

Crop Finances and Government Payments

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Ag Decision Maker Webinar
2020 Government Payments and USDA FSA Programs
October 15th 2020

Overview

- Financial situation in early 2020
- Costs in 2020
- Revenues in 2020

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Average Net Farm Income increased in 2019...

Mid-size Iowa farms with Gross Revenue > \$100,000
(accrual, not adjusted for inflation)

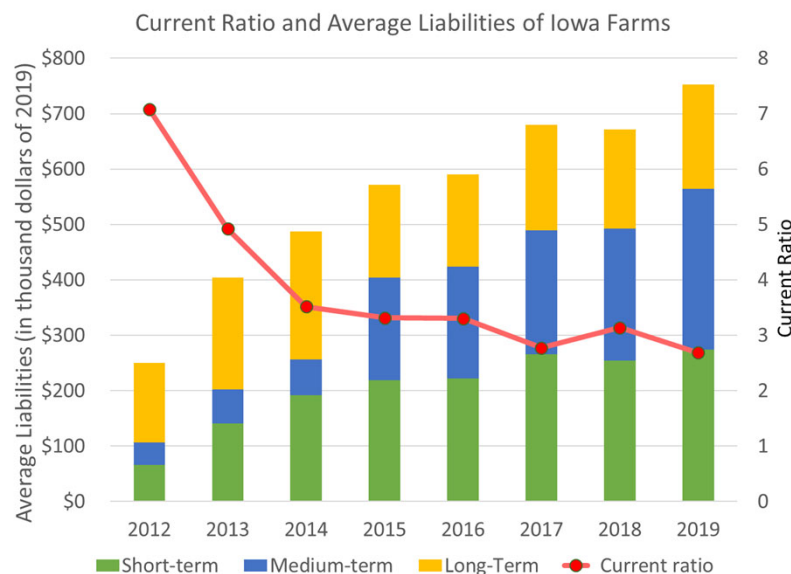


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Source: Iowa Farm Costs and Returns.
Ag Decision Maker File C1-10. Various years.
Based on data from Iowa Farm Business Association

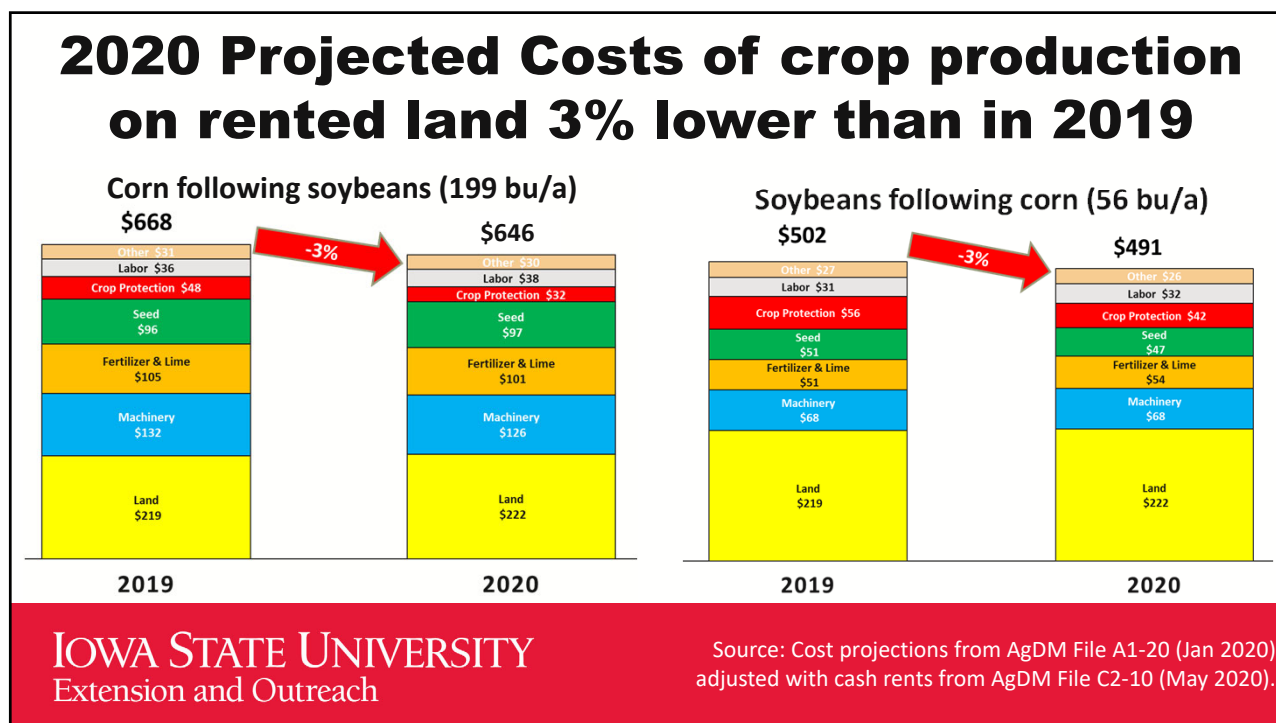
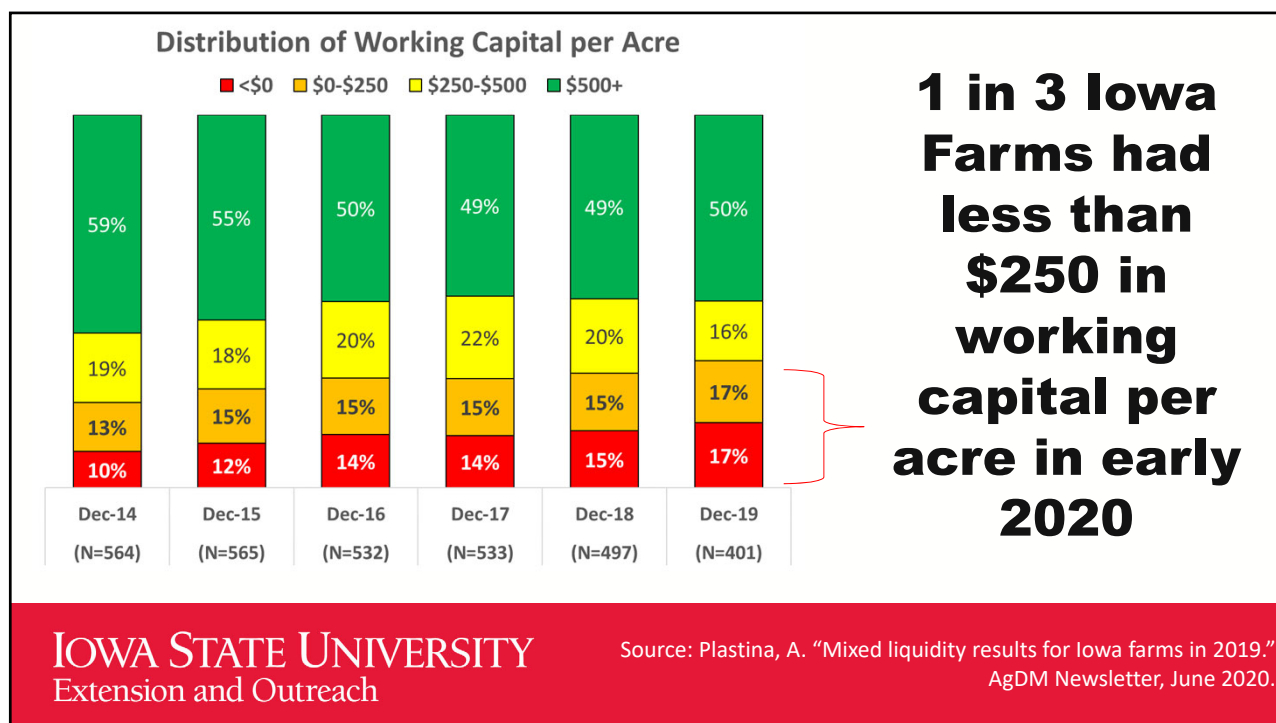
...but non-real estate farm debt increased, and liquidity declined...

