
Future Food Prices: FAPRI Projections and Sources of Uncertainty

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Conference on “Agricultural
Markets and Food Price Inflation”
Federal Reserve Bank of Chicago
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Food and Agricultural
Policy Research Institute

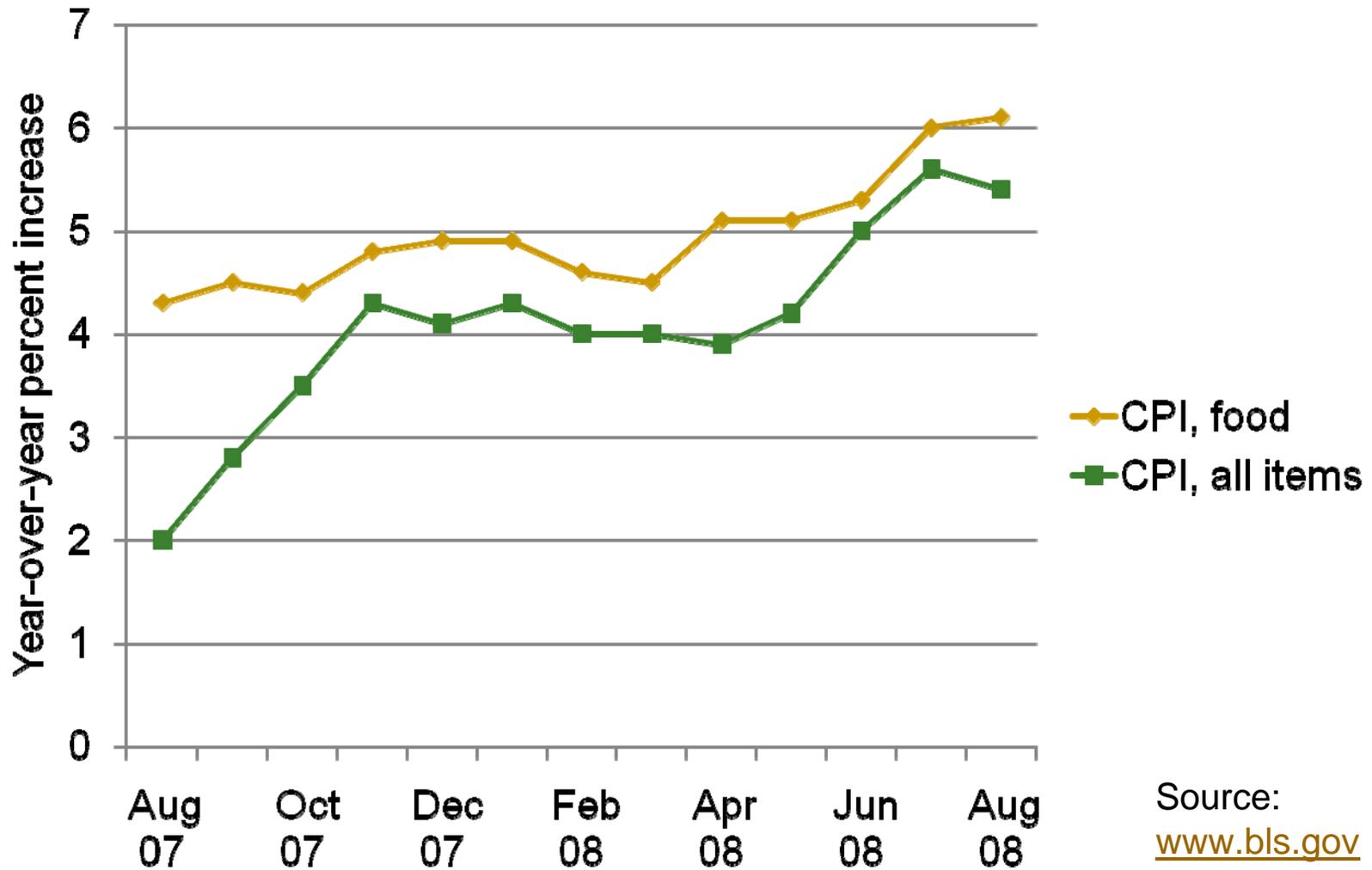


University of Missouri

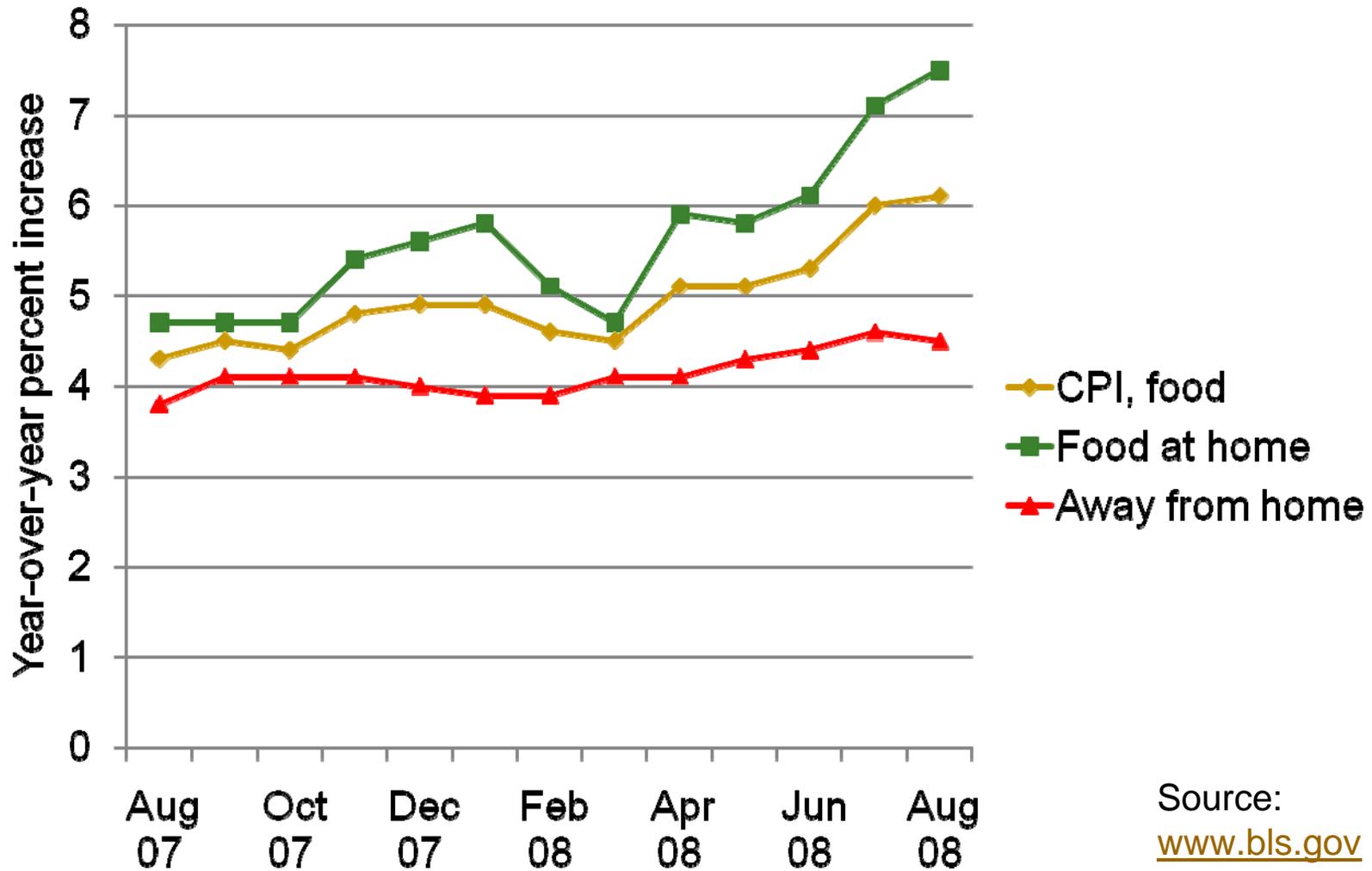
Agenda

- Quick review of food inflation numbers
 - FAPRI agricultural market and food price projections
 - Sources of uncertainty in the projections
-

