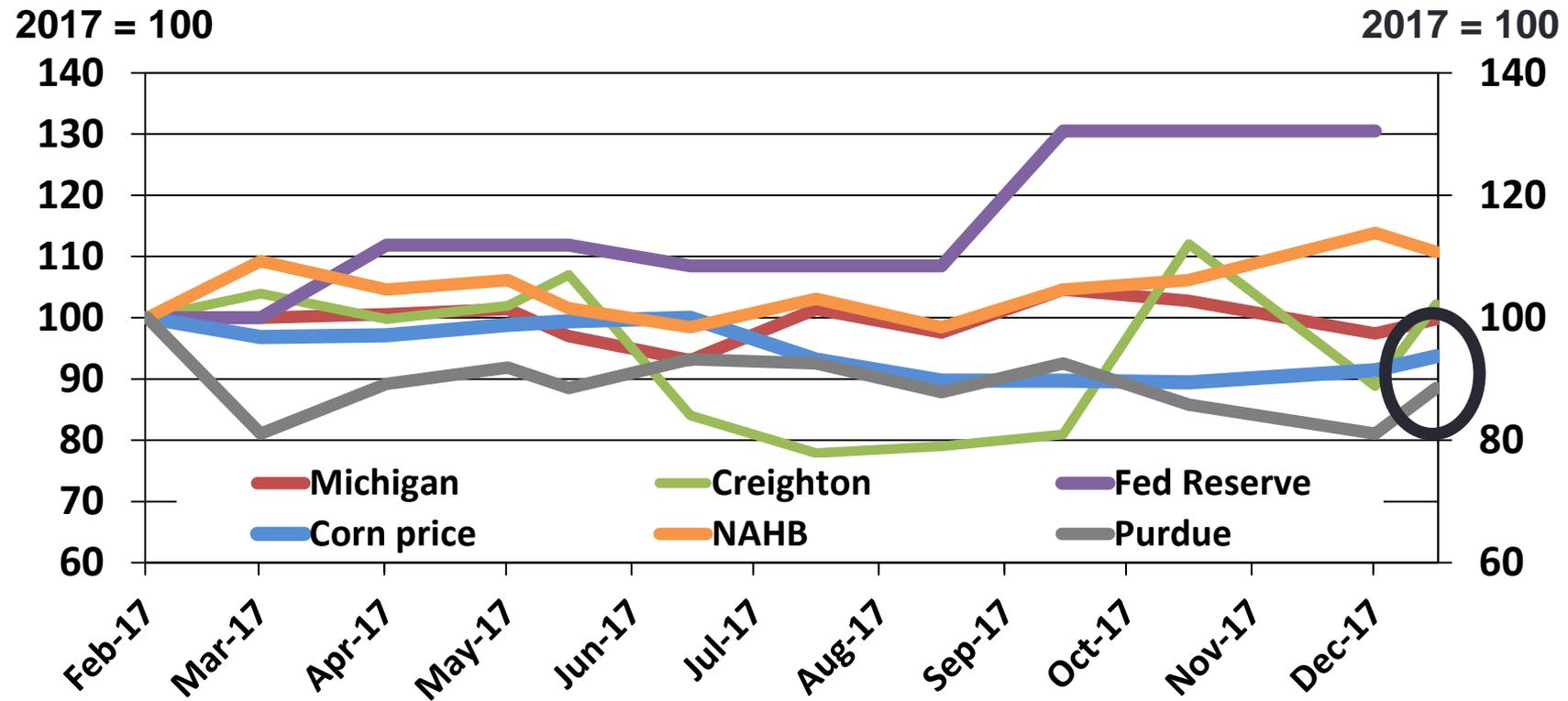


ROOTS OF PROSPERITY OUTLOOK FOR 2018

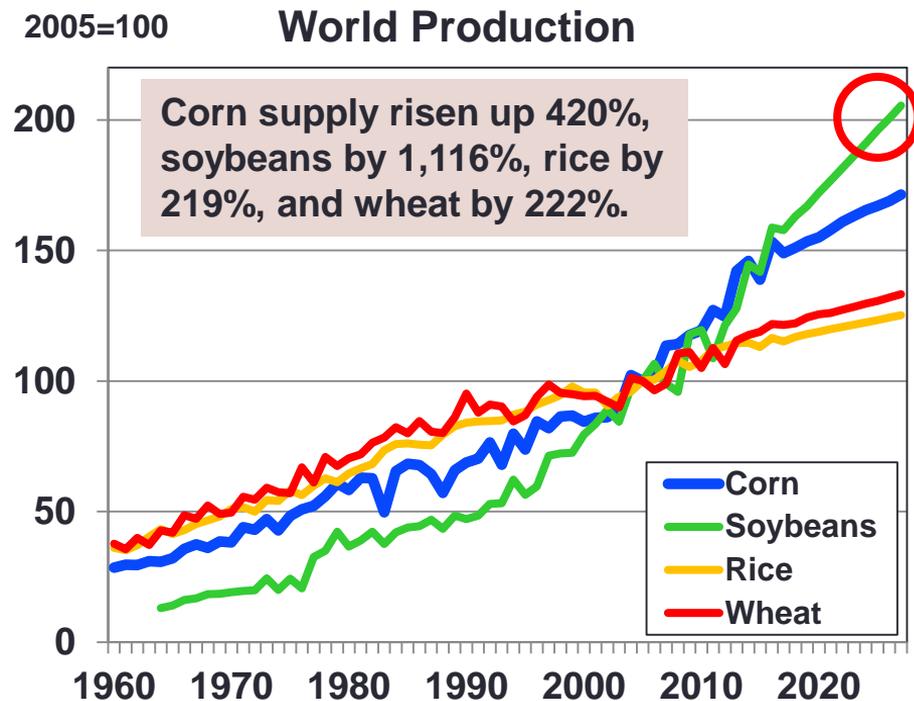
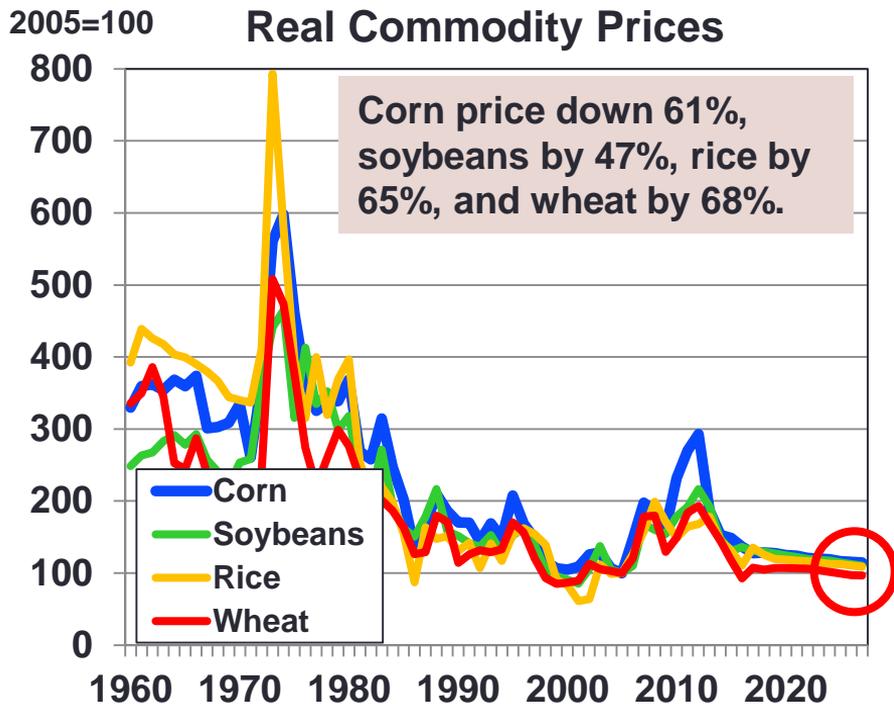
Robert Johansson
Chief Economist, USDA
February 2018

Farmers' sentiment is low compared to others, following corn prices down

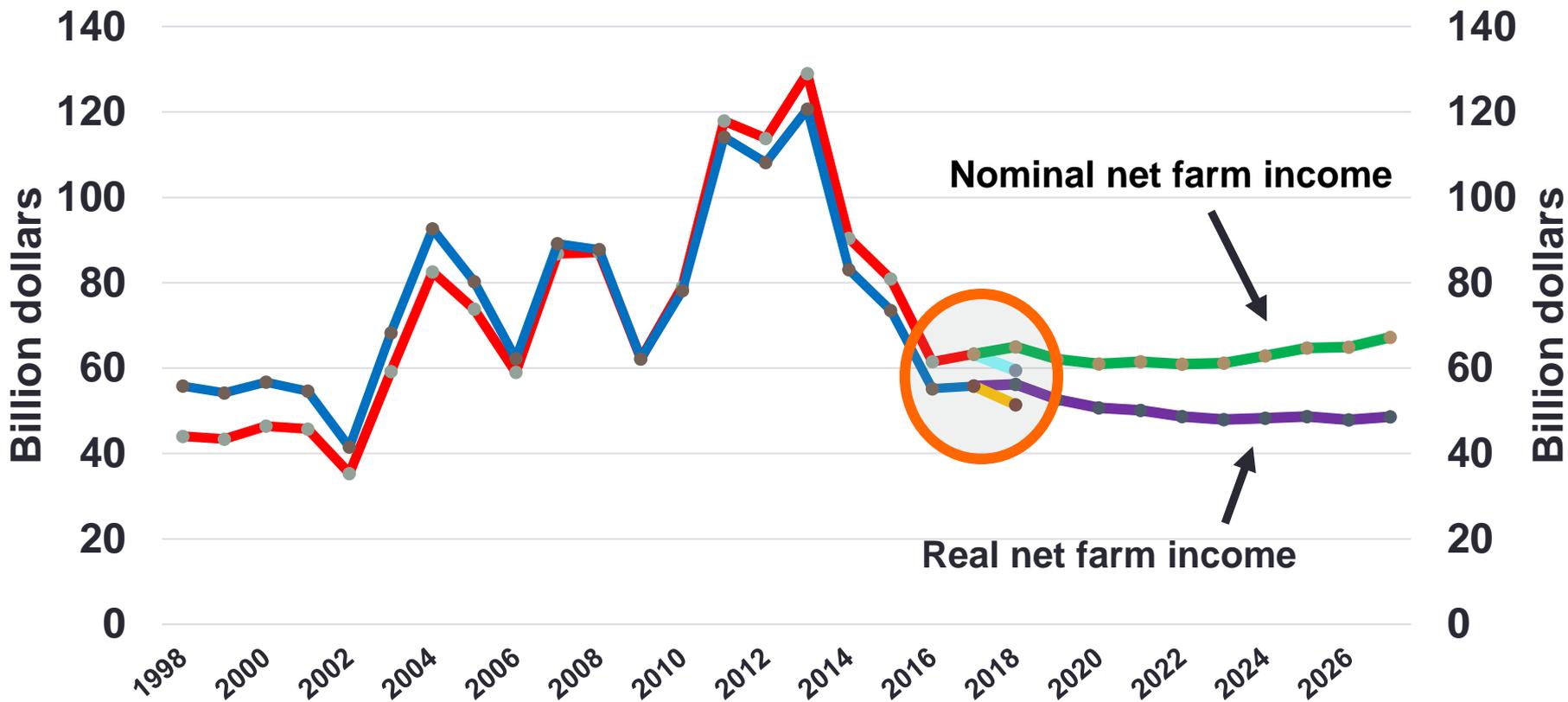


Data: USDA, UofMich, Purdue, Fed Reserve, NAHB, Creighton.

Real prices trend down, as ag productivity outstrips population growth

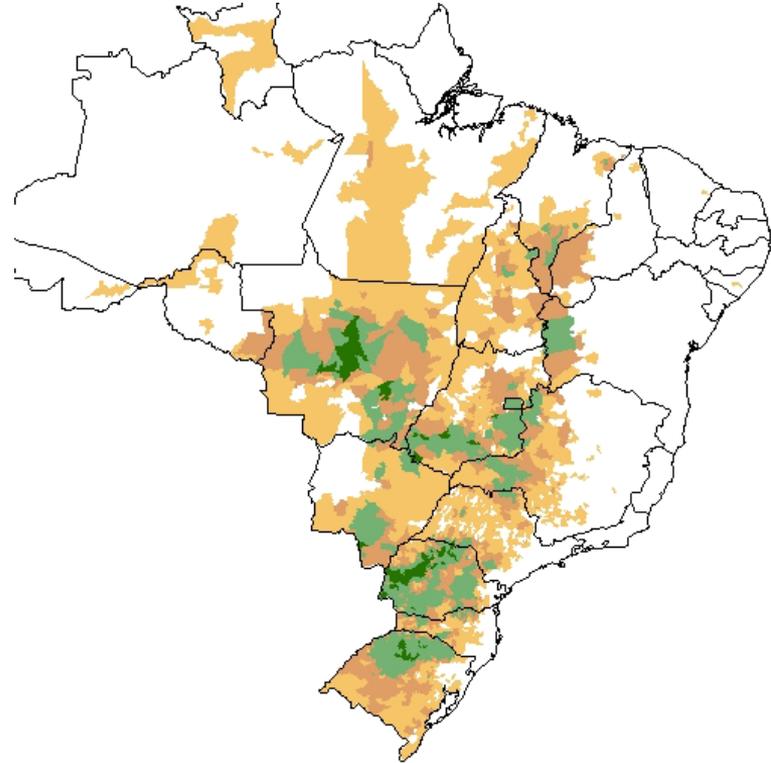


Real net farm income falling



What might improve income?

