



Food & Agricultural
Policy Research Institute

University of Missouri

U.S. and Global Agricultural Market Outlook

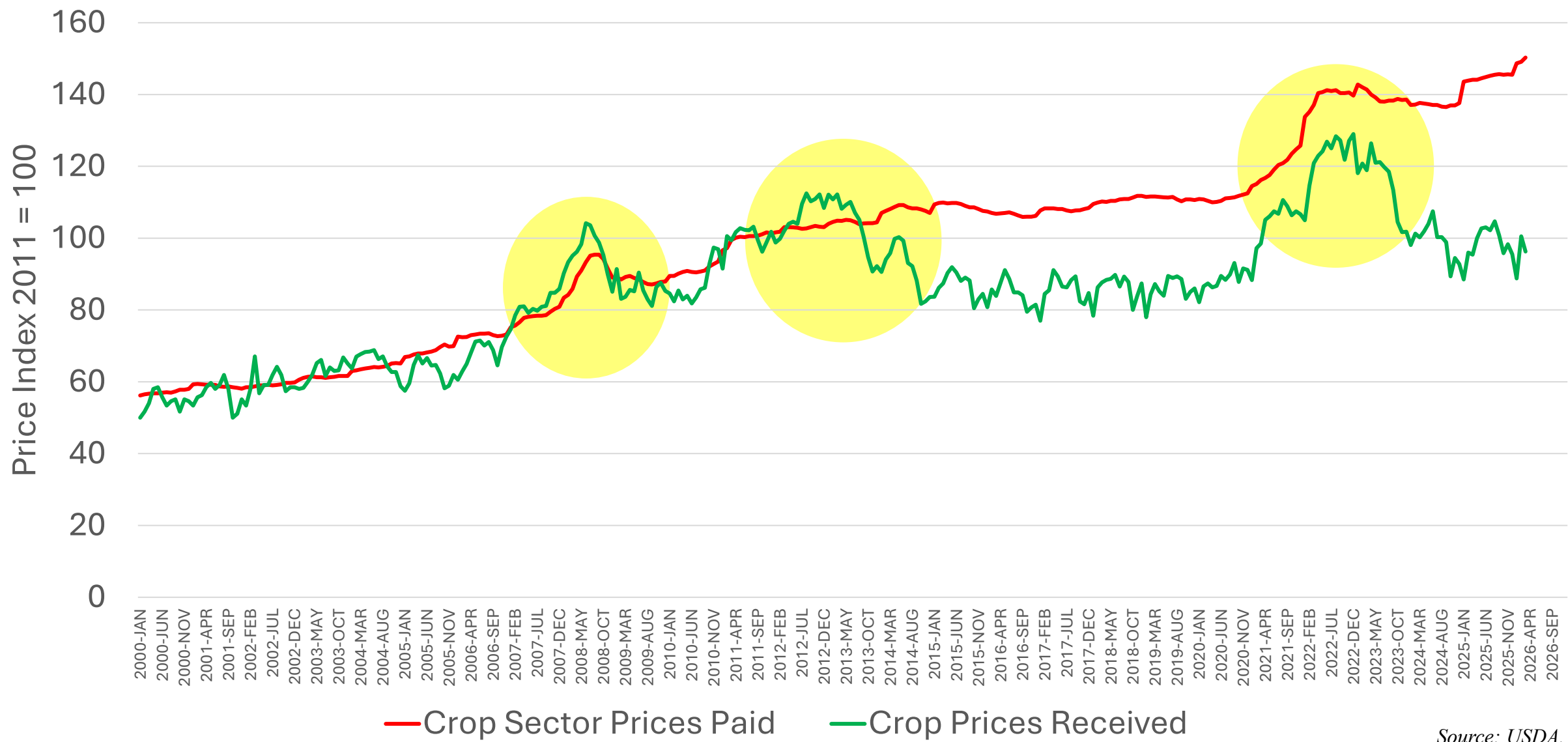
Seth Meyer and Wyatt Thompson

Presented at the Policy Research Institute, Ministry of
Agriculture, Forestry and Fisheries, Tokyo, Japan

June 5, 2026

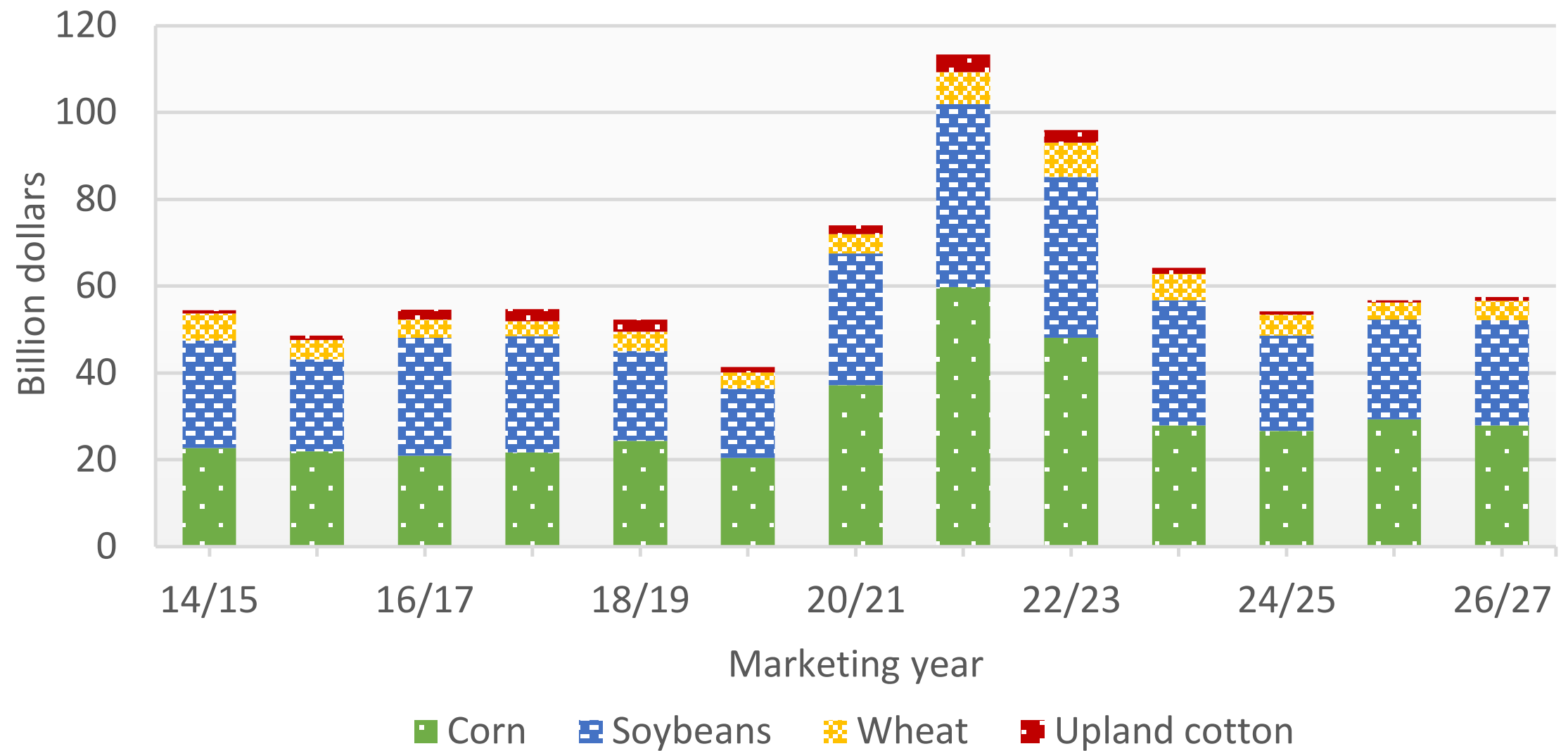
Output and Input prices for Crop Producers

2011 = 100



Source: USDA.

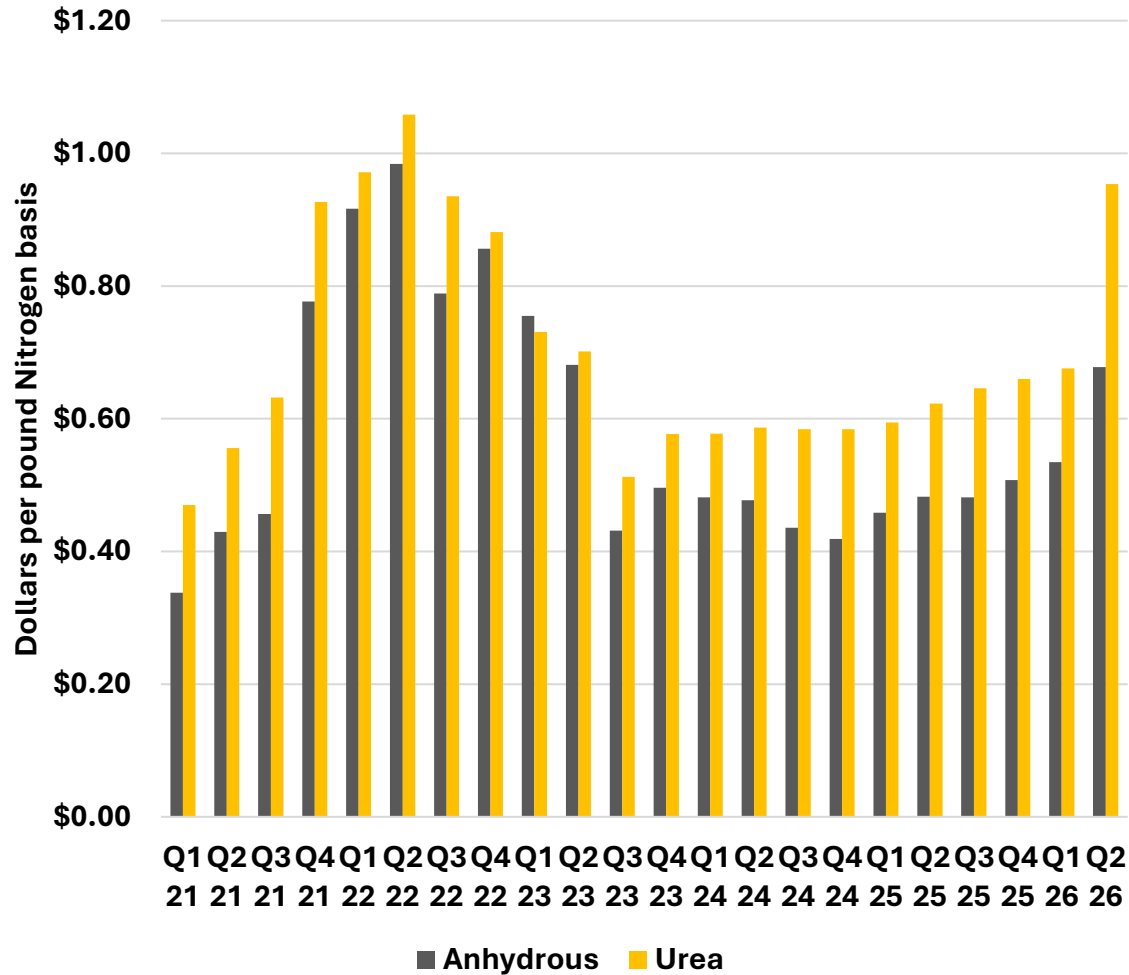
Crop net returns decline from recent peaks