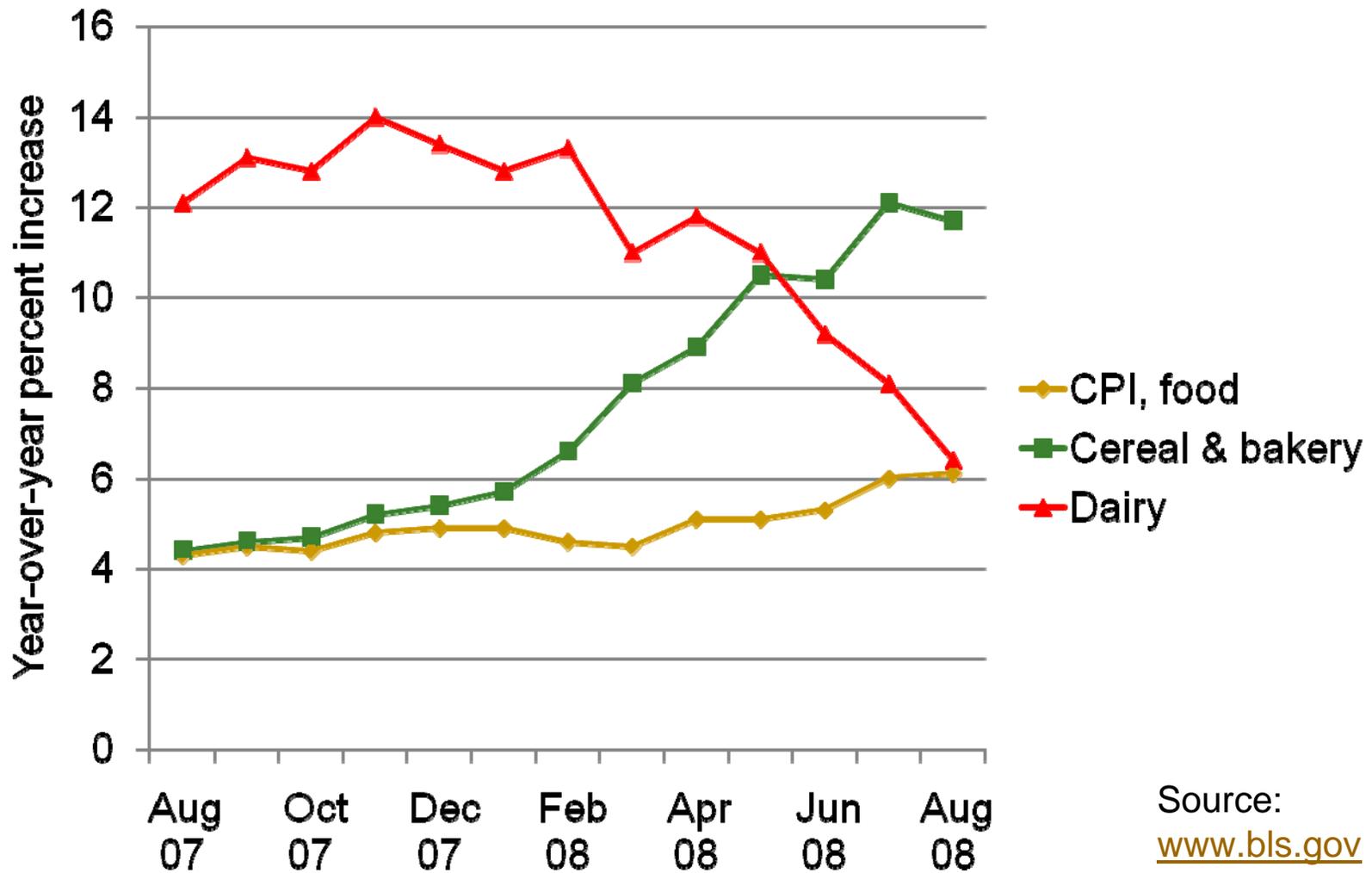
Food and general inflation



Food inflation: at home and away

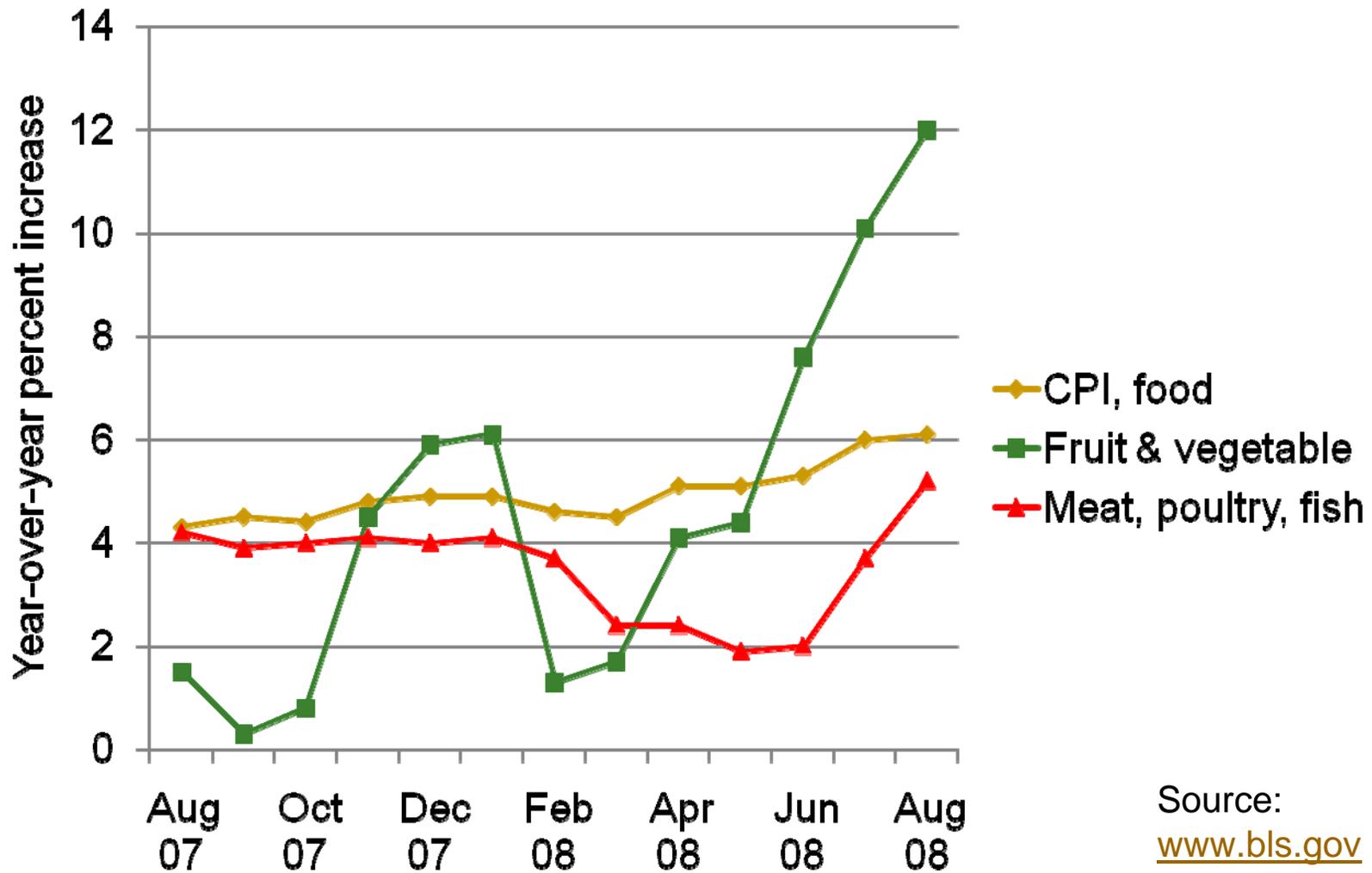


Food inflation: a few categories



Source:
www.bls.gov

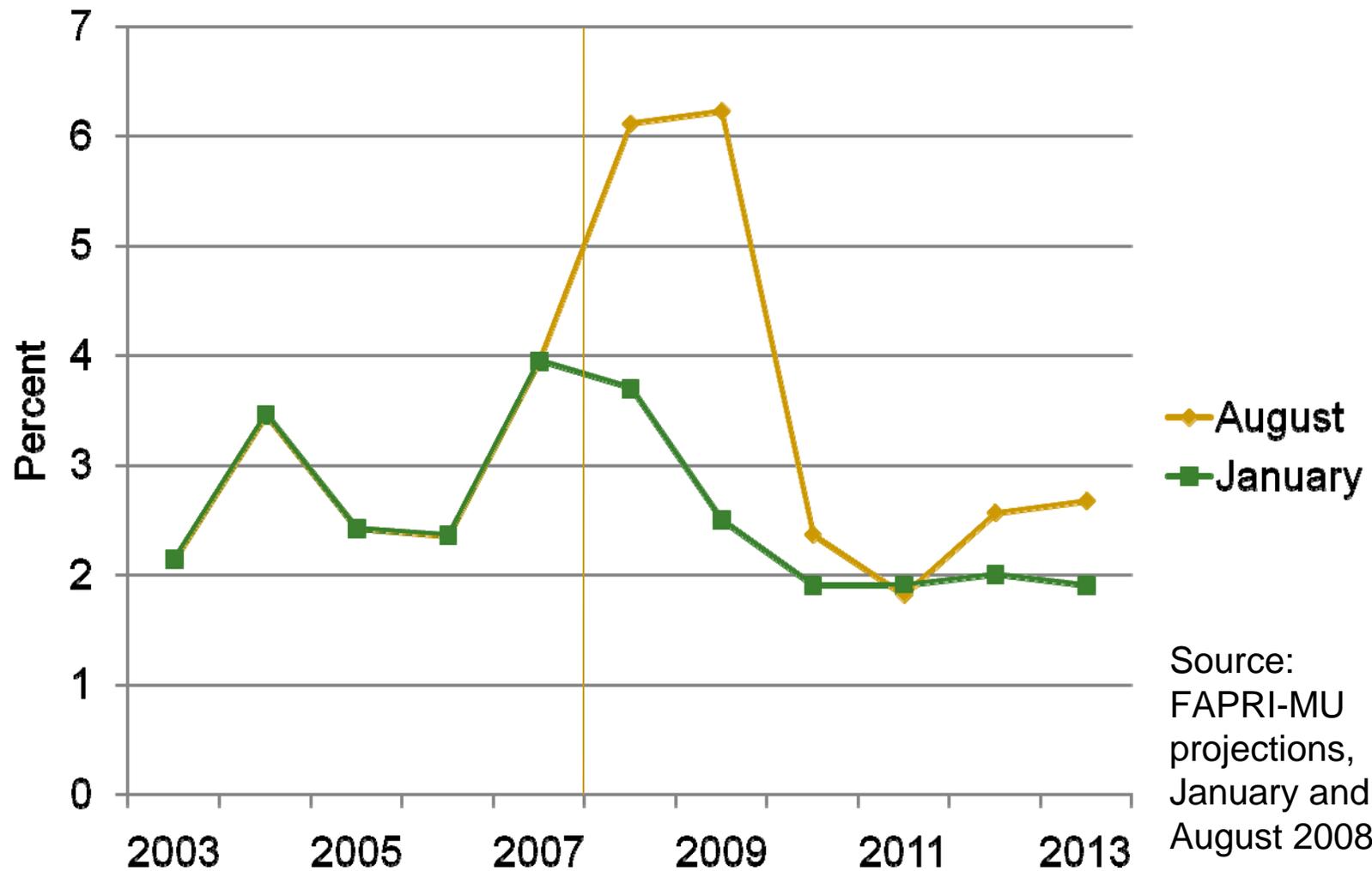
Food inflation: a few categories



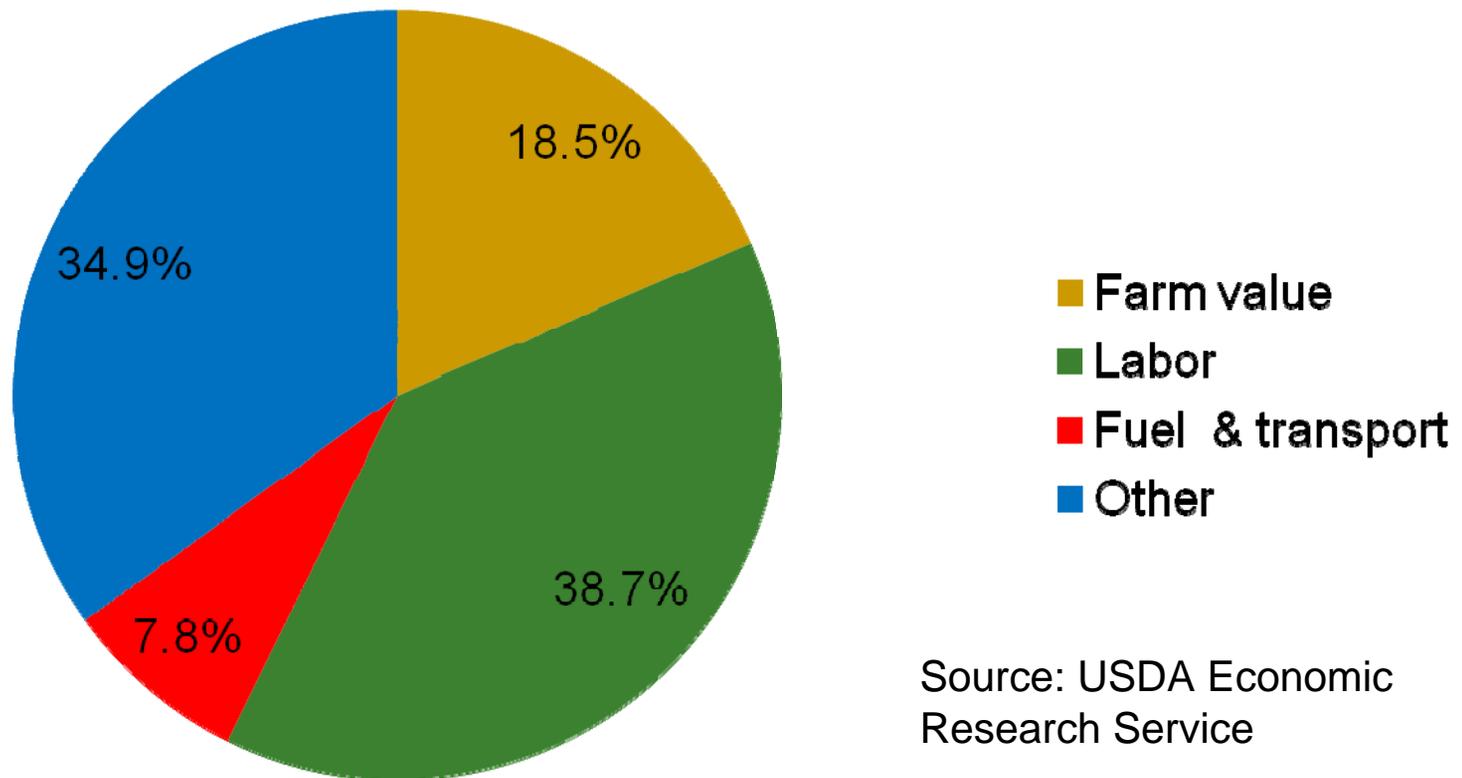
Food inflation: FAPRI projections



Food inflation: Aug. vs. Jan. projections



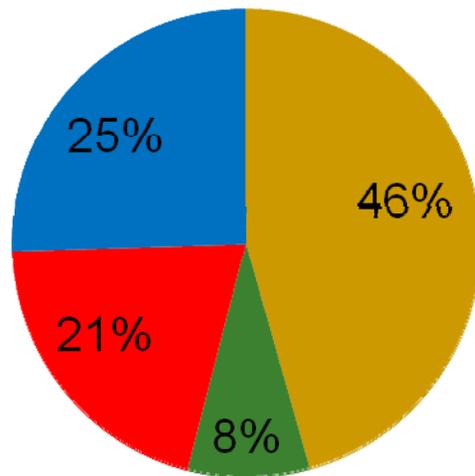
Food expenditures: farm value and marketing bill, 2006