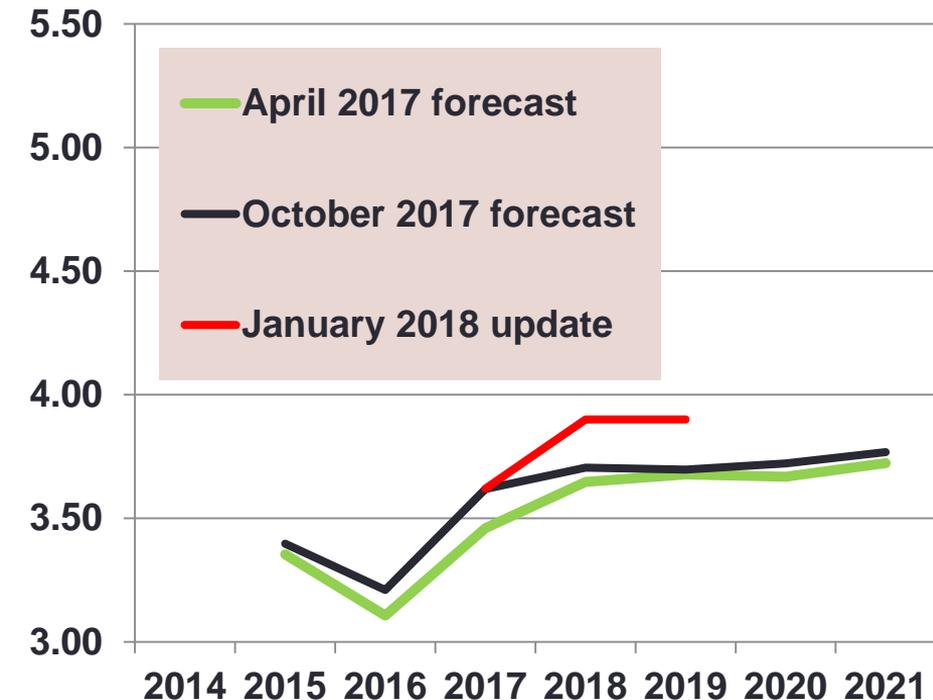
- **Demand change:**
 - **Global GDP growth boosts demand**
 - **Dollar weakness boosts trade**
 - **Improved market access abroad**
- **Supply change:**
 - **Weather events**
 - **Less distorting int'l farm policy**
- **US Farm Policy**
 - **Current economic conditions**
 - **New farm bill—when?**



IMF growth forecasts more optimistic

World

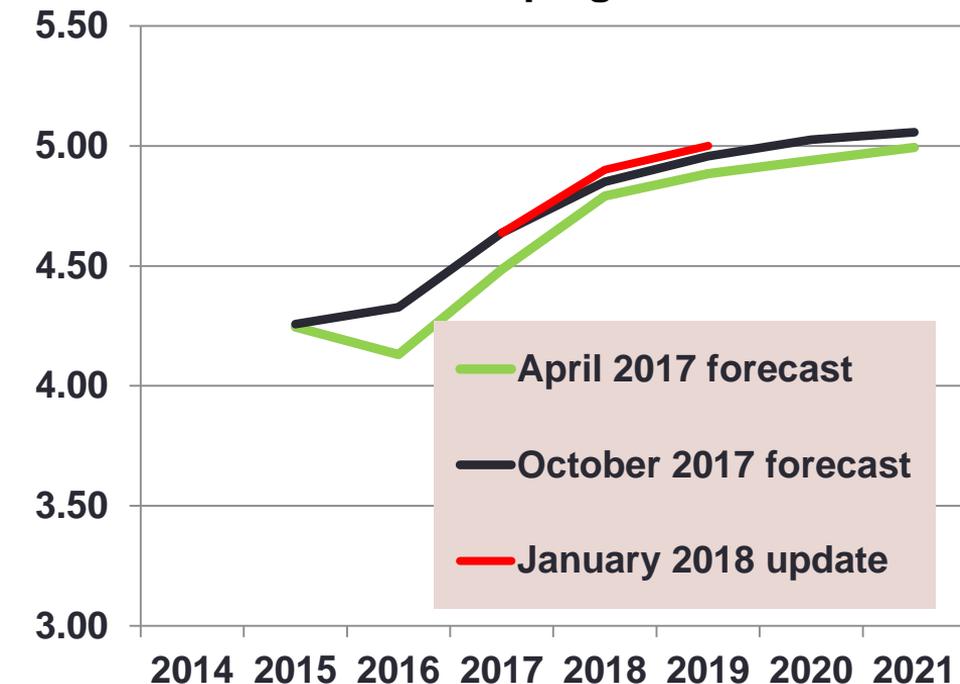
Percent change



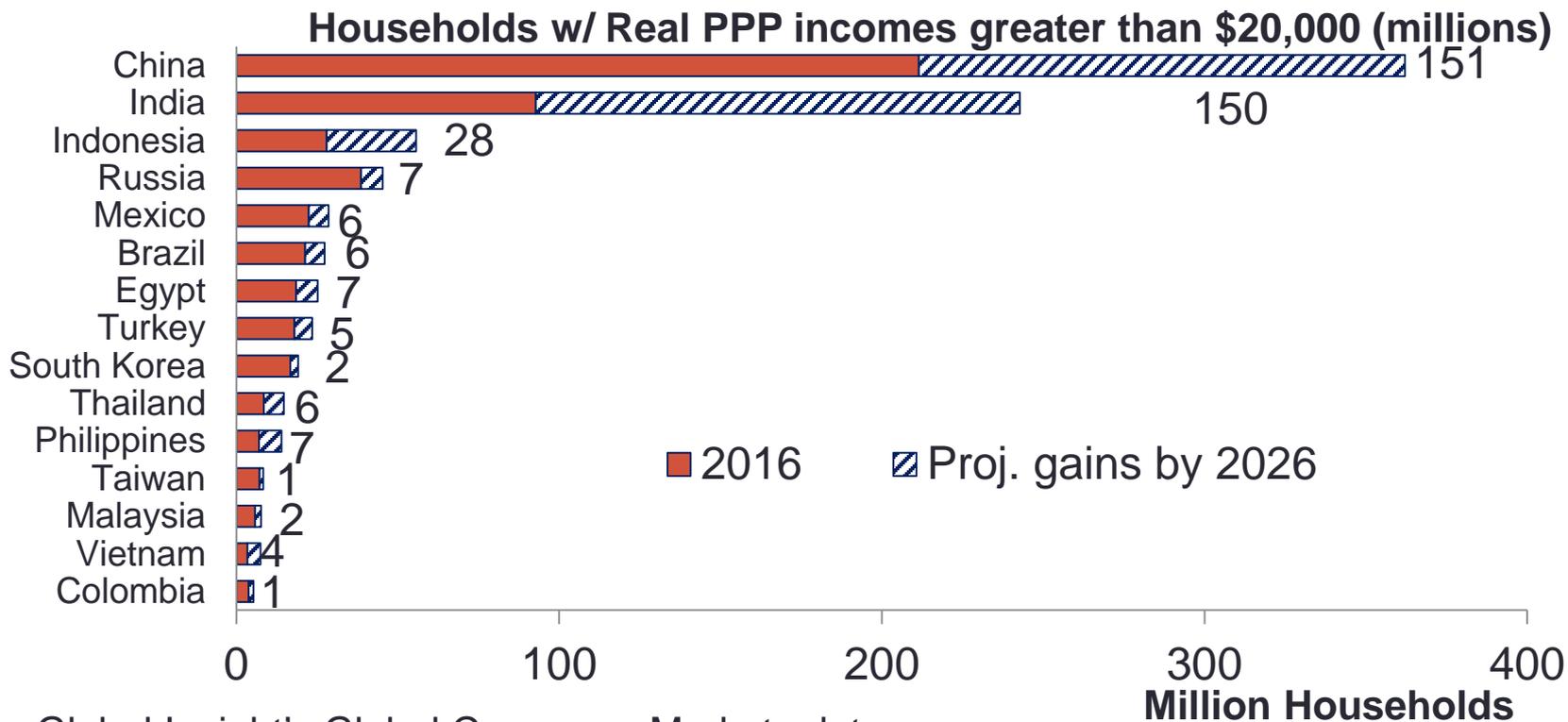
Data: IMF.

Emerging markets and developing countries

Percent change



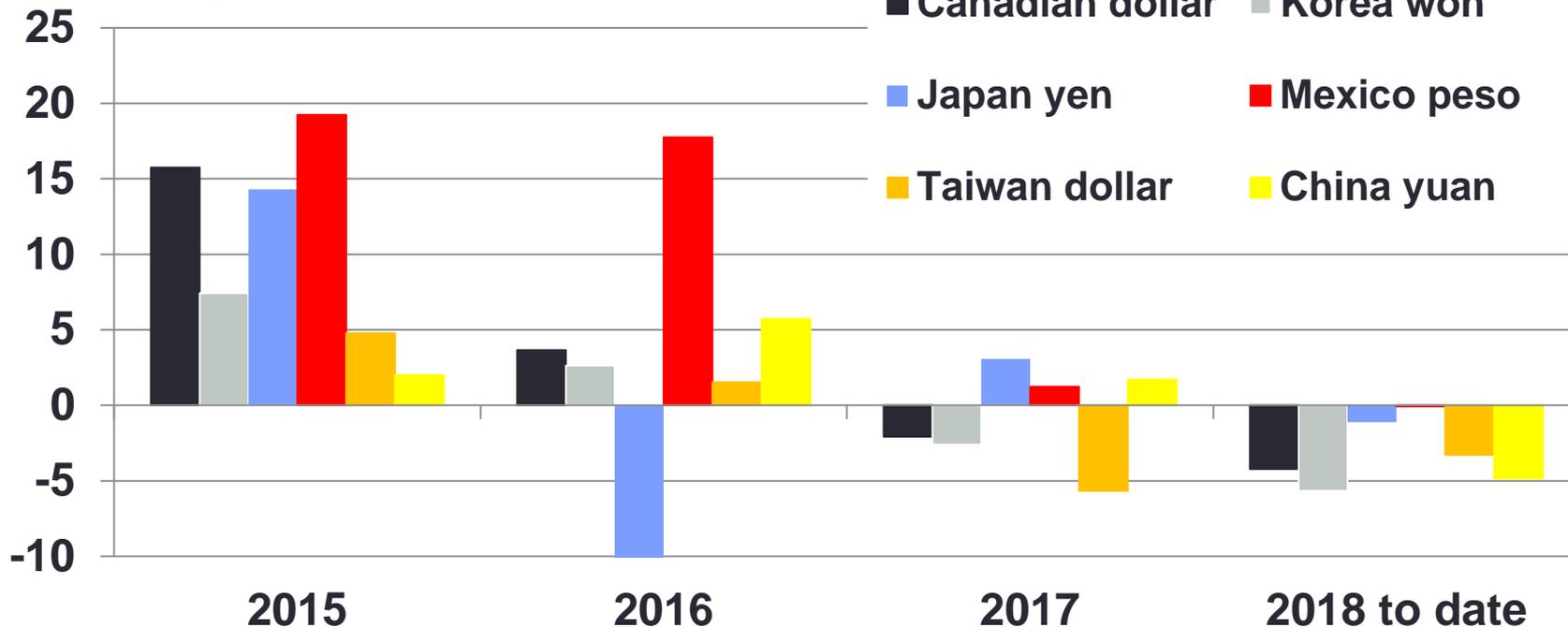
Income growth will drive increased global demand



Data: Global Insight's Global Consumer Markets data.

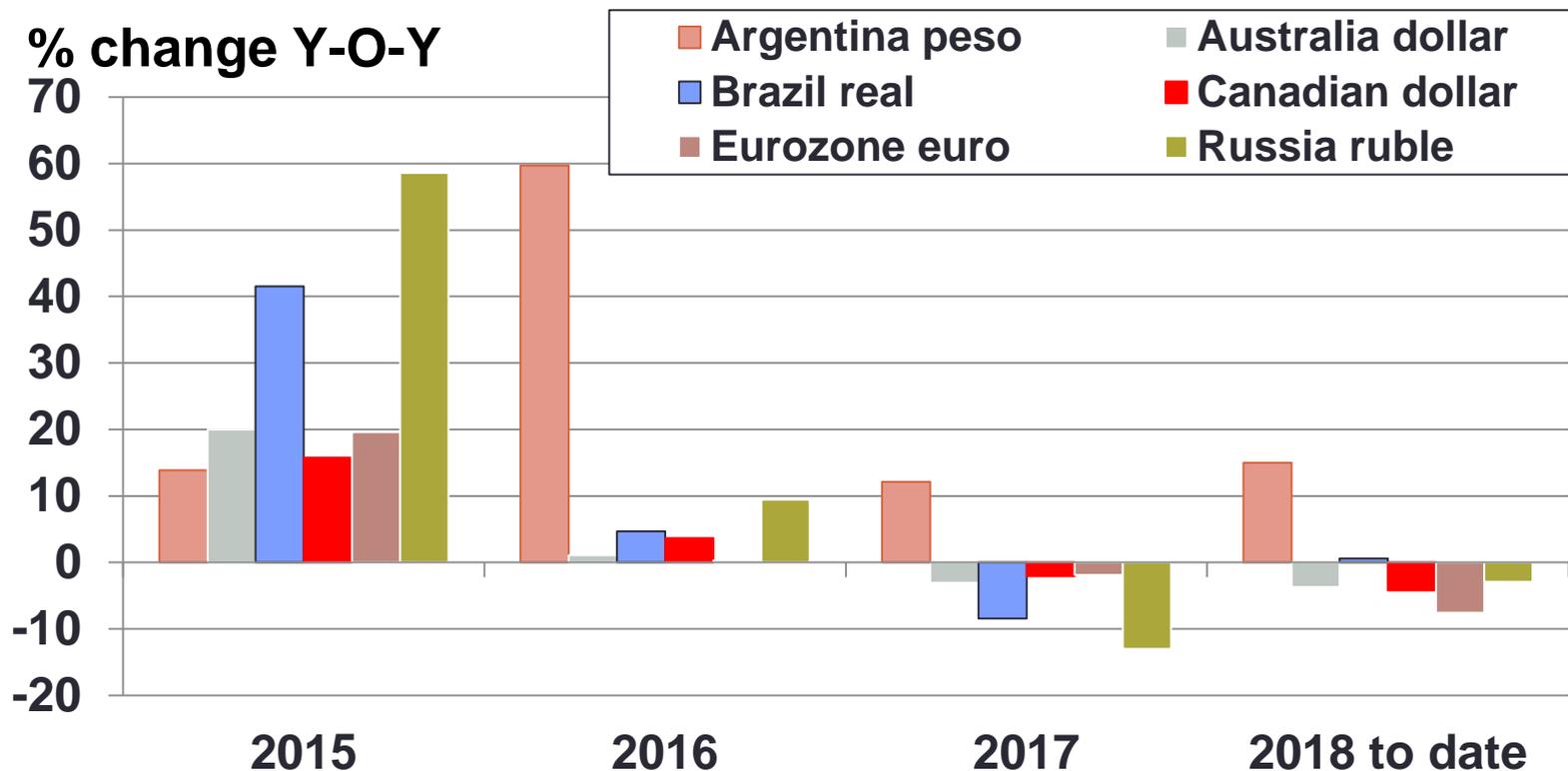
Dollar depreciating so far in 2018 versus customer currencies