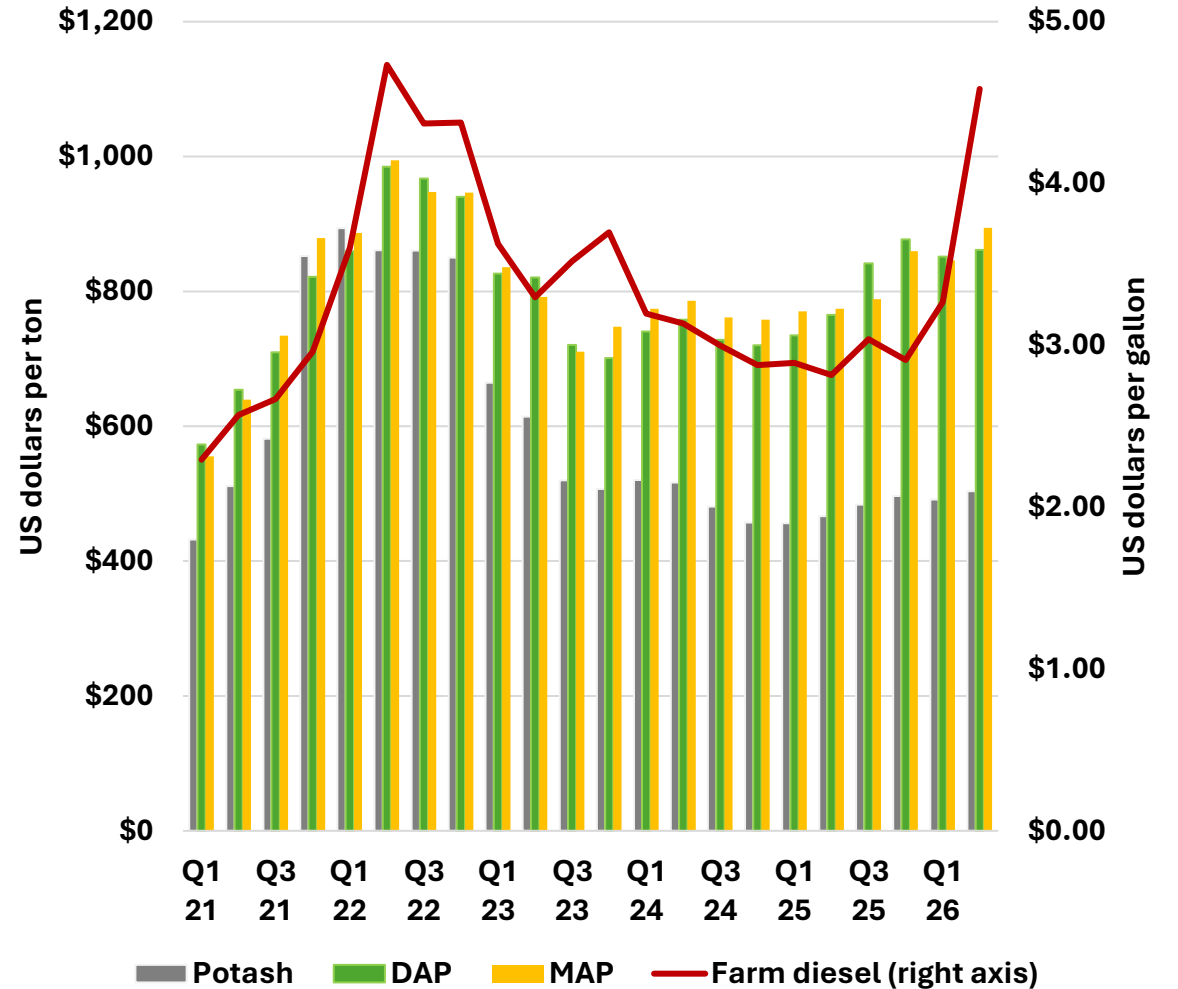
Sources: USDA historical data and FAPRI-MU projections.

Trends in input prices...

Nitrogen



Phosphorus, Potassium, Farm diesel



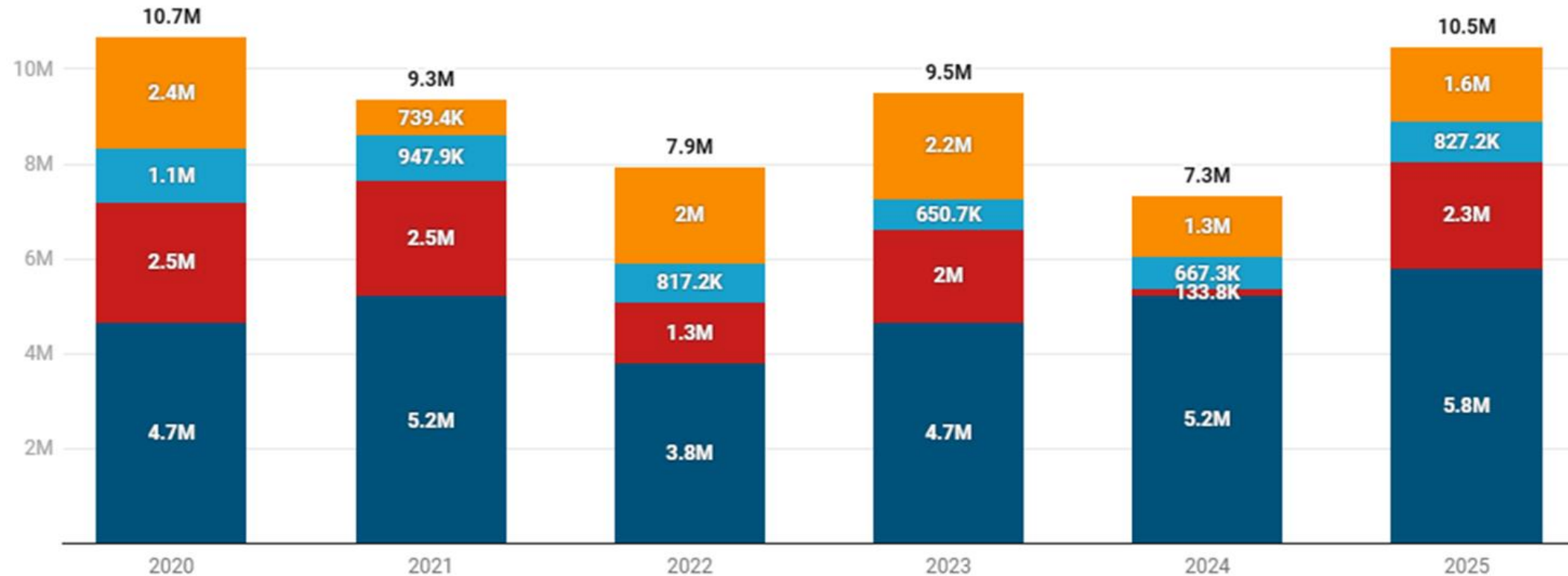
Source: USDA AMS-Illinois.

Not YET seeing the slowing trade

Urea and ammonia nitrate exports

Metric tons

Russia China Indonesia Egypt



Exports in nitrogen equivalents. Russia totals reflect mirror trade for 2022 to 2025.

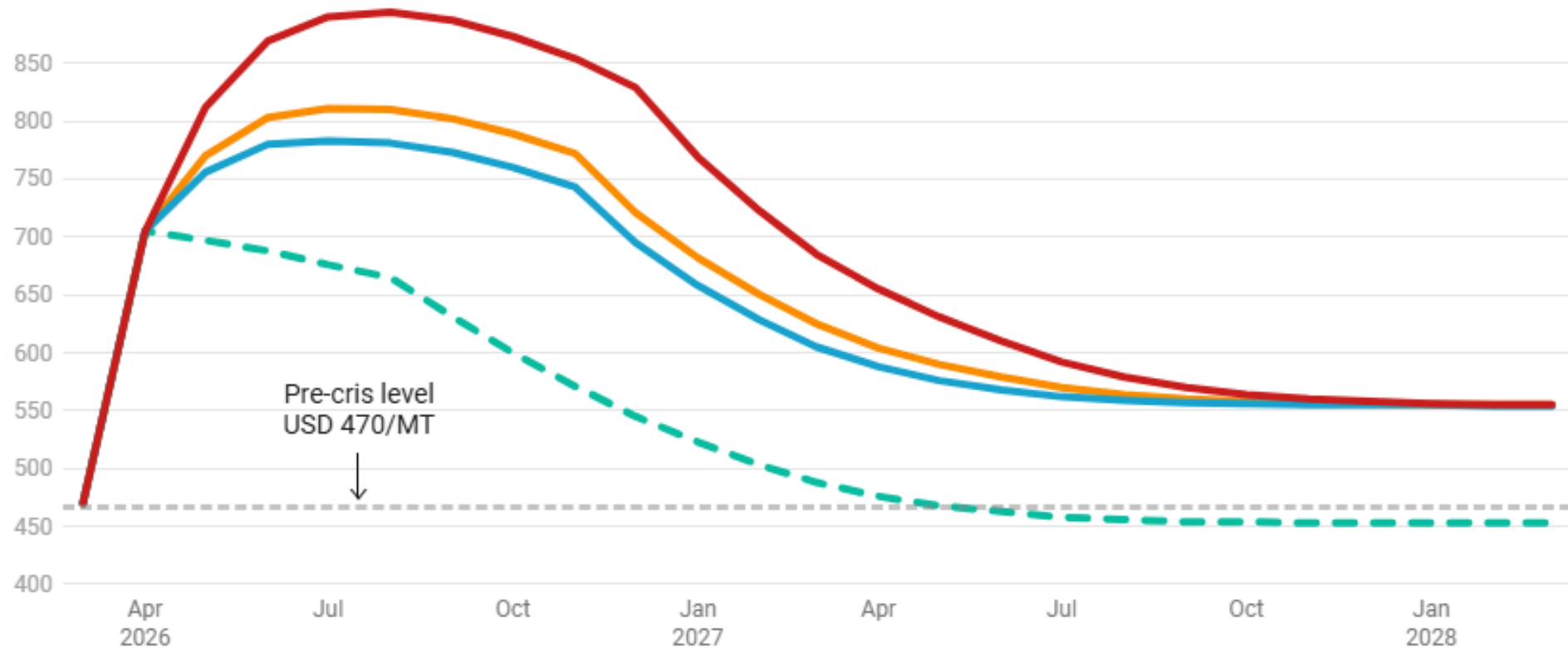
Source: TDM • [Get the data](#)

Fertilizer price increases likely to have a 'long tail'

Urea price projections under alternative export restriction assumptions

USD/MT

Relaxing export restrictions (+6.1 MMT) Baseline Small increase (-1.0 MMT) More severe increase (-3.5 MMT)



Monthly NOLA urea prices, 25-month horizon from March 2026

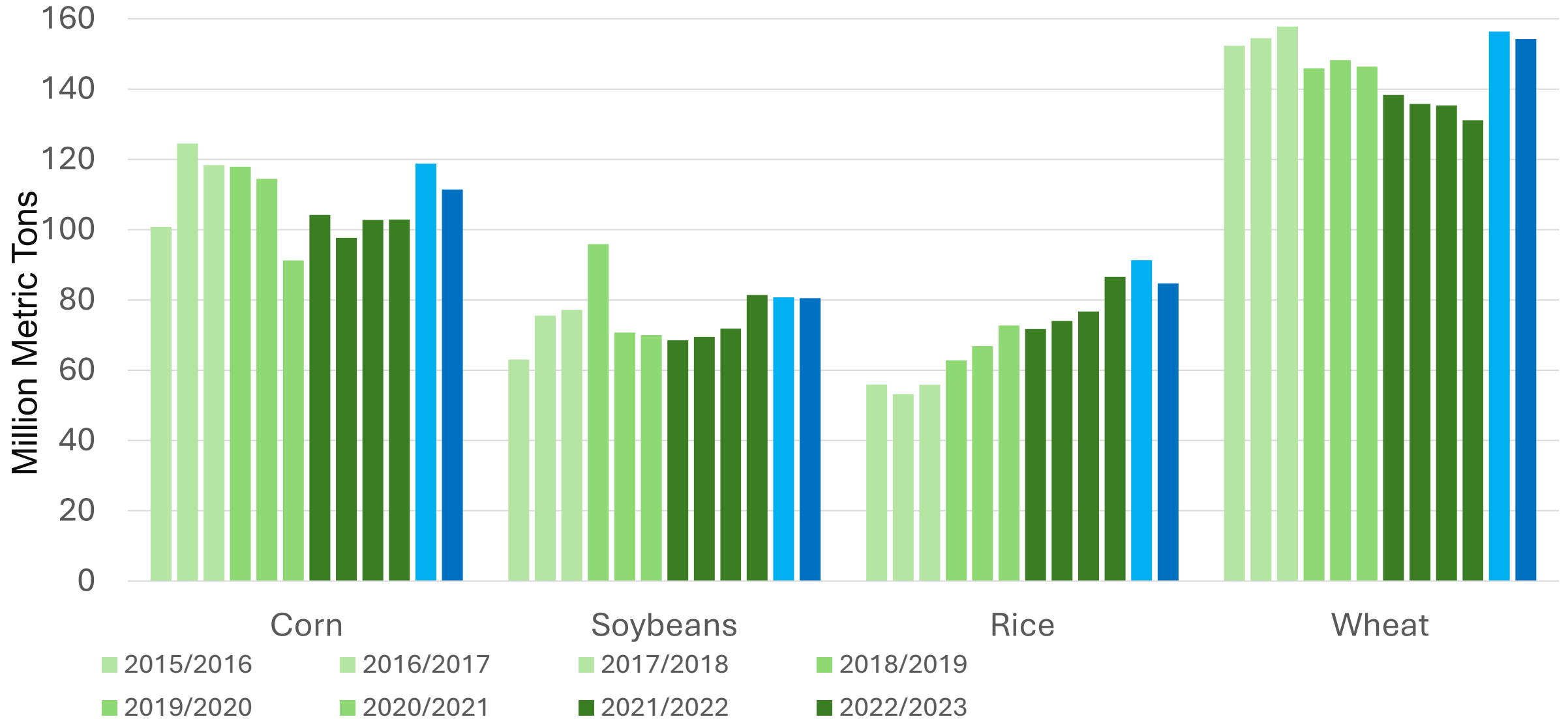
Source: NDSU-ARPC Global Fertilizer Model https://www.capt-ndsou.com/_files/ugd/3c6228_4d823ed03f1a4a3fb0e93737f6d07449.pdf • [Get the data](#)

At the ‘bottom’ ?