U.S. grain use

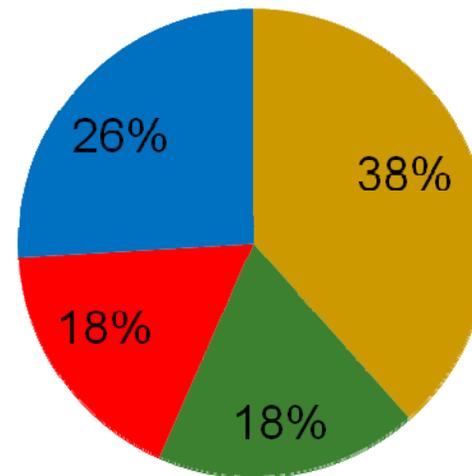
Based on USDA estimates, September 2008

2003/04



Total: 353 million metric tons

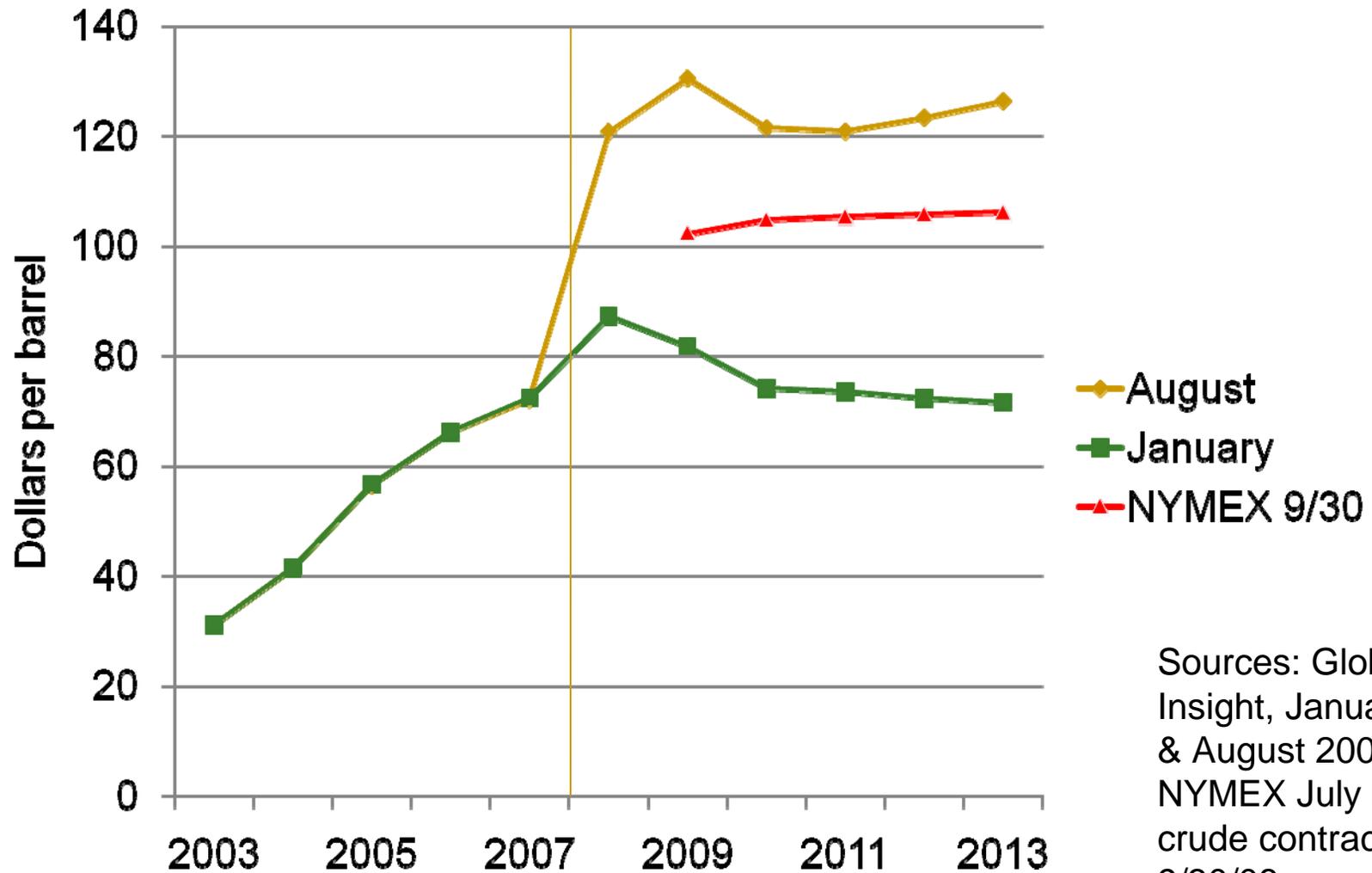
2007/08



Total: 420 million metric tons

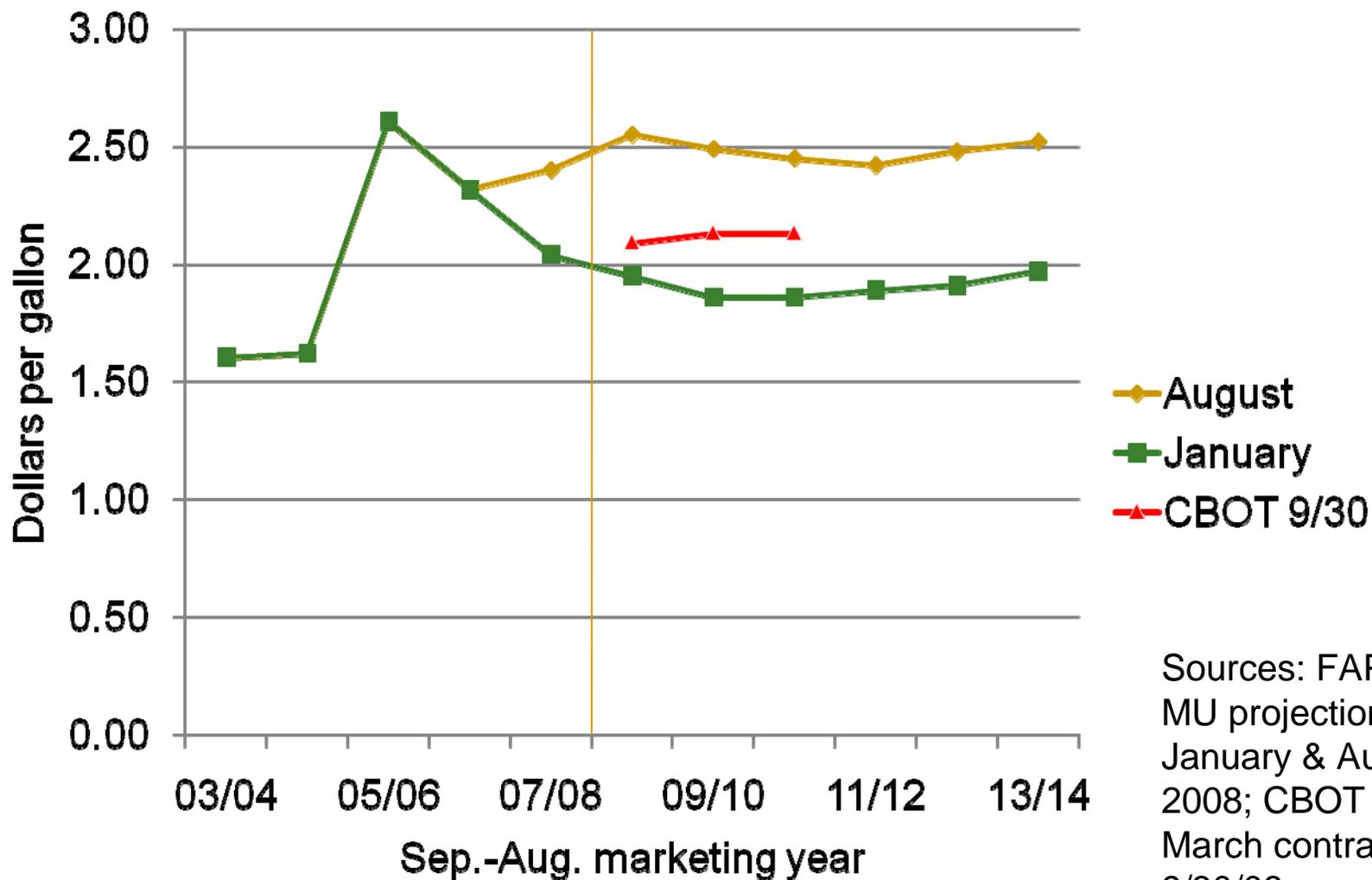
Grains: Wheat, corn, sorghum, barley, oats and rice

WTI petroleum prices: Aug. vs. Jan. projections and current futures



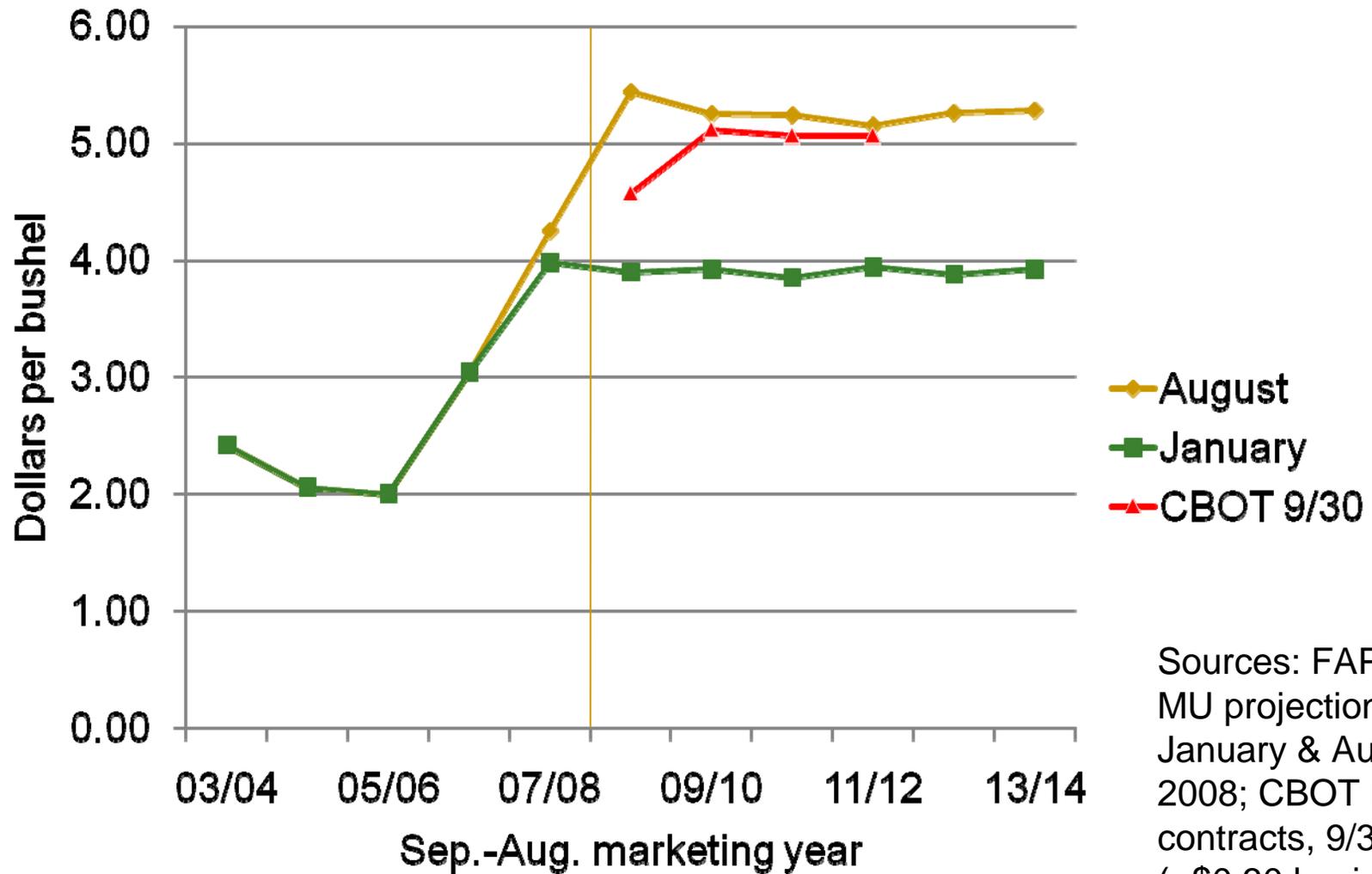
Sources: Global Insight, January & August 2008; NYMEX July light crude contracts, 9/30/08

Ethanol rack prices: Aug. vs. Jan. projections and current futures

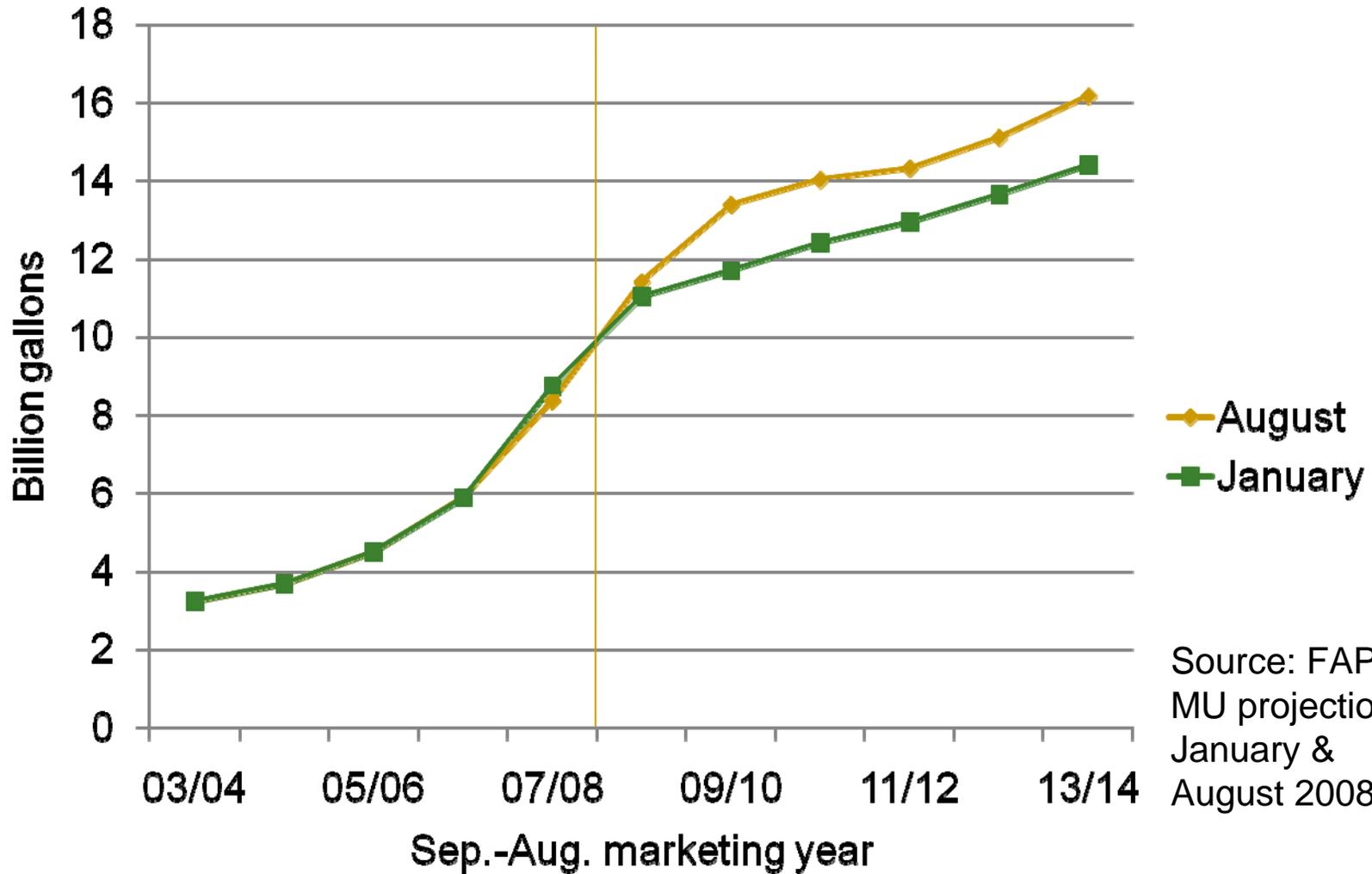


Sources: FAPRI-MU projections, January & August 2008; CBOT March contracts, 9/30/08

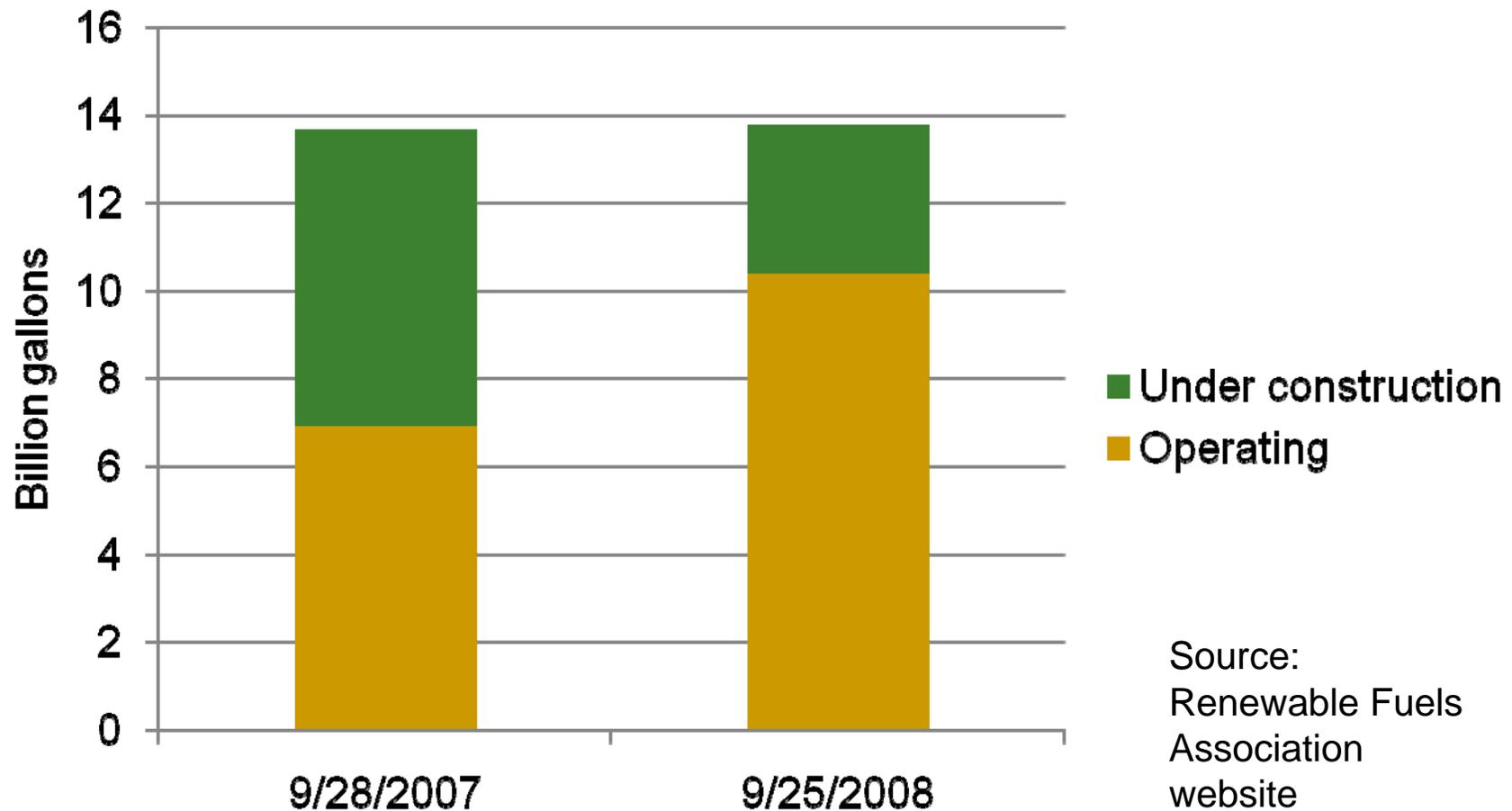
Corn prices: Aug. vs. Jan. projections and current futures