% change Y-O-Y



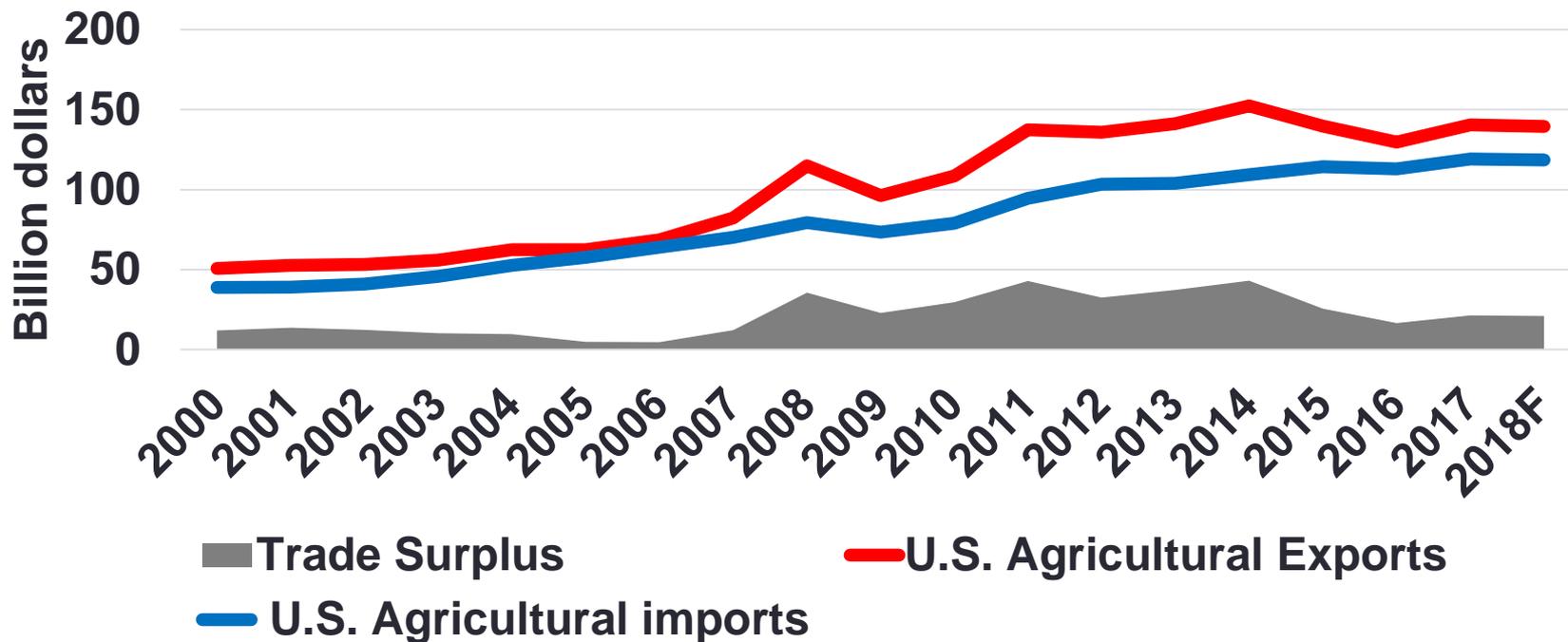
Data: Thomson Reuters Datastream

Down versus most competitor currencies too



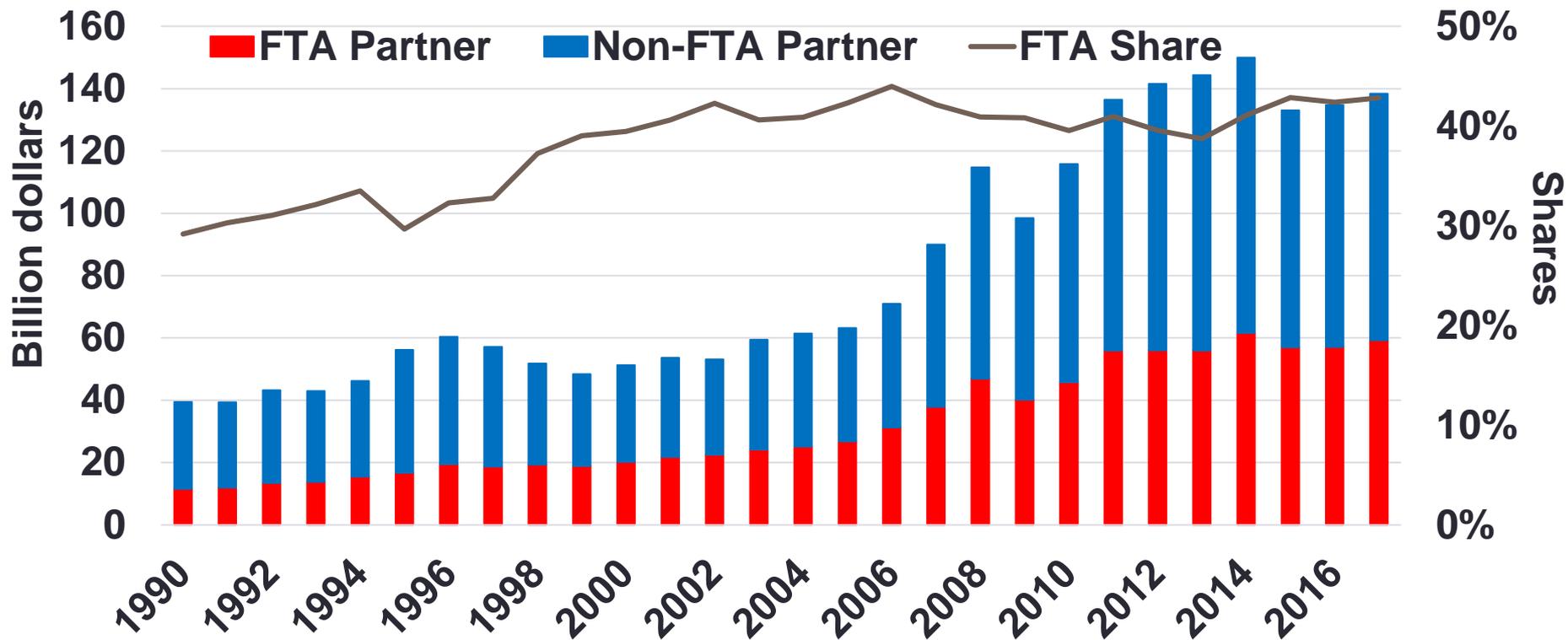
Data: Thomson Reuters Datastream

That should help maintain FY2018 ag exports



Data: USDA.

FTA's account for large share of total U.S. ag exports

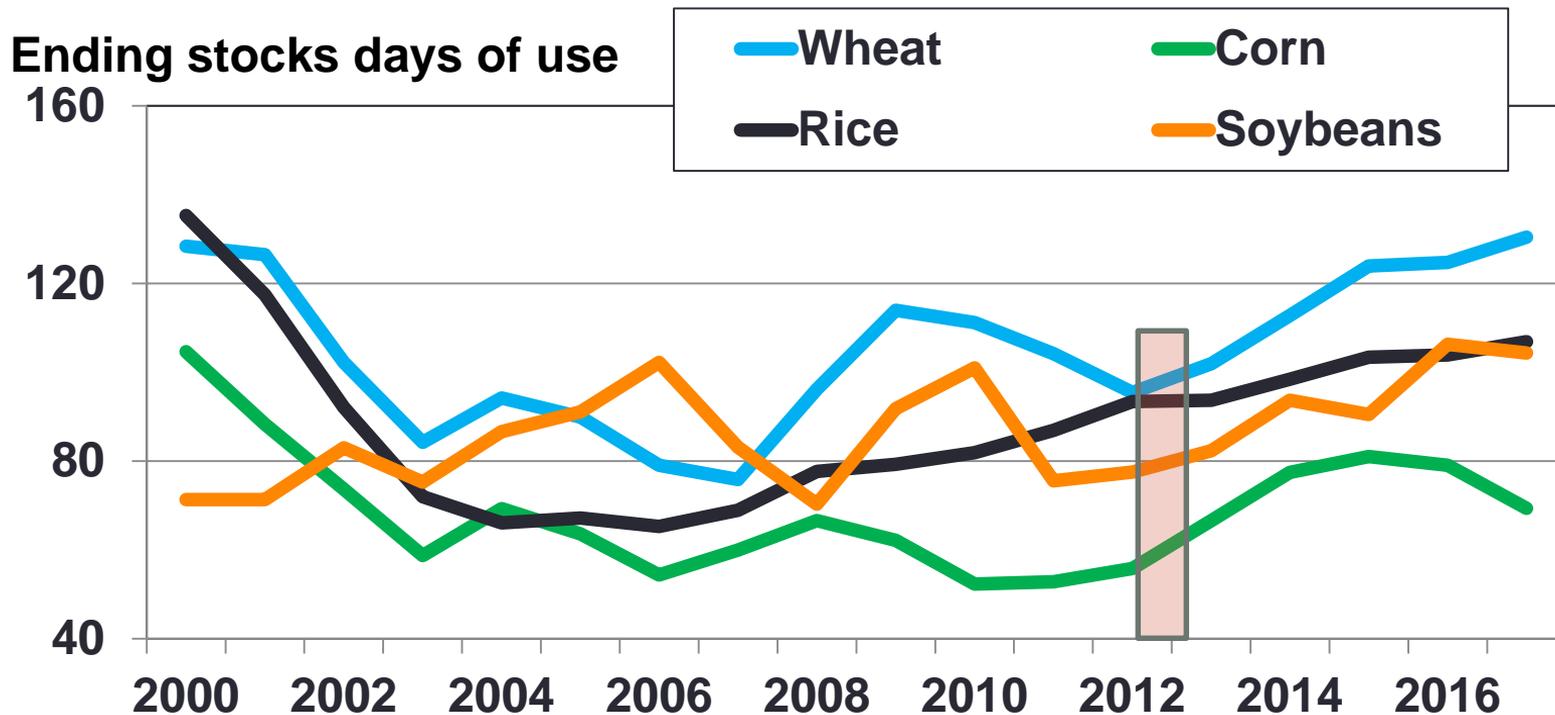


U.S. crop forecast



Photo source: www.farmanddairy.com/438028.html

Global ending stocks to continue relatively high, moderating price volatility



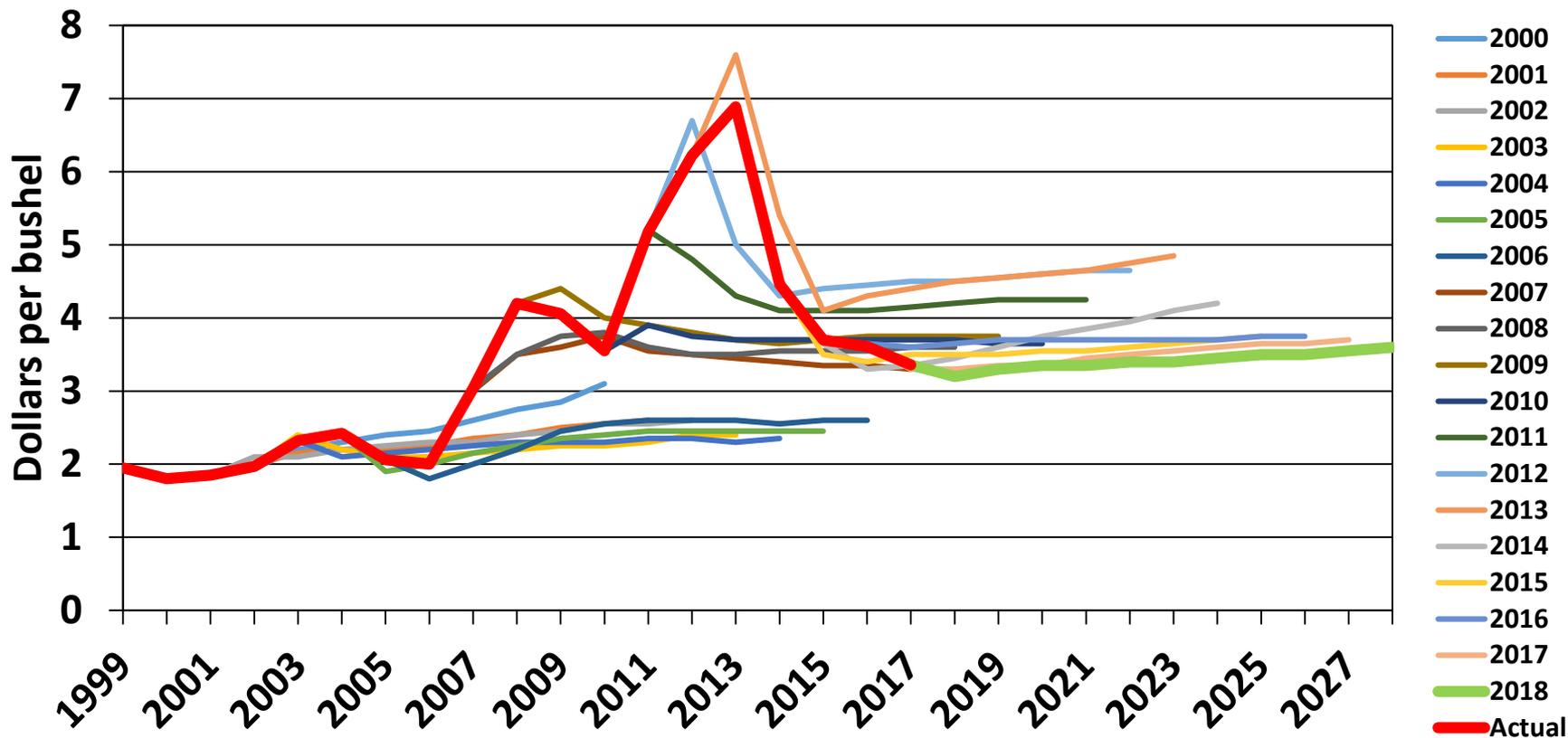
Data: USDA.

Some prices expected to edge up into 2018/19

Crop	2014	2015	2016	2017	2018F	%Δ
Wheat (\$/bu)	5.99	4.89	3.89	4.60	4.70	2.2
Corn (\$/bu)	3.70	3.61	3.36	3.30	3.40	3.0
Soybeans (\$/bu)	10.10	8.95	9.47	9.30	9.25	-0.5
Cotton (cents/lb)	61.30	61.20	68.00	69.00	63.00	-8.7
All Rice (\$/cwt)	13.40	12.20	10.40	12.50	11.90	-4.8

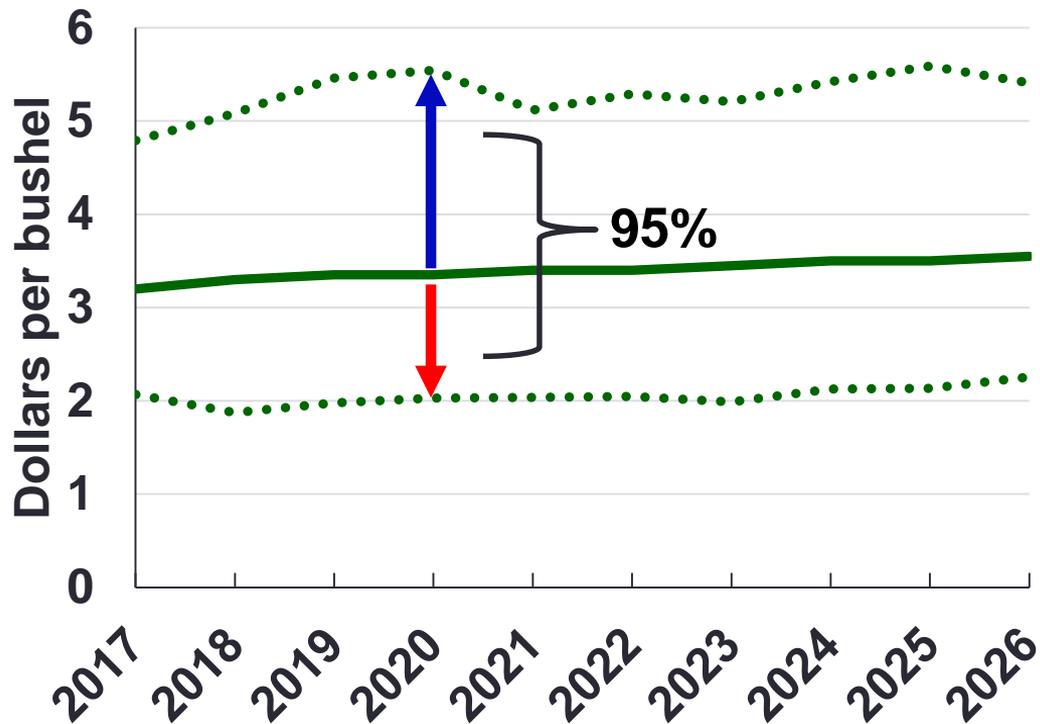
Data: USDA.

