

Oilseed and Products Supply/Demand: Trends, Drivers & Challenges

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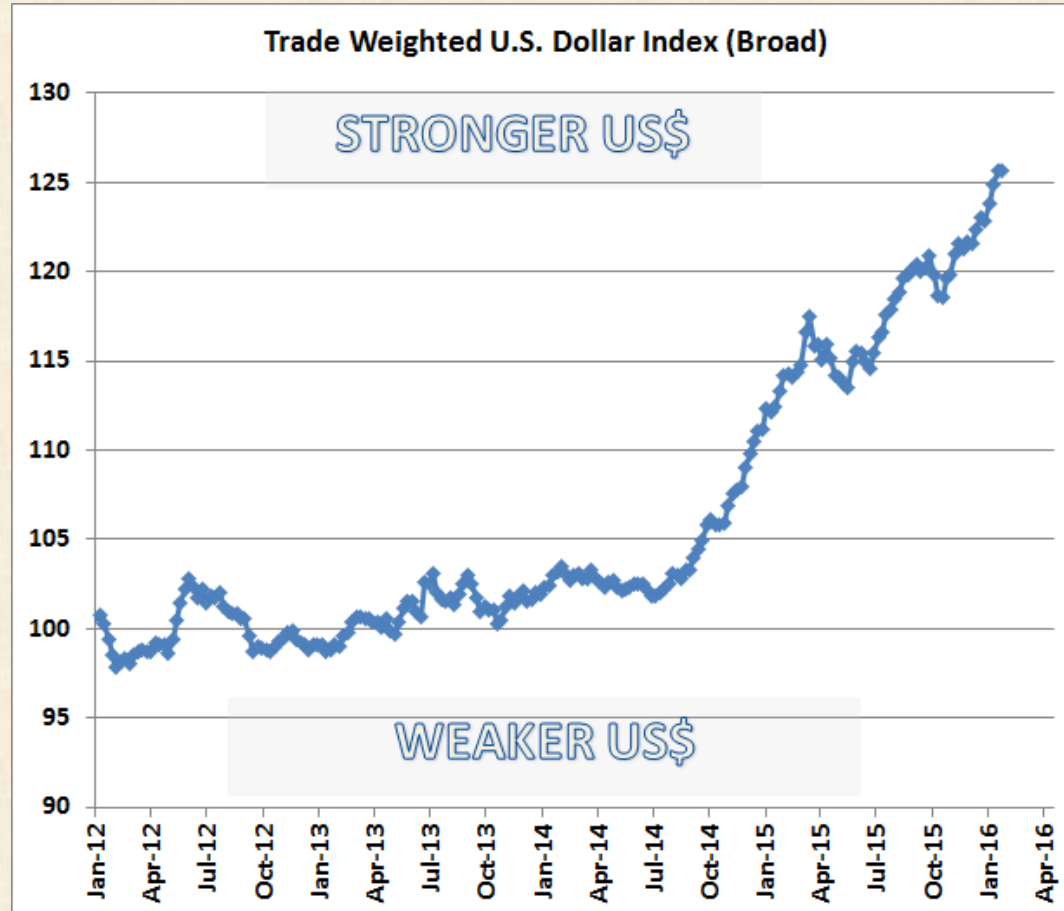
February 10, 2016

Key Issues to Focus On

- Where will the US dollar go?
- Where will crude oil prices go?
- How much more impact from Argentine policy changes?
- US corn/soybean planting decision this spring
- Canada canola/wheat planting decision this spring
- Weather – do we believe the myth of La Nina?
- Impact of tighter US & world vegoil supplies
- Price ideas for 2016

Since July 2014: US Dollar Very Strong

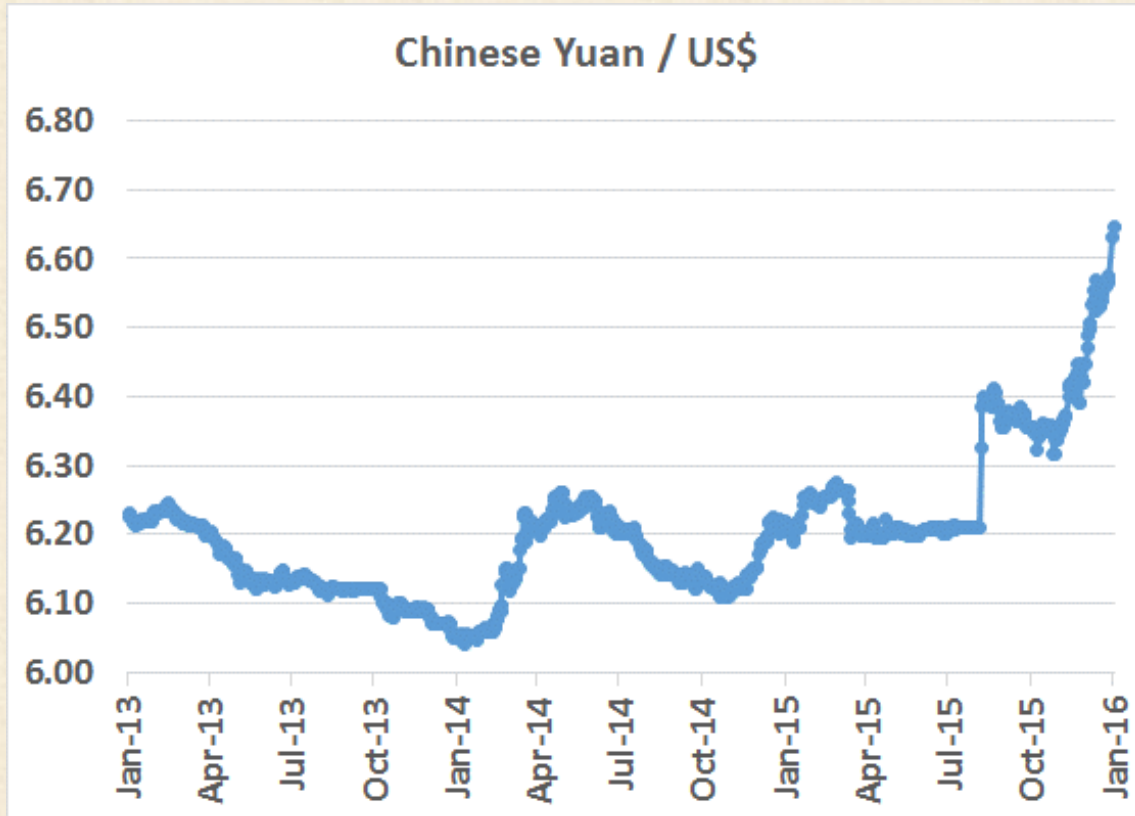
- gaining 20% vs major trade partners



- Highest level since 2002
- Reflects US economy performing (relatively) very well compared to other global economies
- How does this play out:
 - US imports less expensive
 - US exports more expensive
 - We are exporting inflation to our trade partners
- Key Implications:
 - Negative for commodity prices
 - Negative for US exports of ag products, etc.
 - Positive for competing producers