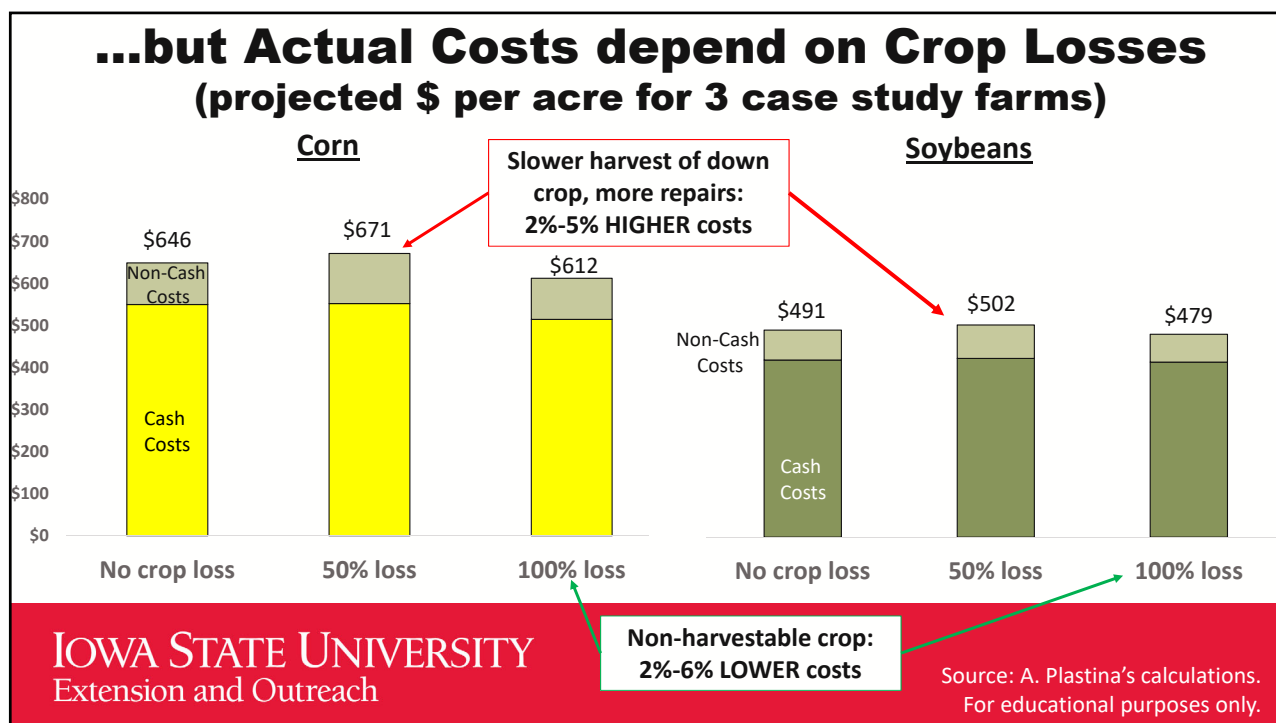


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Source: Iowa Farm Costs and Returns.
Ag Decision Maker File C1-10. Various years.
Based on data from Iowa Farm Business Association





Cash income in 2020?

- 1) Cash Receipts from Crop Sales
- 2) Crop Insurance
- 3) ARC/PLC Payments in 2020 from 2019 crop
- 4) 3rd batch of Market Facilitation Payments (MFP)
- 5) Coronavirus Food Assistance Program 1 (CFAP 1)
- 6) CFAP 2
- 7) Forgiveness of Paycheck Protection Program (PPP) Loans

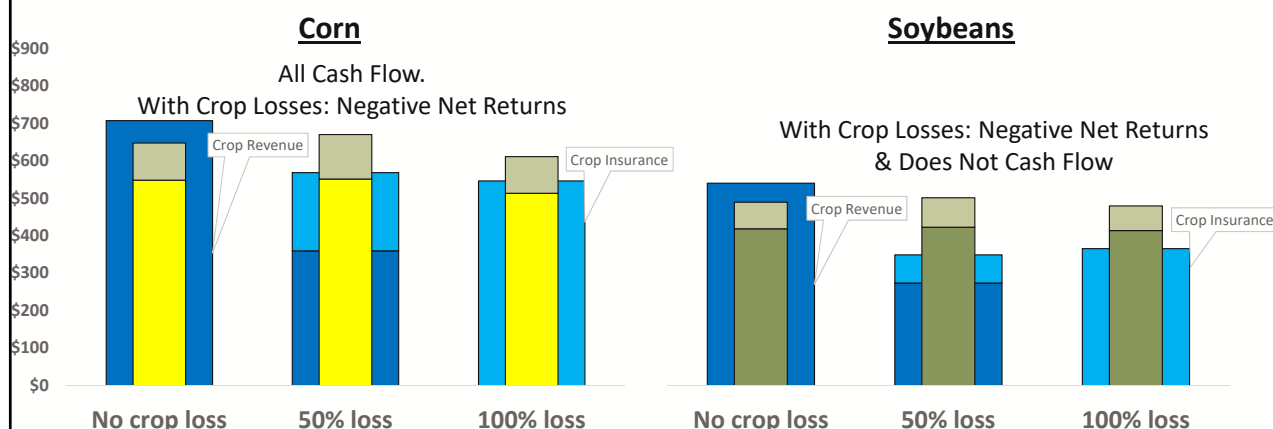
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2020 Cash Receipts & Crop Insurance