Corn prices rise slowly over next 10 years



Prices +/- will depend on weather and economy

Corn Price Simulations

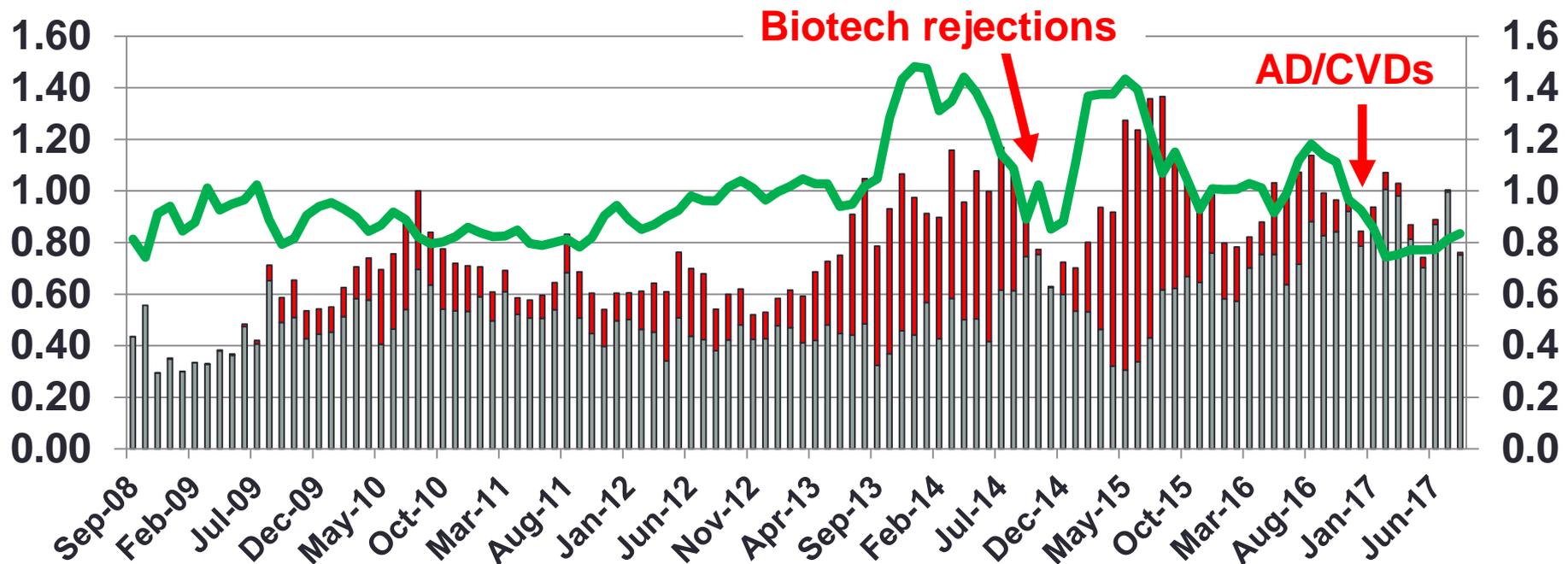


Projections for 2020	Low Corn Price	High Corn Price
Corn price (\$/bu)	2.02	5.56
Yield (bu/acre)	196	158
Ending stocks (mils bu)	4,477	1,699
Soybean price (\$/bu)	5.49	10.89

...and on other countries farm and trade policies

DDG/corn price ratio

DDG exports mmt

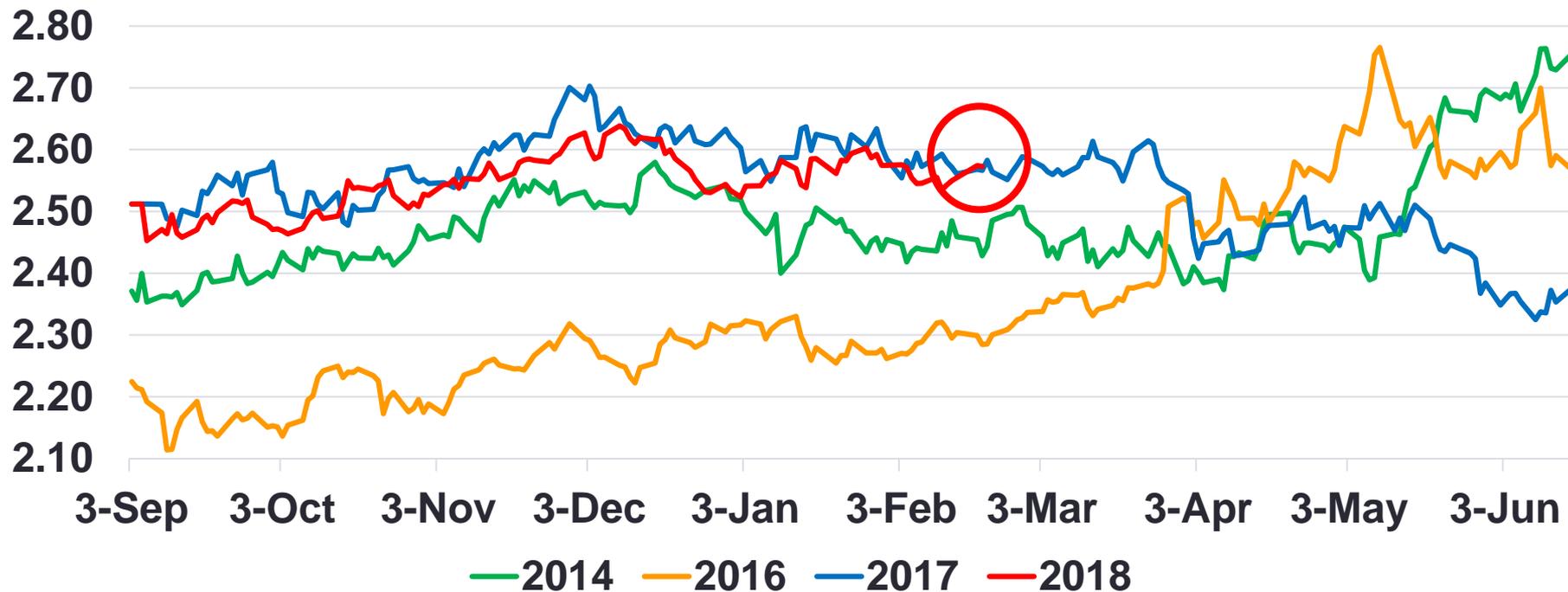


US DDG Exports to other
 US DDG Exports To China
 DDG/Corn Price (t-1)

Data: USDA.

... but farmers plant based on what they expect

Evolution of New Crop U.S. Soybean to Corn Price Ratio for Selected Years



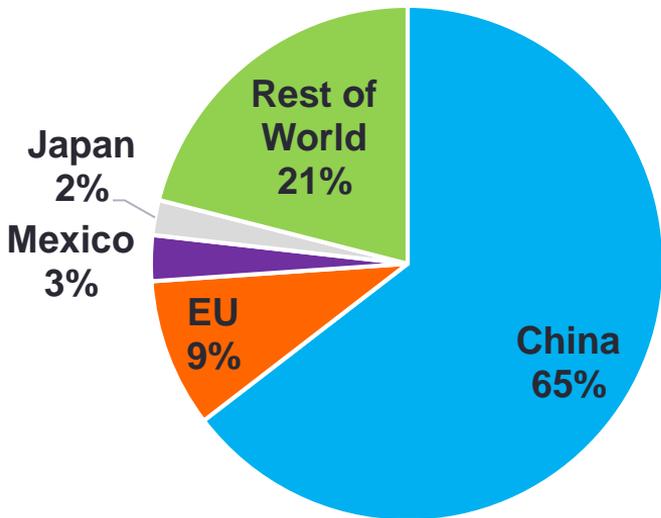
Corn and bean area at parity, wheat holding

Crop (mil. acres)	2014	2015	2016	2017	2018F	%Δ
Corn	90.6	88.0	94.0	90.2	90.0	-0.2%
Soybeans	83.3	82.7	83.4	90.1	90.0	-0.1%
Wheat	56.8	55.0	50.1	46.0	46.5	1.1%
All cotton	11.0	8.6	10.1	12.6	13.3	5.6%
<i>Other feedgrains</i>	<i>12.9</i>	<i>15.2</i>	<i>12.6</i>	<i>10.7</i>	<i>12.6</i>	<i>17.8%</i>
Rice	3.0	2.6	3.2	2.5	2.9	16%
<i>Total 8 crops</i>	<i>257.6</i>	<i>252.0</i>	<i>253.4</i>	<i>252.1</i>	<i>255.3</i>	<i>1.3%</i>

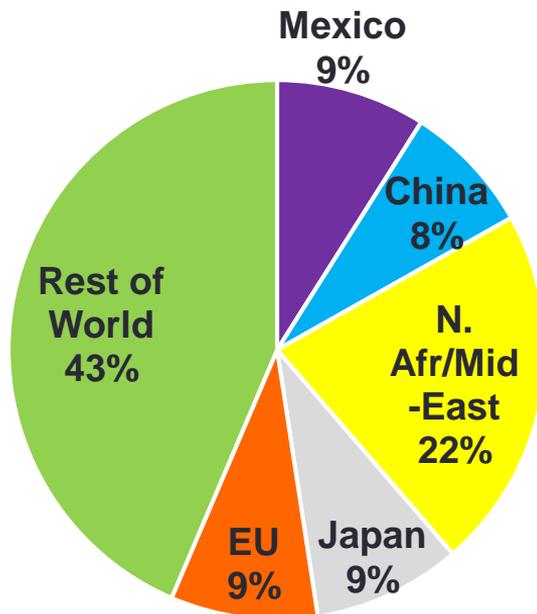
Data: USDA.

Who's buying now? Global Import Share (2017/18)

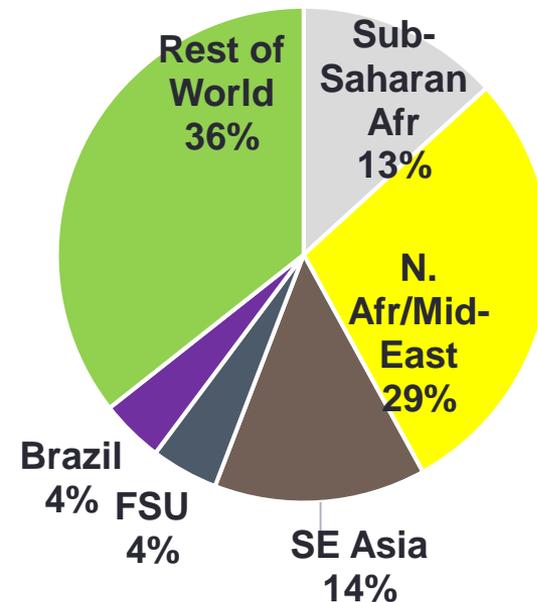
Soybeans



Coarse Grains

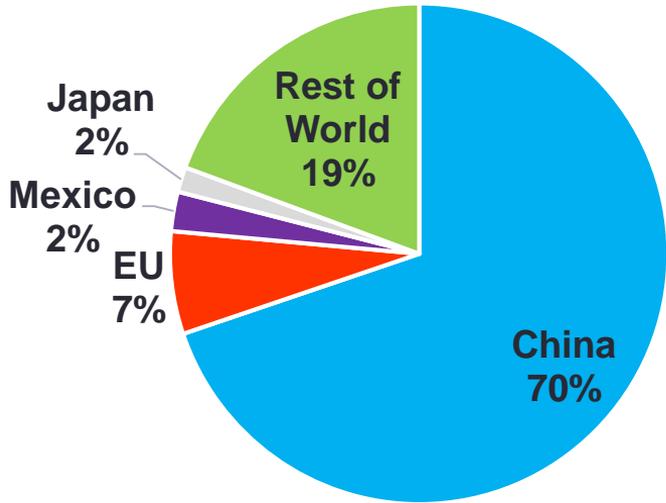


Wheat

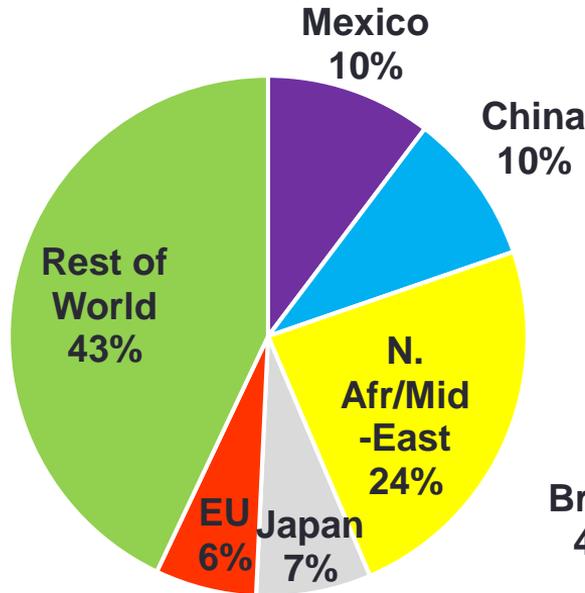


Who will be buying? Global Import Share (2027/28)