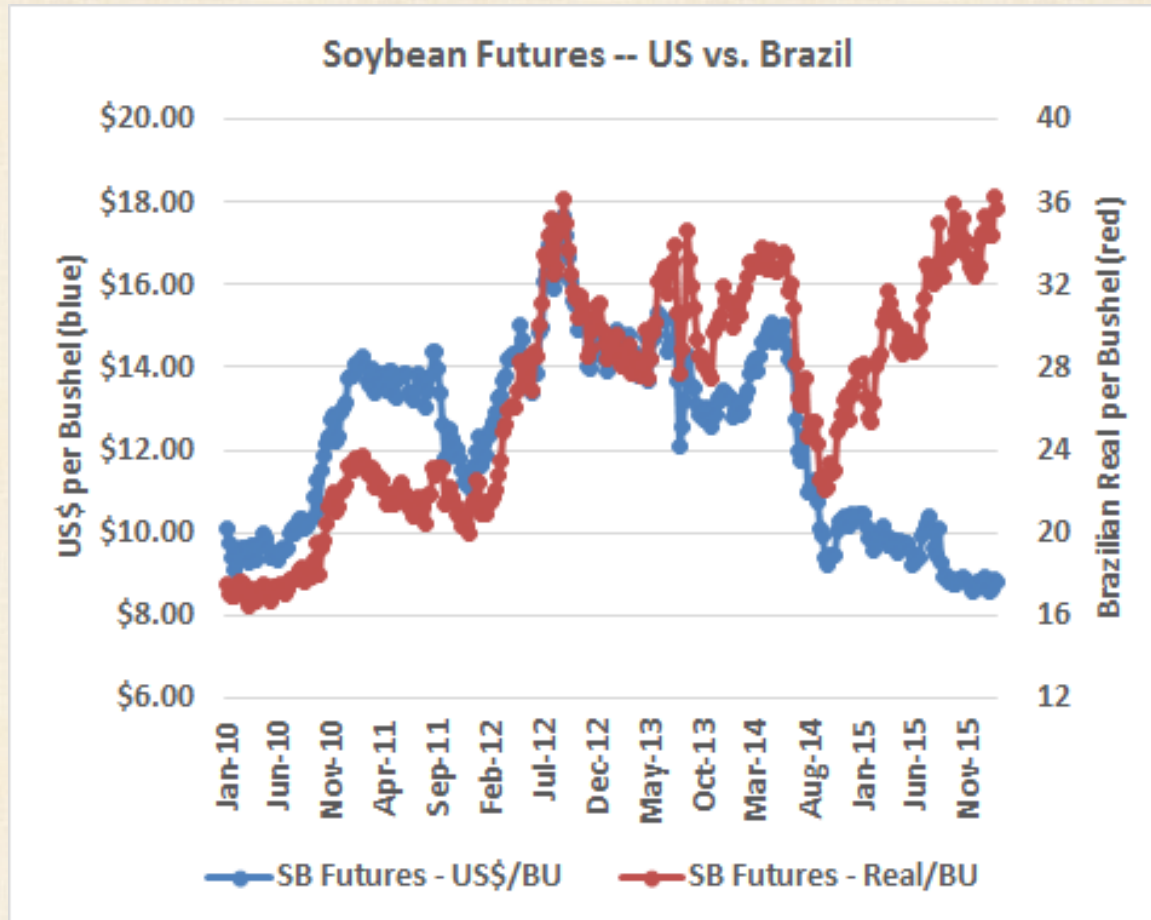
China's Slowing Economy, Currency Depreciation

- Primary Catalyst for Declining Commodity Prices



- **China's strong economic growth over the past decade has been the key driver behind higher commodity prices**
- **Now, China's economy is slowing, and with it comes lower commodity demand and prices**
- **The Chinese Yuan has declined sharply over the past two months, leading to financial turmoil in the US, as well as lower crude oil prices**

The Price of Soybeans: Declining in US\$/Bushel, But very attractive to the Brazilian farmer



The Impact of a Weaker Brazilian Real

- Soybean futures – US\$/bushel – have declined by 16% over the past year from \$10.50 to less than \$9.00
- Soybean futures – in Real/bushel, have increased by 27%
- While US soybean farmer returns are historically poor, returns to producing soybeans in Brazil are very favorable

Crude Oil Declines to 7-year lows

- *Off more than 2/3rds in just 18 months*



- **NYMEX crude has now approached \$30, levels not seen since early 2009**
- **Fundamentals largely justify the decline**
 - Large US and world inventories
 - OPEC “Call” remains well below production
 - OPEC showing no sign of slowing
 - Global economic growth slowing
 - China devaluation
- ***Potential to see crude in \$20s, but far from certain that a sub-\$30 market can be sustained***

Long-Term Crude Oil Prices:

Where will futures be during Jan 2020?

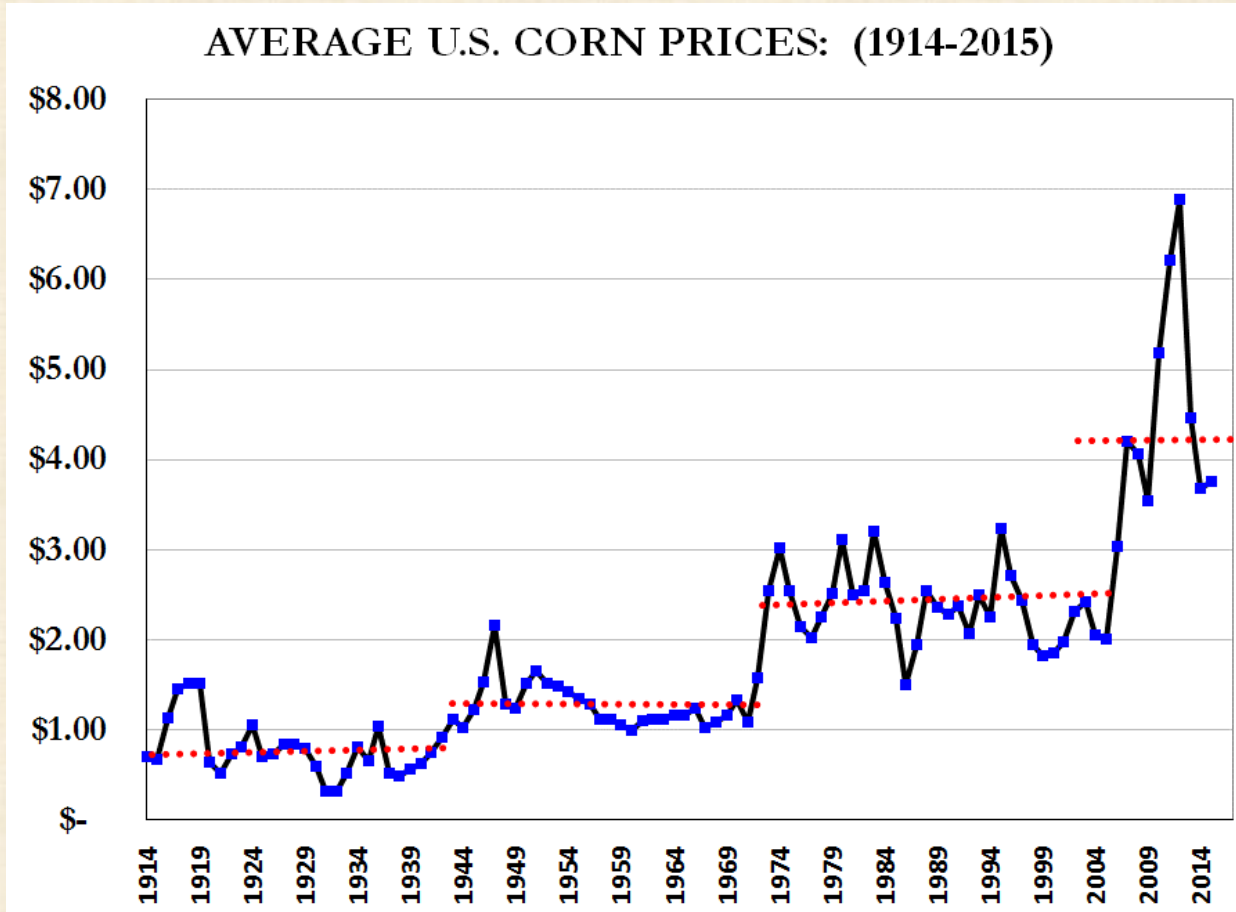


Where will nearby NYMEX crude oil price close on February 10, 2020?