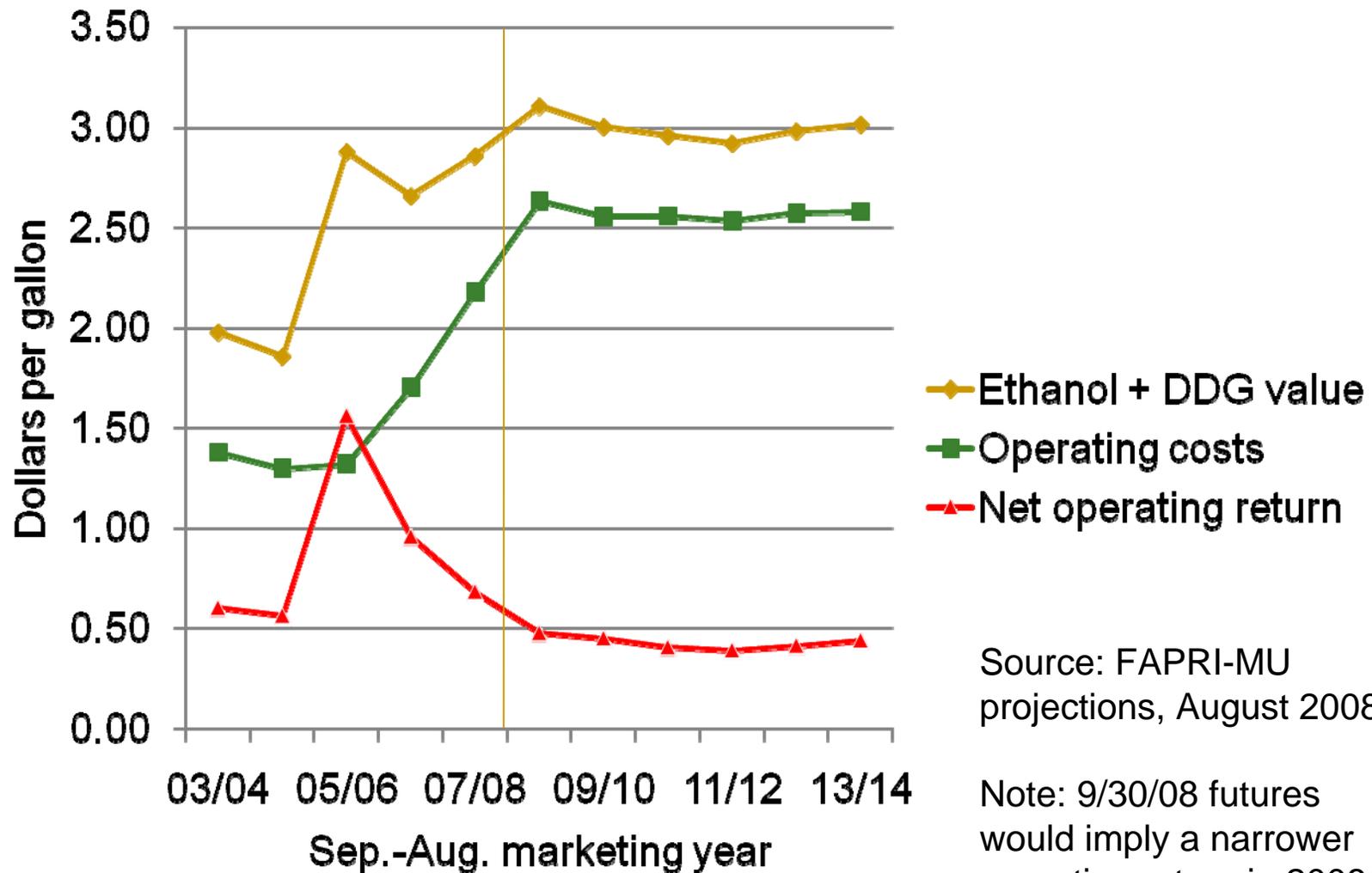
Ethanol production: Aug. vs. Jan. projections



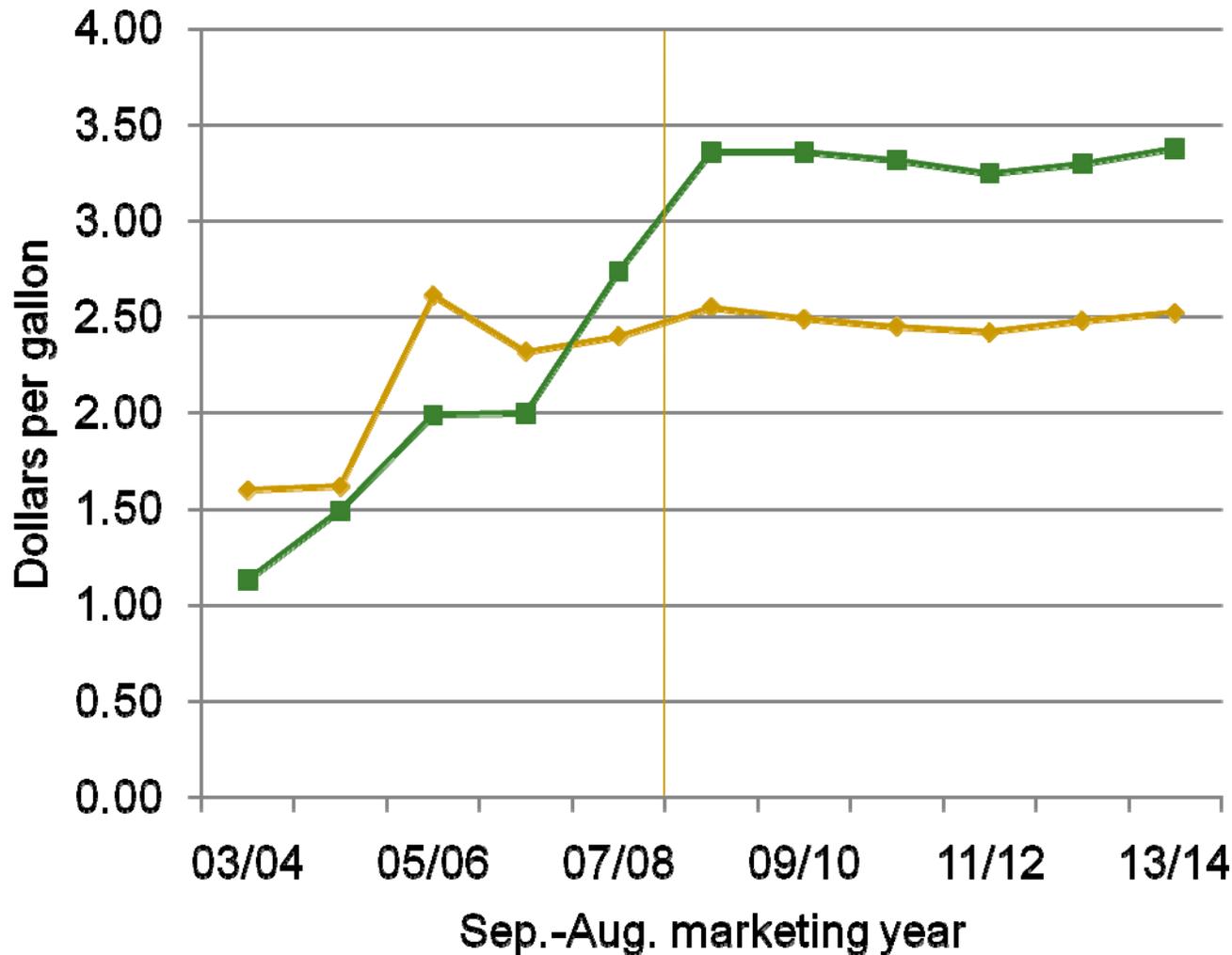
Ethanol production capacity



Ethanol dry mill operating costs and returns



Omaha rack prices for ethanol and gasoline



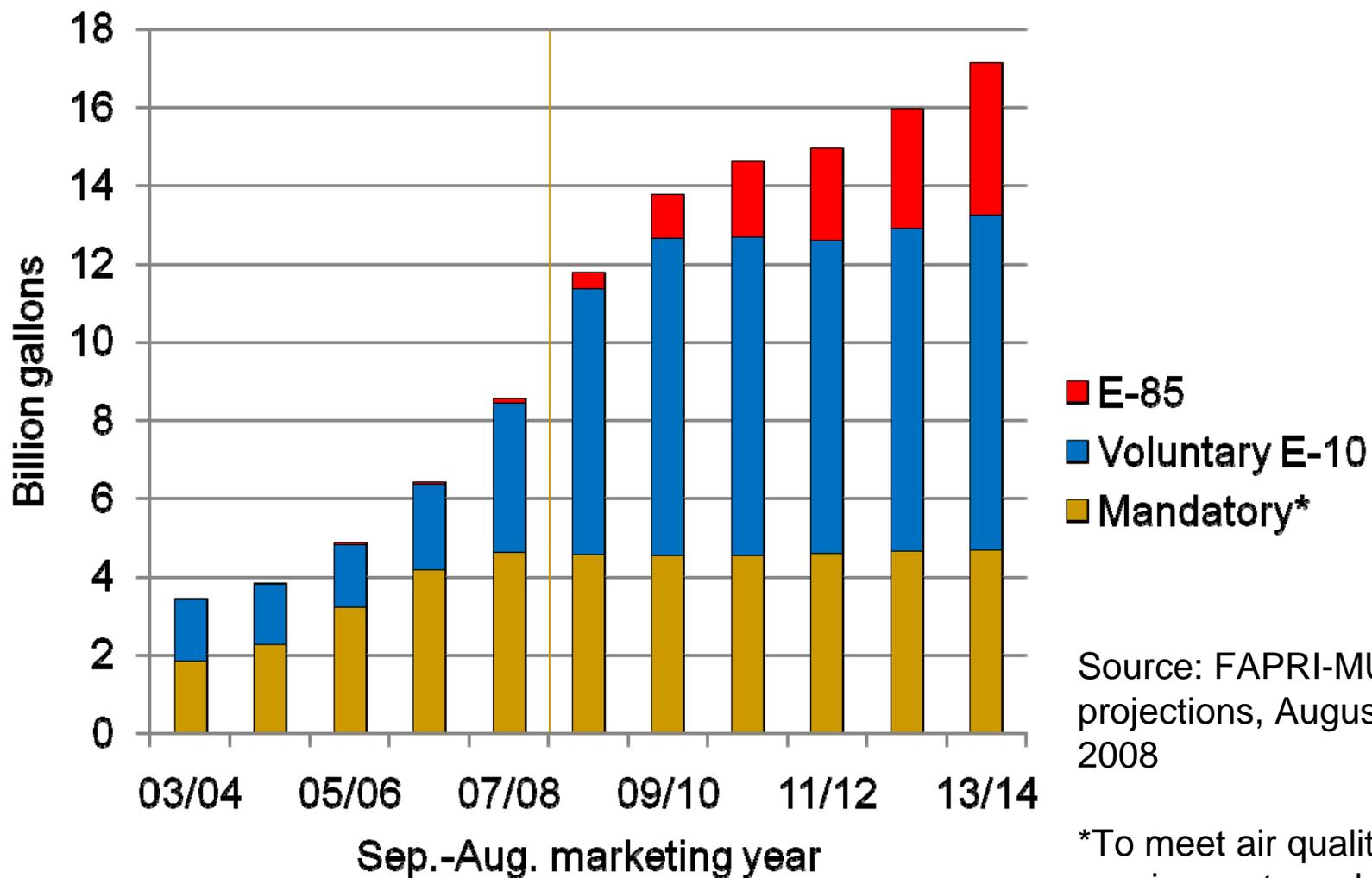
April 2009
futures on 9/30:
\$2.66 for
NYMEX RBOB
gasoline, \$2.09
for CBOT
ethanol