Source of Revenue from Corn Acres	No Crop Loss 200 bu	50% Crop Loss 100 bu	Unharvestable Crop (100% Loss)
Cash Receipts (WASDE \$3.60)	\$720	\$360	\$0
Crop Insurance (RP 80%; APH 180 bu; \$3.88 spring ; \$3.38 harvest)	-\$12	\$209	\$547
Sub-Total per Acre	\$708	\$569	\$547

Source of Revenue from Soybeans Acres	No Crop Loss 56 bu	50% Crop Loss 28 bu	Unharvestable Crop (100% Loss)
Cash Receipts (WASDE \$9.80)	\$549	\$274	\$0
Crop Insurance (RP 80%; APH 45 bu; \$9.17 spring; \$10.40 harvest)	-\$8	\$75	\$366
Sub-Total per Acre	\$541	\$349	\$366

2020 Total Costs vs. Cash Receipts & Crop Insurance (projected \$ per acre for 3 Case Study Farms)

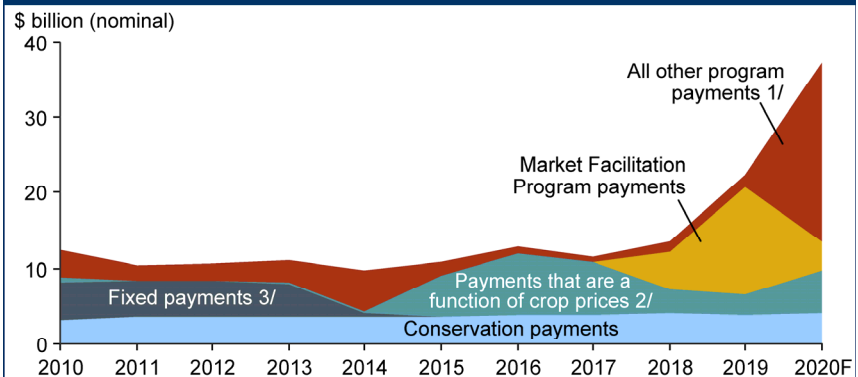


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Source: A. Plastina's calculations.
For educational purposes only.

**In
September,
USDA
projected
massive
government
programs
(before CFAP
2)...**

Government farm program payments to farm producers, 2010–20F



Note: F = forecast.

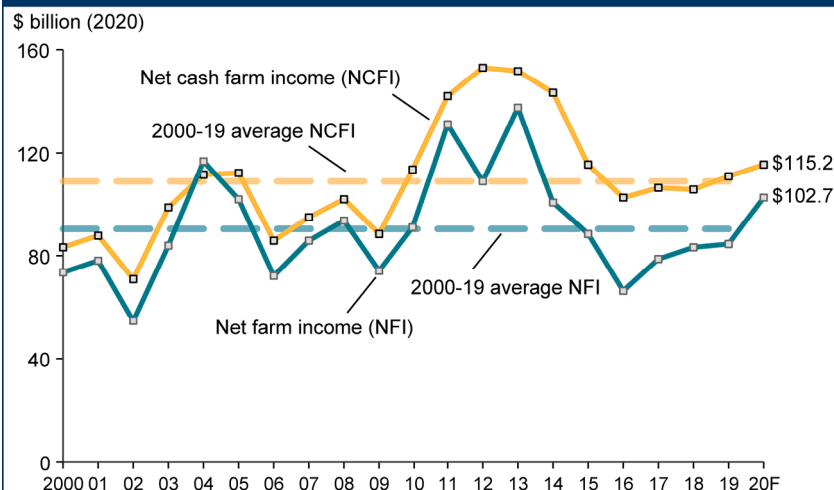
1/ All other payments includes supplemental and ad hoc disaster assistance which in 2020 includes payments from the Coronavirus Food Assistance Program and Paycheck Protection Program loans. It also includes tobacco transition, Cotton Ginning Cost Share, and dairy payments.

2/ Includes Price Loss Coverage (PLC), Agriculture Risk Coverage (ARC), counter-cyclical payments (CCP), Average Crop Revenue Election (ACRE) payments, loan deficiency payments (excluding grazeout payments), marketing loan gains, and certificate exchange gains. CCP and ACRE were not continued in the 2014 Farm Bill. PLC and ARC payments began in 2015.

3/ Includes direct fixed payments portion of Direct and Counter-Cyclical Program (DCP) and Cotton Transition Assistance Program (CTAP) payments (in 2014/15).

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.
Data as of September 2, 2020.

Net farm income and net cash farm income, 2000–20F



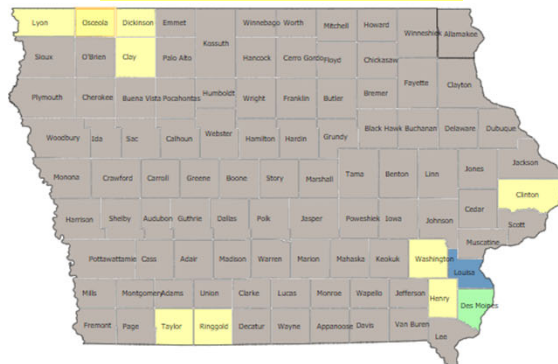
Note: F = forecast. Values are adjusted for inflation using the chain-type GDP deflator, 2020=100.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.
Data as of September 2, 2020.

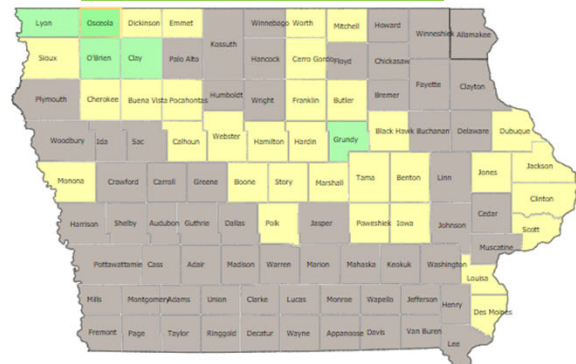
**...that were
expected to
push net
farm
income
higher in
2020.**