- A. Below \$25**
- B. Between \$25-35**
- C. Between \$35-50**
- D. Between \$50-75**
- E. Above \$75**

Prices Move to a new plateau in 2007

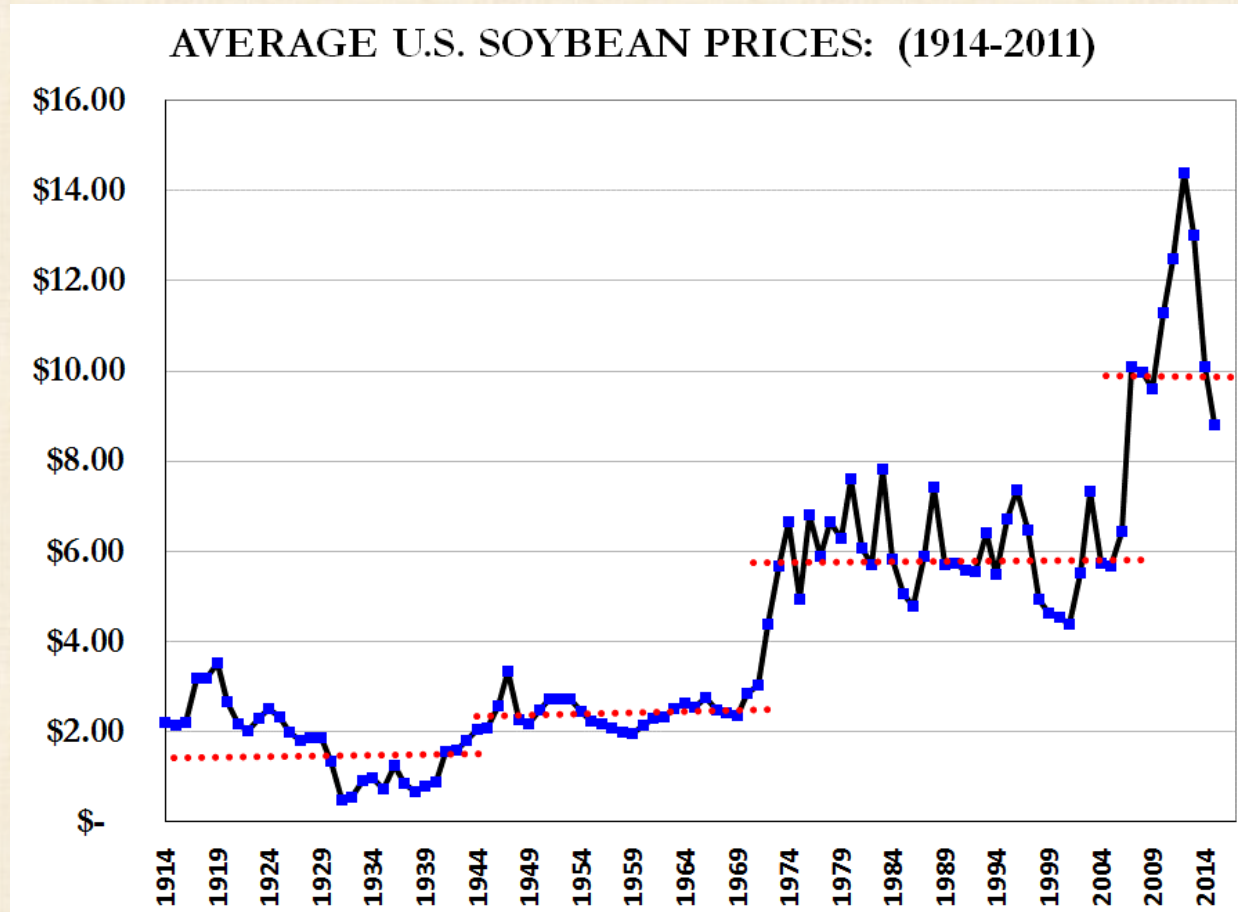
- will we return to pre-2007 levels?



- History shows corn prices trading in a range for decades, then moving to “new plateau”
 - 1914 to 1945 (\$.81)
 - 1946 to 1972 (\$1.29)
 - 1973 to 2006 (\$2.40)
 - 2007 to present -- ??
- In the past, prices have moved to a new plateau, and not returned to old prices levels
 - New plateau lows higher than old plateau highs
- *A return to old plateau (\$2.40 +/-) is unlikely*
 - *But watch US\$ and crude oil prices*

Prices Move to a new plateau in 2007

- will we return to pre-2007 levels?

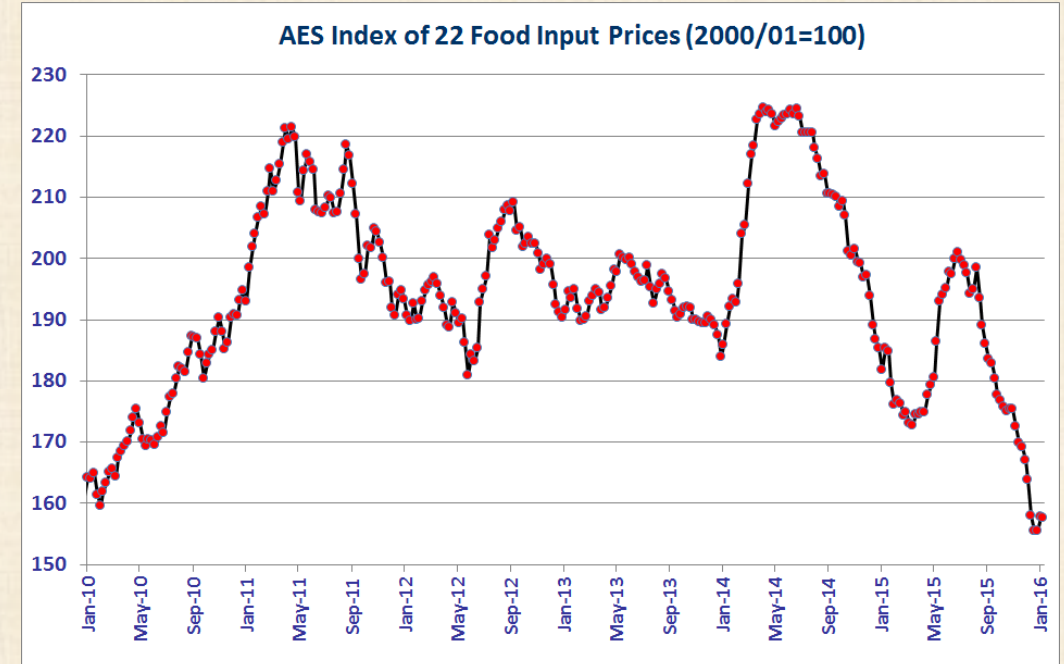


- History shows soybean prices trading in a range for decades, then moving to “new plateau”
 - 1914 to 1945 (\$1.76)
 - 1946 to 1972 (\$2.54)
 - 1973 to 2006 (\$5.98)
 - 2007 to present -- ??
- In the past, prices have moved to a new plateau, and not returned to old prices levels
 - New plateau lows higher than old plateau highs
- *A return to old plateau (\$5.98 +/-) is unlikely*
 - *But watch US\$ and crude oil prices*