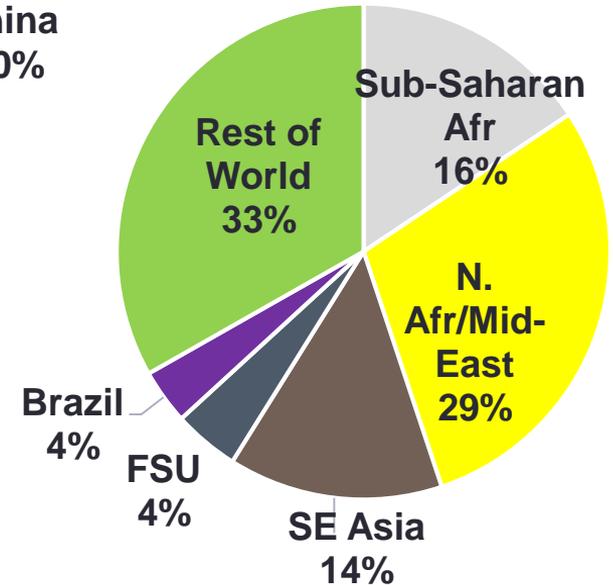
Soybeans



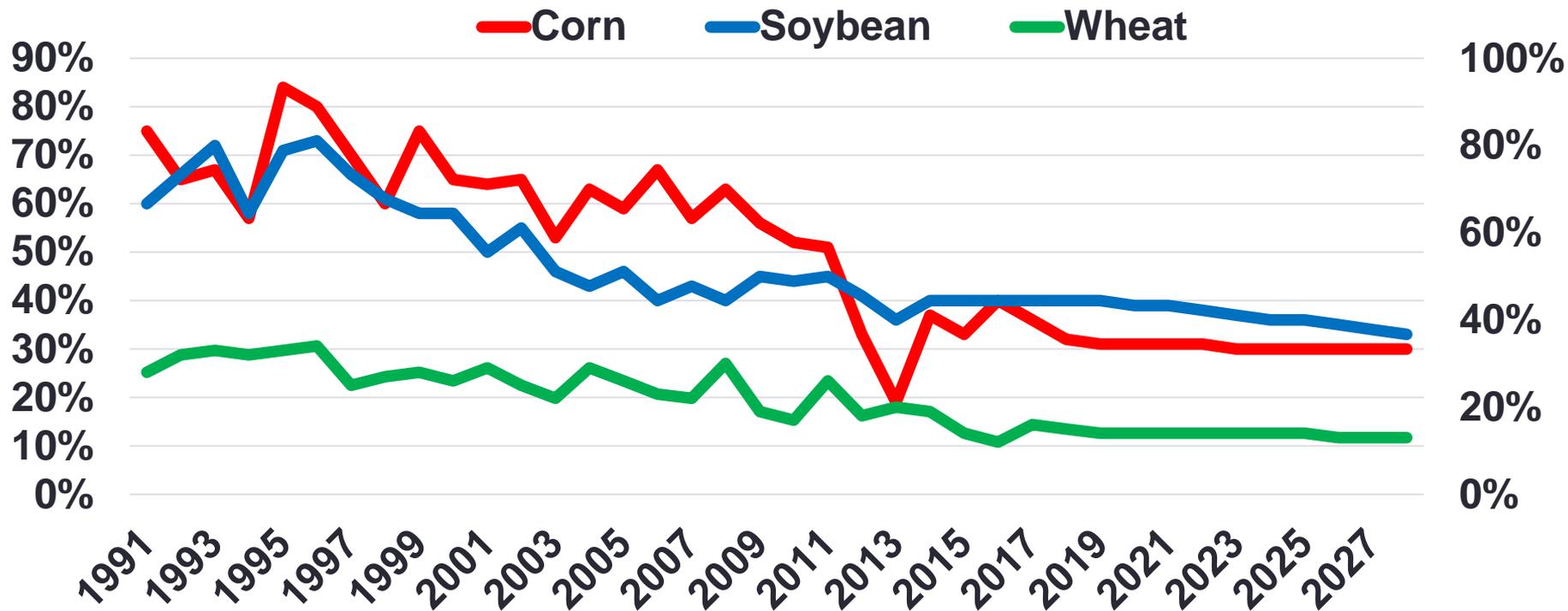
Coarse Grains



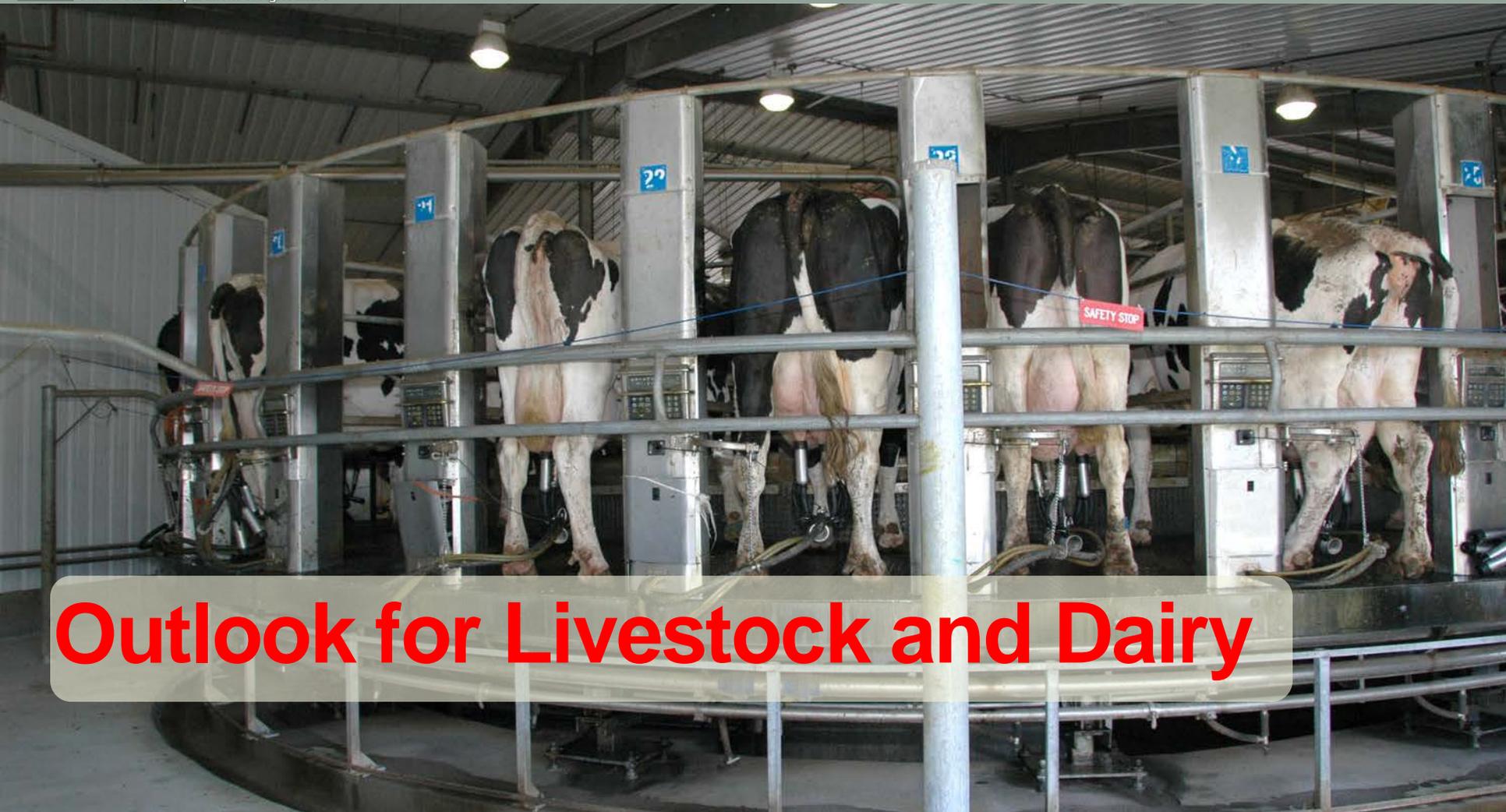
Wheat



U.S. export share of global trade flattens



Data: USDA



Outlook for Livestock and Dairy

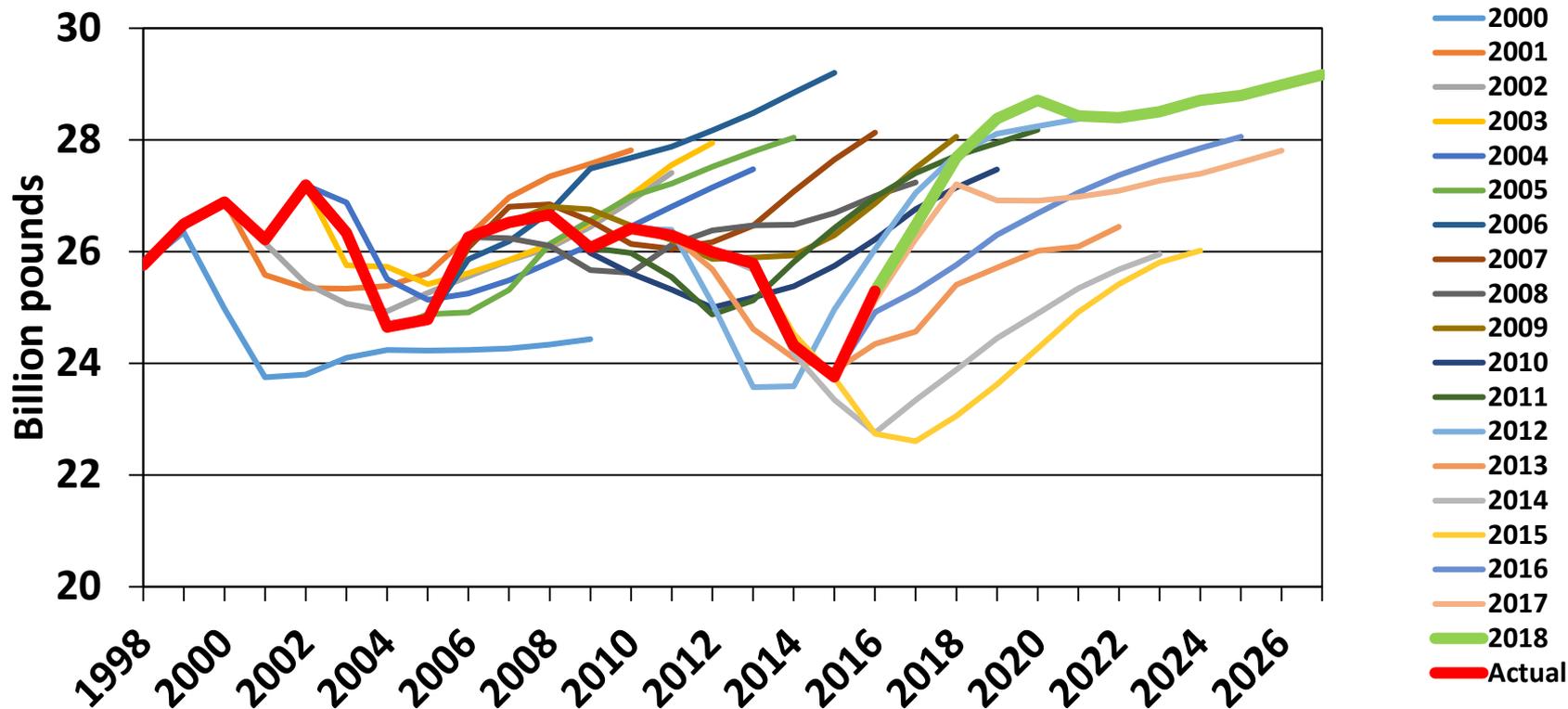
Meat and milk production to be record high in 2018

Item	2014	2015	2016	2017	2018F	%Δ
	Billion Pounds					
Beef	24.3	23.7	25.2	26.2	27.7	5.9
Pork	22.8	24.5	24.9	25.6	26.9	5.1
Broilers	38.6	40.0	40.7	41.6	42.6	2.3
Total¹	92.2	94.6	97.6	100.1	103.9	3.8
Milk	206.1	208.6	212.4	215.4	218.7	1.5

Data: USDA-OCE.

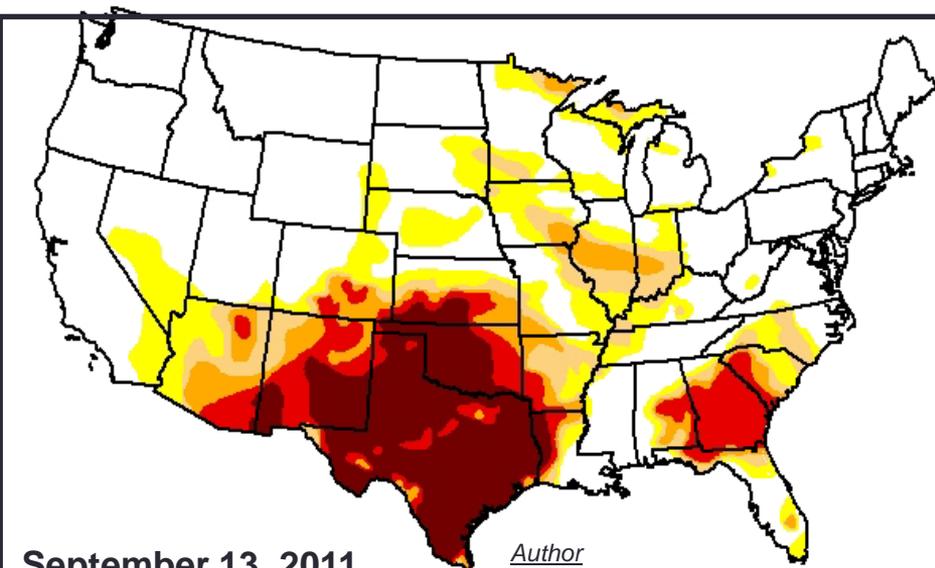
Data in red denote record levels. ¹ Total red meat and poultry