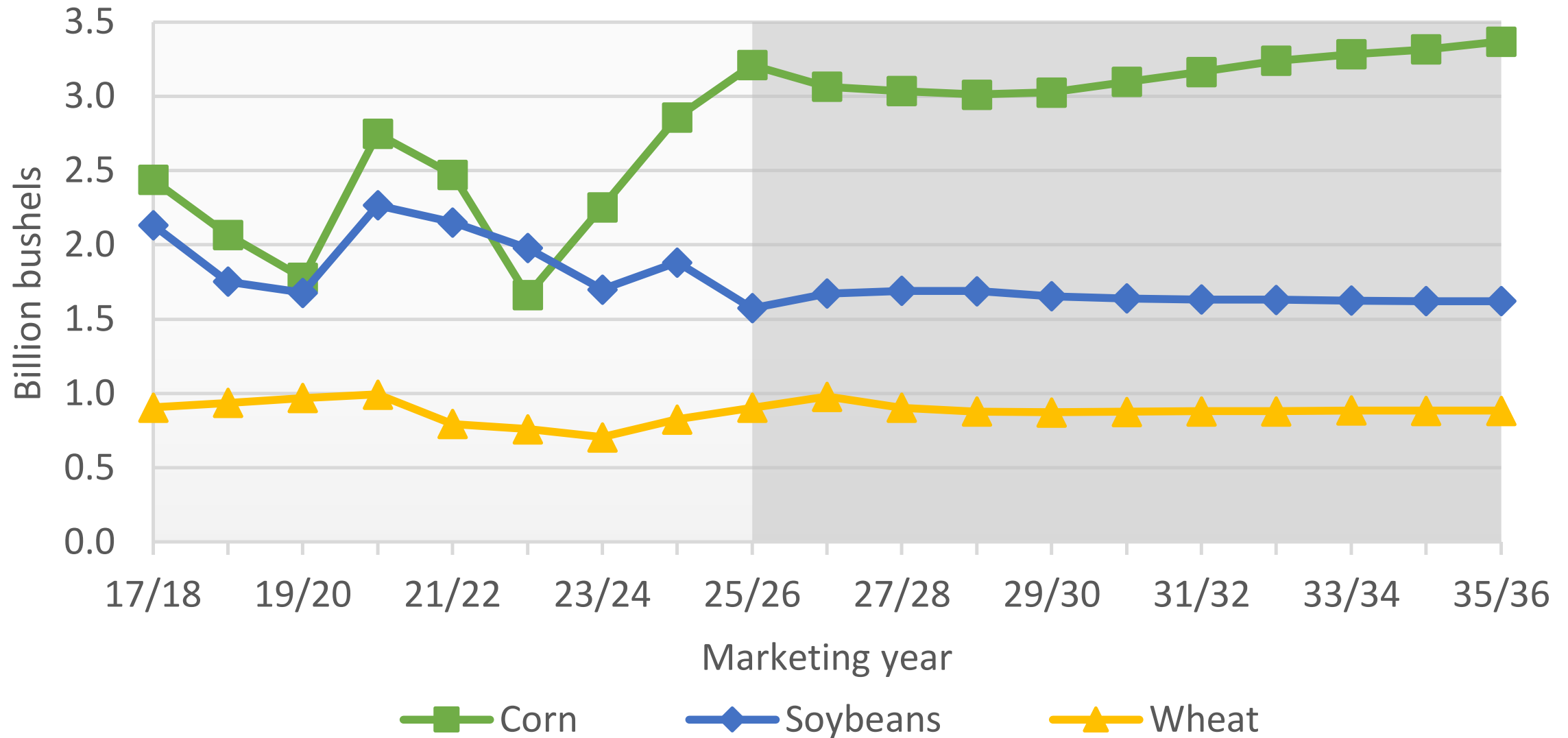
Crop	2010/11- 2013/14 avg	2014/15- 2019/20 avg	2020/21- 2023/44 avg	2024/25	2025/26	USDA 2026/27	2026/27 FAPRI Stoch Mean
Corn (\$ / bu.)	5.69	3.53	5.41	4.24	4.15	4.40	4.21
Soybeans (\$ / bu.)	12.80	9.15	12.68	10.00	10.40	11.40	10.39
Sorghum (\$ / bu.)	5.40	3.32	5.57	4.07	3.55	4.10	3.75
Wheat (\$ / bu.)	6.90	4.87	7.12	5.52	5.00	6.50	5.58
Upland Cotton (¢/ lb)	80.1	64.8	79.6	63.2	63.0	73.0	63.8
All Rice (\$ cwt)	14.65	12.52	16.90	15.10	12.10	13.50	13.19
Soybean Oil (c/lb)	47.62	30.33	60.60	47.59	63.00	70.00	52.06

Sources: USDA historical and WASDE data and FAPRI-MU projections.

