U.S. baseline outlook

Jarrett Whistance(WhistanceJL@missouri.edu)
Scott Gerlt (GerltS@missouri.edu)
Julian Binfield (BinfieldJ@missouri.edu)
FAPRI at the University of Missouri
www.fapri.missouri.edu

3rd Annual Womack Conference
Columbia, Mo
March 16, 2016
Contributing to the outlook

- Food and Agricultural Policy Research Institute at the University of Missouri (FAPRI-MU)
  - Crop and biofuel markets, government costs, farm income

- Agricultural Markets and Policy group at MU
  - Livestock and dairy markets, consumer food costs

- Agricultural and Food Policy Center (AFPC) at Texas A&M University
  - Outlook for representative farms

- Center for Economic Development at University of Nevada, Reno
  - International crop markets

- Cotton Economics Research Institute at Texas Tech University
  - Markets for cotton and other commodities

- Global Rice Marketing and Research Policy program at University of Arkansas
  - International markets for rice
Agenda

• Macroeconomy overview
• Biofuels
• Crops
• Livestock and Dairy
Faster U.S. growth and low inflation expected in 2016
Oil prices recover after sharp decline

Baseline WTI assumption

EIA STEO, March 2016

June futures, 3/14/2016
Lower feed, fuel prices reduce 2015 and 2016 costs
RFS volumes rise slowly

Calendar year

Billion gallons (ethanol eqv.)


Conventional gap
Advanced gap
Biomass-based diesel
Cellulosic
Biofuel production growth has slowed
Domestic ethanol use breaches 10% blendwall

Calendar year

Billion gallons

Page 37 of the U.S. Baseline Briefing Book
Biodiesel production expands at a modest pace

Calendar year

Billion gallons

Soy oil
Corn oil
Other fats/oils
Renewable diesel
Cellulosic diesel
Our baseline

• Assumes continuation of new 2014 farm bill
  – Allows re-enrollment in 2019

• 500 outcomes for every year
  – Generally report average
  – Helps account for known unknowns
  – Still unknown unknowns
World corn production

Source: USDA PSD Online, March 2016
World corn stocks

Source: USDA PSD Online, March 2016
World soybean production

Source: USDA PSD Online, January 2016
World soybean stocks

Source: USDA PSD Online, January 2016
Large crops result in lower prices
Planted area

Calendar year

Million acres

Soybeans

Wheat

Corn

Planted area

Calendar year

Million acres


240 245 250 255 260 265

12 major crops
Input costs decrease again
... but uncertainty exists
Corn production and use
Corn use

September-August marketing year

- Feed & residual
- Ethanol & coproducts
- Exports
- Ending stocks
U.S. exports to China

Source: USDA FAS, March 2016
Corn returns

Dollars per acre

September-August marketing year

- Market
- Program payments
- Ins. net indemnities
- Variable expenses
Soybean trade

Source: FAPRI-MU collaborators at the University of Nevada, Reno, January 2016
U.S. and Brazilian soybean prices

In U.S. dollars per metric ton

-34% vs. 2013

Source: USDA’s Foreign Agricultural Service “Oilseeds: World Markets and Trade,” various issues and author calculations using monthly exchange rates reported by www.x-rates.com
U.S. and Brazilian soybean prices

**In U.S. dollars per metric ton**

- Oct 2013
- Oct 2014
- Oct 2015

**In Brazilian reals per metric ton**

- Oct 2013
- Oct 2014
- Oct 2015

-34% vs. 2013

+17% vs. 2013

Source: USDA’s Foreign Agricultural Service “Oilseeds: World Markets and Trade,” various issues and author calculations using monthly exchange rates reported by [www.x-rates.com](http://www.x-rates.com)
Soybean production and use

Billion bushels

Production
Total use

September-August marketing year

09/10 11/12 13/14 15/16 17/18 19/20 21/22 23/24 25/26
Soybean returns

September-August marketing year

Dollars per acre

- Market
- Program payments
- Ins. net indemnities
- Variable expenses
Wheat production and use

Billion bushels

Production

Total use

June-May marketing year

09/10  11/12  13/14  15/16  17/18  19/20  21/22  23/24  25/26
Upland cotton returns

August-July marketing year

Market  Program payments  Ins. net indemnities  Variable expenses
Livestock and dairy outlook

U.S. outlook from AMAP
Agriculture Markets and Policy

www.amap.missouri.edu
Production growth outpaces meat trade

Billion pounds vs. previous year

Production growth and net trade from 2003 to 2017. Projections by AMAP.
The beef cow herd grew by 1 million last year.
Prices decline as more meat reaches U.S. markets

Choice boxed beef
Pork cutout
12-city chicken

Page 5 of the U.S. Baseline Briefing Book. Projections by AMAP.
Poultry consumption outpaced beef and pork in 2015
World dairy prices show no sign of recovery

Global Dairy Trade, March 15th 2015
Butter and cheese prices to fall further in 2016
Dairy margins to remain tight in 2016

Milk price
MPP feed component
MPP margin
Net exports of butter and cheese declined in 2015.
Thanks!

Download the full Briefing Book from:

www.fapri.missouri.edu