Beef production is projected to continue to rise



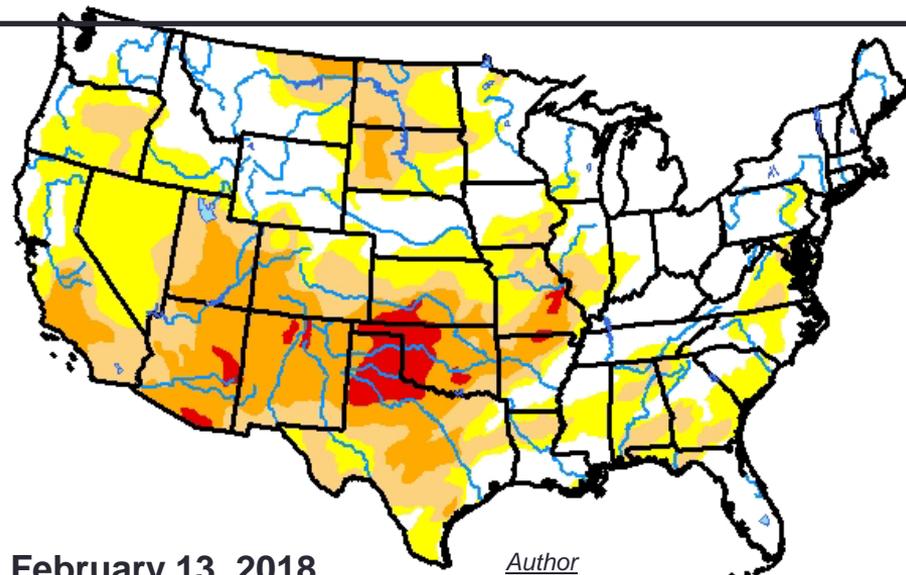
Data: USDA

U.S. Drought Monitor, Sept 2013 and Feb 2018



September 13, 2011
(Released Thursday, Sep. 15, 2011)
Valid 7 a.m. EST

Author
Mark Svoboda
National Drought Mitigation Center



February 13, 2018
(Released Thursday, Feb. 15, 2018)
Valid 7 a.m. EST

Author
Eric Luebehusen
U.S. Department of Agriculture

Percent of Southern Plains* In D3-D4 Drought

September 13, 2011: 83.3%
February 13, 2018: 16.5%

* Kansas, Oklahoma, and Texas

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought



<http://droughtmonitor.unl.edu/>

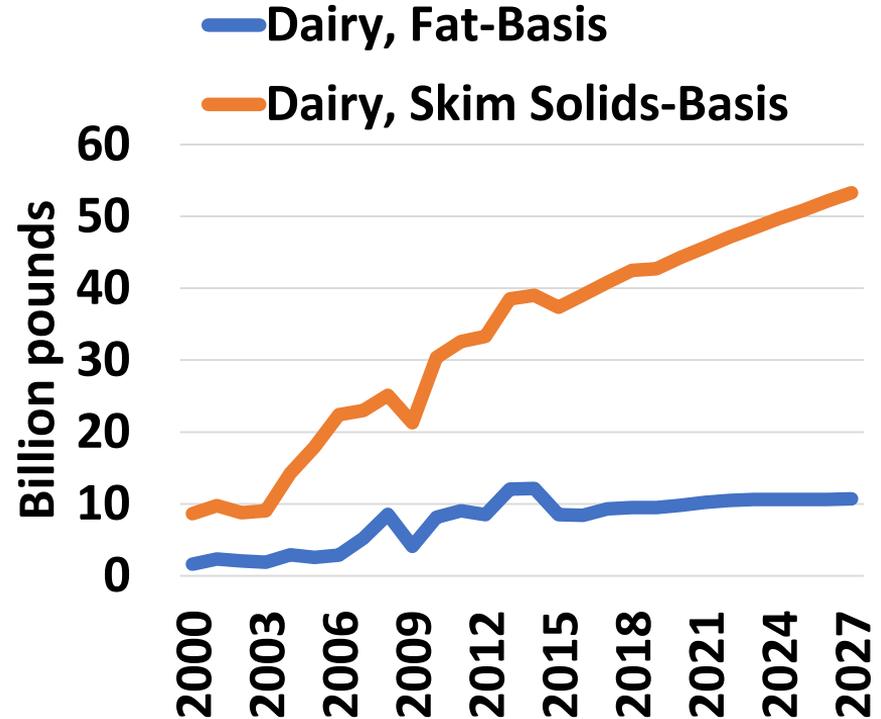
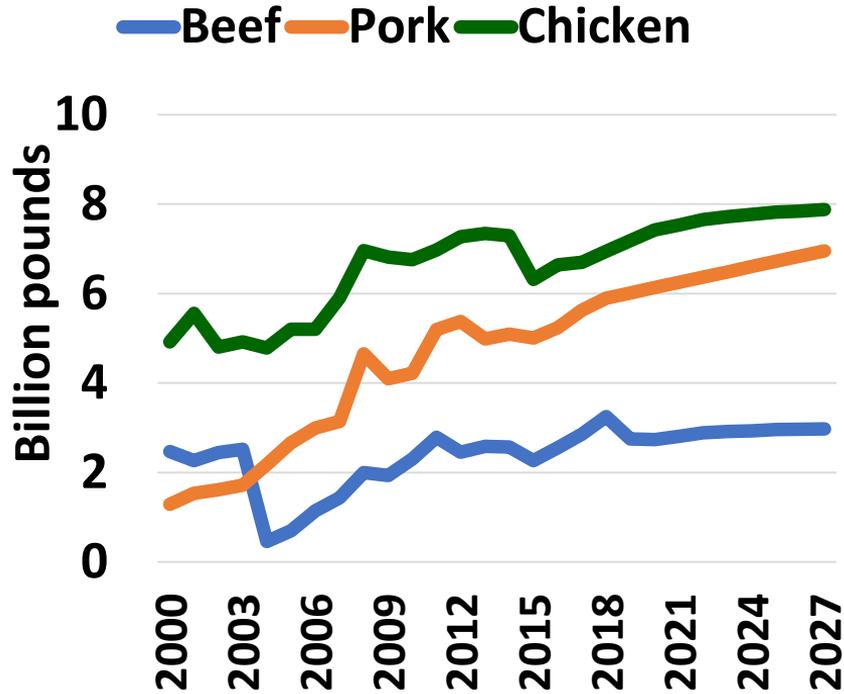
Livestock, poultry, and milk prices were higher in 2017, but will decline in 2018

Item	2014	2015	2016	2017	2018F	%Δ
	Dollars per cwt					
Steers	154.56	148.12	120.86	121.52	119.25	-1.9
Hogs	76.03	50.23	46.16	50.48	48.00	-4.9
Broilers	104.9	90.5	84.3	93.5	90.8	-2.9
Milk	23.97	17.13	16.30	17.63	16.05	-9.0

Data: USDA.

Prices in red denote record levels.

Export volumes rise over time

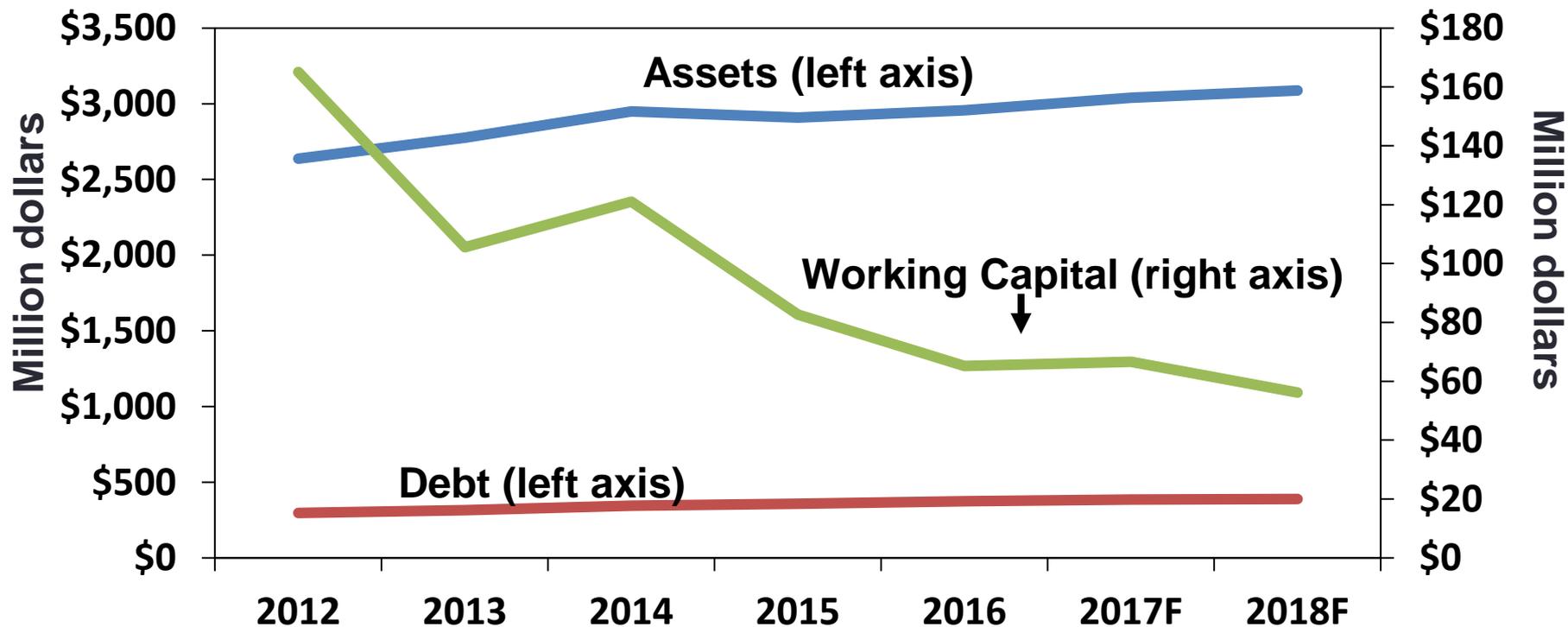


Data: USDA.

Status of the Farm Economy



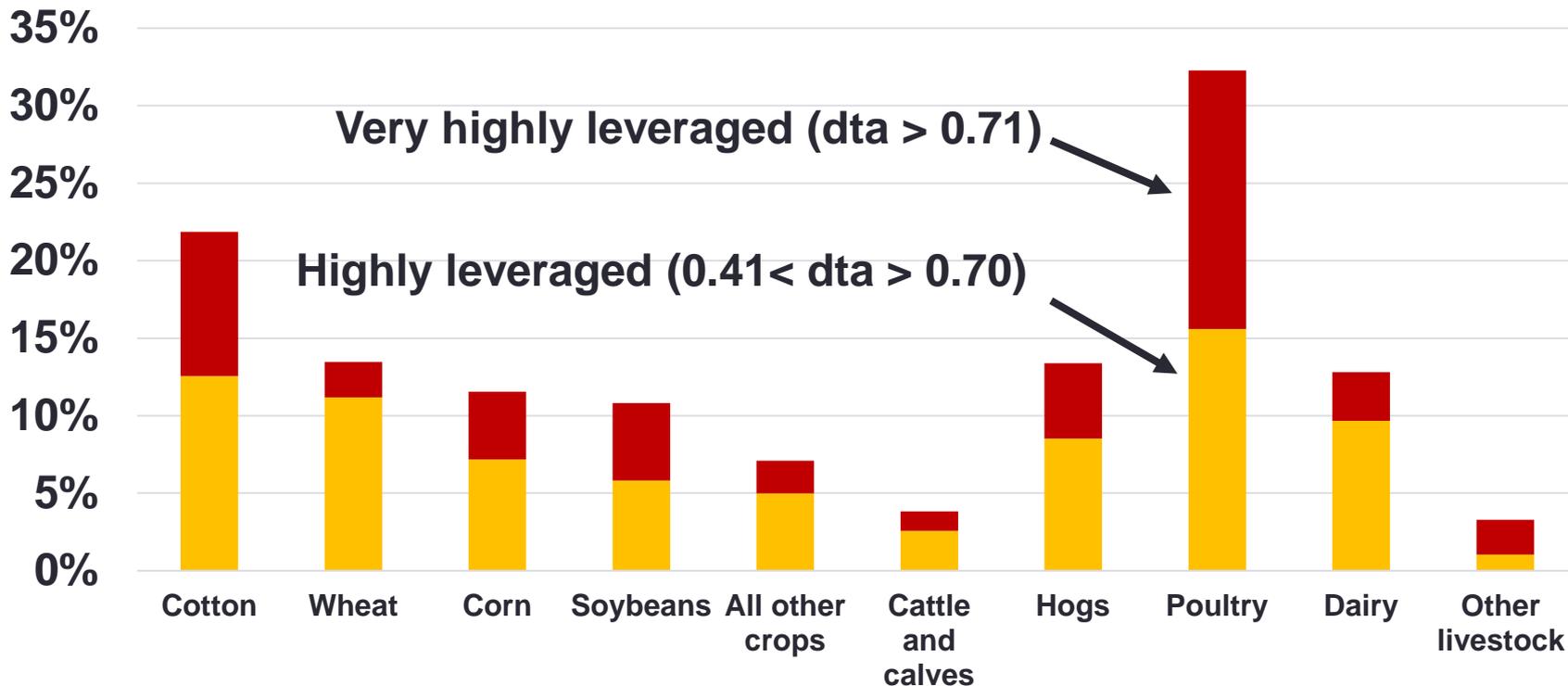
Working capital falling



Data: USDA.

Debt-to-asset ratios vary by sector

% of farm businesses

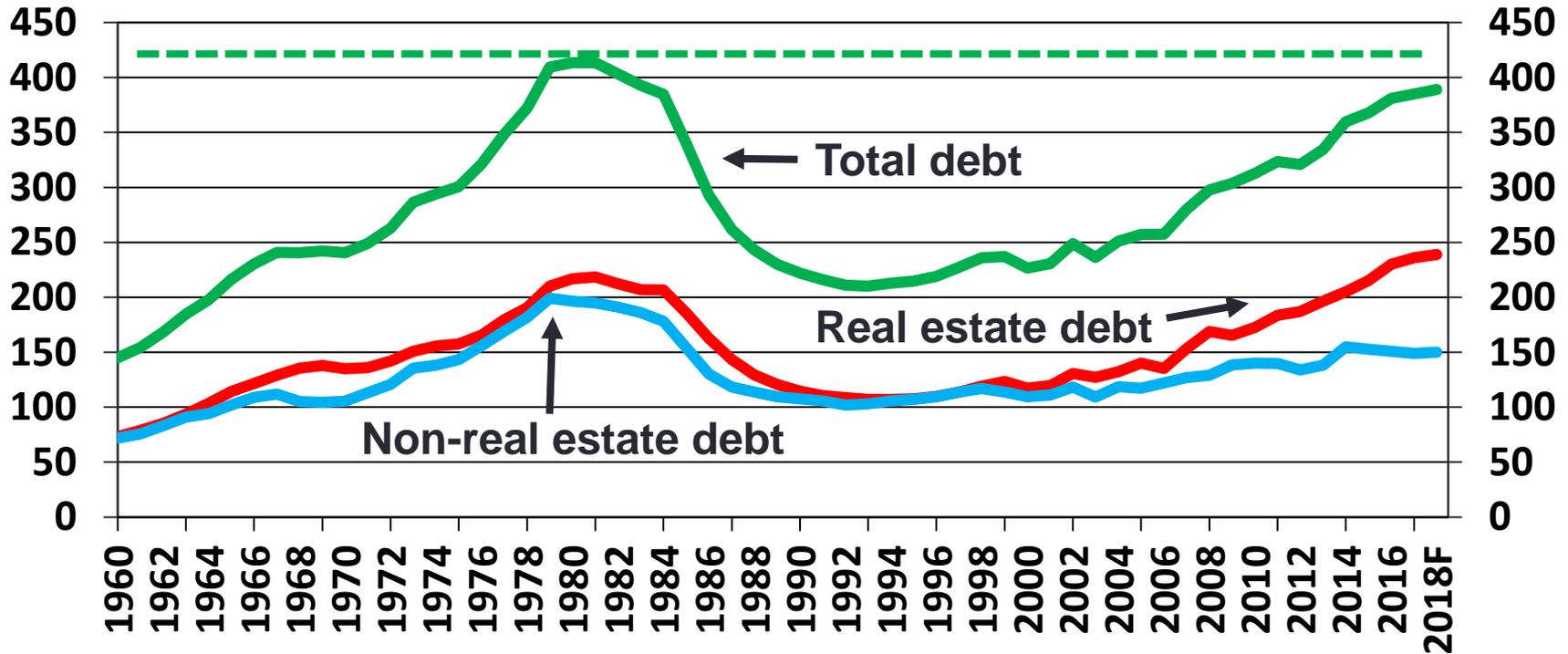


Data: USDA.