ARC-CO payments per Base Acre in 2020 for the 2019 crop year

Corn Base Acres
Average ARC-CO Payment
\$1.60 per acre



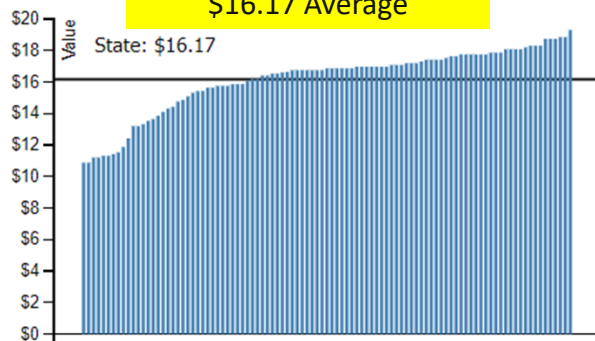
Soybean Base Acres
Average ARC-CO Payment
\$5.00 per acre



N.A. 0\$ \$1 - \$25 \$25 - \$50 \$50 - \$75 \$75 - \$100

PLC payments per acre in 2020 for the 2019 crop year

Corn Base Acres
PLC payments
\$16.17 Average



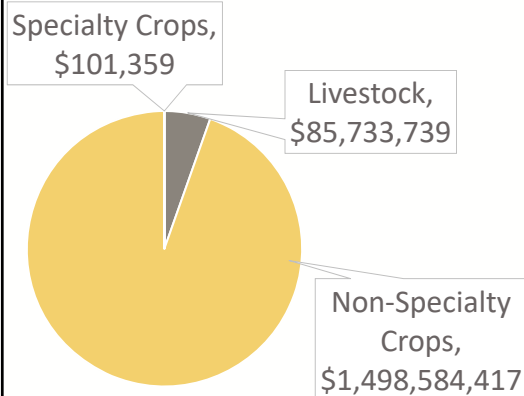
PLC payments per base acre by county, ordered by size of payment

Soybean Base Acres
No PLC payments

ARC-CO & PLC not dependent on planted acres but Base Acres.

ARC/PLC average payment per acre for Case Study Farms =
 $\frac{2}{3} * \$16.17$ (PLC Corn) +
 $\frac{1}{3} * \$5.00$ (ARC-CO Soy) = \$12.45

Total MFP Payments in Iowa \$1.6 Billion (11% of national MFP Payments)



Average Pmt. per Planted Acre \$66

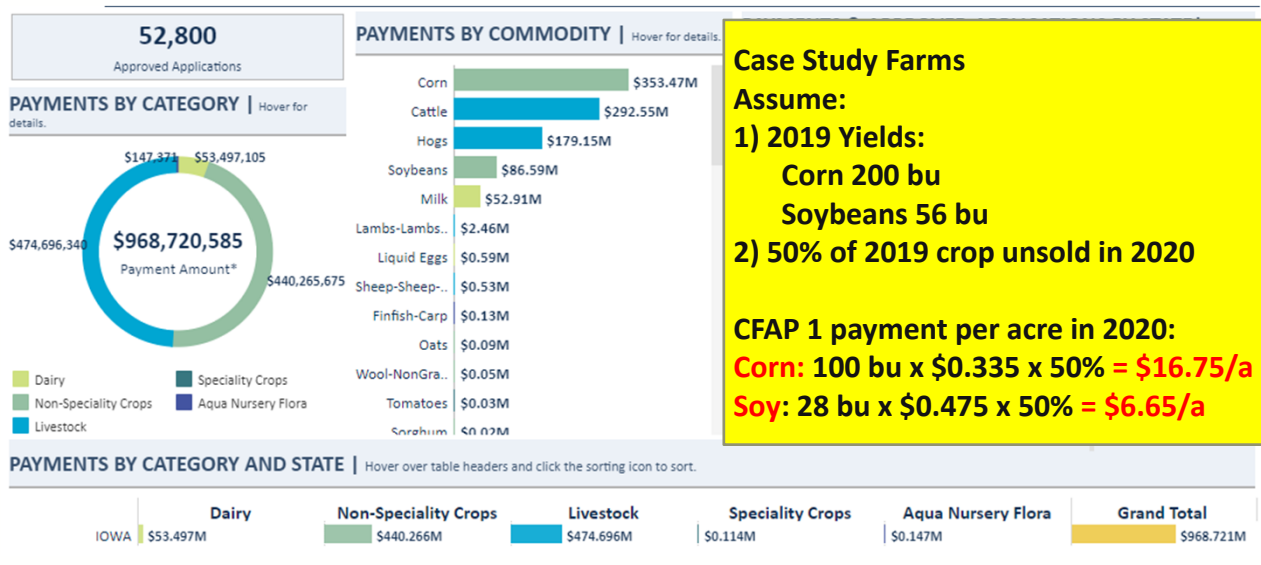
1st & 2nd Batches in 2019: 75%

3rd Batch in 2020: 25%

\$16.50 per acre in 2020

Source: Farmers.gov
September 28, 2020

CFAP 1 Approved Payments in Iowa as 10/4/20 Highest in the Nation (~9% of total)



CFAP 2 for Corn and Soybeans

CORN: the greater of:

- A. Crop acreage × \$15 per acre; OR
- B. Crop acreage × \$0.232 per bushel × producer's weighted 2020 Actual Production History (APH) approved yield.

Case Study Farms:

Corn: APH 180 bu/a → **\$41.76/a**

Soy: APH 45 bu/a → **\$15.00 /a (>\$14.09)**

SOYBEANS: the greater of:

- A. Crop acreage × \$15 per acre; OR
- B. Crop acreage × \$0.3132 per bushel × producer's weighted 2020 APH approved yield.

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Forgiveness of PPP Loans

Maximum forgiveness (currently under review):

- cash compensation up to \$20,833 per owner
 - sole proprietors: no tax obligation if taken as a “draw” from farm bank account;
 - corporations: higher taxable income, since paid expenses with forgiven PPP \$ are not deductible from net farm income calculation
- cash compensation up to \$46,154 per non-owner employee
 - If paid with forgiven loan proceeds, this payroll expense is not currently deductible

Case Study Farms: assume 750 acres and max owner compensation only → transfer by acre = \$27.80 per acre