Commodity Price Indices Off Sharply During 2015

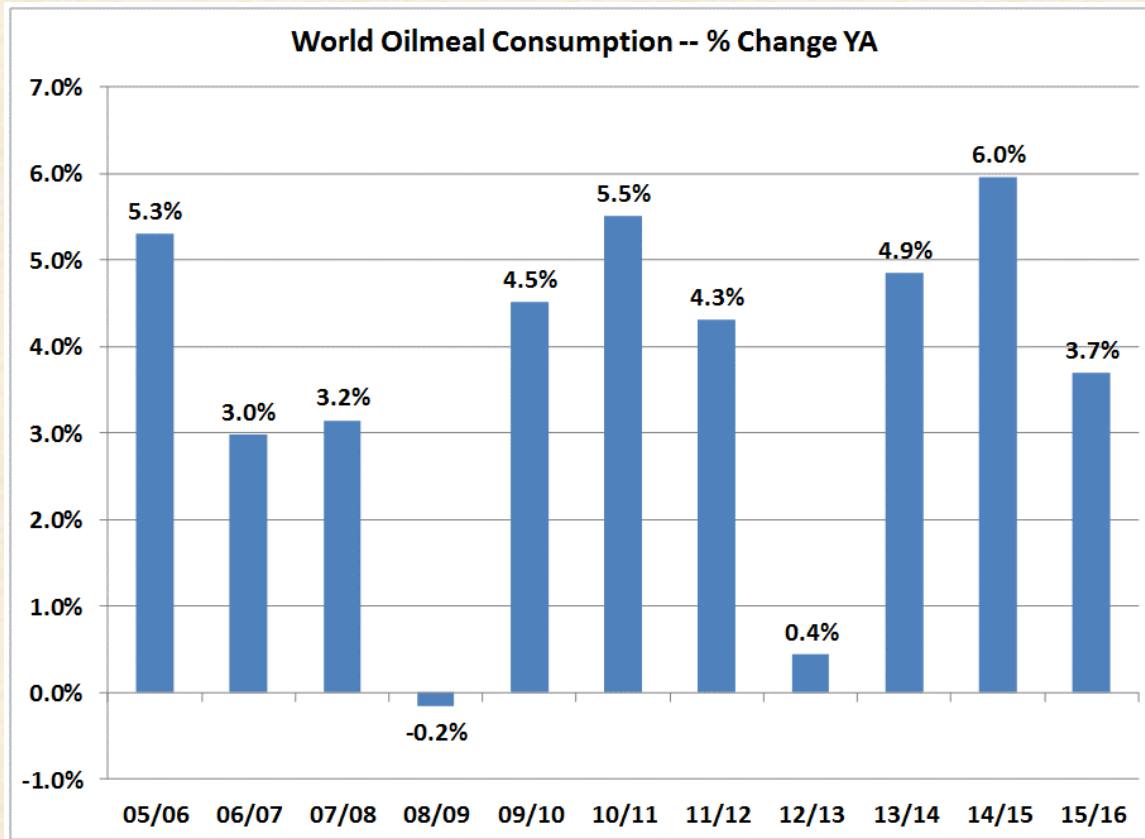


Thomsen-Reuters Commodity Price Index – off 27% vs. YA



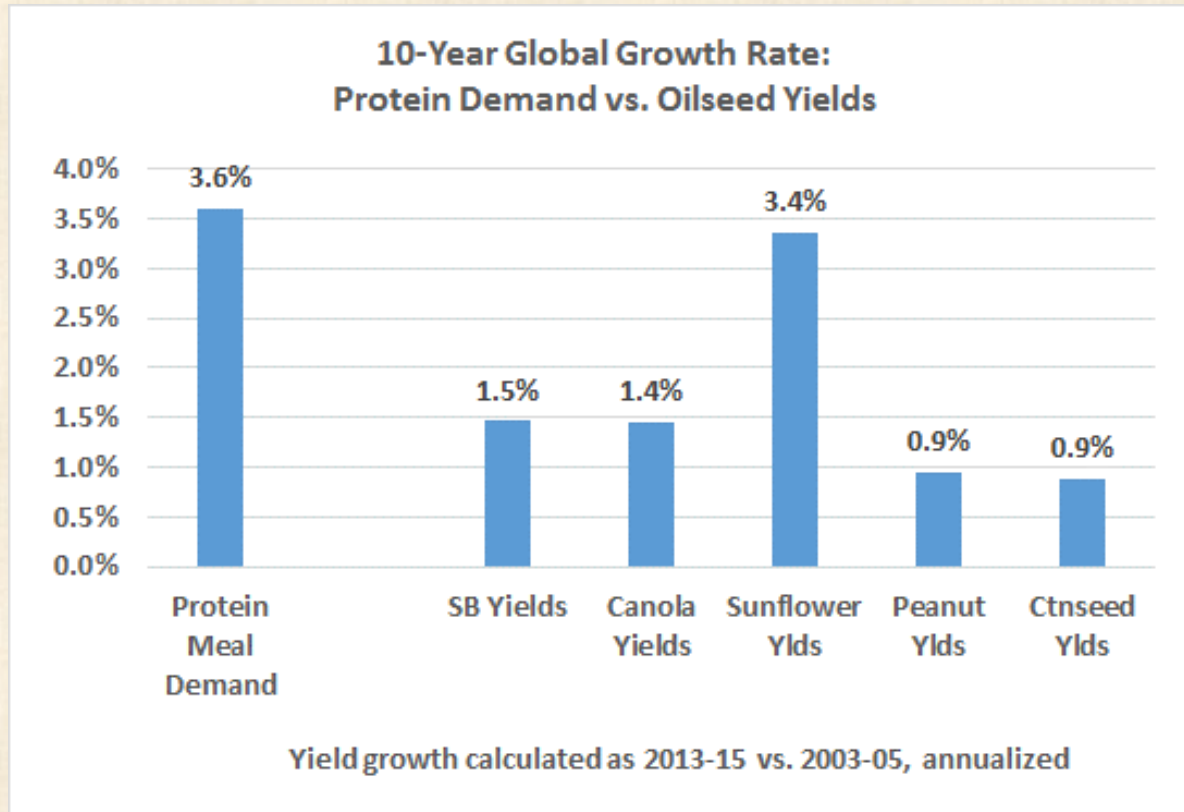
AES Food Input Cost Index – off 15% vs. YA

Strong Global Protein Meal Demand



- Growth of 3.6% annually over the past 10 years
- Led by developing countries
 - Slower growth in developed economies
- World +36%
- **China +75%**
- Brazil +63%
- Argentina +175%
- India +46%
- Indonesia +106%
- Russia +93%