Global Carryout Stocks *Less China*

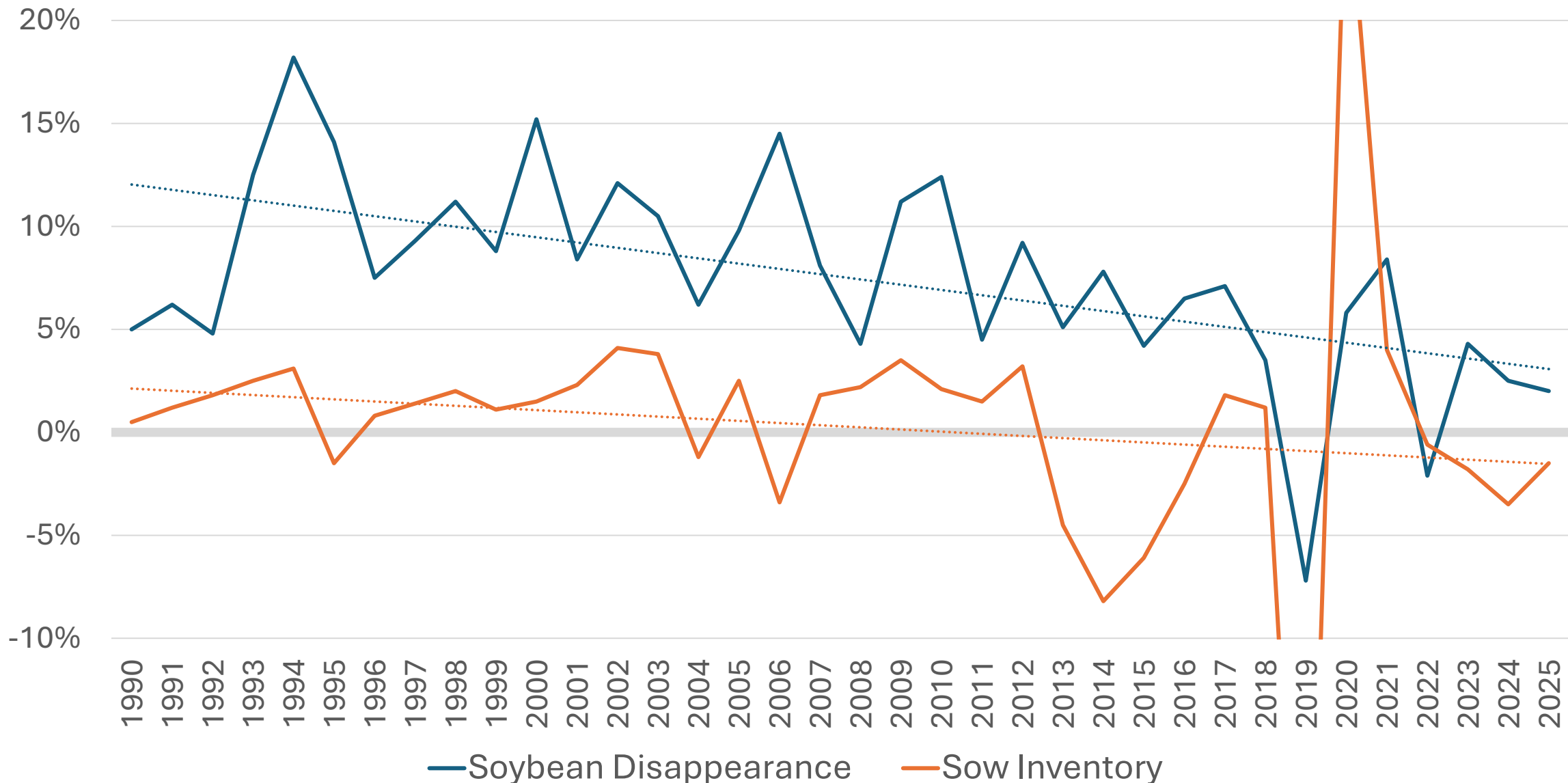


Exports are critical for many commodities

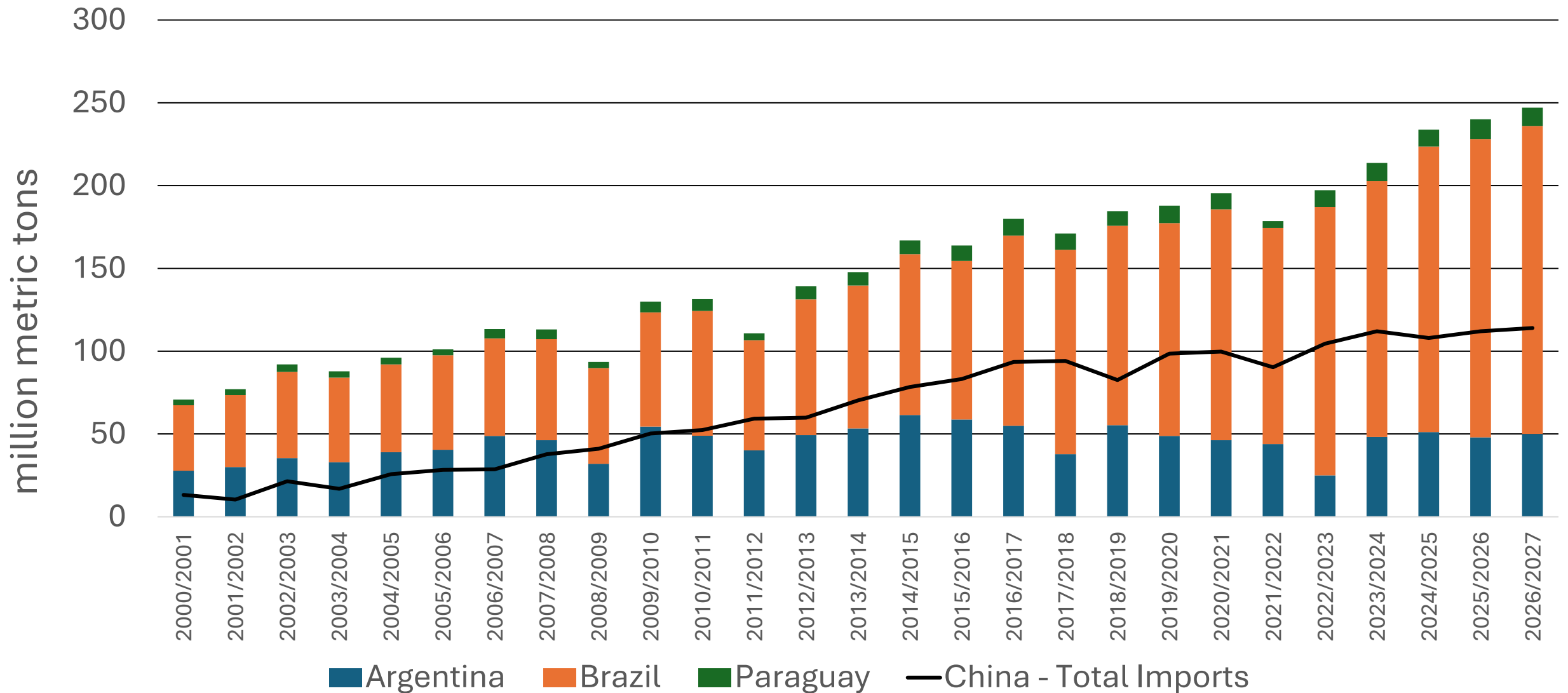


Change in China's Soybean Use and Sow Herd

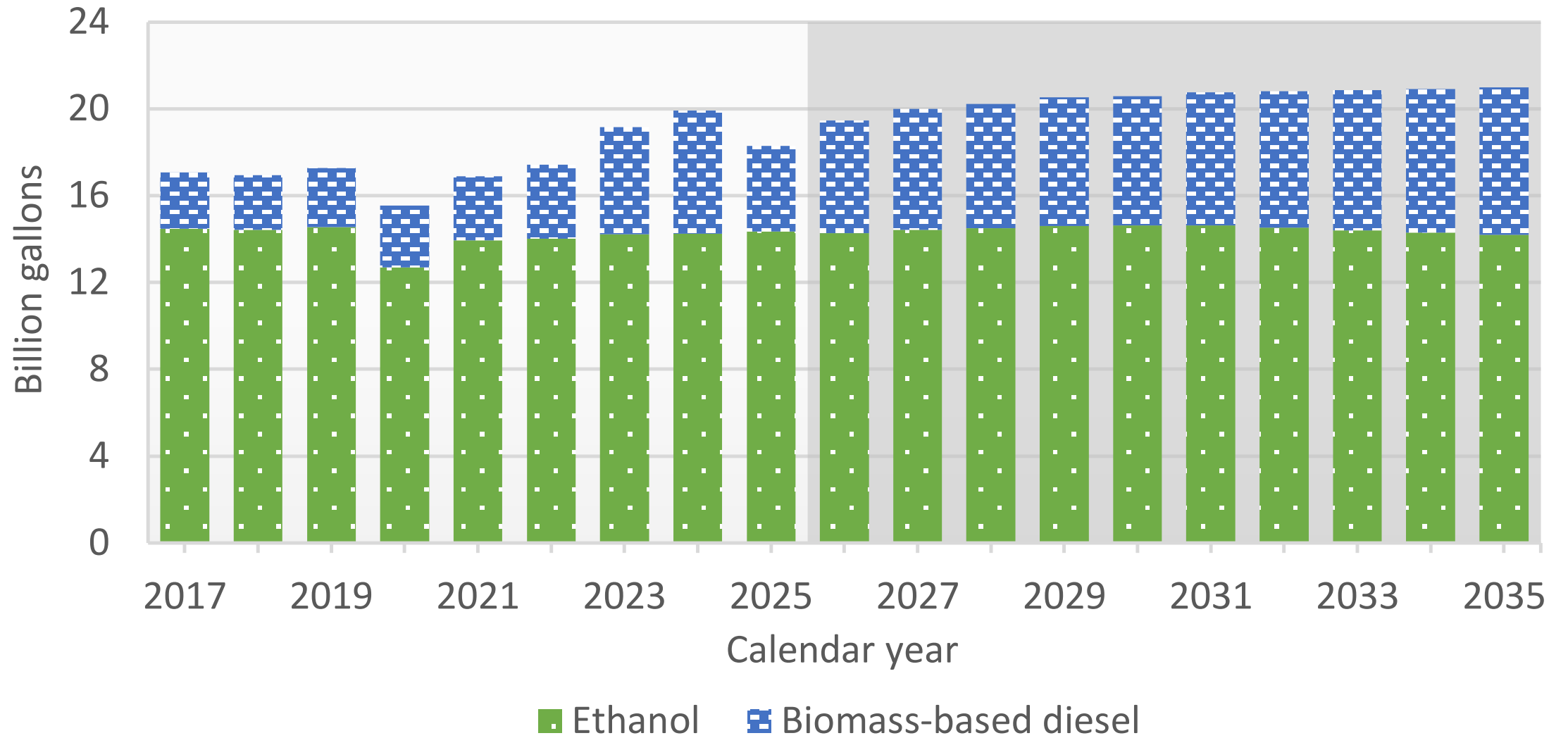
Year over year percent change



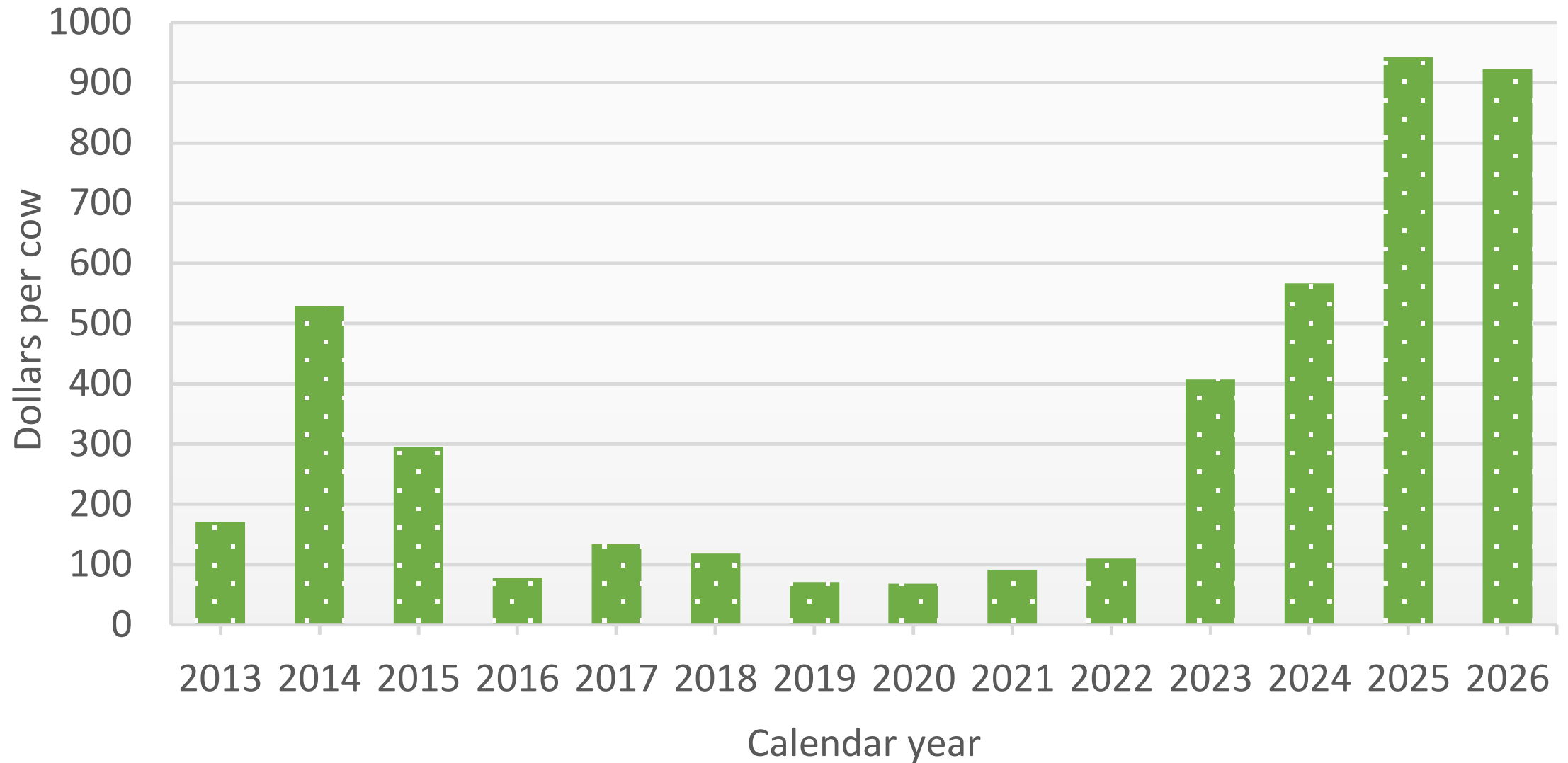
Brazil, Argentina and Paraguay Soybean Production and China's import demand