◆ Ethanol
■ Gasoline

Source:
FAPRI-MU
projections,
August 2008

Note: Maintains
2009 tax
credits, tariffs

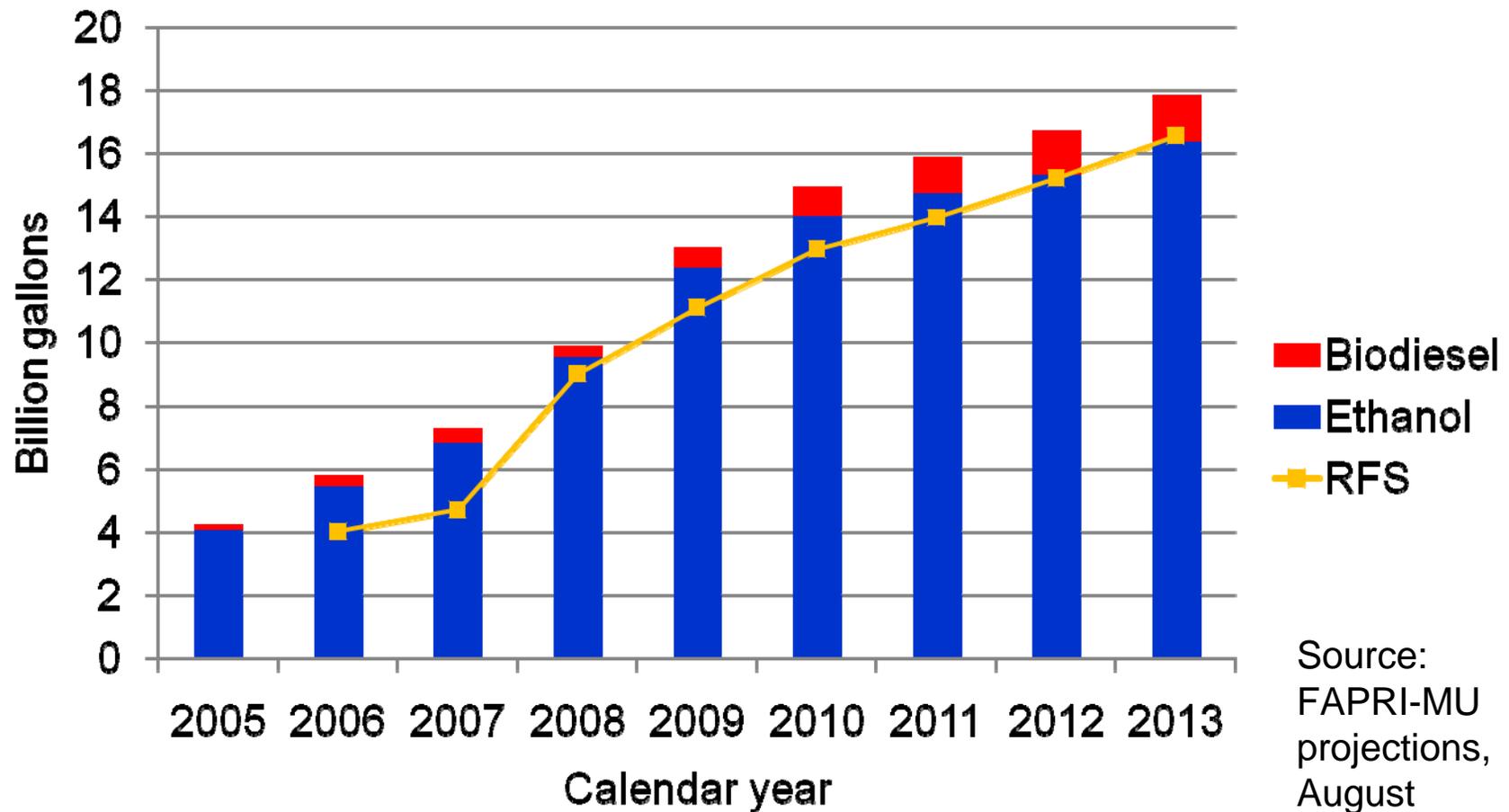
Ethanol consumption by category



Source: FAPRI-MU
projections, August
2008

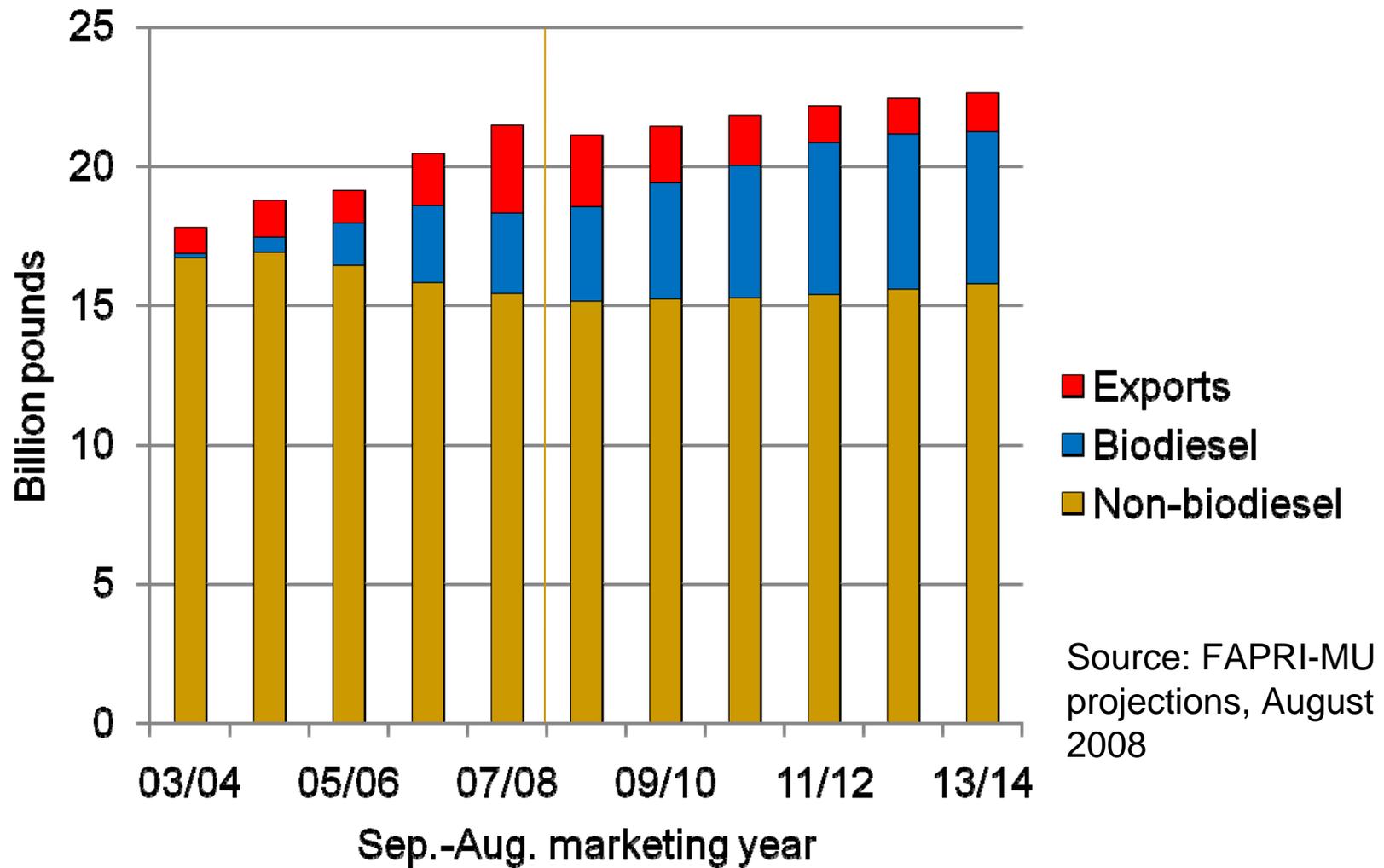
*To meet air quality
requirements and
state mandates

Biofuel consumption and the Renewable Fuel Standard (RFS)

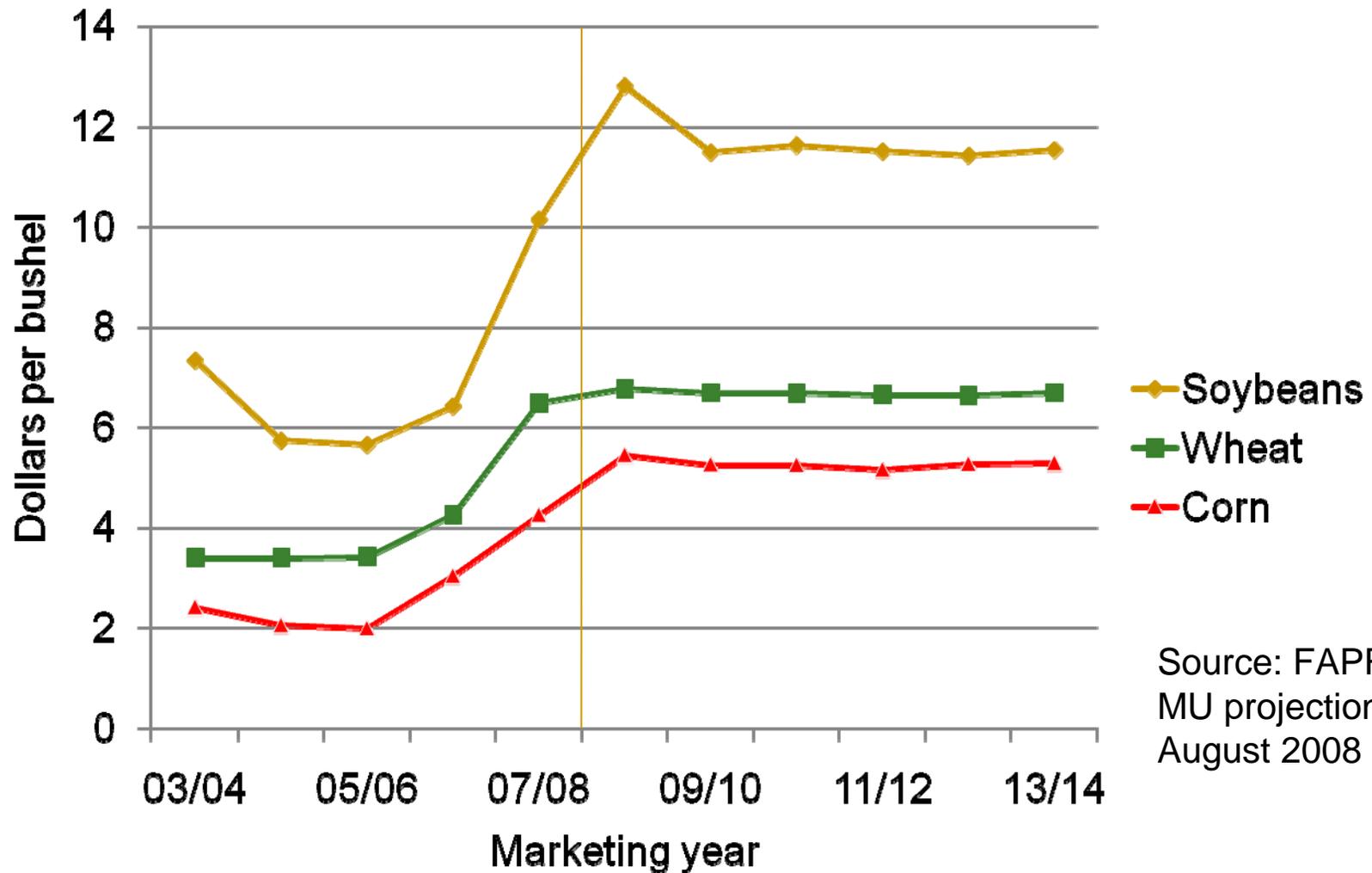


Source:
FAPRI-MU
projections,
August
2008

U.S. soyoil consumption by category



Crop prices: FAPRI-MU projections



Source: FAPRI-MU projections, August 2008

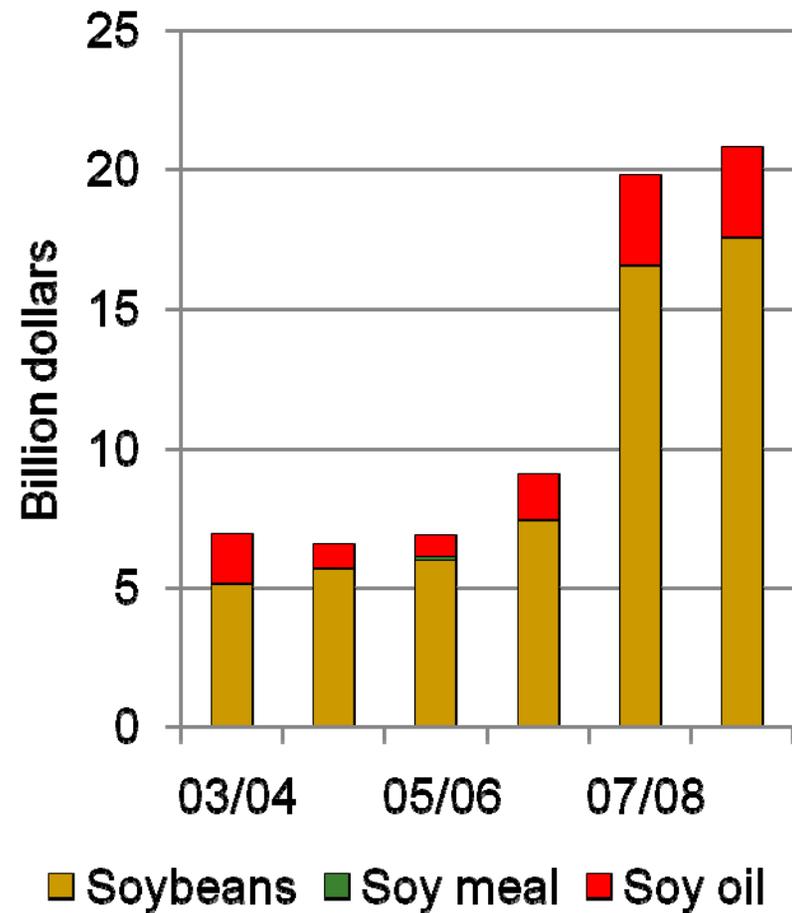
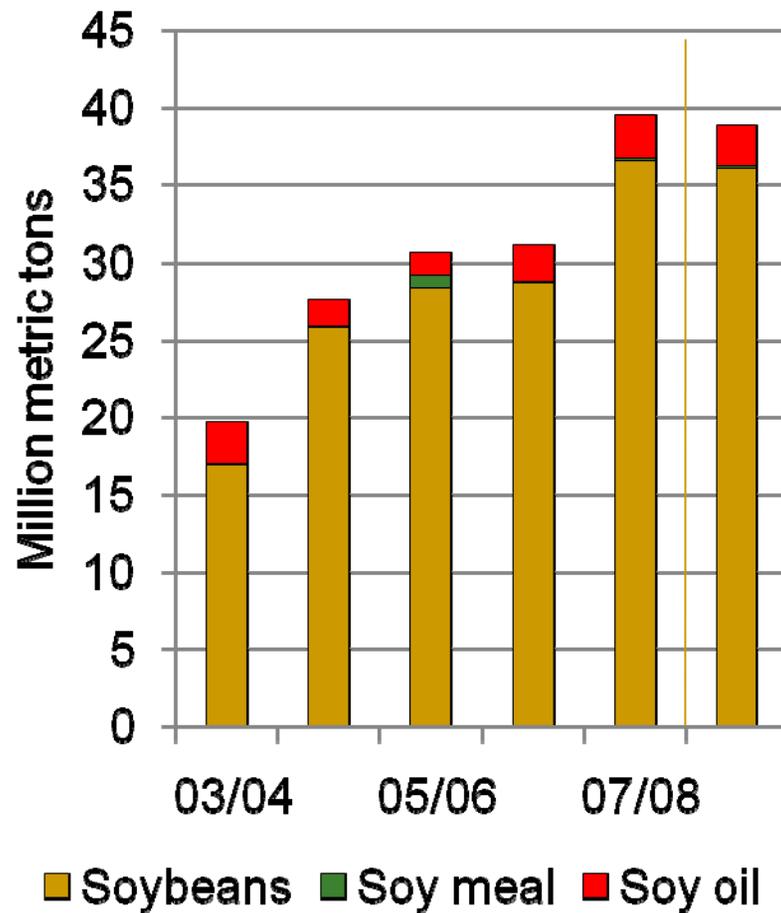
U.S. crop exports

Based on USDA estimates, September 2008

	Corn	Soybeans	Wheat
Quantity (mil. bu.)			
2005/06	2,134	940	1,003
2006/07	2,125	1,116	908
2007/08	2,425	1,155	1,264
2008/09	2,000	1,000	1,000
2008/09 vs. 2005/06	-6%	+6%	0%
Farm value of exports (bil. dollars)			
2005/06	\$4.3	\$5.3	\$3.4
2008/09	\$11.0	\$12.4	\$7.3
2008/09 vs. 2005/06	+158%	+132%	+111%

China imports of soybean products

Based on USDA estimates, September 2008



Commodities valued at Illinois prices

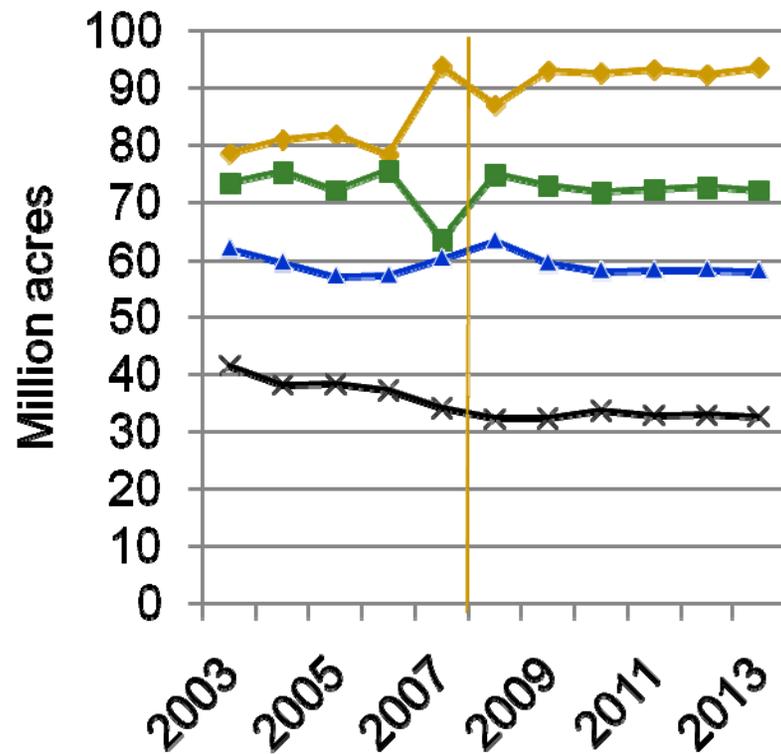
U.S. crop production

Based on USDA estimates, September 2008

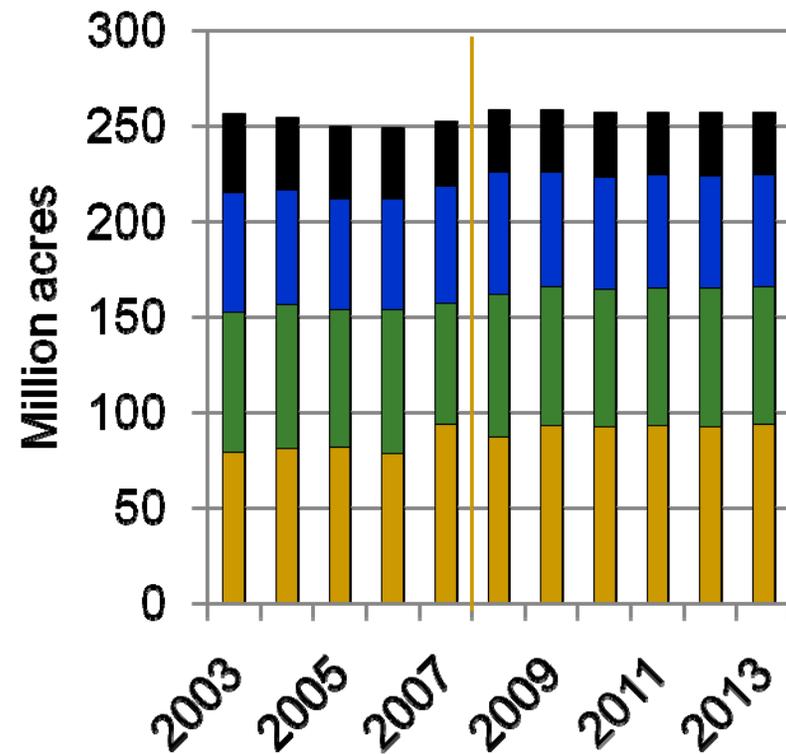
	Corn	Soybeans	Wheat
Quantity (mil. bu.)			
2005/06	11,114	3,063	2,105
2006/07	10,535	3,188	1,812
2007/08	13,074	2,585	2,067
2008/09	12,072	2,934	2,462
2008/09 vs. 2005/06	+9%	-4%	+17%
Farm value of prod. (bil. dollars)			
2005/06	\$22.2	\$17.3	\$7.2
2008/09	\$66.4	\$36.2	\$17.8
2008/09 vs. 2005/06	+199%	+109%	+148%