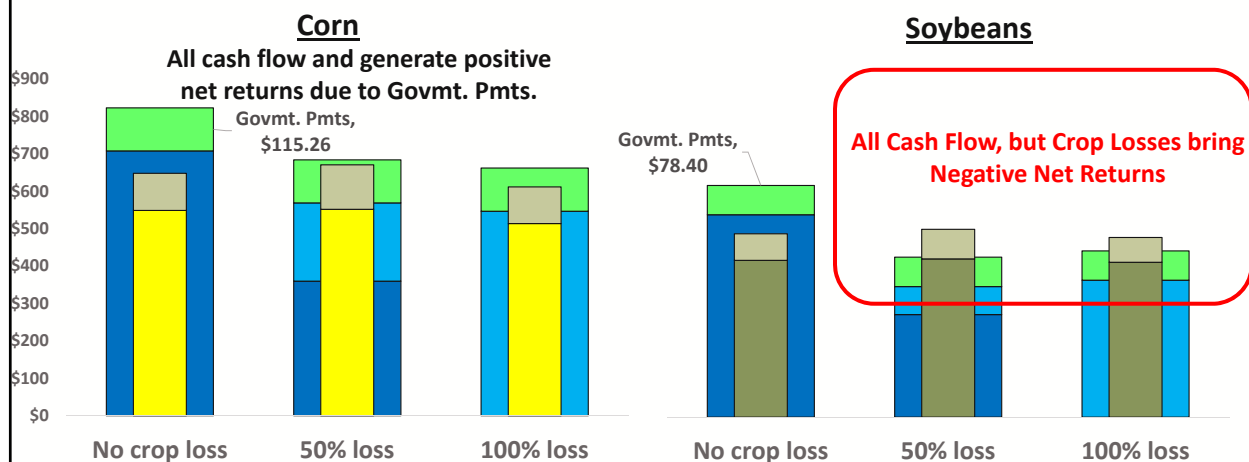
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Iowa Farm Income Tax Webinar 2020

Thursday, November 5, 2020, at 1:00 p.m.

Speakers: Charles Brown, ISU Extension Farm Management Specialist
Kristine Tidgren, Director, Center for Agricultural Law & Taxation

2020 Total Costs versus ALL Cash Revenues (projected \$ per acre for 3 Case Study Farms)



Source: A. Plastina's calculations. For educational purposes only.

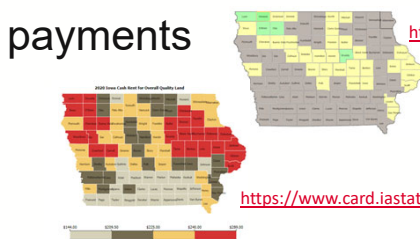
Government Payments per Acre:

Corn: \$12.45 ARC-CO&PLC + \$16.5 MFP + \$16.75 CFAP1 + \$41.76 CFAP2 + \$27.80 PPP = **\$115.26**

Soy: \$12.45 ARC-CO&PLC + \$16.5 MFP + \$ 6.65 CFAP1 + \$15.00 CFAP2 + \$27.80 PPP = **\$ 78.40**

Local conditions will be different...

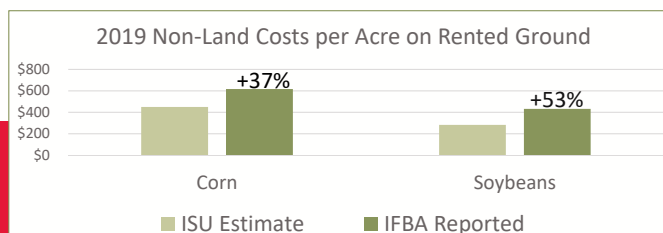
- Crop damage, combining speed & direction
- Government payments
- Cash rents
- Actual Yields
- Other ...



<https://www.card.iastate.edu/tools/farm-bill/arc-plc/>

<https://www.card.iastate.edu/tools/ag-risk/cash-rental-rates/>

<https://www.card.iastate.edu/tools/yield-prediction/>



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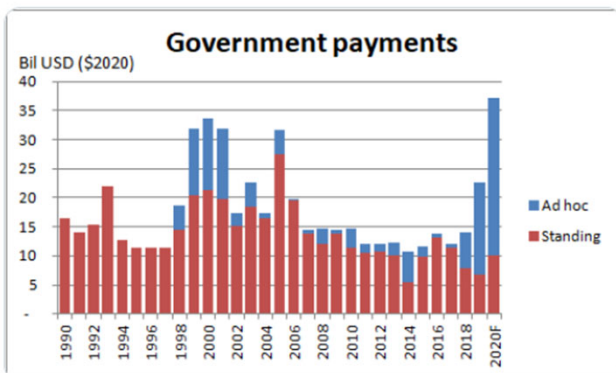
JoeGlauber--IFPRI
@JoeGlauber1



Congress must end blank check to use on government farm subsidies

BY VINCENT SMITH AND JOSEPH GLAUBER, OPINION CONTRIBUTOR — 07/23/20 03:00 PM EDT
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

Chart shows farm payments since 1990 adjusted for inflation. Last time ad hoc payments were this high was 1999-2001. One of the consequences of that period was the Brazil cotton case.

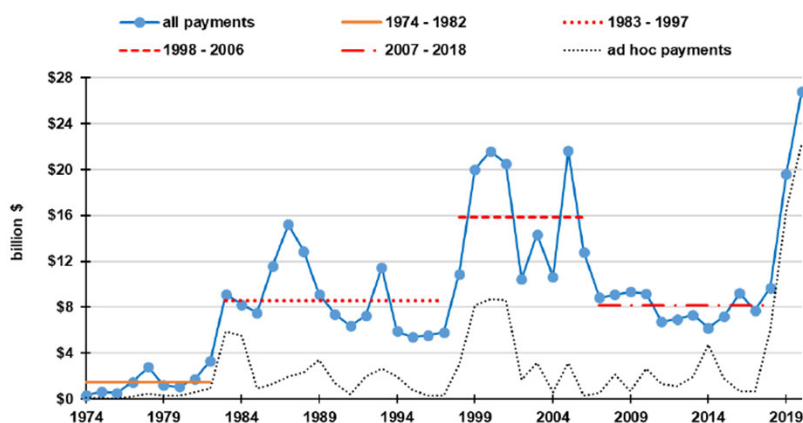


7:55 AM · Sep 30, 2020 · Twitter Web App

High Ad-hoc payments are concerning due to
(1) potential **challenges to coupled payments at the WTO**; and
(2) **lack of Congress oversight** of farm subsidies.



Figure 1. Government Farm Payments to Farms Excluding Conservation and Energy Payments, US, 1975-2020



...as well as (3) **structural change in policy** towards sustained higher farm payments.