Biofuel demand is driven by policy

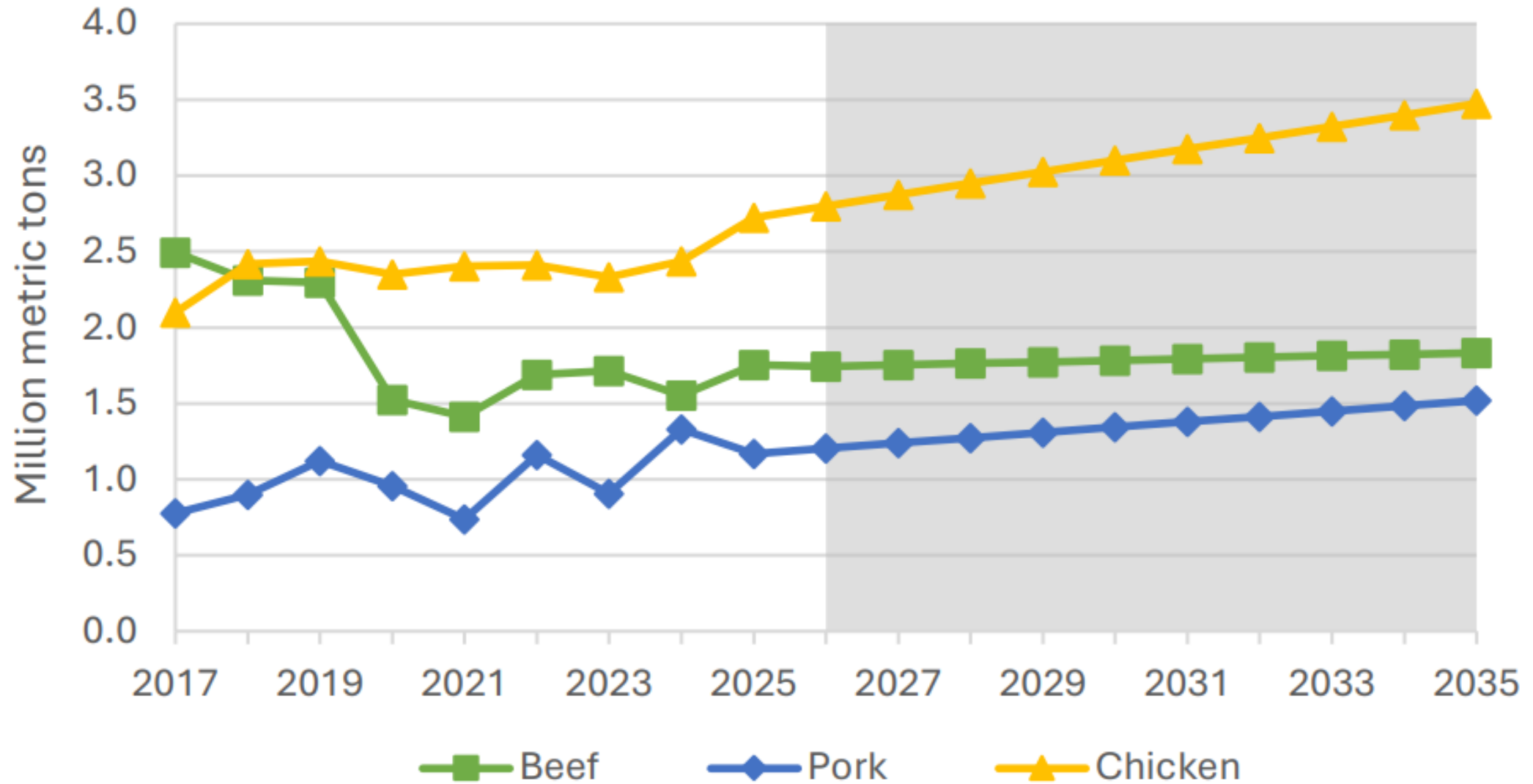


Cow-calf returns reach record highs

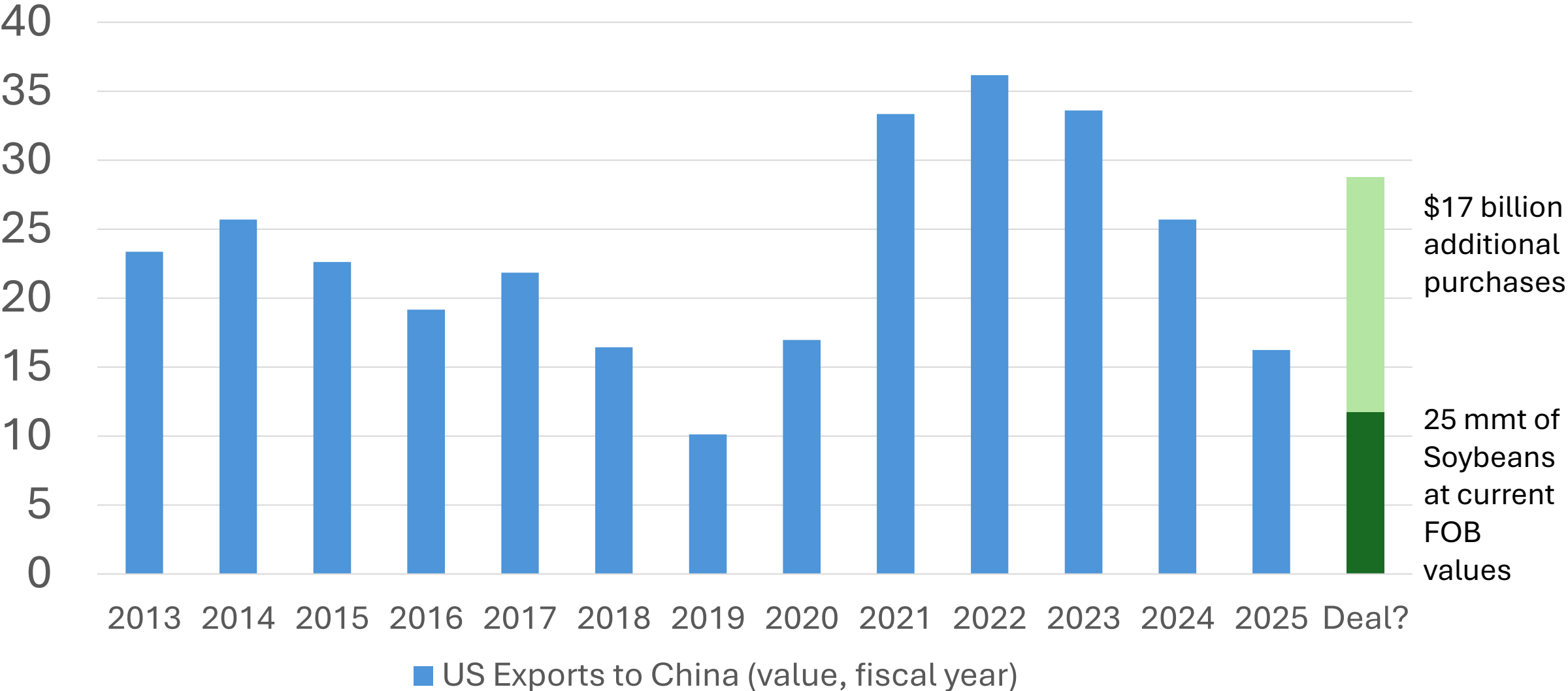


Sources: USDA historical cost and price data; FAPRI-MU calculations; and FAPRI-MU projections.

Global net trade of meats increases



Outline of US – China trade deal (?)



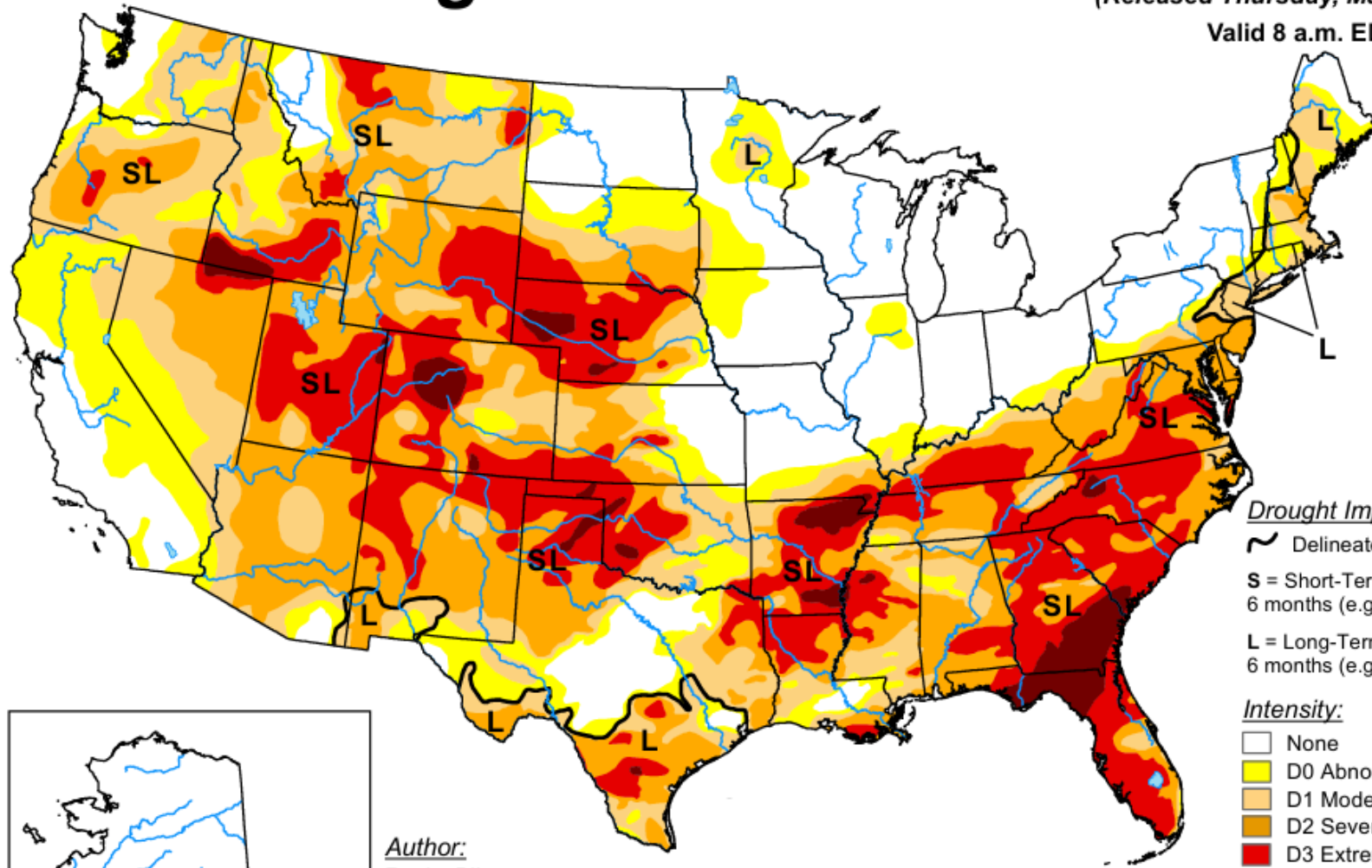
Sources: USDA FAS historical data and author's calculations for last column.

U.S. Drought Monitor

May 19, 2026

(Released Thursday, May. 21, 2026)

Valid 8 a.m. EDT

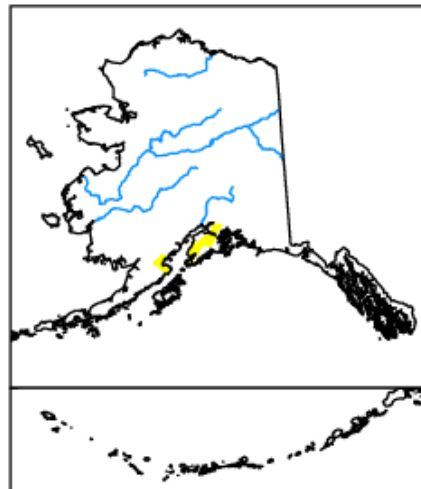


Drought Impact Types:

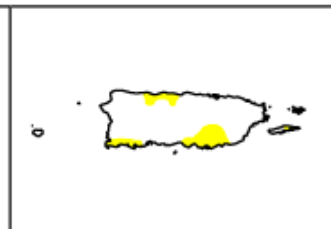
- Delineates dominant impacts
- S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought



Author:
Rocky Bilotta
NCEI/NOAA



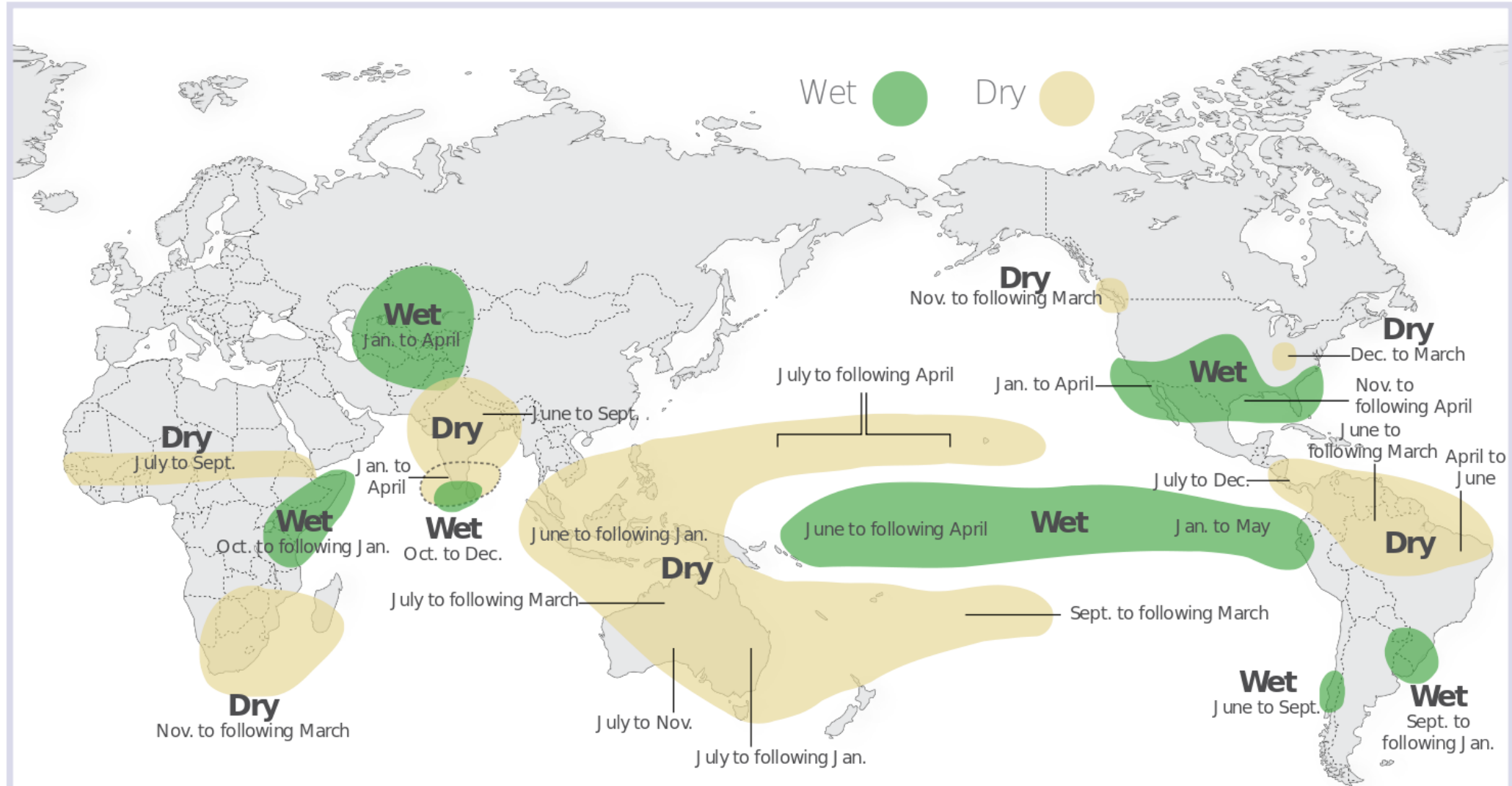
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



droughtmonitor.unl.edu

El Niño and Rainfall

El Niño conditions in the tropical Pacific are known to shift rainfall patterns in many different parts of the world. Although they vary somewhat from one El Niño to the next, the strongest shifts remain fairly consistent in the regions and seasons shown on the map below.