Demand Growing Faster Than Yields: *Need More Oilseed Acres!*

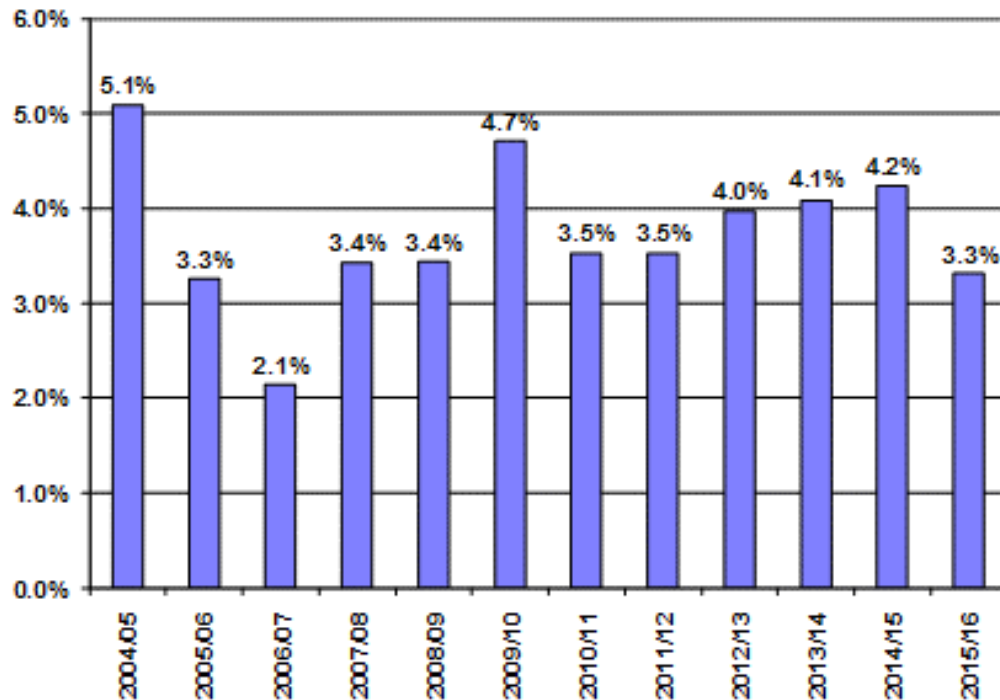


- Over the past 10 years, global protein meal demand has been growing at 3.6% rate
- During the same time, oilseed crop yields have been rising at an average annual rate of 1.7% (0.9%-3.4%)
- *Implication: More oilseed acreage will continue to be needed to meet global demand*

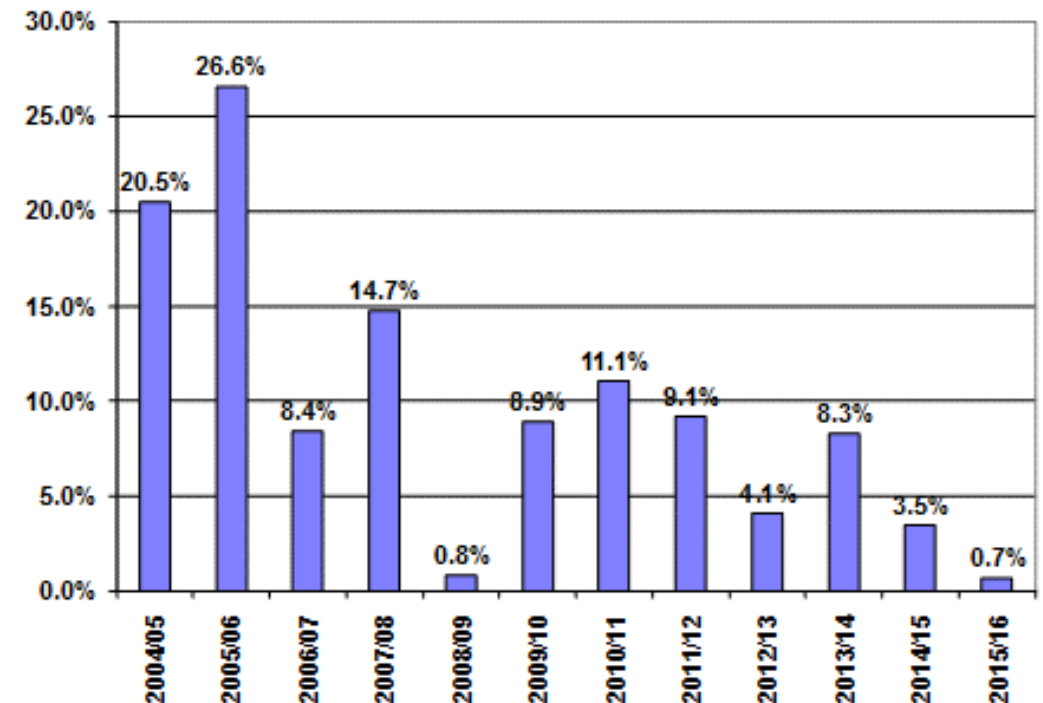
Global Vegoil Demand Has Also Been Robust