Zulauf, C., G. Schnitkey, J. Coppess, N. Paulson, and K. Swanson. "Ad Hoc Payments: A Leading Indicator of Farm Policy Change." *farmdoc daily* (10): 140, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 29, 2020. <https://farmdocdaily.illinois.edu/2020/07/ad-hoc-payments-a-leading-indicator-of-farm-policy-change.html>

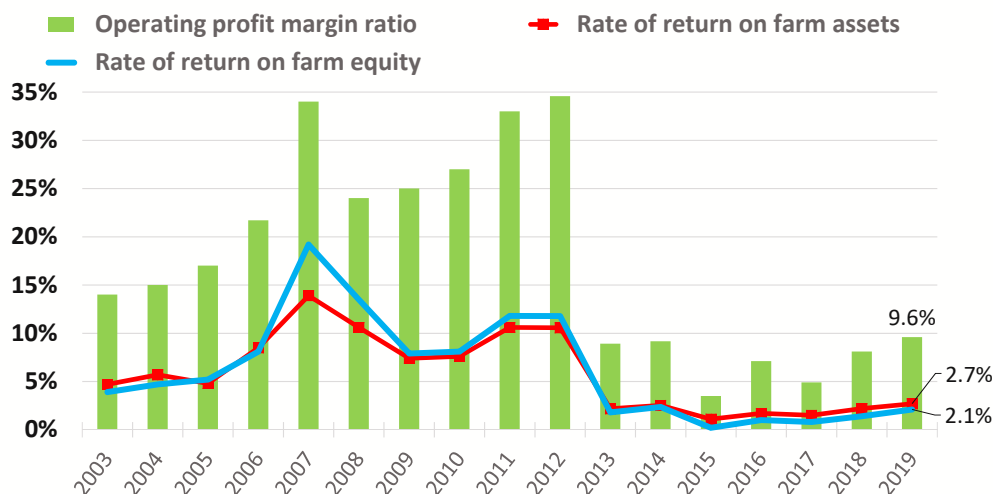
Questions? Comments?

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Please share your thoughts about this presentation:
<https://bit.ly/2FkVMBo>

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...but Farm Profitability remained subdued

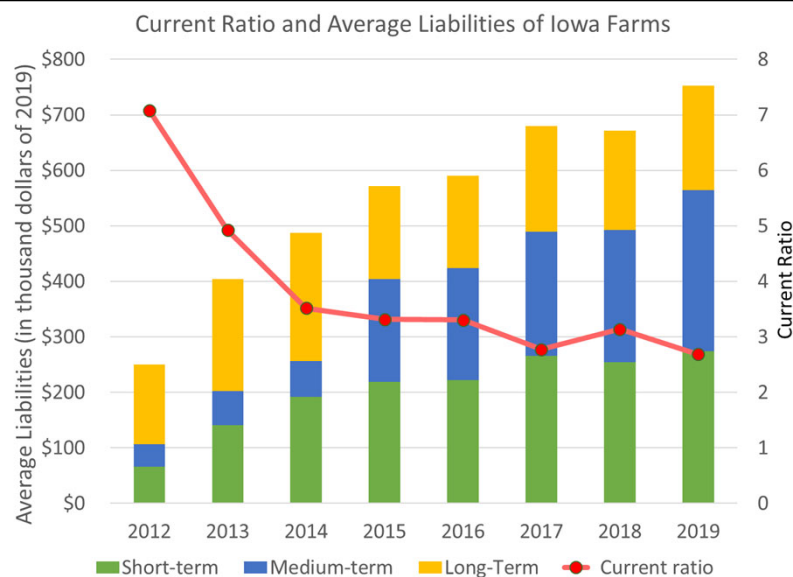


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Source: *Iowa Farm Costs and Returns*.
 Ag Decision Maker File C1-10. Various years.
 $OPMR = (\text{Accrual Net Farm Income} + \text{Interest} - \text{Unpaid labor}) / \text{Gross revenue}$

Farm debt increased, and liquidity declined...



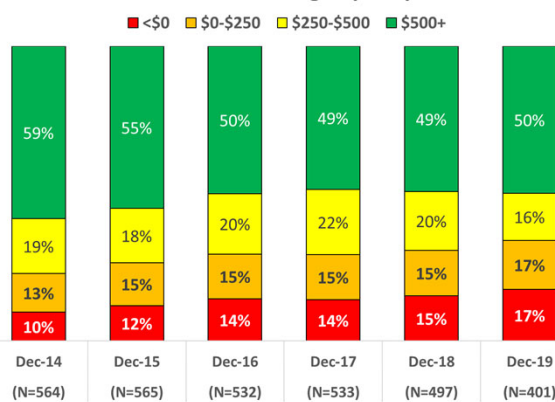
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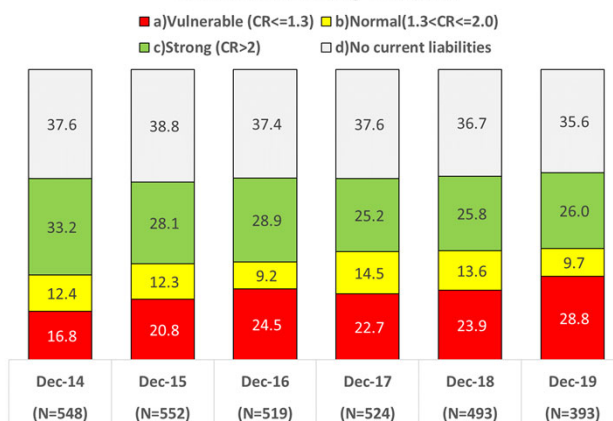
Source: *Iowa Farm Costs and Returns*.
Ag Decision Maker File C1-10. Various years.
Based on data from Iowa Farm Business Association

1 in 3 Iowa Farms had Weak Liquidity in December 2019

Distribution of Working Capital per Acre



Percent of Farms by CR Status

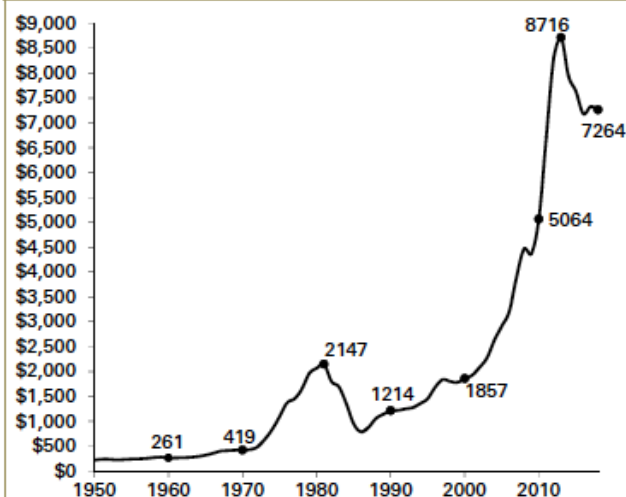


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Source: Plastina, A. "Mixed liquidity results for Iowa farms in 2019."
AgDM Newsletter, June 2020.