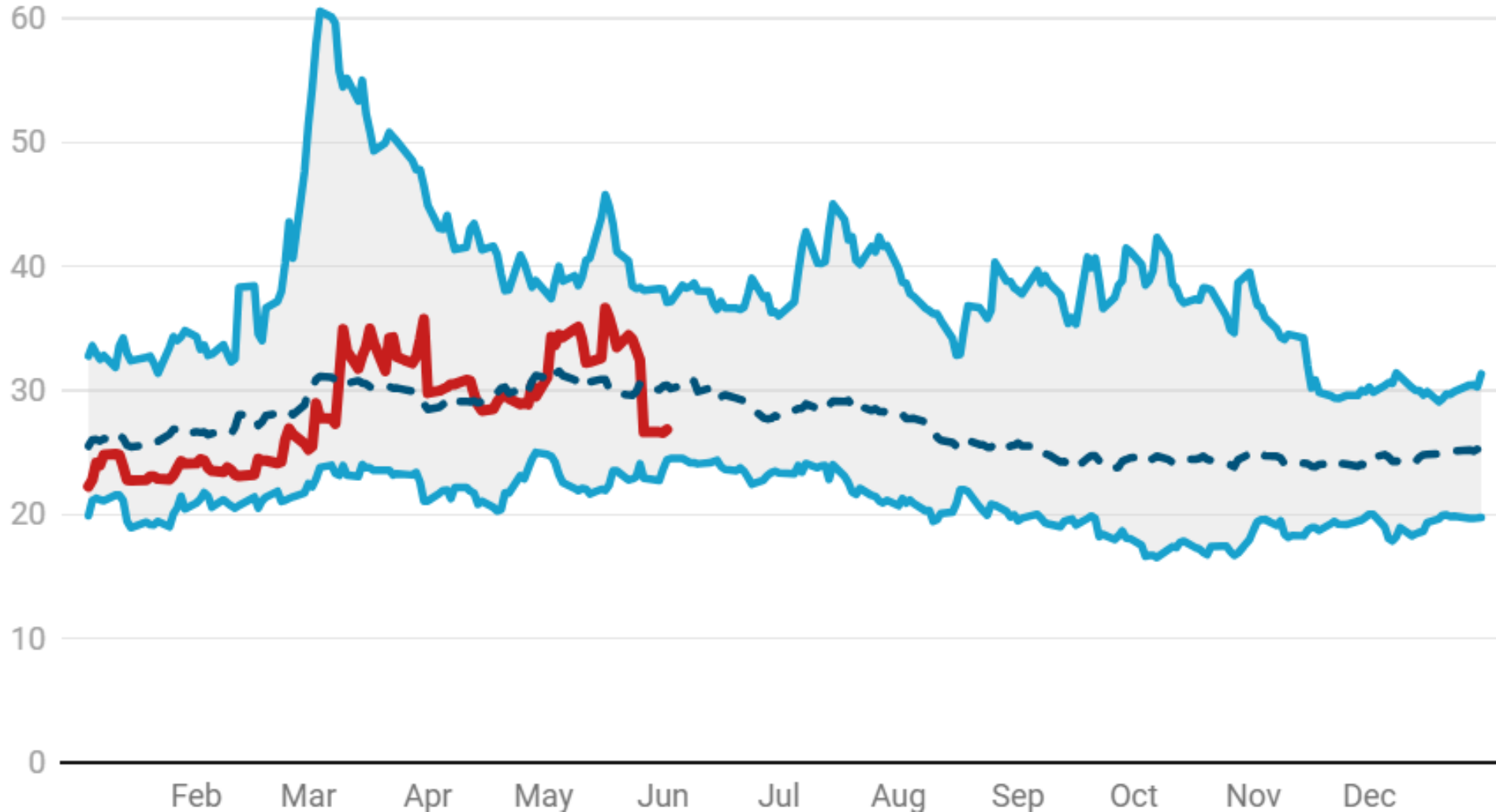
For more information on El Niño and La Niña, go to: <http://iri.columbia.edu/ENSO>

Sources: Ropelewski, C. F. and M. S. Halpert, 1989: Precipitation patterns associated with the high index phase of the Southern Oscillation. *J. Climate.*, 2, 268-284, Mason and Goddard, 2001. Probabilistic precipitation anomalies associated with ENSO. *Bull. Am. Meteorol. Soc.* 82, 619-638

Wheat nearby futures Implied Volatility (IV)

Percentage

Minimum Maximum 10-year average 2026



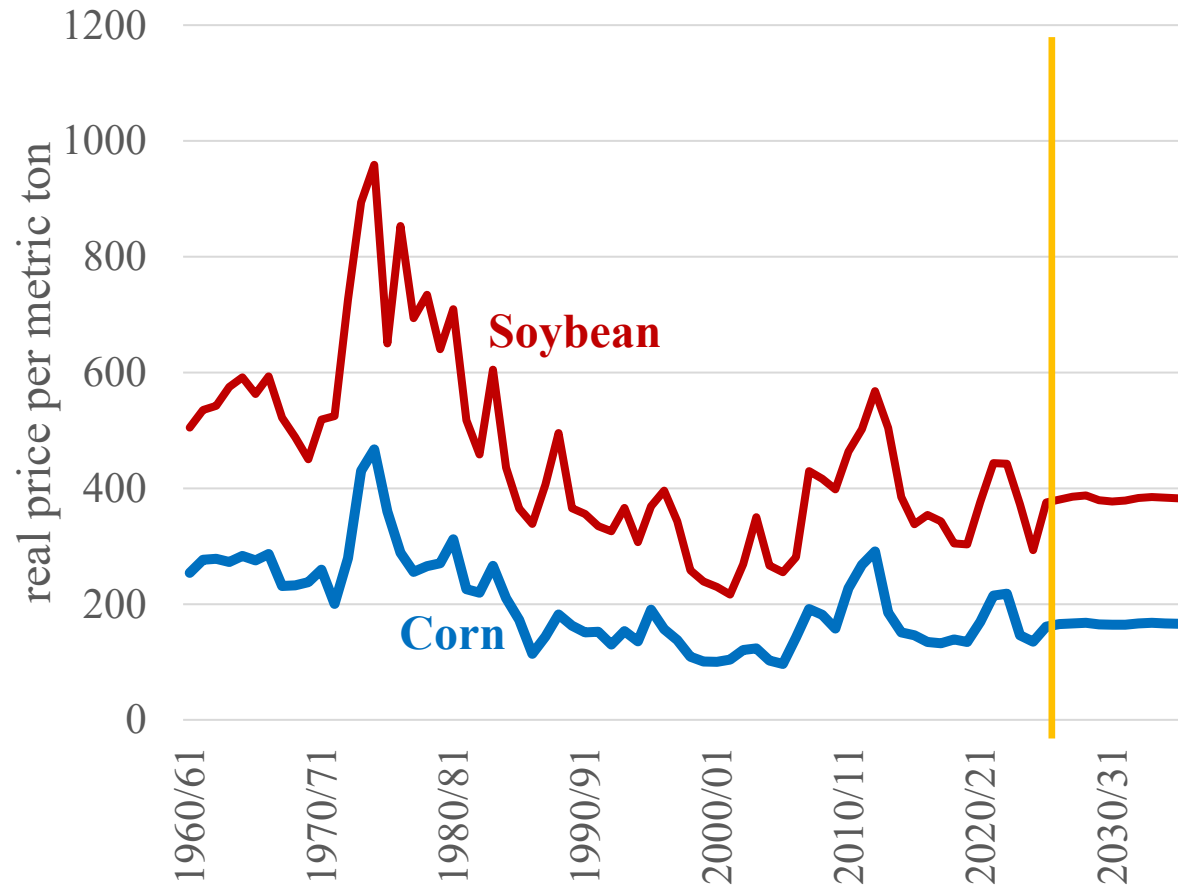
Source: IFPRI (Glauber).

Not 'yet' another price shock, what would change my mind?

- Market sanguine about current conditions
- Global carryout stocks tightening, but still at reasonable levels.
- Some *combination* of:
 - More significant El Nino shocks or multiple production shocks
 - Continued energy / fertilizer price shocks
 - Conflict expansion (Black Sea, Strait of Hormuz)
 - *Sustained* energy induced biofuel demand globally
- US – China trade deal?

Real price projections are flat or weak, but tended to fall over the long run

Real US corn and soybean farm prices



Trends and conditions

Real prices over time

Long-run negative trend

Periods with spikes

Flat in last 20 years?

US policy: RFS, MTBE, tariff, credits

Petroleum and related prices

Growing use in China

Strong demand overall

Relevance in future context?

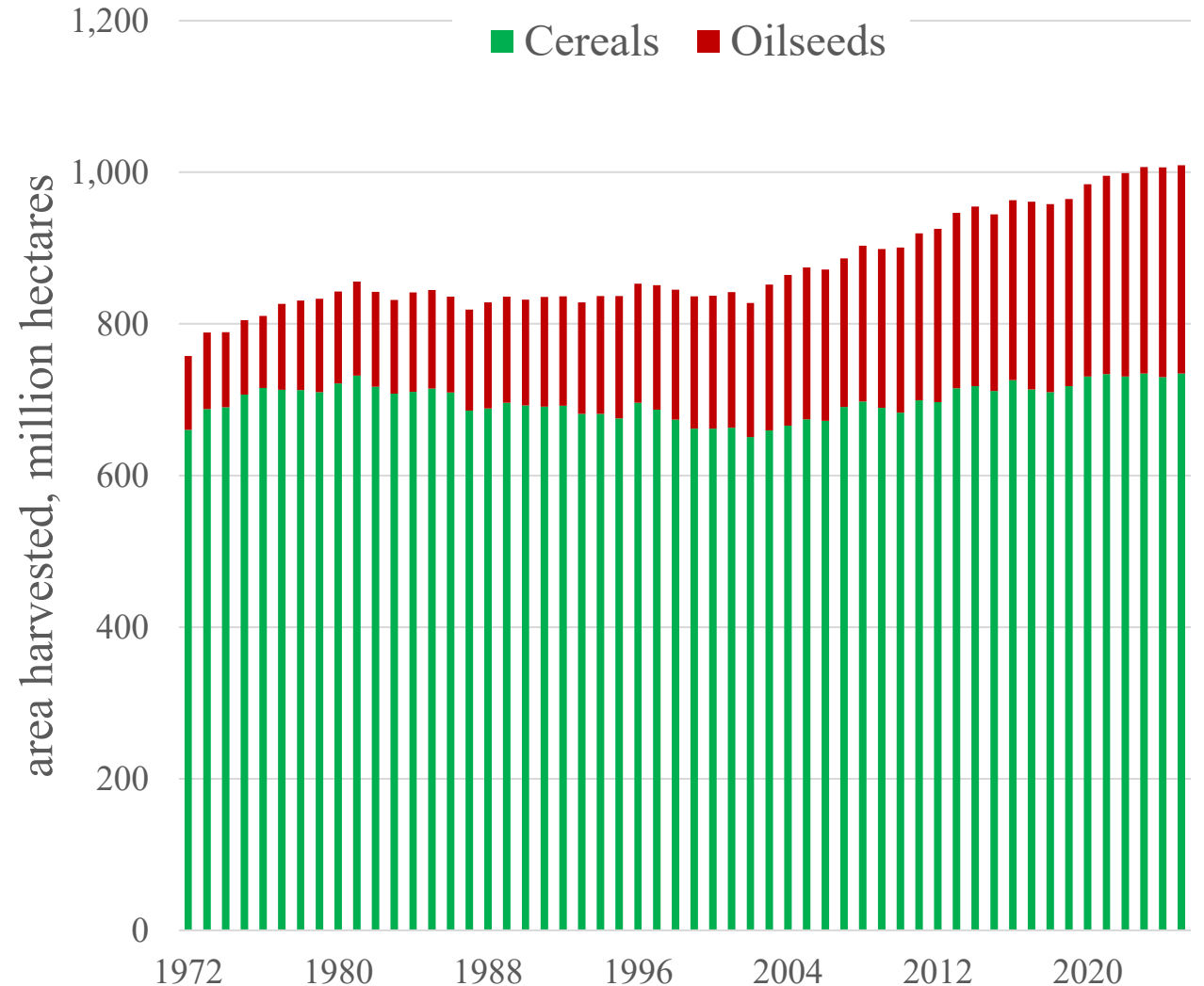
World crop area

Land in cereals and oilseeds

- Total area stable 1980-2005

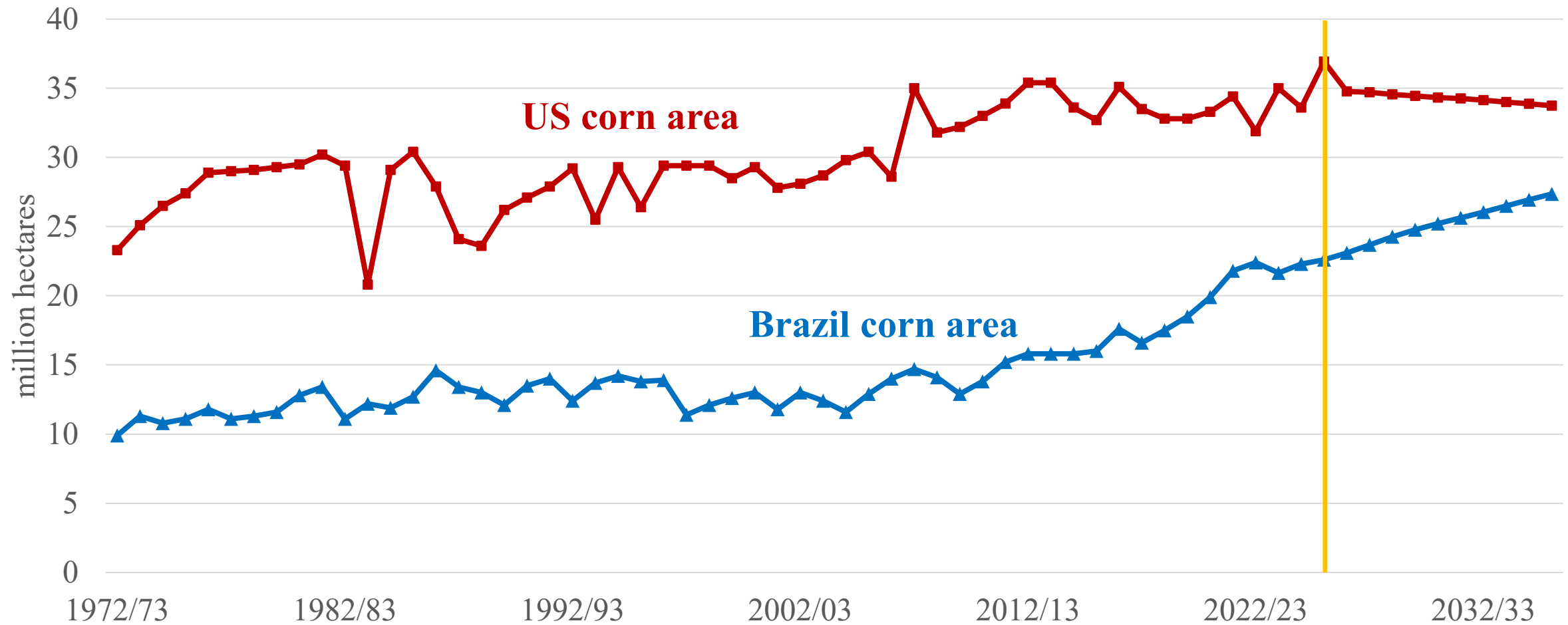
Prices matter

- Area increased after price surges of 2005-07, 2012
- “Big” or “small” change?
 - Total now about 20% more than before 2005



Totals hide important changes

US single-crop corn and Brazil double-crop corn



World crop yields

Trends matter!