Borrowing continuing to rise

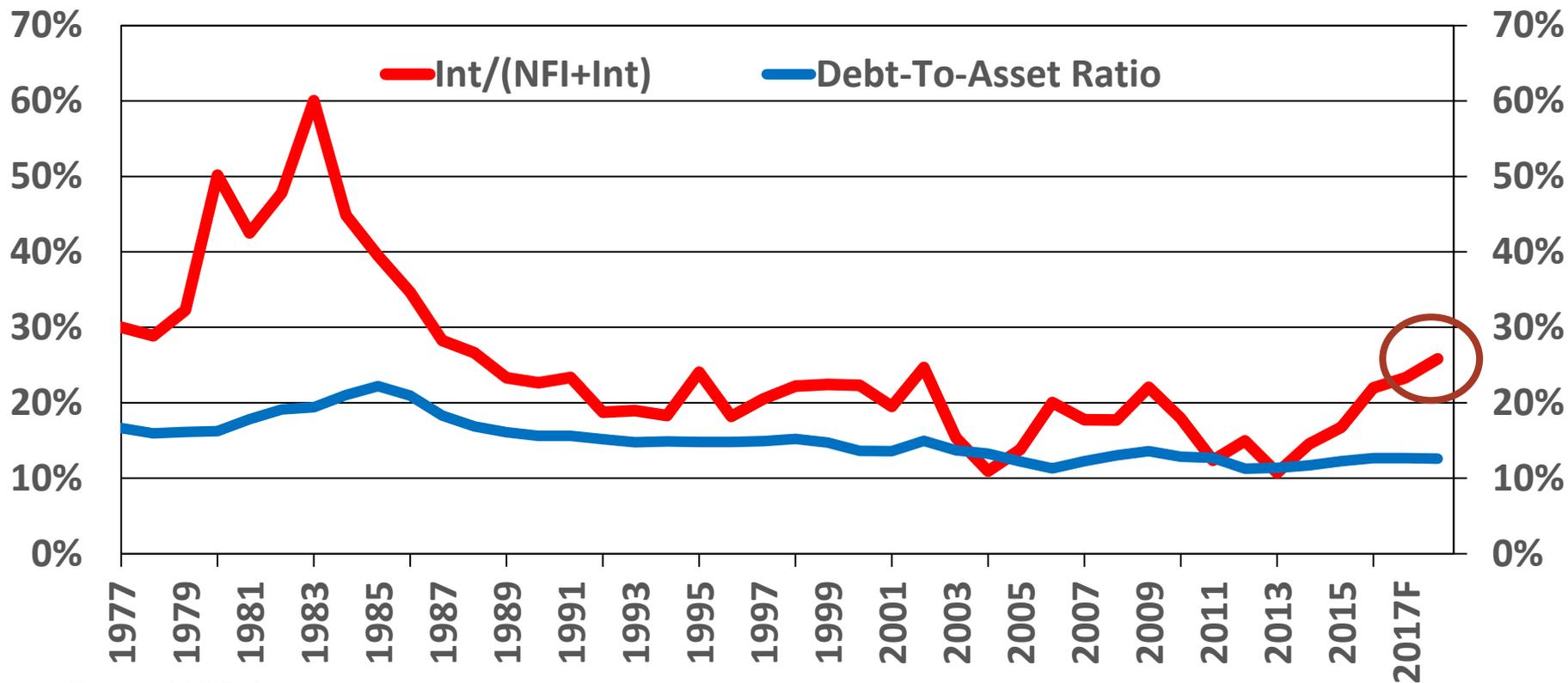
Billion dollars (2018\$)

Billion dollars (2018\$)



Data: USDA.

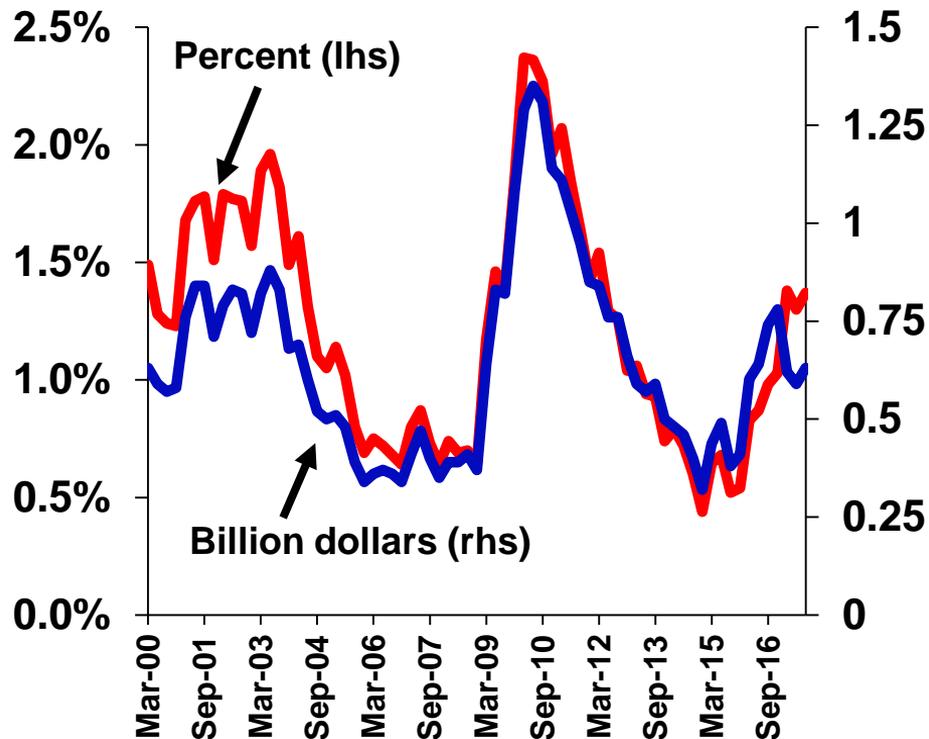
Debt-to-assets remain low, but interest payments rising



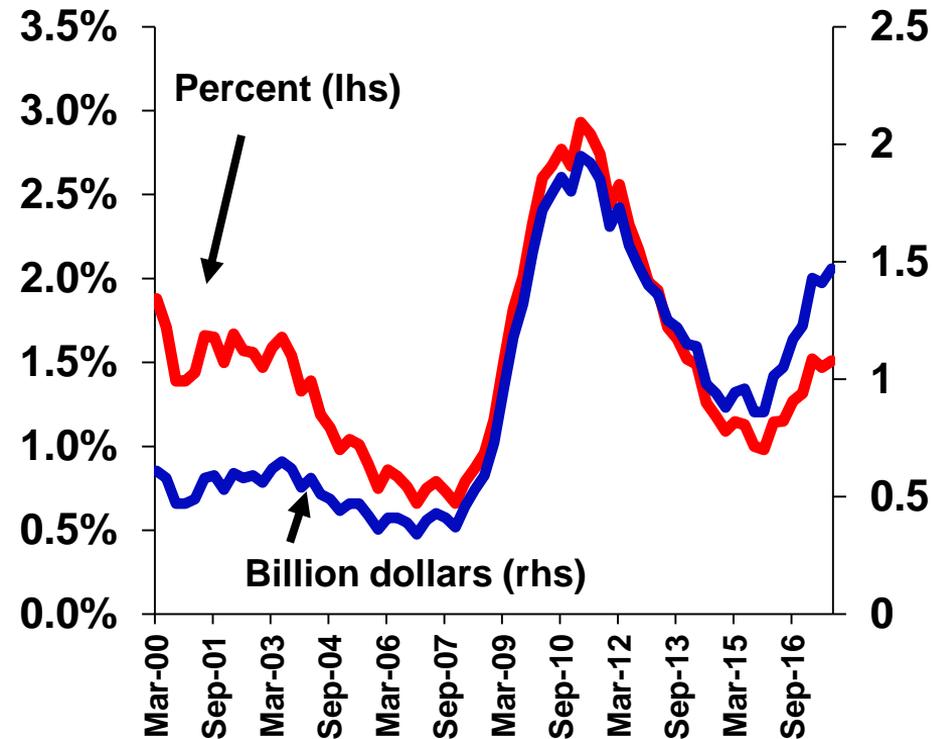
Data: USDA.

The share of non-performing loans is rising

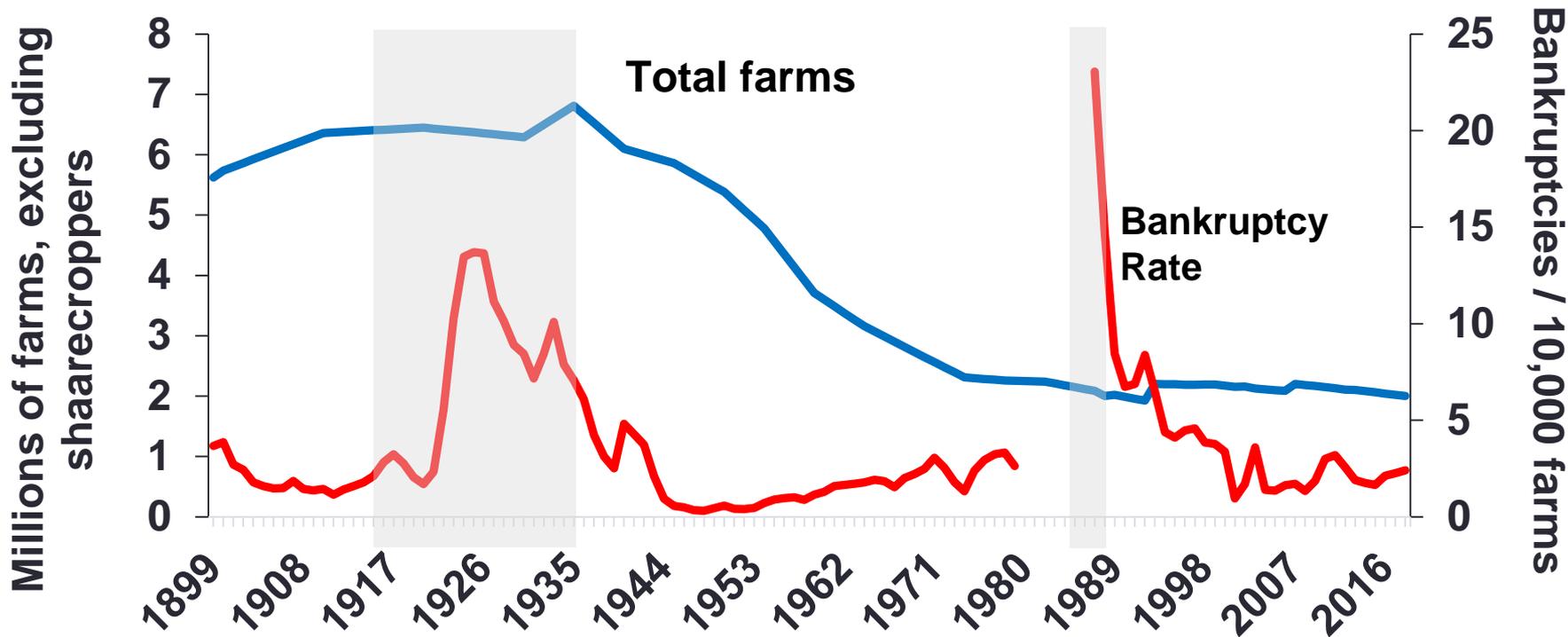
Non-real estate loans



Real estate loans



Farm bankruptcy remains low

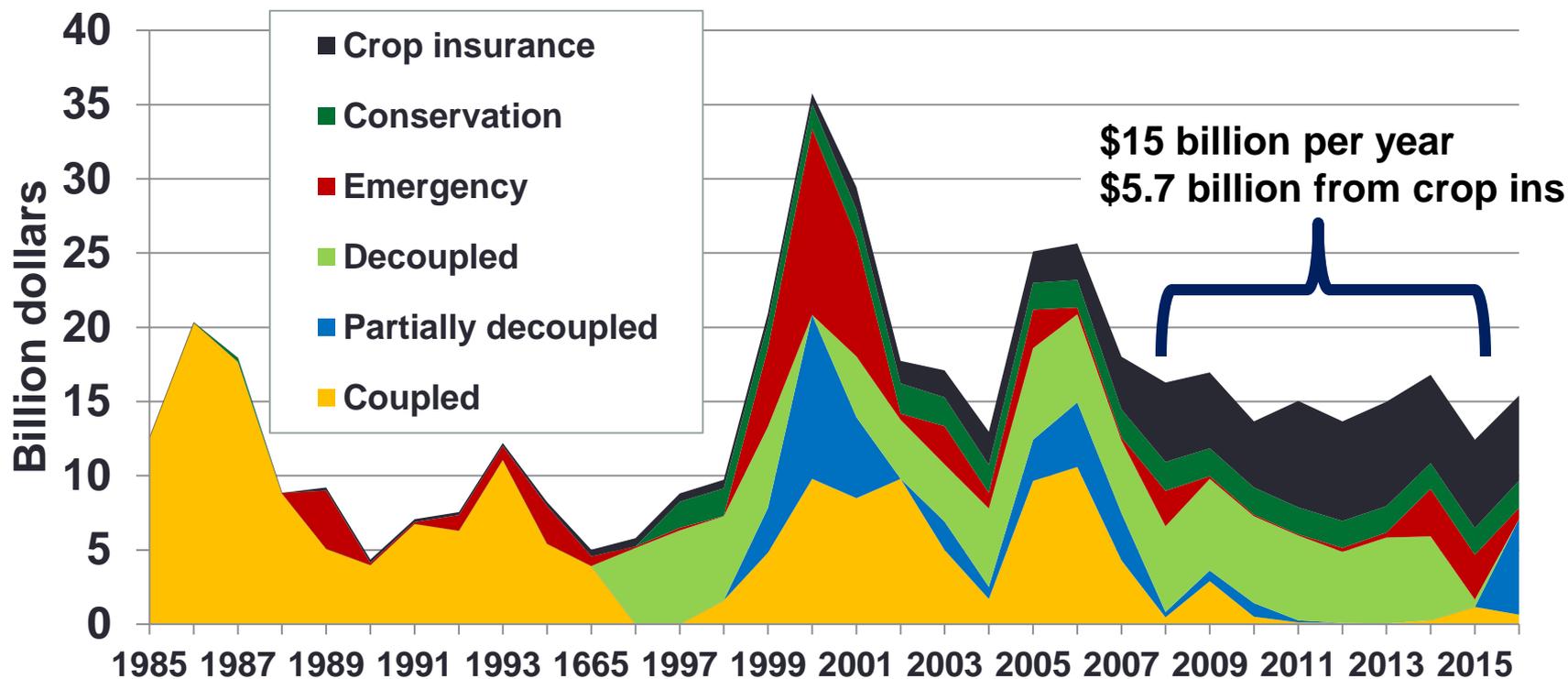


Source: USDA-ERS.