U.S. crop acreage planted: 2 views

FAPRI-MU Aug. 2008 projections



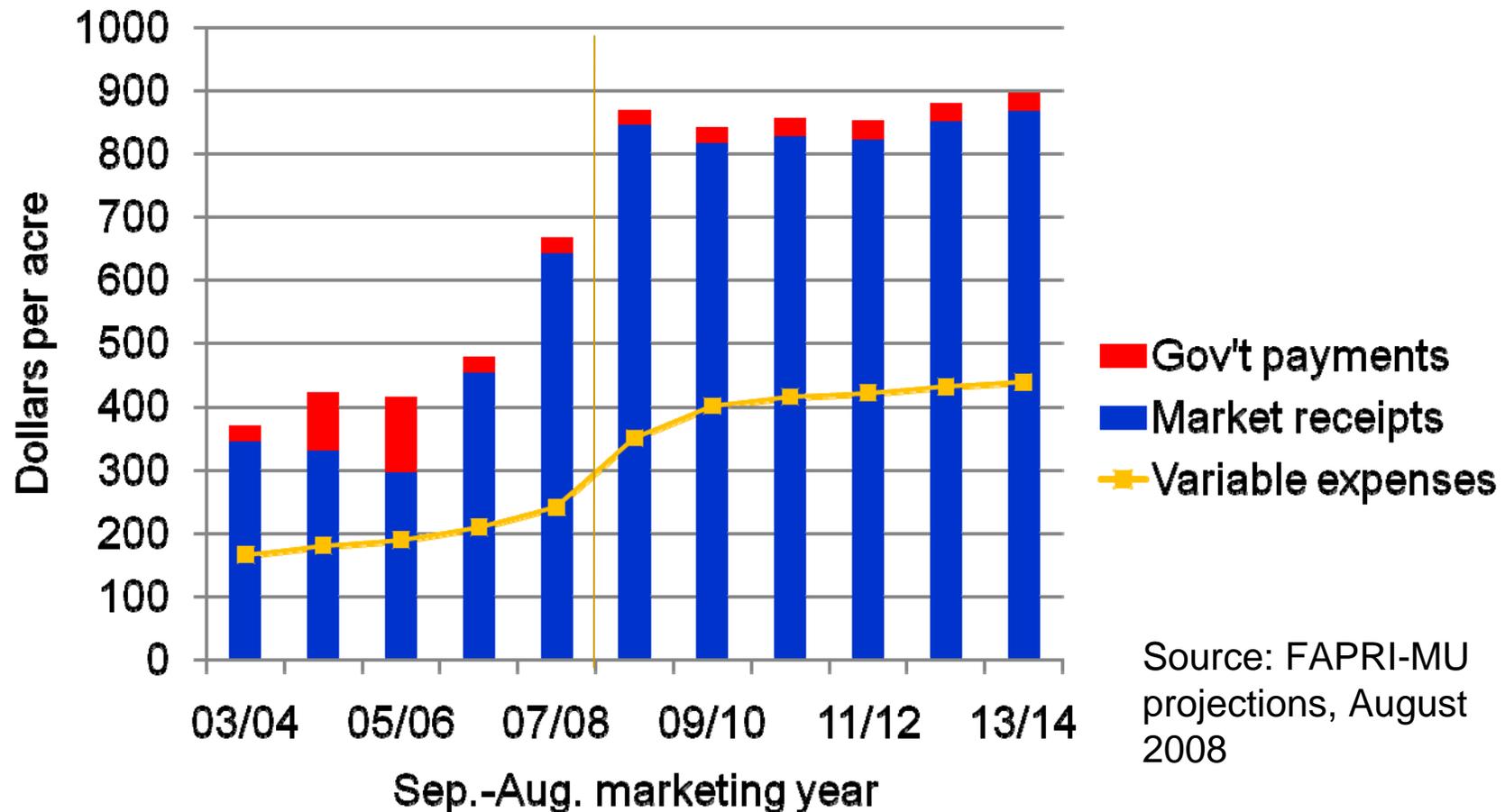
—♦— Corn —■— Soybeans
—▲— Wheat —×— 9 other crops



■ Corn ■ Soybeans
■ Wheat ■ 9 other crops

Other crops: Upland cotton, rice, sorghum, barley, oats, peanuts, sunflowers, sugar cane and sugar beets

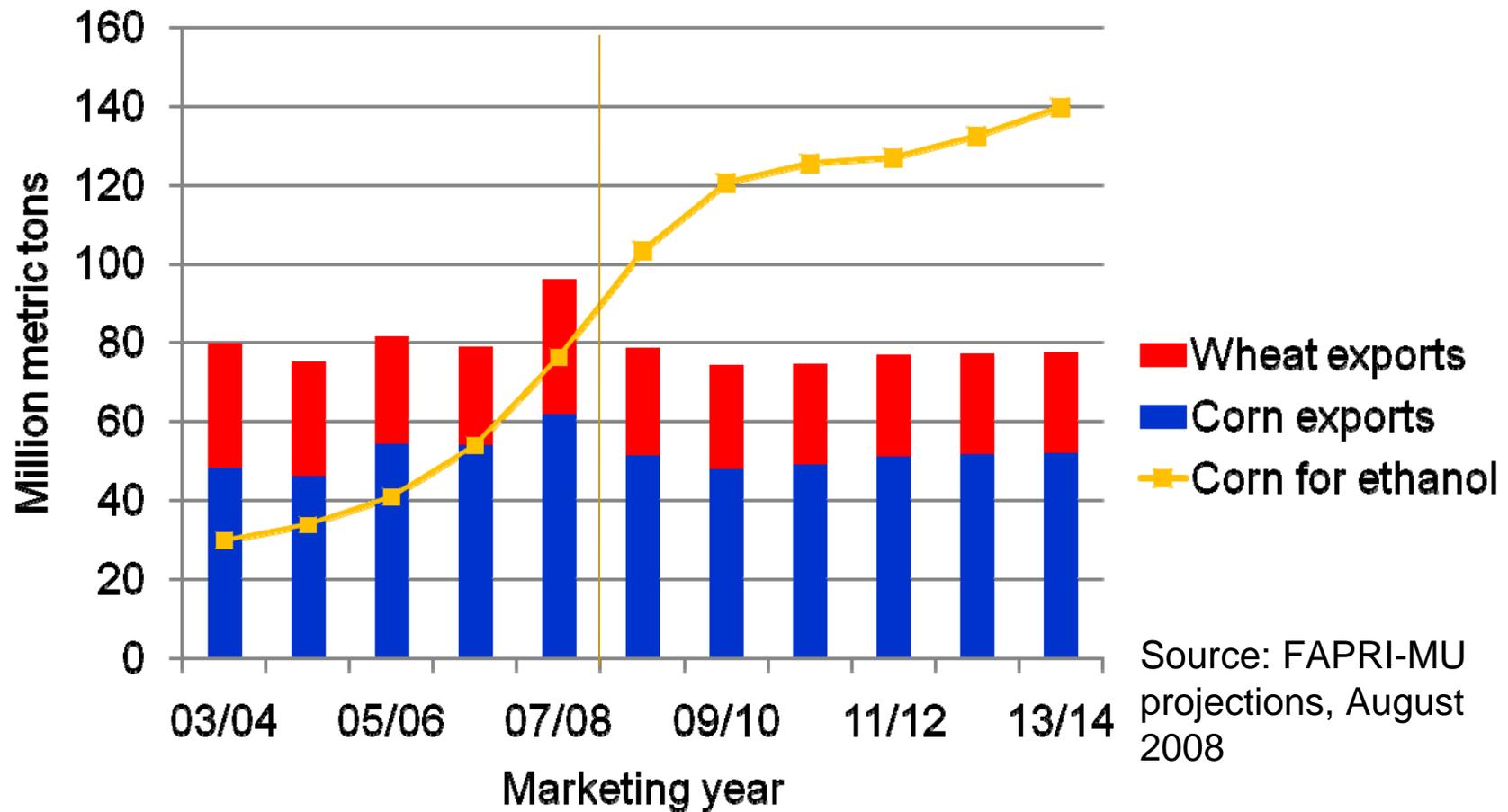
Corn market receipts, government payments and variable expenses



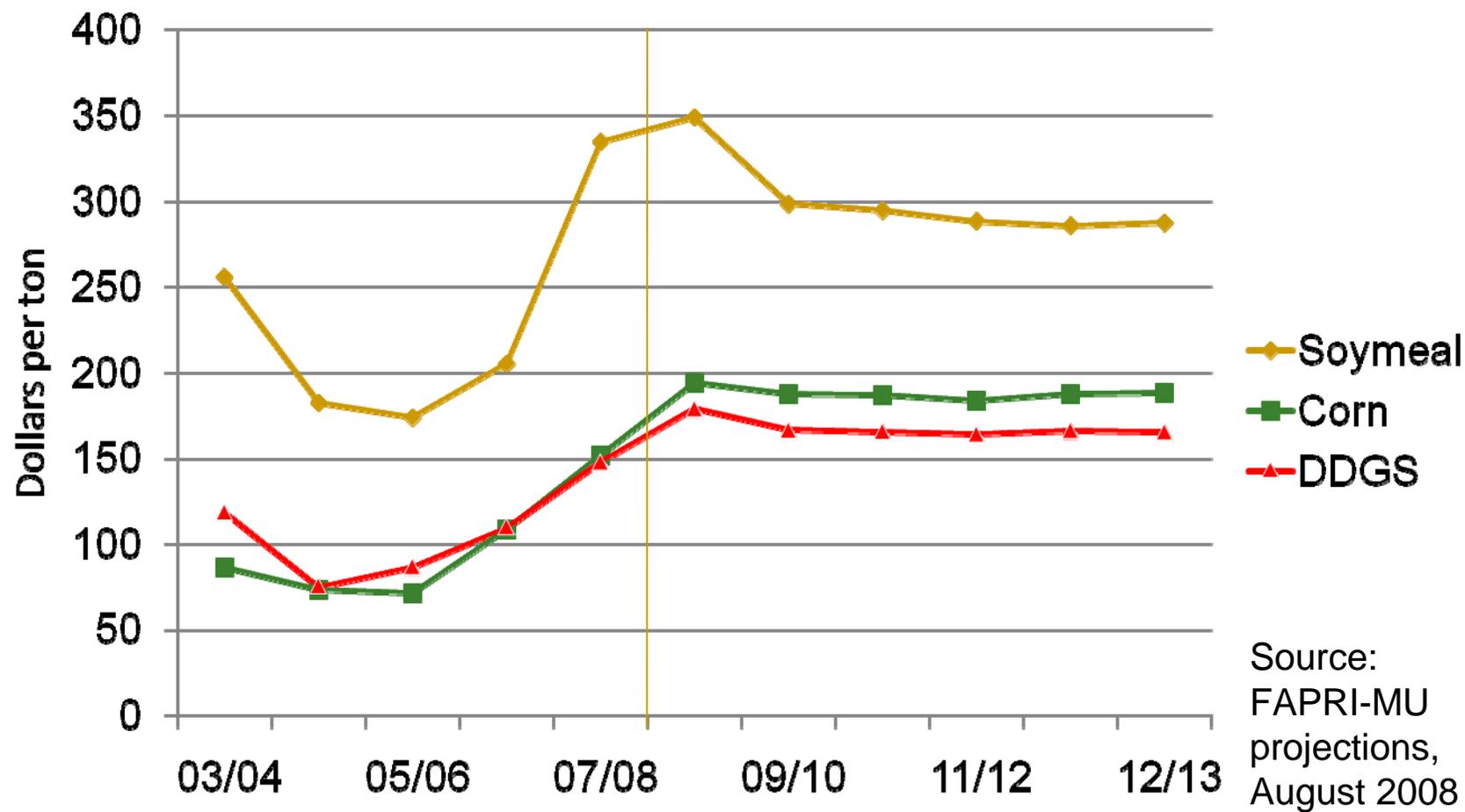
Source: FAPRI-MU
projections, August
2008