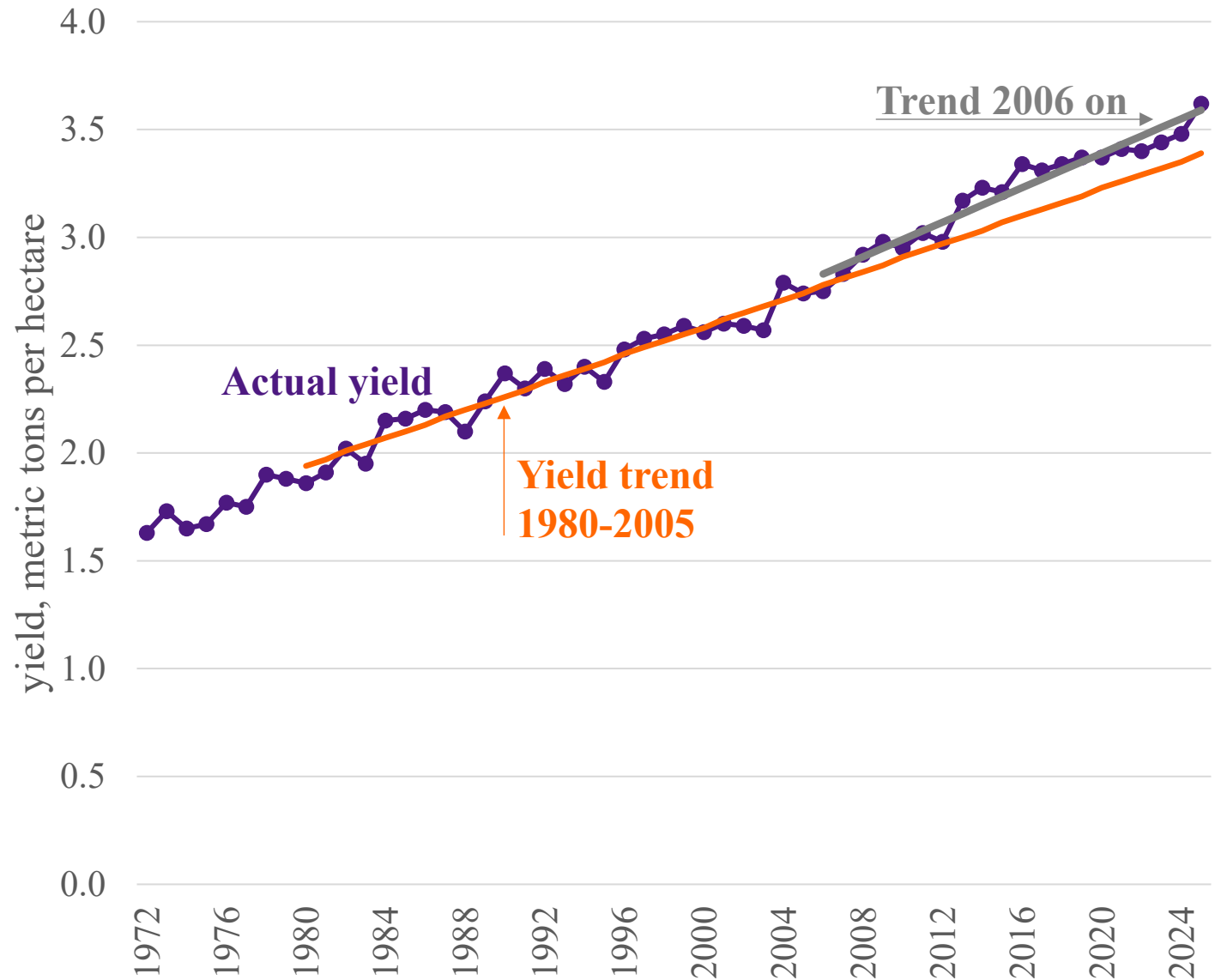
1980-2005 trend weaker than trend from 2006

(2025 trend → 6% more output)

Induced innovation

Productivity (yield) is endogenous over time

→ Prices matter



World demand per capita

(cereals + oilseeds)

Production - use

Per capita use is more stable than production ← stocks!

Flat per person use to 2005

Total excluding China falling

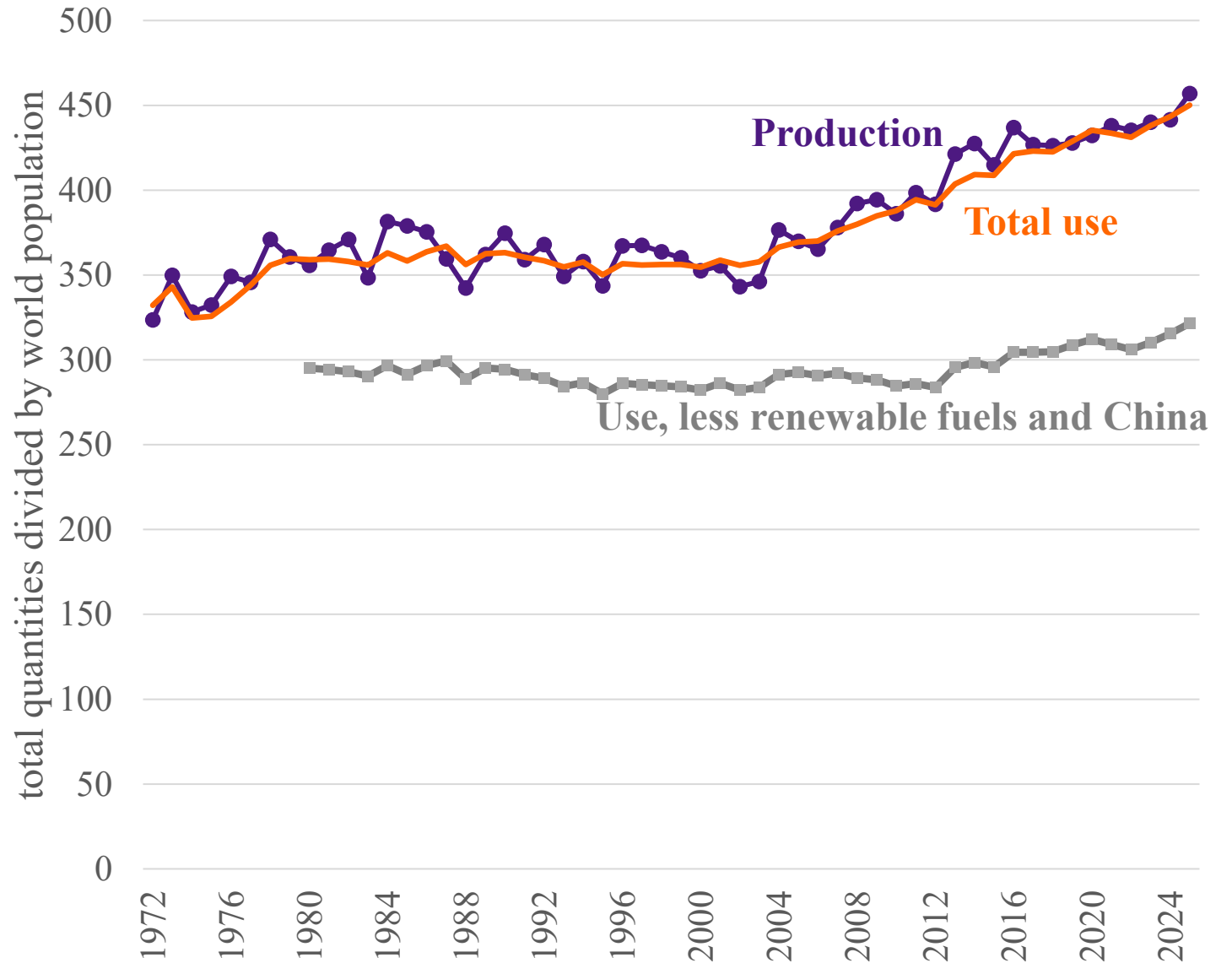
→ China demand growth

2005 start of price surges

Rising total use

Biofuel use & China ↑

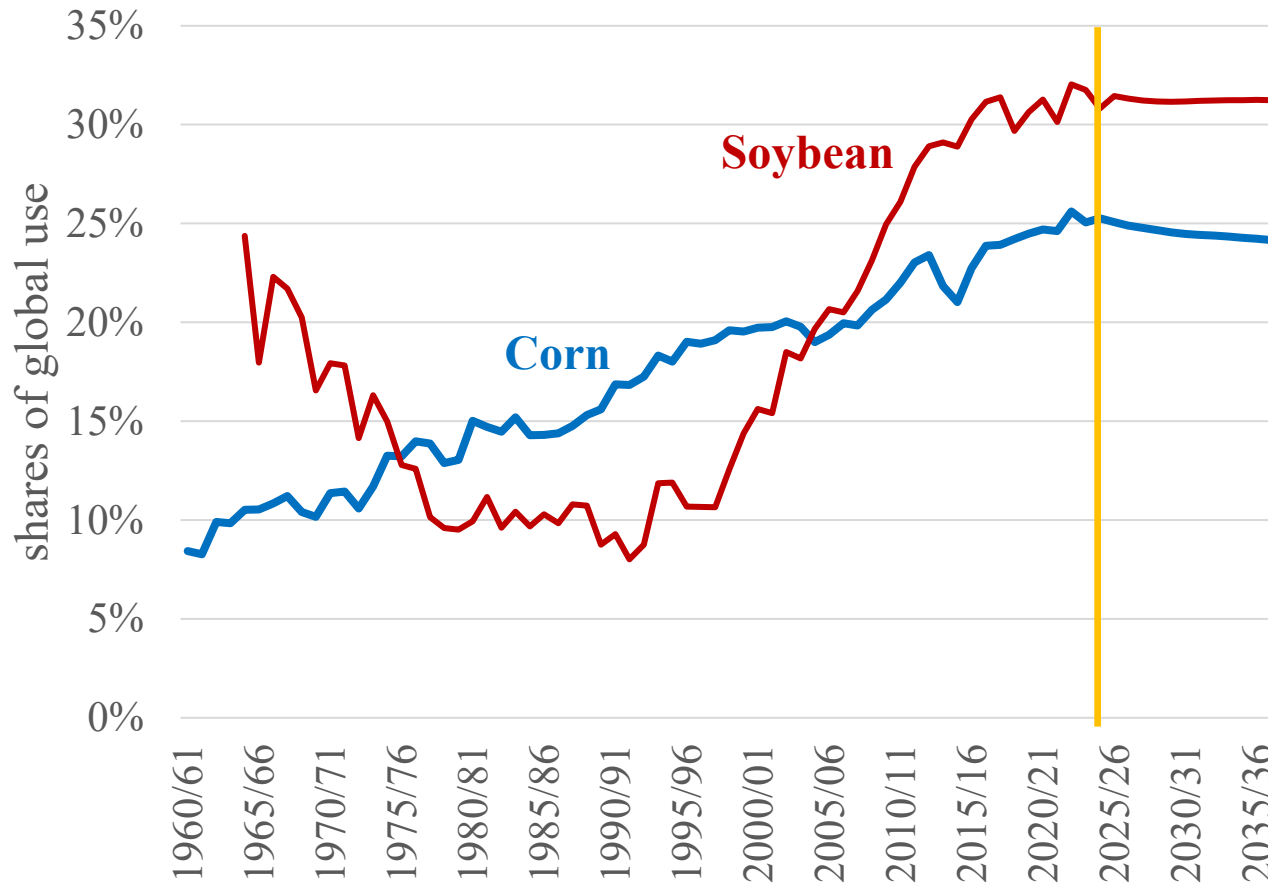
Other uses continue at high price



Sources: USDA FAS PSD totals for grains and oilseeds; based on Westhoff and Thompson (2016).

