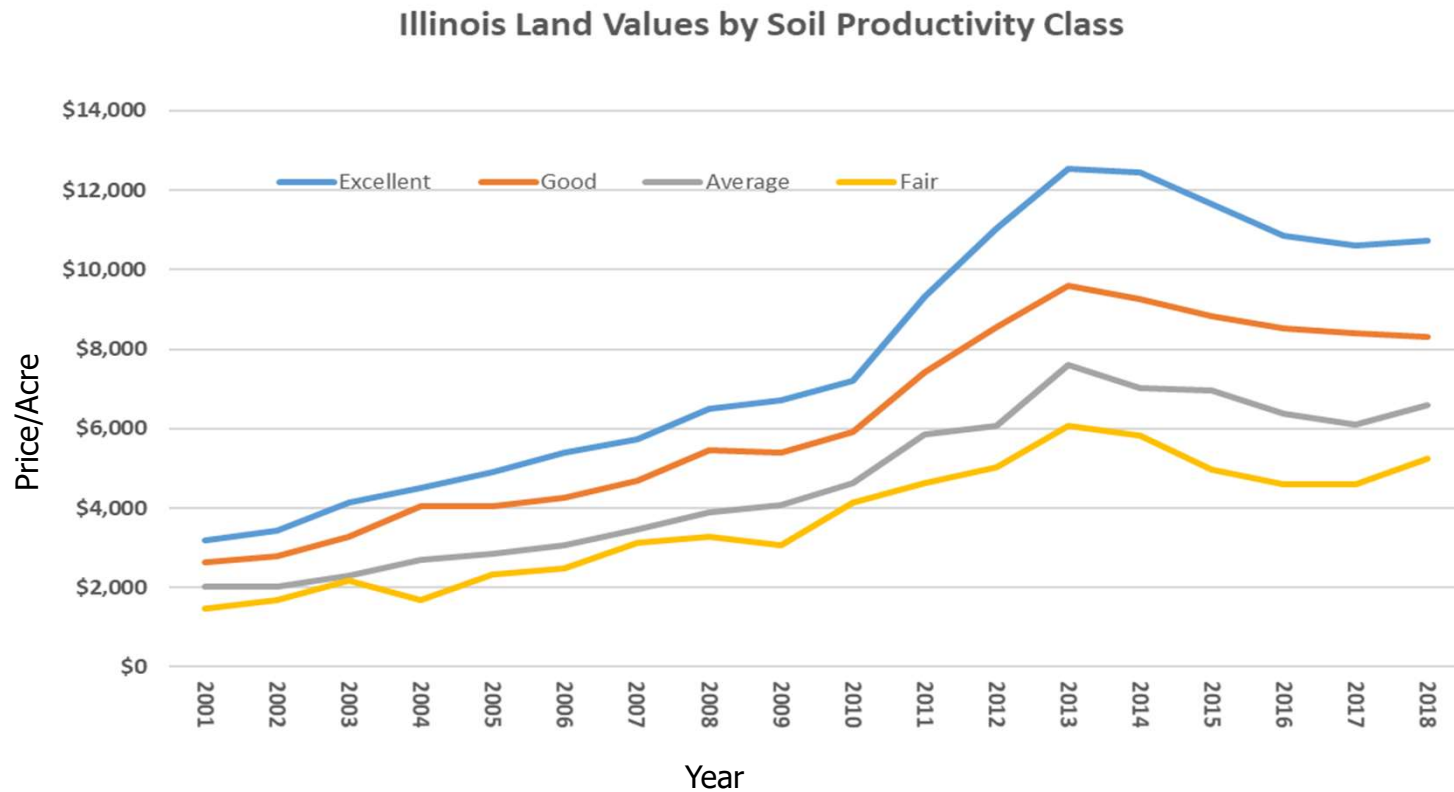


Net Returns on Cash and Share Rents, Excellent Quality Farmland

Understanding Farmland Categories

- Excellent – Expected corn yields over 200 bpa
- Good – Expected corn yields between 170 to 200 bpa
- Average – Expected corn yields between 150 to 170 bpa
- Fair – Expected corn yields less than 150 bpa

Illinois Land Values



Source: Illinois Society of Professional Farm Managers and Rural Appraisers

Farmland Value Changes

- Farmland values peaked in 2013
- Excellent – about 15% drop from the peak
- Good – about 13.5% drop from the peak
- Average – about 13.5% drop from the peak

AgLetter

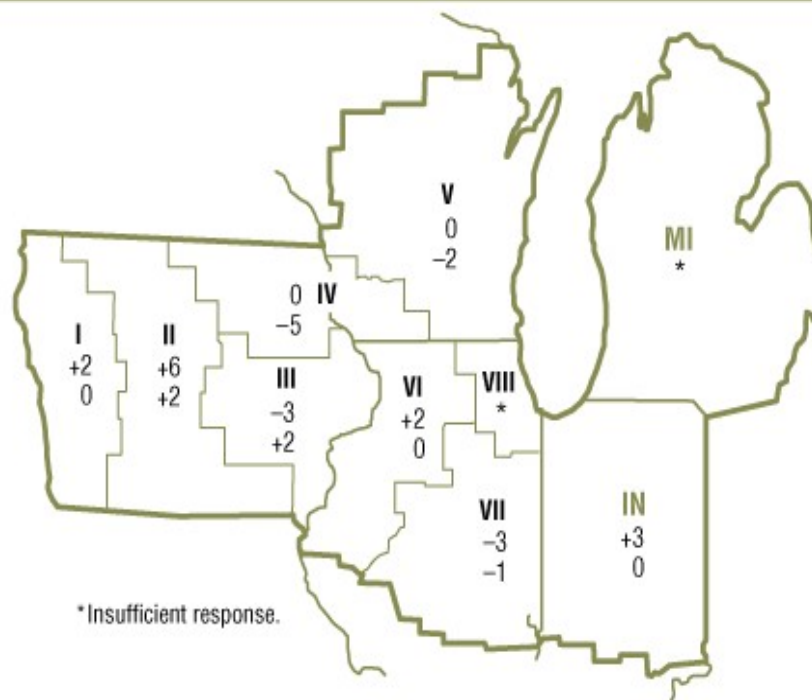
Chicago Fed, November 2019

Percent change in dollar value of "good" farmland

Top: July 1, 2019 to October 1, 2019

Bottom: October 1, 2018 to October 1, 2019

	July 1, 2019 to October 1, 2019	October 1, 2018 to October 1, 2019
Illinois	-1	-1
Indiana	+3	0
Iowa	+2	0
Michigan	*	*
Wisconsin	0	-2
Seventh District	+1	-1



Farmland Values

- Two main factors
 - Income stream associated with farmland
 - Cash rent income
 - Adjustments for ownership costs
 - Discount rates
 - Interest rates
- Other factors

Summary

- Higher farm income period ended in 2013, incomes back to pre-2006 levels
- Above trend yields (except 2019) and government assistance (MFP) supported incomes since 2012
- Tight cash flows still major financial challenge for many, debt to asset positions still good
- Cash rents and land values have pulled back due to lower returns, seemed to have stabilized for now

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Thanks!!

Dale Lattz and Gary Schnitkey