- Both Food and Biofuel Use Have Contributed

World Vegoil Usage - Food Use % Change

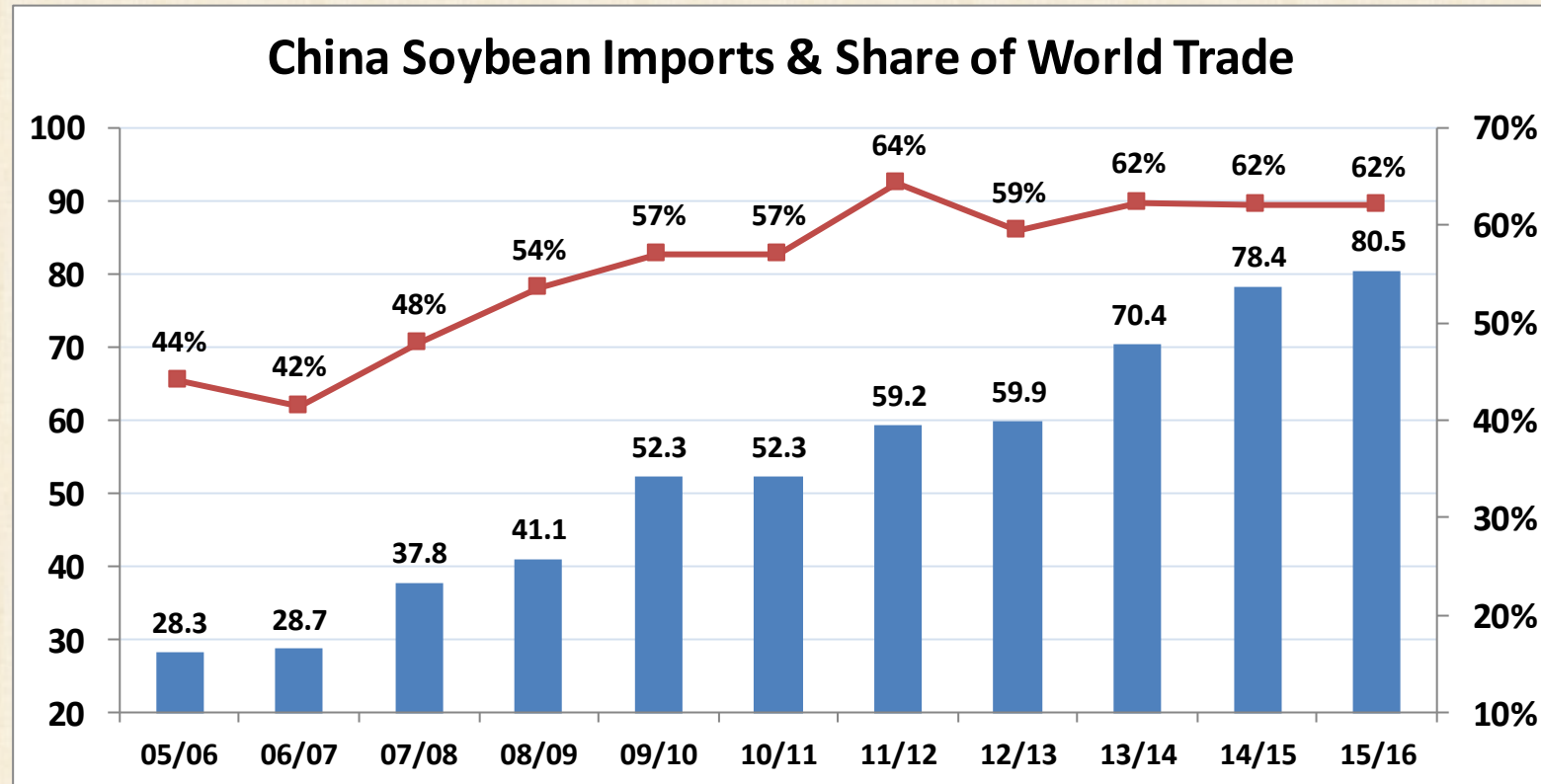


World Vegoil Usage - Industrial (Biofuel) Use % Change



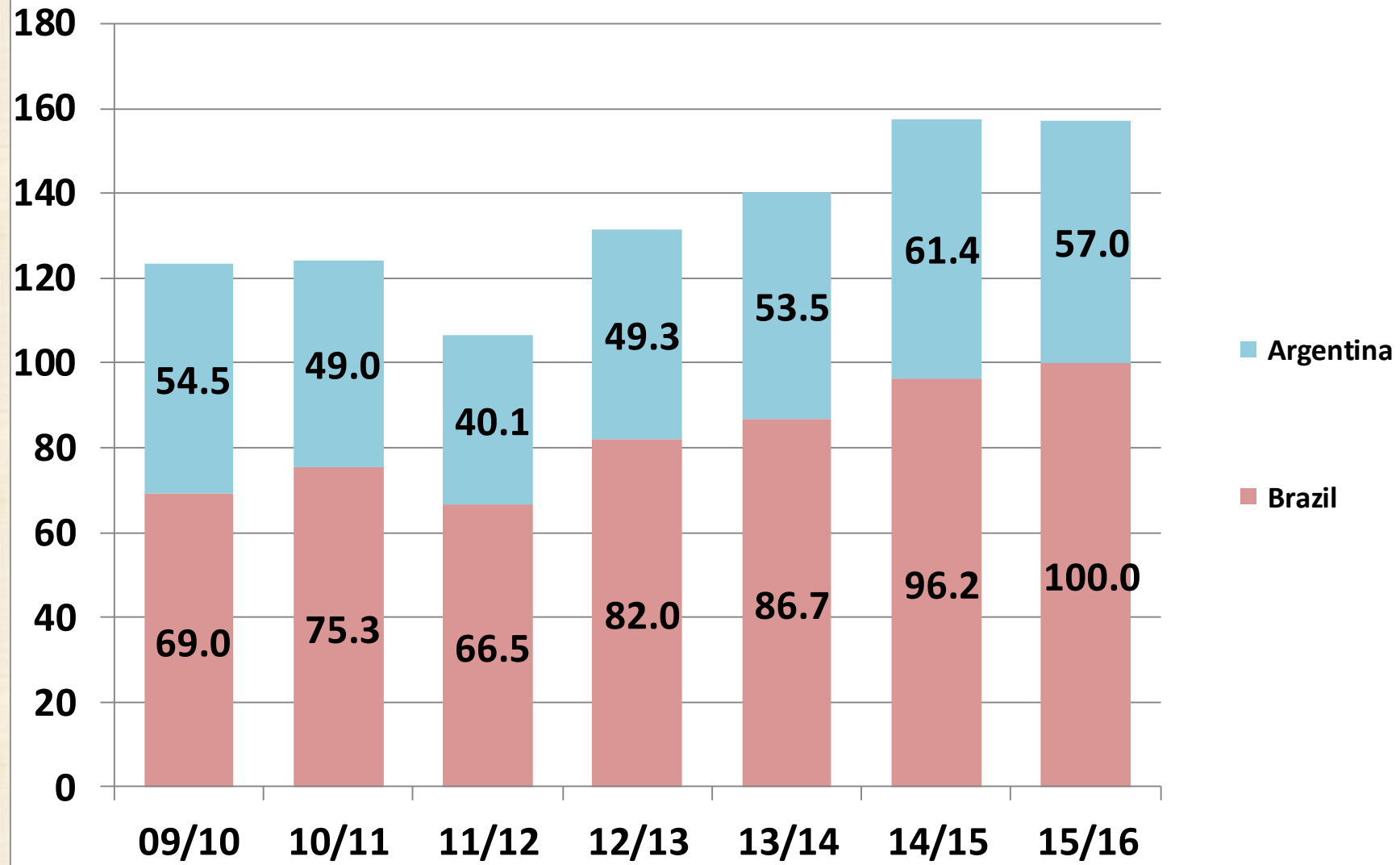
Chinese Soybean Imports

2015/16F: 80.5 MMT, equal to 64 mm acres



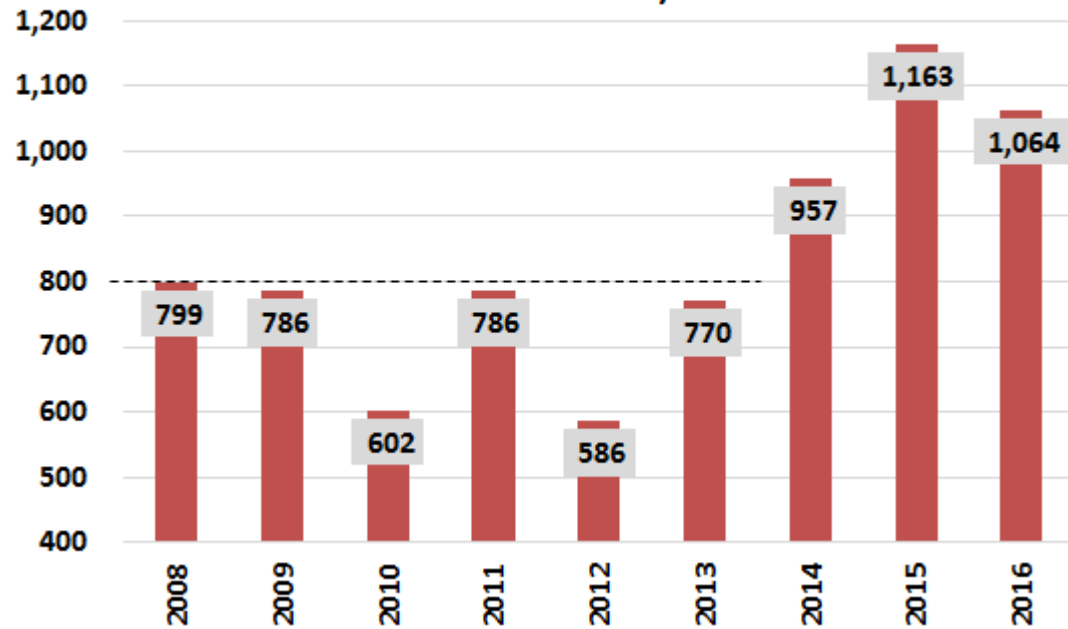
- Watch USDA Feb 25 (Outlook) forecast for 2016/17 - 84-86 MMT