A key recent demand: China

China use as a share of world use



Drivers and implications

China:

use climbed even as world prices surged
rising income, urbanization

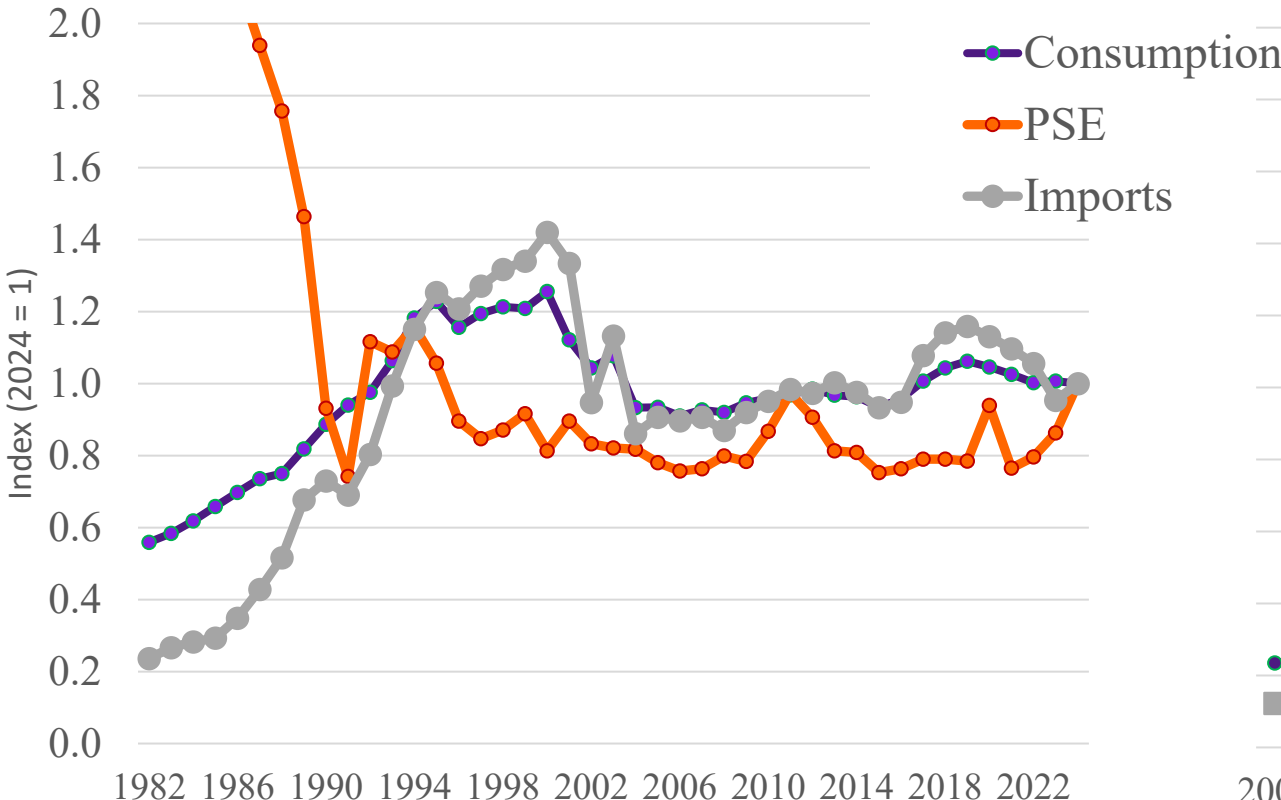
Future global food demand?

Population
Income - falling demand impact?
Preferences

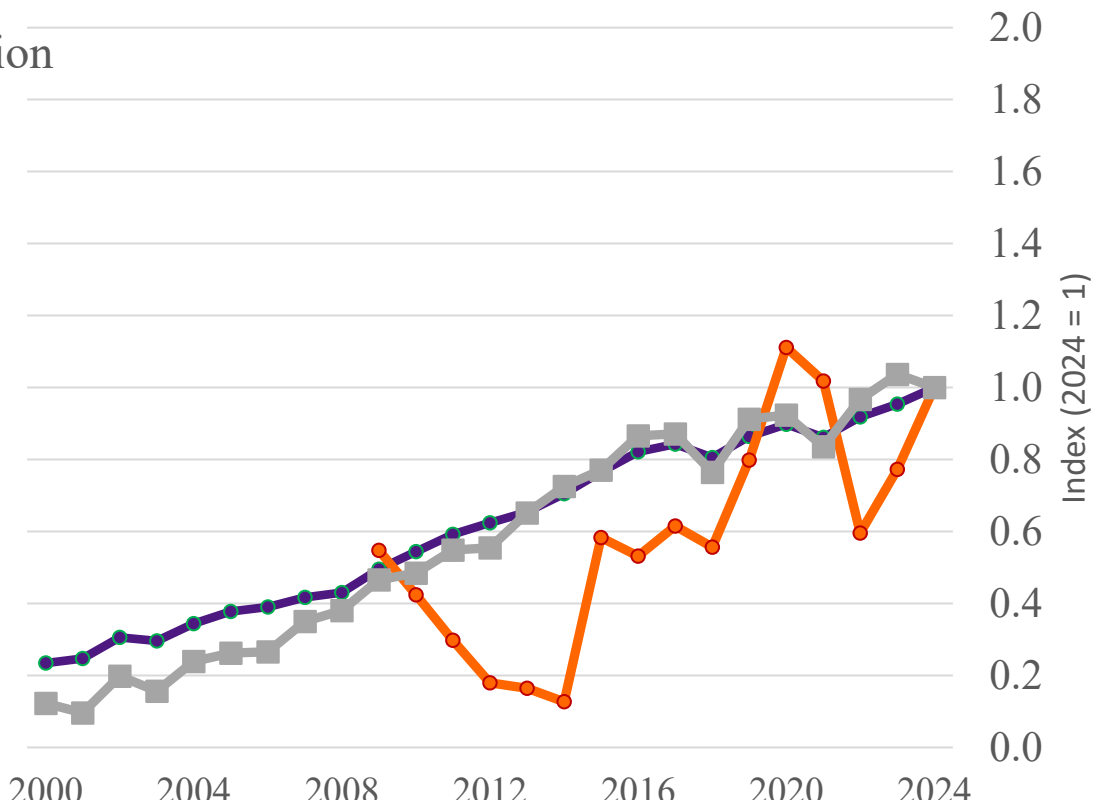
Roles of demand and policy?

Consumption, protection and shocks, and trade

Japan beef, 1982-2024



China soybean, 2000-2024



Agricultural policy over time

Producer support estimates

- Measure of ag policy support
- Includes tariffs
- % of gross receipts

Global patterns in past*

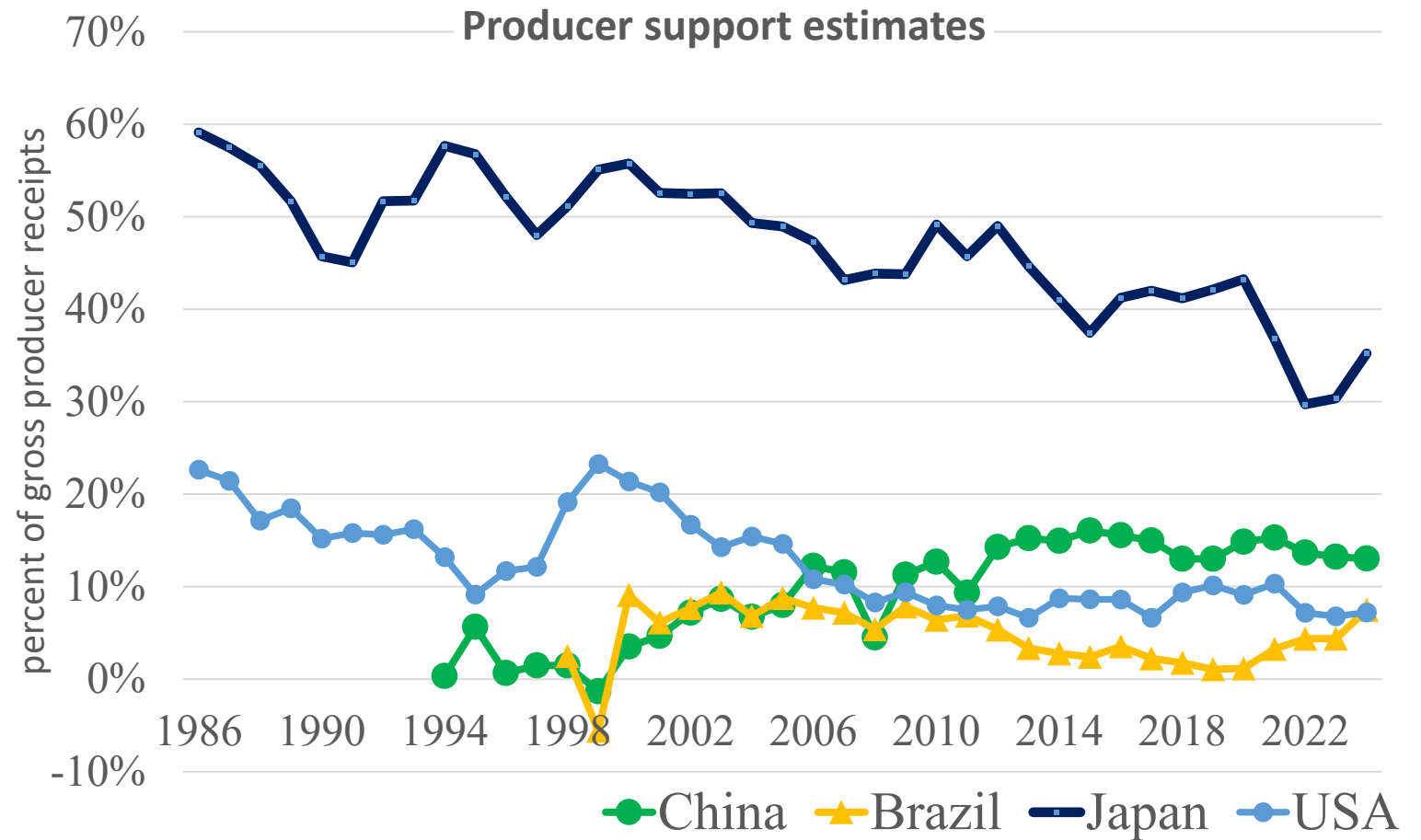
As countries developed:

(1) stop taxing agriculture & start supporting agriculture

(2) use tariffs less and payments more

But that was in the past

* Anderson et al. JEL 2013, Zhao et al. JAE 2018



Future fundamentals?

DEMANDS

World population

Growth rate slowing
China population decline?

World income

Weakening income effect
on total food demand

Other uses

Renewable fuels
What is next?

SUPPLIES

Resources as inputs

Land quality and competition
Water

Productivity trends

(yield, output/animal)
In the long run, productivity
depends on price

Shocks!

Animal diseases

POLICIES

Trade policies

New tariffs and new deals
mean new trade flows?

Domestic policies

If the trade environment
changes, then will countries
change their other policies?

Other policies

Nutrition, energy?

Thanks!

FAPRI-MU website:



www.fapri.missouri.edu



This material is based upon work supported by the U.S. Department of Agriculture, Office of the Chief Economist, under Agreement #58-0111-24-015, and the USDA National Institute of Food and Agriculture, Hatch project number MO-C1537173. Any opinion, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture nor the University of Missouri.

FAPRI-MU team:

- Julian Binfield
- Ben Brown
- Sera Chiuchiarelli
- Hoa Hoang
- Shokhrukh-Mirzo Jalilov
- Fazal Malakhail
- Bob Maltsbarger
- Seth Meyer
- Srushti Patil
- Wyatt Thompson
- Pat Westhoff
- Jarrett Whistance
- Sunghwi Woo
- Peter Zimmer