Iowa farmland values support the solvency of owner-operators

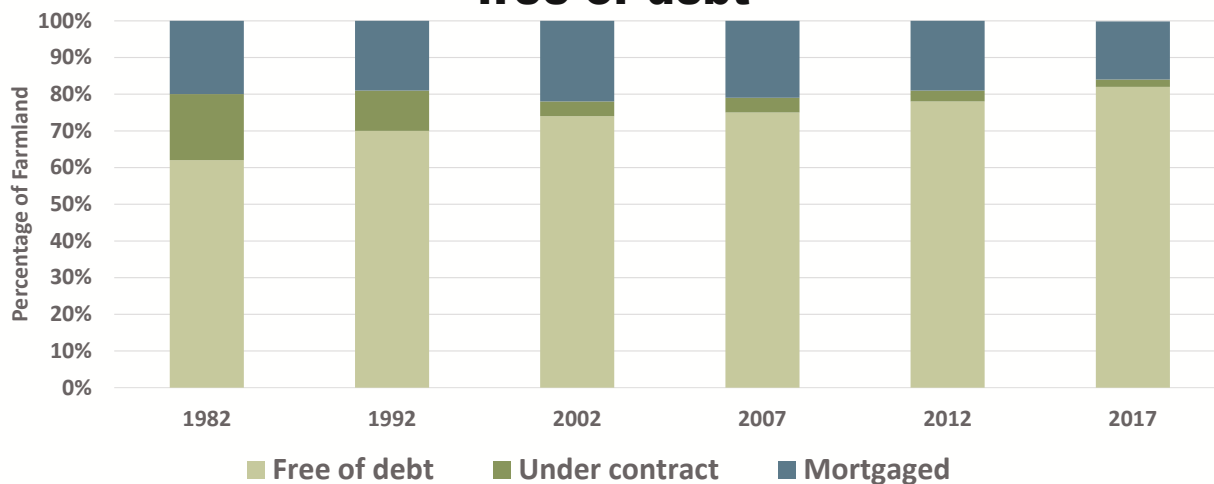
Figure 1. Average value per acre of Iowa farmland



Source: Iowa State University Land Value Survey

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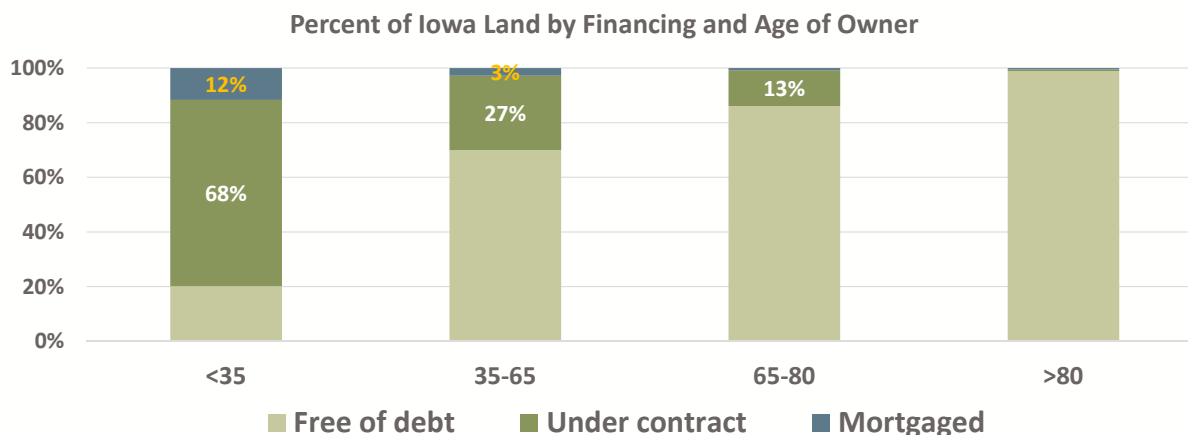
...particularly since most Iowa Farmland is owned free of debt



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Source: 2017 Iowa Farmland Ownership and Tenure Survey.
<https://store.extension.iastate.edu/product/6492>

...but younger owners have more land under contract and mortgaged



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Source: 2017 Iowa Farmland Ownership and Tenure Survey.
<https://store.extension.iastate.edu/product/6492>

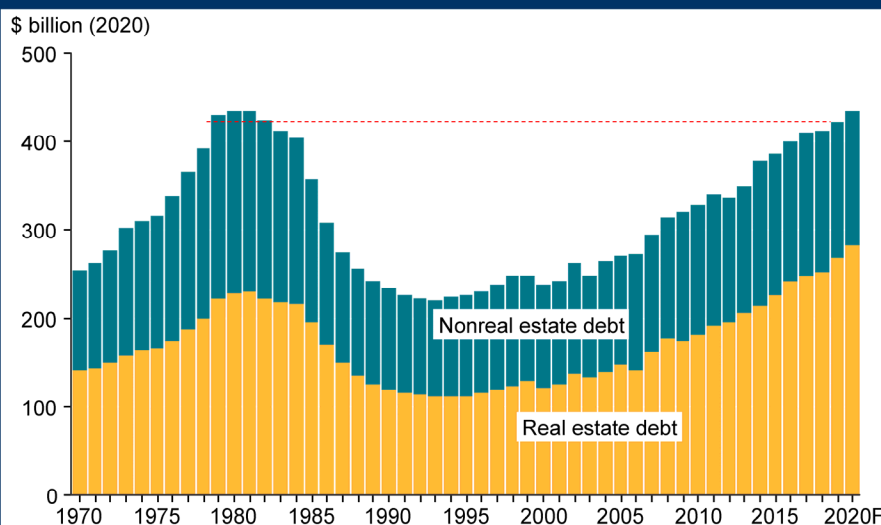
Also, only 37% of Iowa Farmland is Owner-Operated and 53% is Leased

	Percent		Acres
Owner Controlled:	47%		13,851,567
Owner operated		37%	10,819,245
Custom farmed		2%	583,485
Gov't programs and other uses		8%	2,448,837
Leased:	53%		16,771,192
Cash rent (fixed)		35%	11,502,256
Cash rent (flexible)		9%	2,354,117
Crop share		9%	2,875,316
Other types of leases		<1%	39,503
Total:	100%		30,622,759

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Source: 2017 Iowa Farmland Ownership and Tenure Survey.
<https://store.extension.iastate.edu/product/6492>

Farm sector debt, inflation adjusted, 1970–2020F

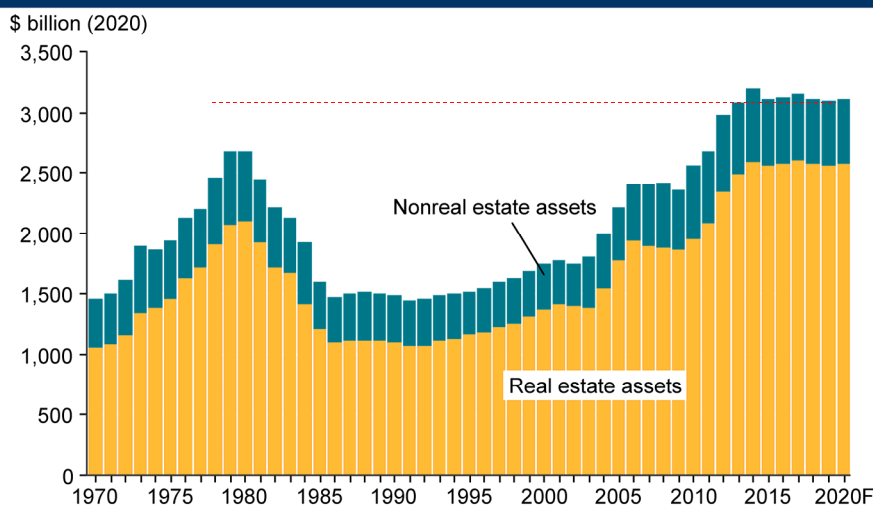


Note: F = forecast. Values are adjusted for inflation using the chain-type GDP deflator, 2020=100.
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.
Data as of September 2, 2020.