Brazil/ Argentina Soybean Production (15/16F)

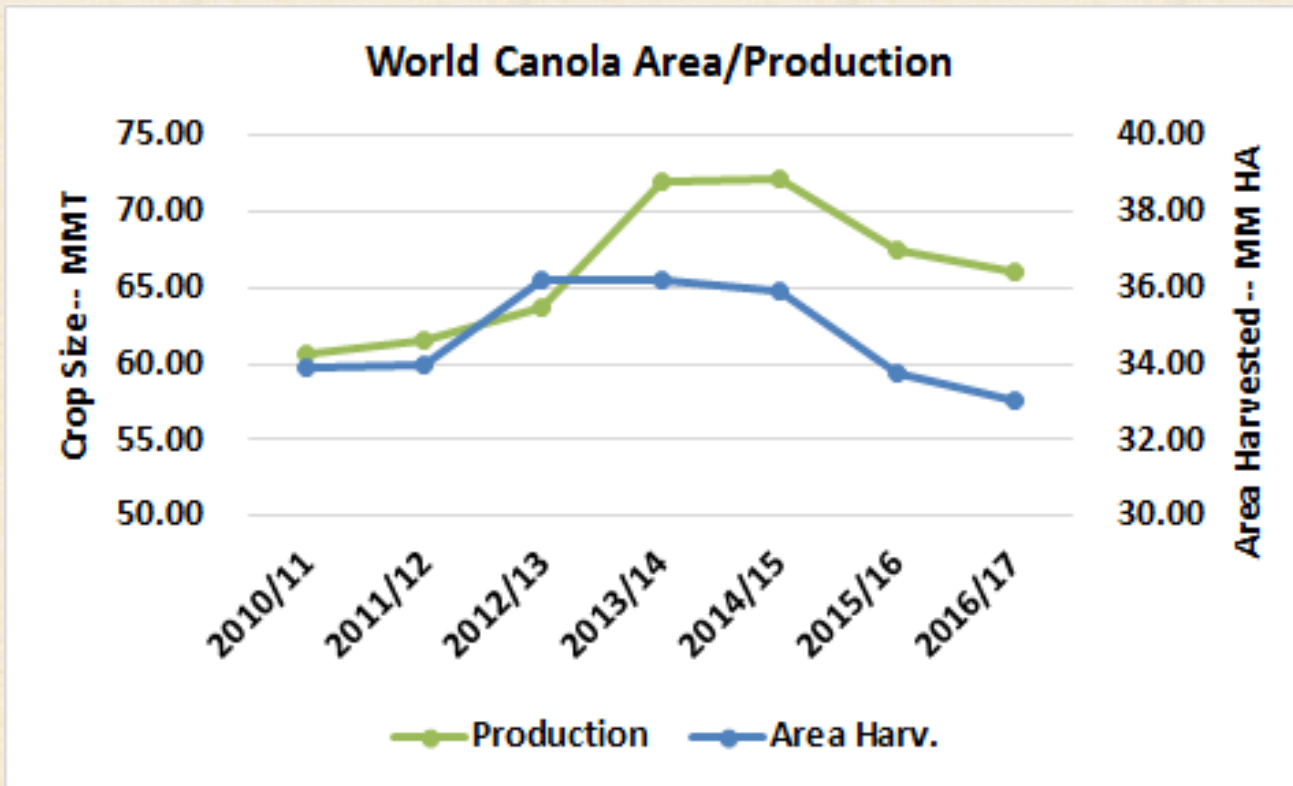


Argentina Begins Liquidation of Surplus SBs

September 1 Argentina Soybean Stocks (MM Bus, 2016F)



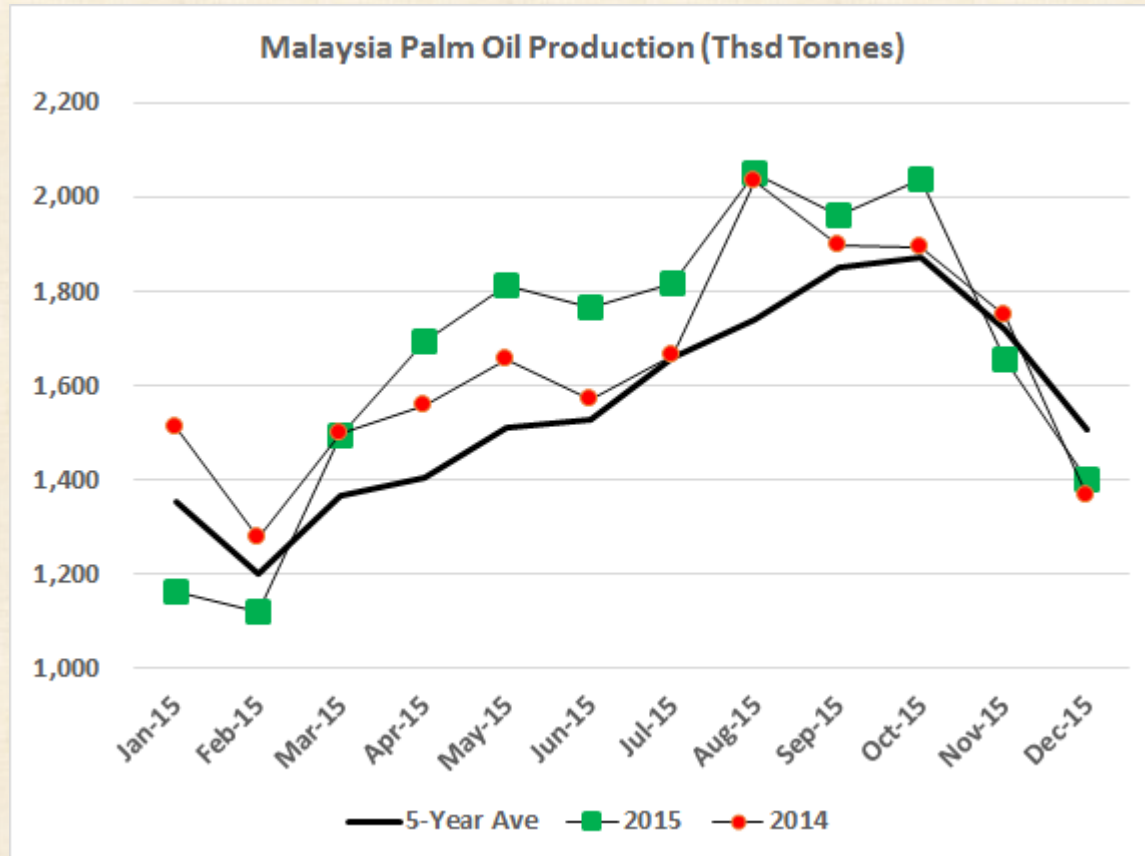
Tightening World Canola Supplies



Canadian Rapeseed Supply/Demand (Million Acres/Tonnes)						
		12/13	13/14	14/15	15/16	16/17
Area Harvested	MM Acres	21.7	20.2	20.6	20.0	19.8
Yield	BU/Acre	28.1	40.6	35.1	37.9	37.0
Production	MMT	13.9	18.6	16.4	17.2	16.6
Beg. Stocks	MMT	0.7	0.6	3.0	2.3	1.5
Total Supply	MMT	14.7	19.2	19.5	19.6	18.4
Exports	MMT	7.1	9.2	9.2	9.6	9.0
Crush	MMT	6.7	7.0	7.4	8.1	8.0
Other Use	MMT	0.3	0.0	0.6	0.4	0.3
Total Use	MMT	14.1	16.2	17.2	18.1	17.3
Ending Stocks	MMT	0.59	3.01	2.32	1.52	1.14
% of Use		4.2%	18.6%	13.5%	8.4%	6.6%