Note: Payments
assume 1 acre of base
for each acre planted

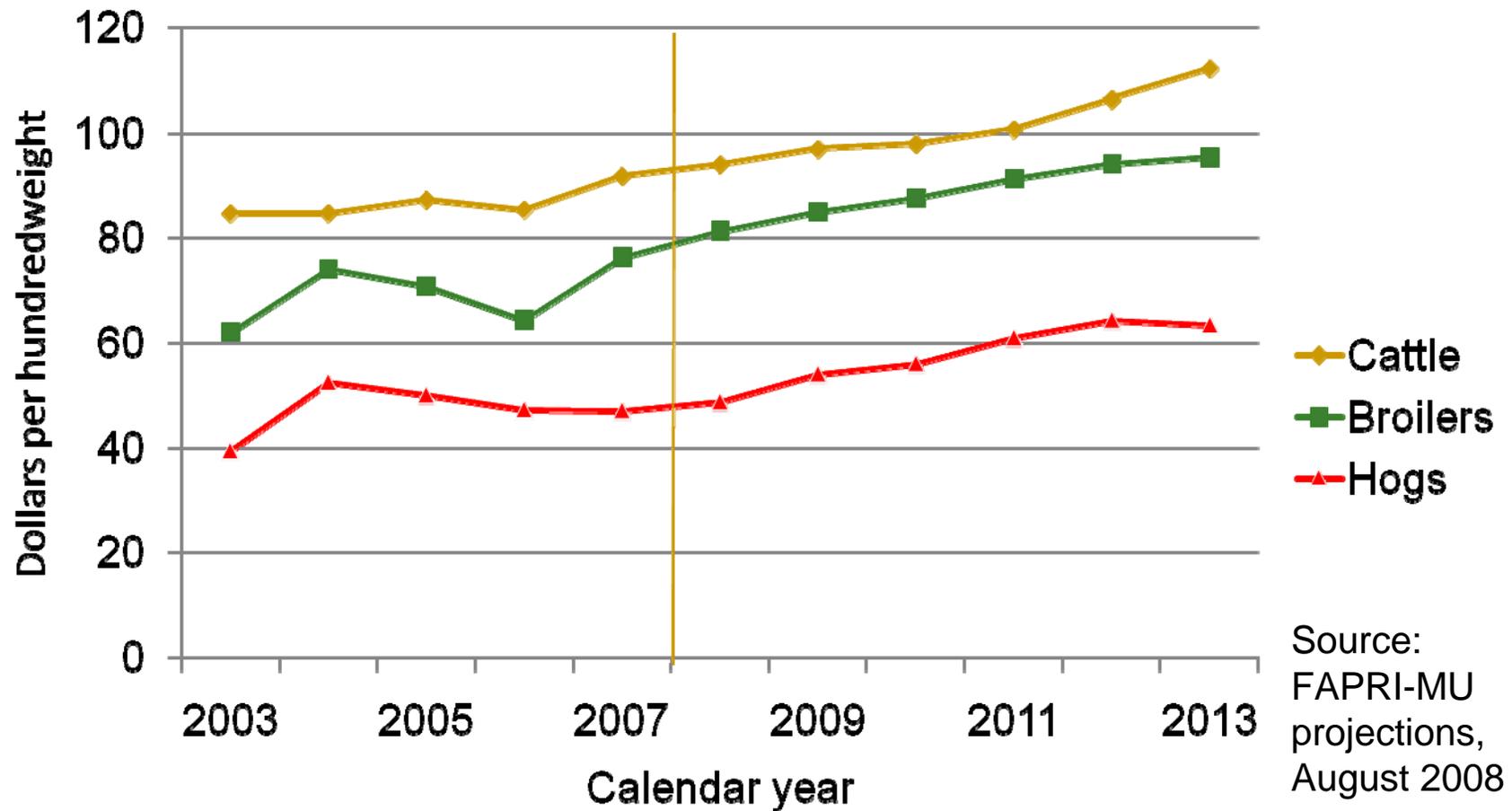
U.S. grain exports and corn used for ethanol production



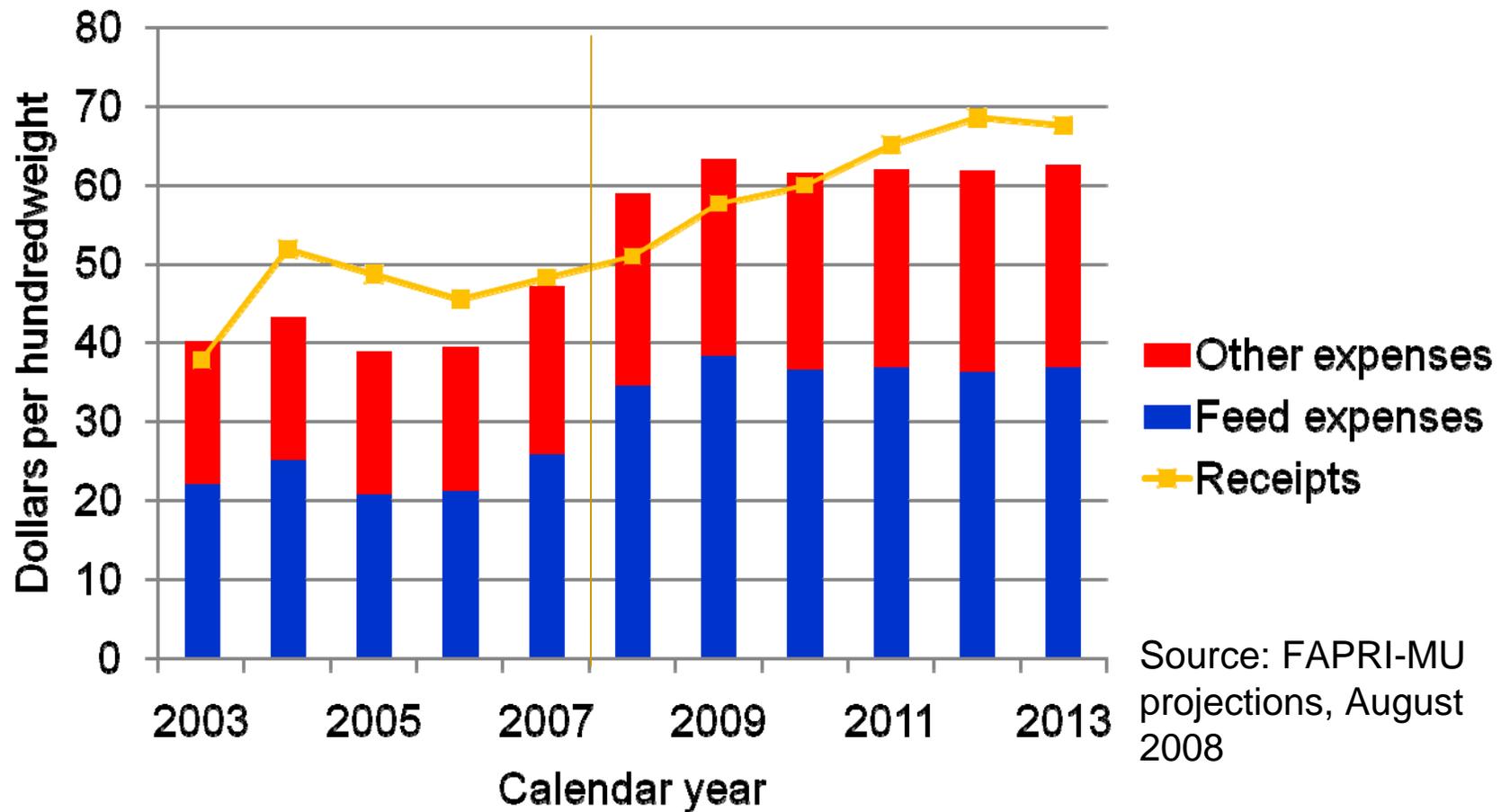
Feed prices: FAPRI-MU projections



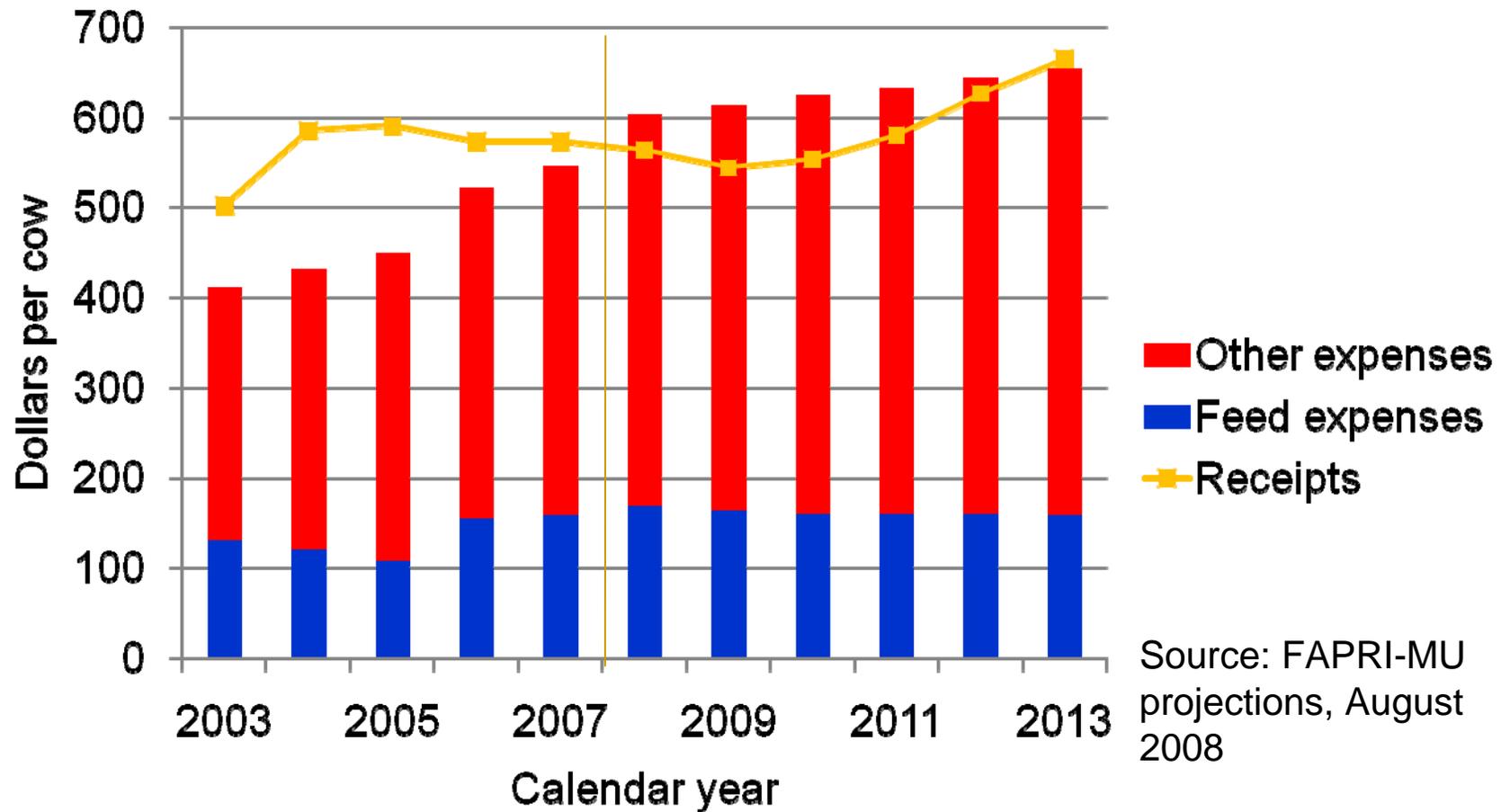
Livestock prices: FAPRI-MU projections



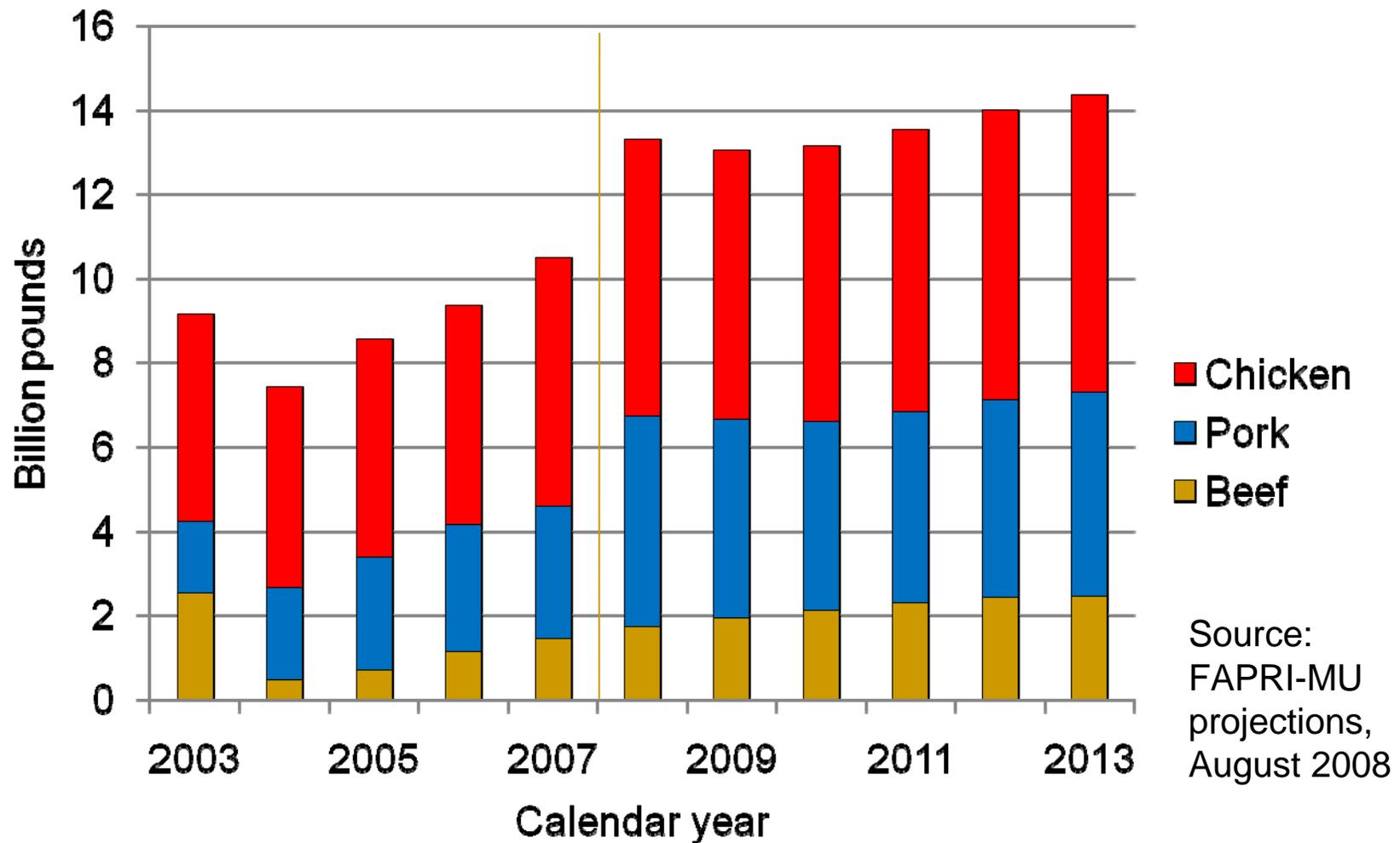
Hogs: Farrow-to-finish receipts and expenses