Farm programs and changes

<https://fm.cnbc.com/applications/cnbc.com/resources/img/editorial/2017/09/11/104702221-GettyImages-56058522.530x298.jpg?v=1505137319>

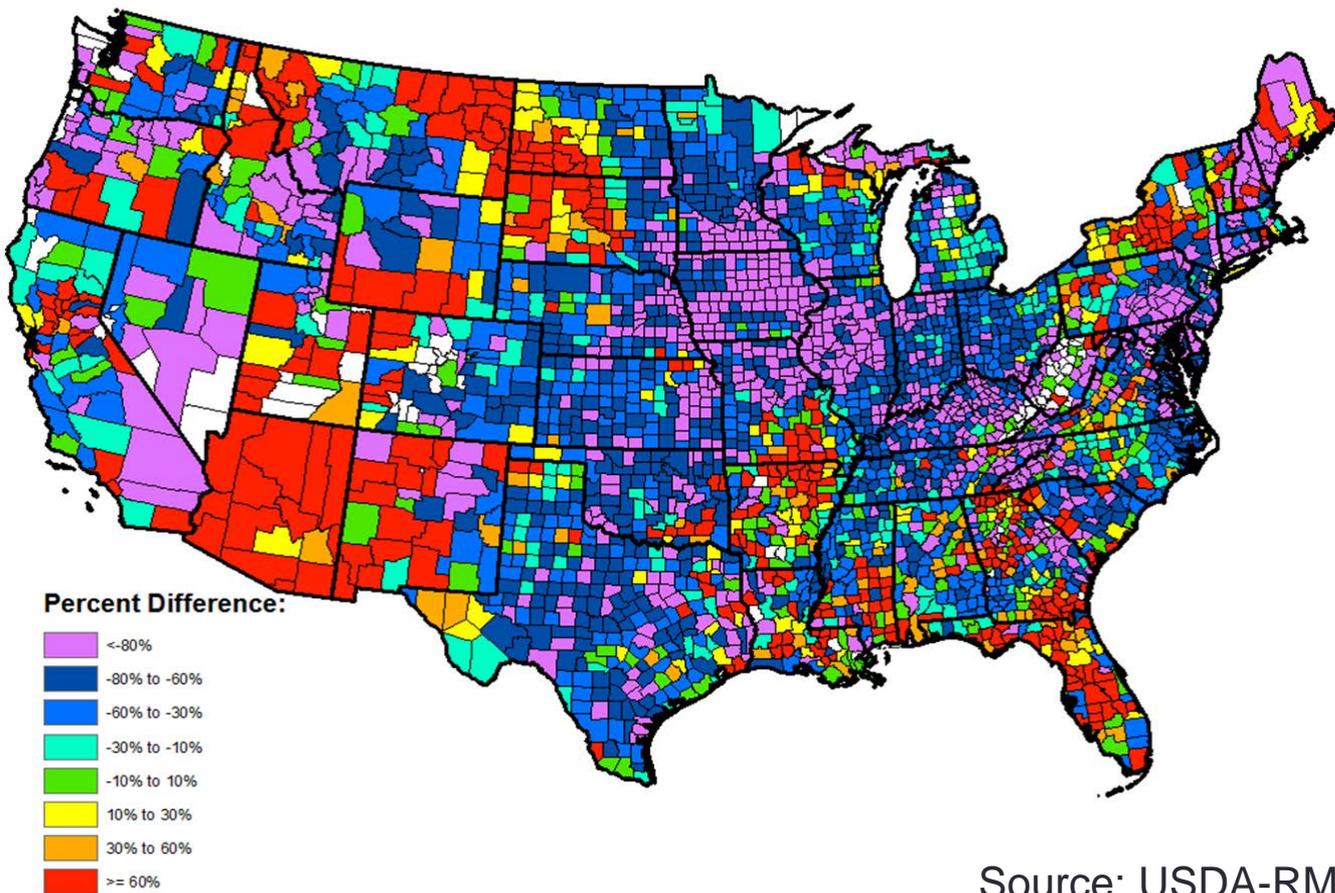
Crop insurance increasing in importance



Source: USDA.

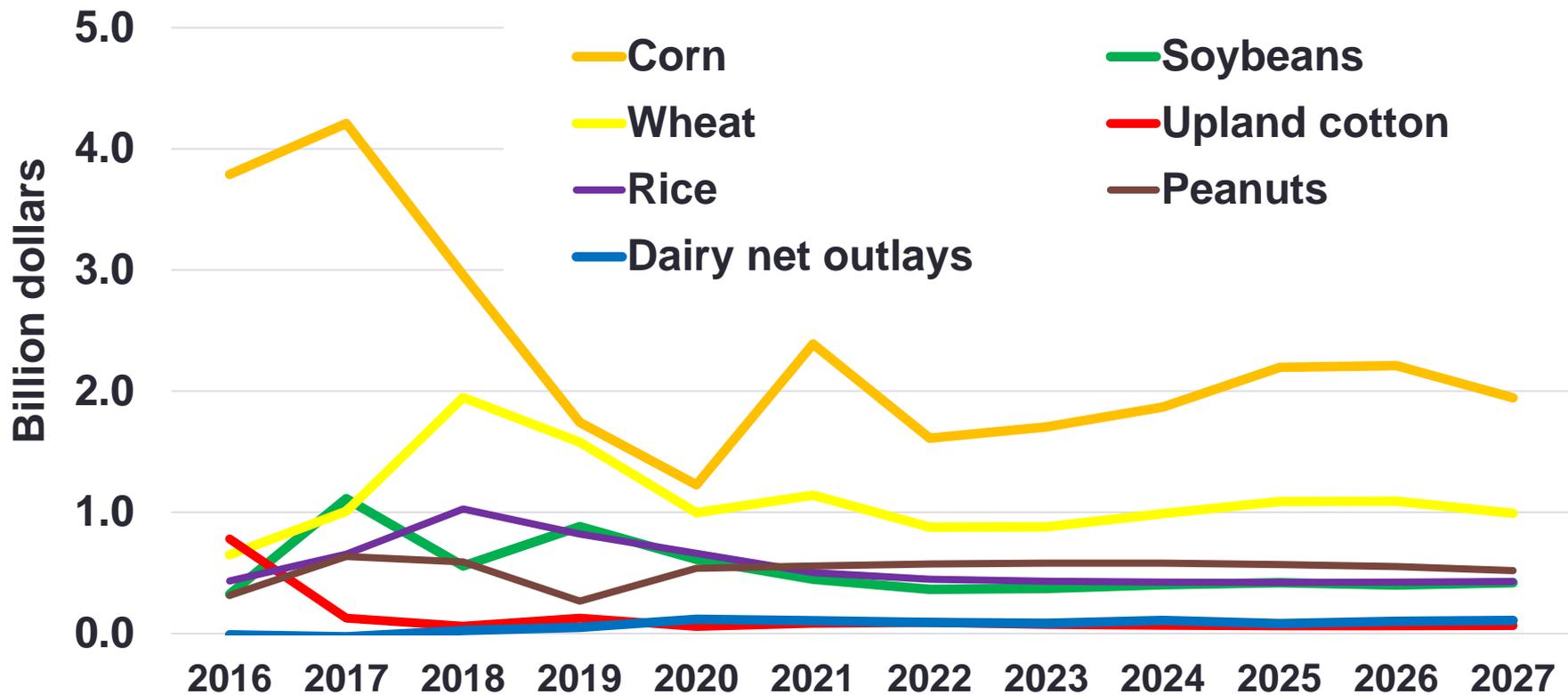
Crop Insurance Indemnity 2017 Indemnity Percent Difference from 10 Year Average

Crop insurance indemnities reflects location of 2017 natural disasters



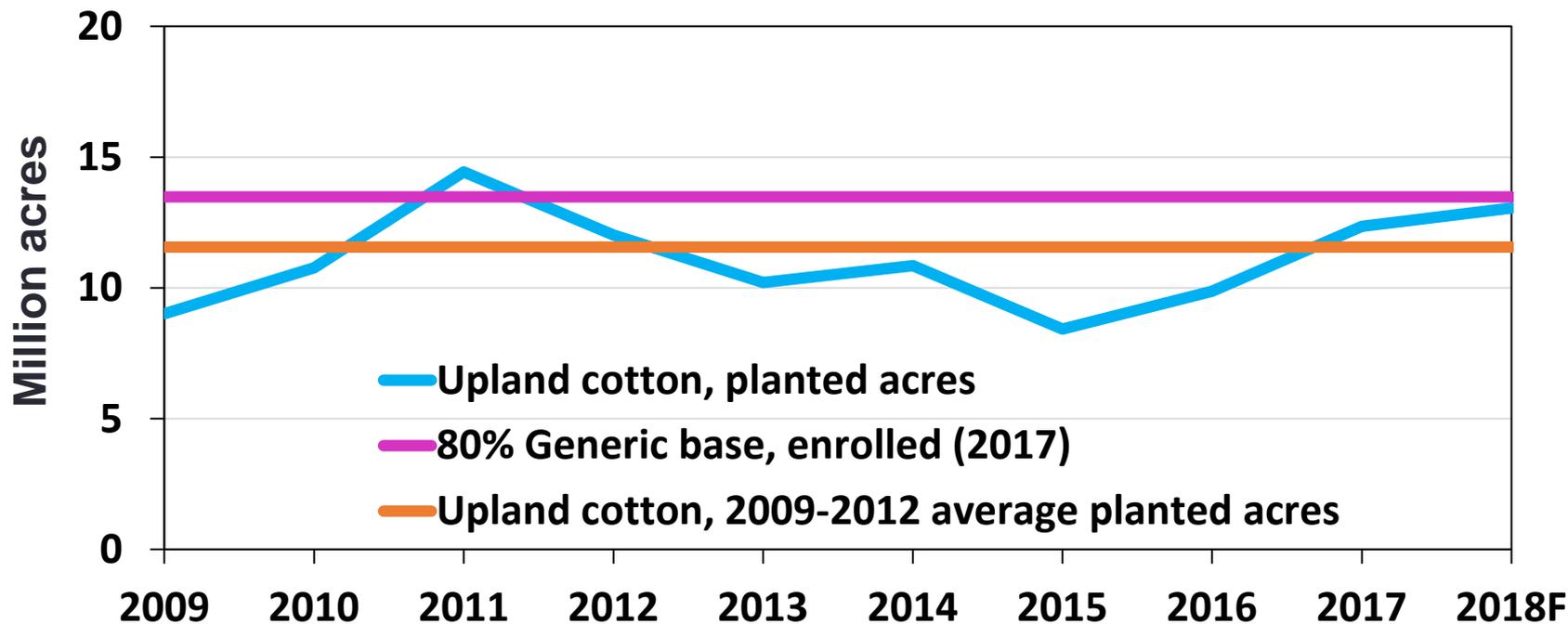
Source: USDA-RMA.

Projected Farm Bill spending by commodity

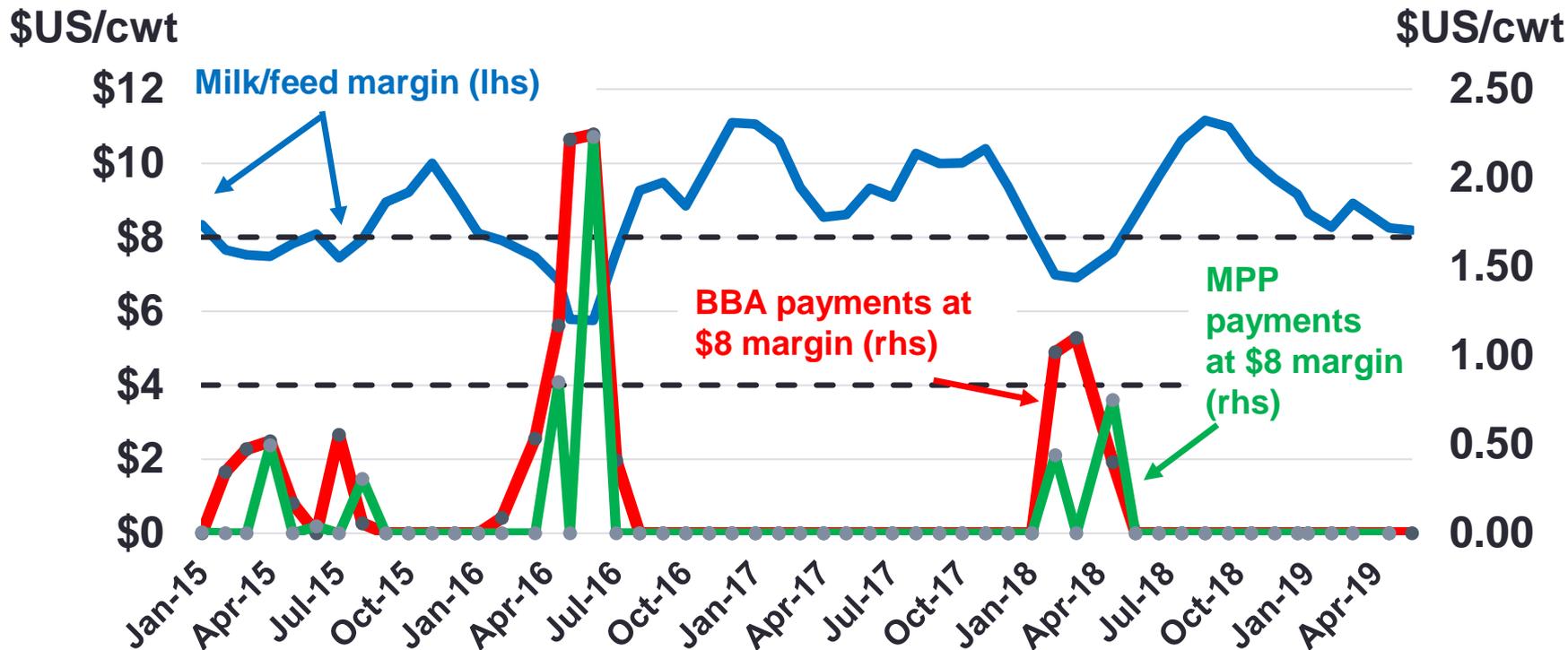


Source: CBO.

80 percent generic base acres > 2009-2012 average for upland cotton planted acres



Increased MPP payments to dairy producers



Note: Payments at \$8 are annual payments/cwt to producers with margin coverage at \$8.
Data: USDA.

Conclusion

1. Total meat and milk production reach record highs in 2018.
2. Strong global GDP and weak dollar maintains exports this year.
3. Parity between soybean and corn acreage in 2018.
4. Net farm income is forecast down and projected to fall in real terms.
5. The 2018 Bipartisan Budget Act will extend farm safety net programs for cotton and dairy and provide additional assistance to producers facing losses from 2017 disasters.

Thank you!