Farm debt increased at the national level too, reaching 1980's levels...

But Farm Assets are much higher than in the 1980's... due mostly to land values

Farm sector assets, inflation adjusted, 1970–2020F



Note: F = forecast. Values are adjusted for inflation using the chain-type GDP deflator, 2020=100.
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.
Data as of September 2, 2020.

Midwest land values are stable, but start trending lower

Percent change in dollar value of "good" farmland

	April 1, 2020 to July 1, 2020	July 1, 2019 to July 1, 2020
Illinois	+1	0
Indiana	-1	+4
Iowa	-1	0
Michigan	*	*
Wisconsin	+3	+1
Seventh District	0	+1

*Insufficient response.

AgLetter: August 2020

By David Oppedahl

FEDERAL RESERVE BANK of CHICAGO



Top: April 1, 2020 to July 1, 2020

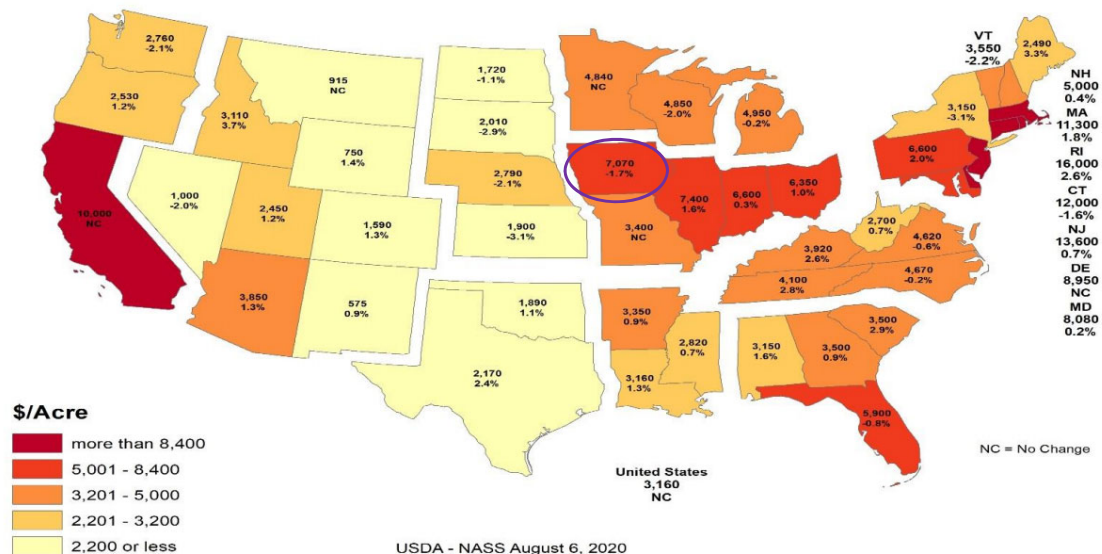
Bottom: July 1, 2020 to July 1, 2020

<https://www.chicagofed.org/publications/agletter/2020-2024/august-2020>

USDA @ Aug 2020: IA drops -1.7% since June 2019

2020 Farm Real Estate Value by State

Dollars per Acre and Percent Change from 2019



Some additional estimates from Aug 20 (Farm Credit & Kansas City Fed)

Land Value Trends for 1st Half of 2020

Iowa, Wyoming: +0.3%

Nebraska: -0.4%

South Dakota: -2.0%

(pasture loss + residual flooding impacts)

Land Sales Move from Auction to Private or Brokered Sales in Q2

Nebraska: -21%; Wyoming: -35%

Iowa: -8%; S. Dakota: -31%

Iowa Tillable Farmland Auction Summary: \$/Soil Quality Index (CSR2)

	2019 Q1-2	2020 Q1-2
\$/CSR2	\$111	\$108
Tillable acres sold	25,180	20,282
# auctions	325	224

Source: Jim Rothermich, Iowa Appraisal and Research

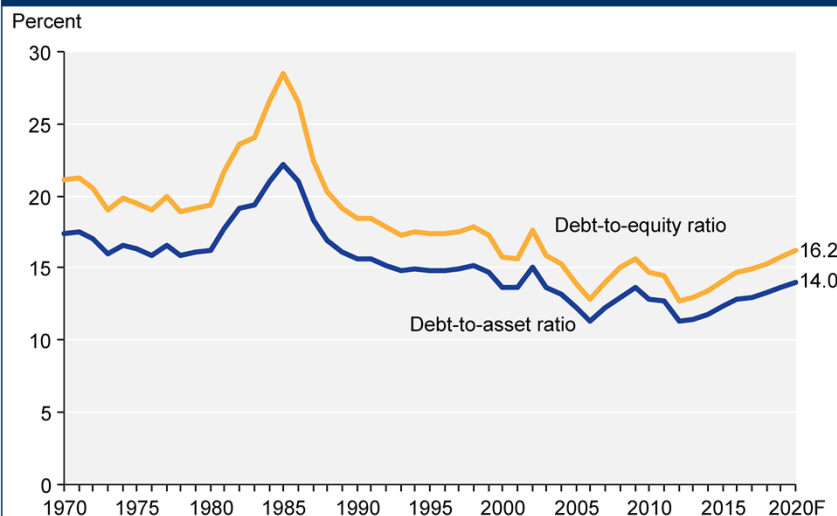
<https://www.iowaappraisal.com/iowa-land-auction-results/>



<https://www.morningagclips.com/2020-farmland-values-are-stable/>

Slide prepared by Dr. Wendong Zhang, ISUEO

Farm sector solvency ratios, 1970–2020F



Note: F = forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Data as of September 2, 2020.

**Farm sector
solvency
ratios are
projected to
deteriorate
in 2020...**