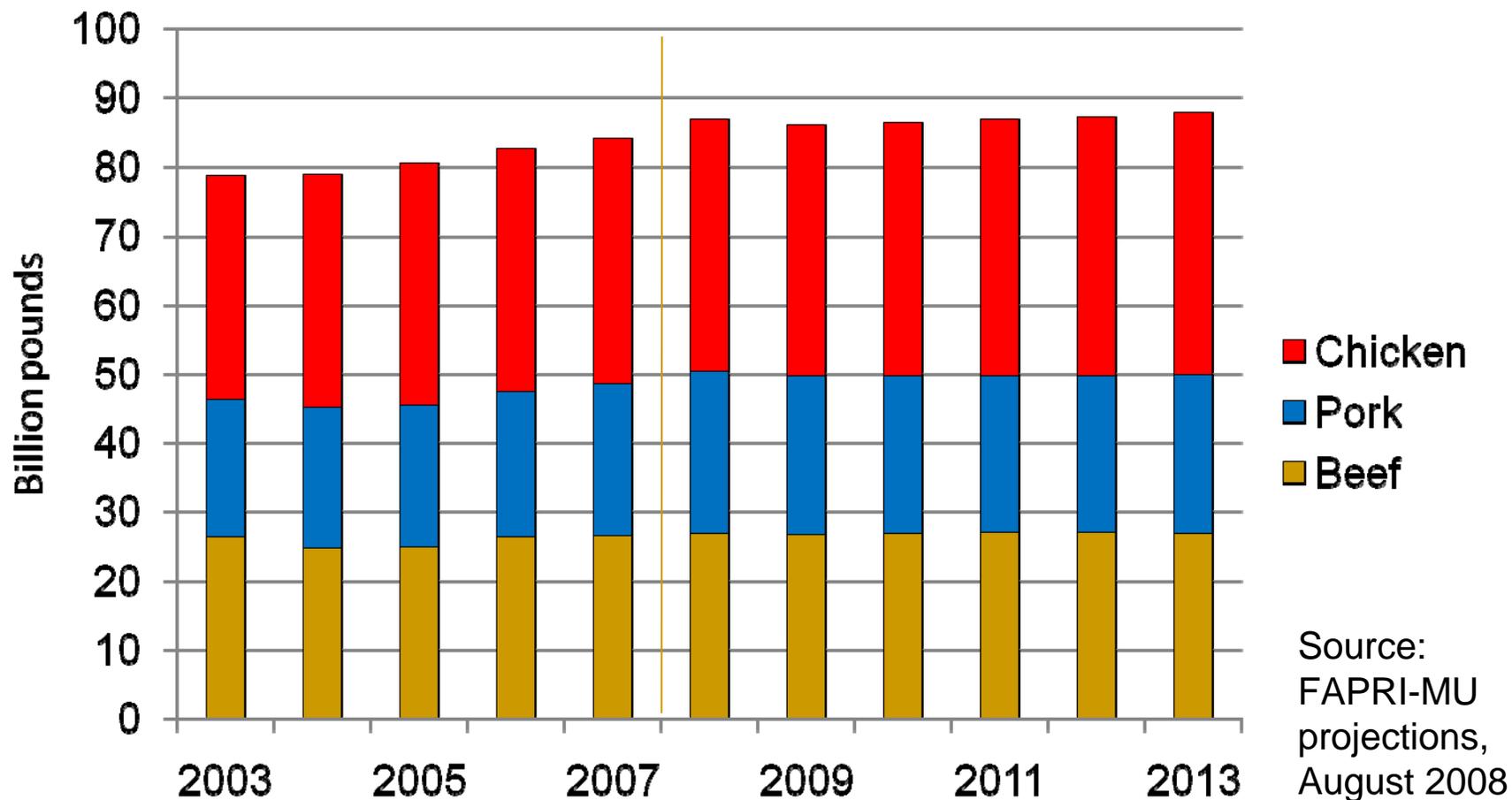
Cattle: Cow-calf receipts and expenses



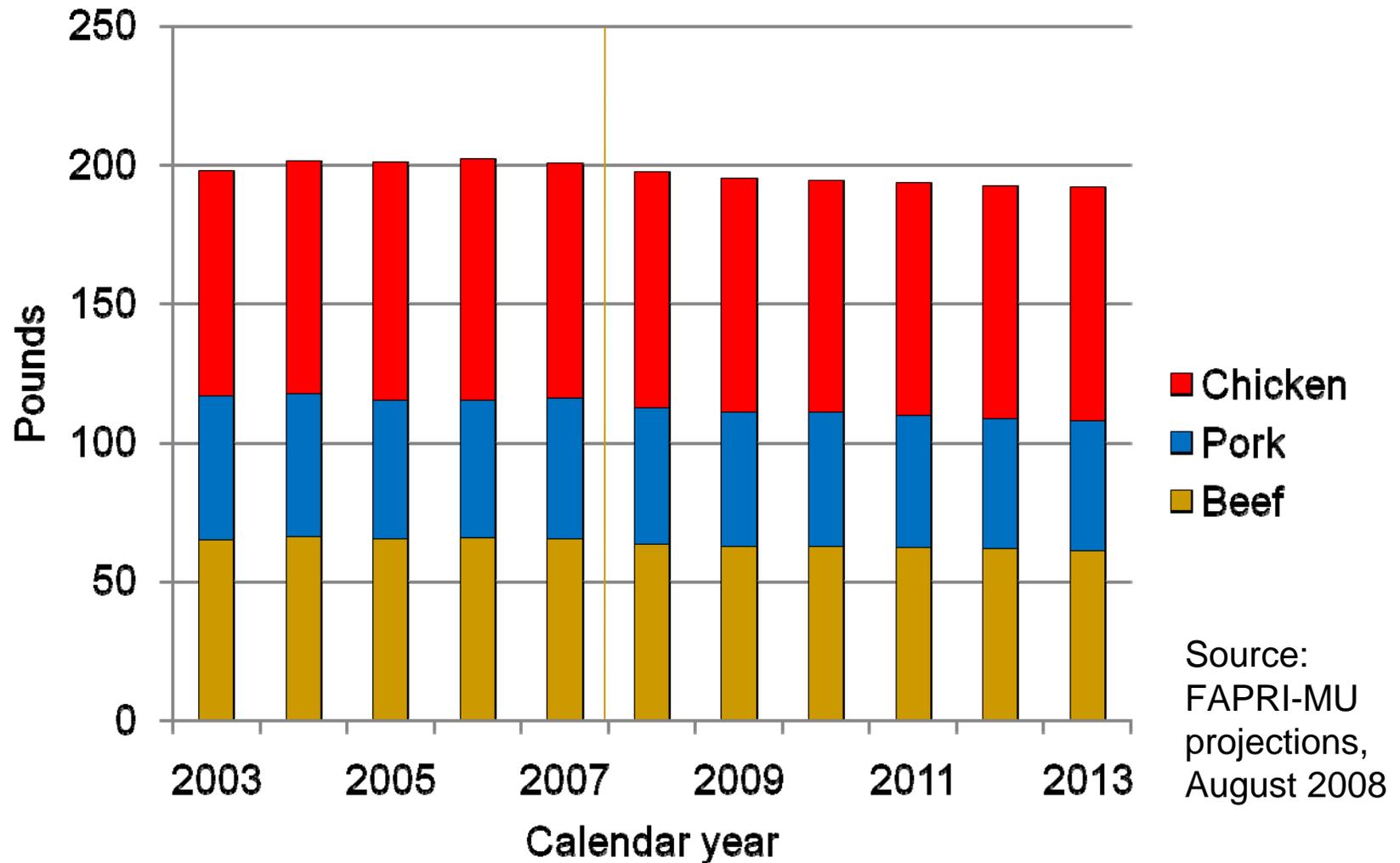
U.S. meat exports: FAPRI-MU projections



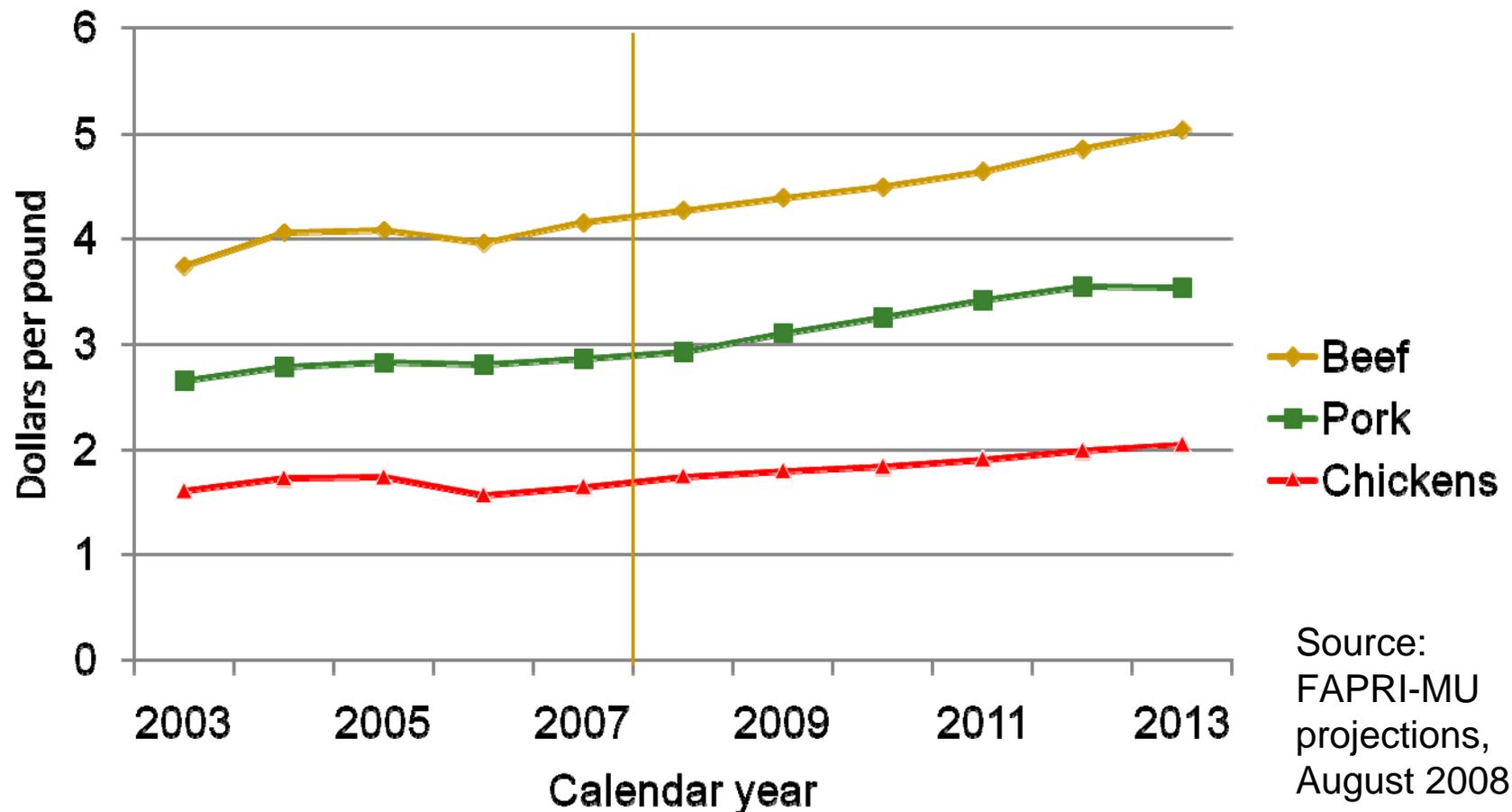
U.S. meat production: FAPRI-MU projections



U.S. meat consumption per capita: FAPRI-MU projections



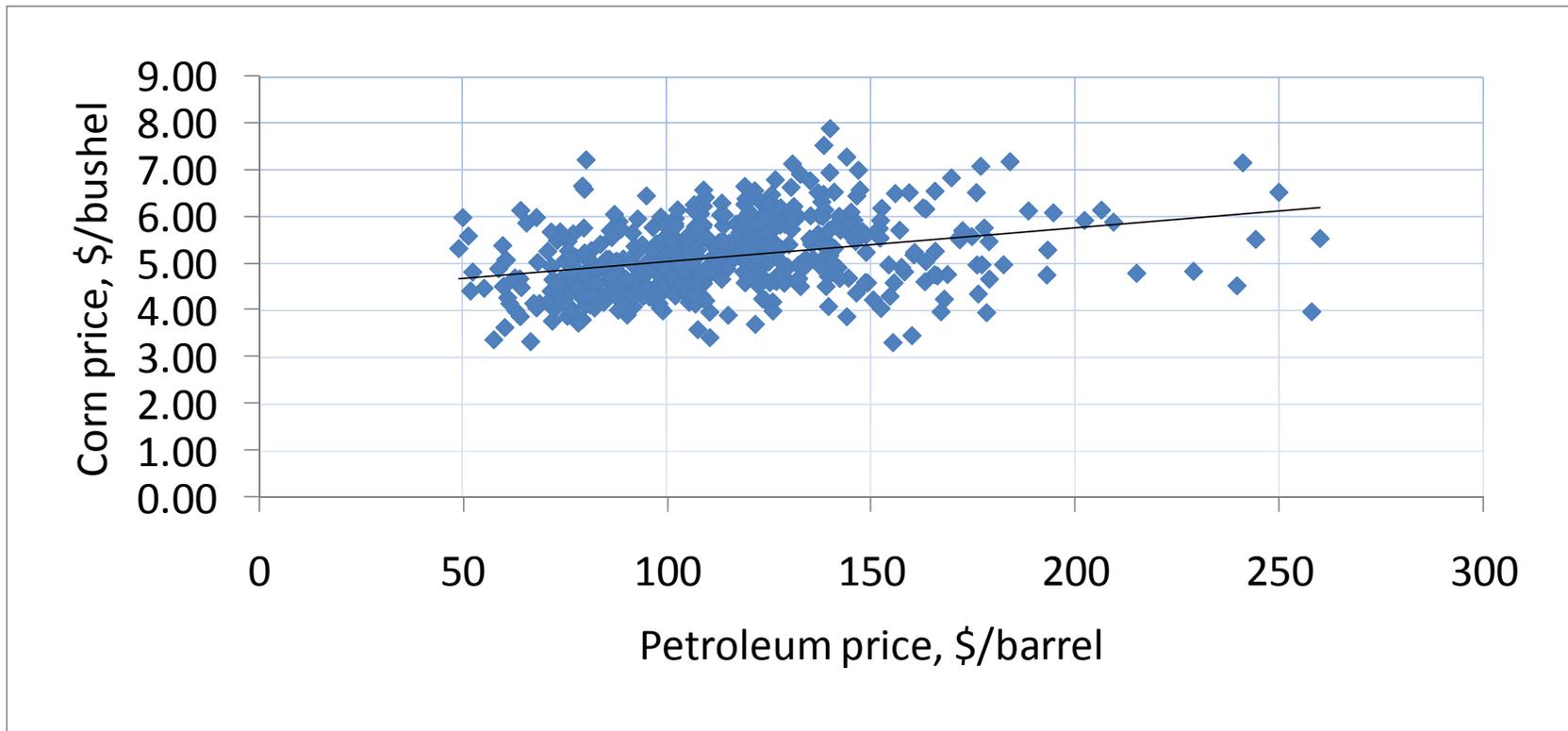
Retail meat prices: FAPRI-MU projections



Some (of very many) uncertainties

- Petroleum prices
 - Weather
 - Technological growth
 - Exchange rates
 - Economic growth
 - Biofuel policies
 - Agricultural policies
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2011/12 corn price and petroleum price



Source: FAPRI August 2008 stochastic baseline update

Thanks!

- Contact me at westhoffp@missouri.edu or 573-882-4647
 - Visit FAPRI-MU web page at www.fapri.missouri.edu
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