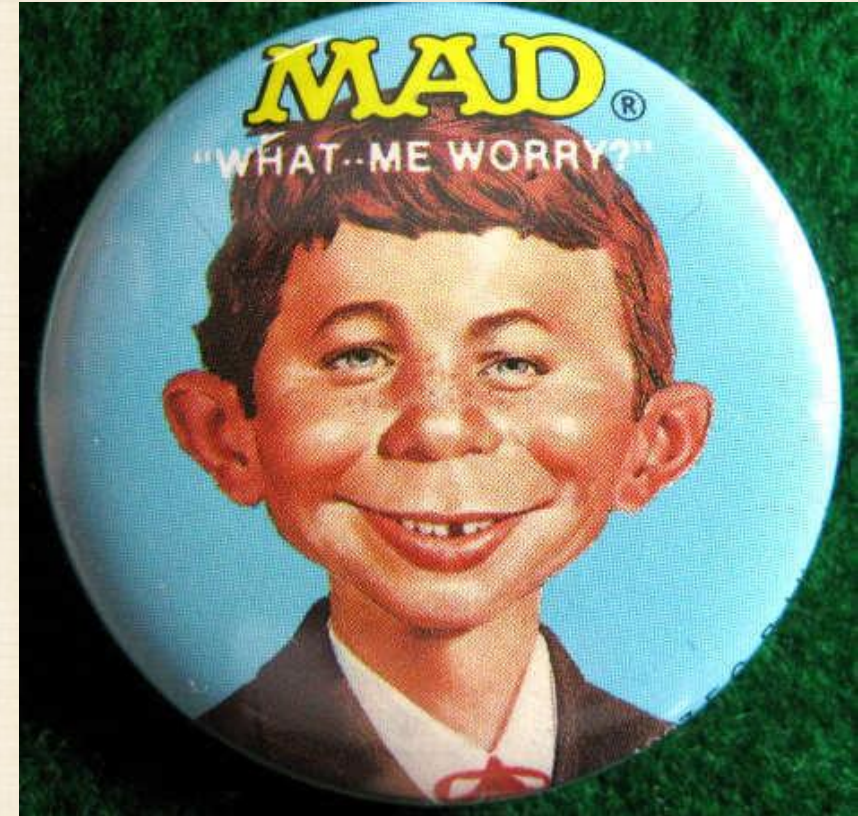
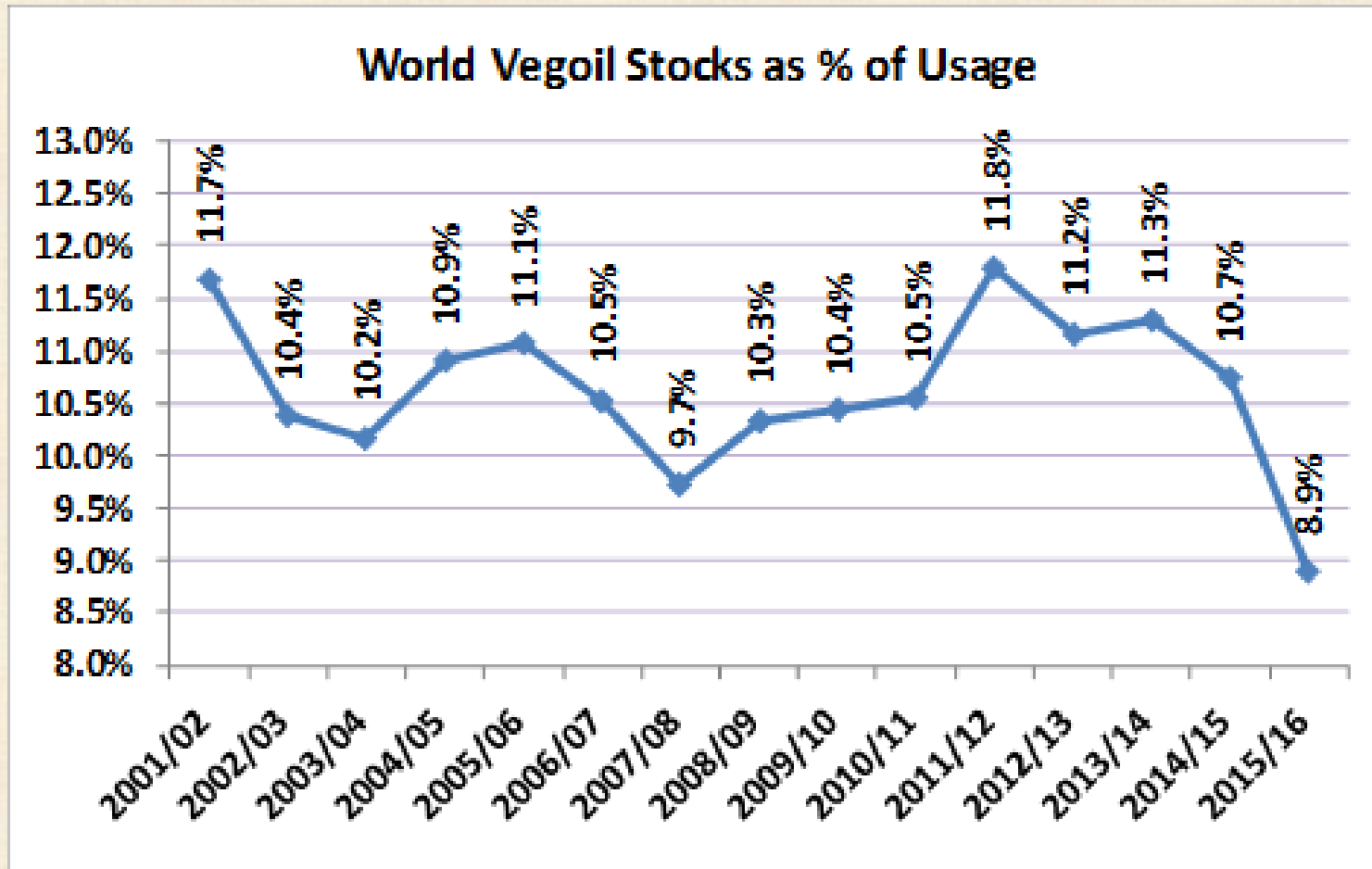
Slowing Malaysian Palm Oil

- Further declines in 2016 due to El Nino?



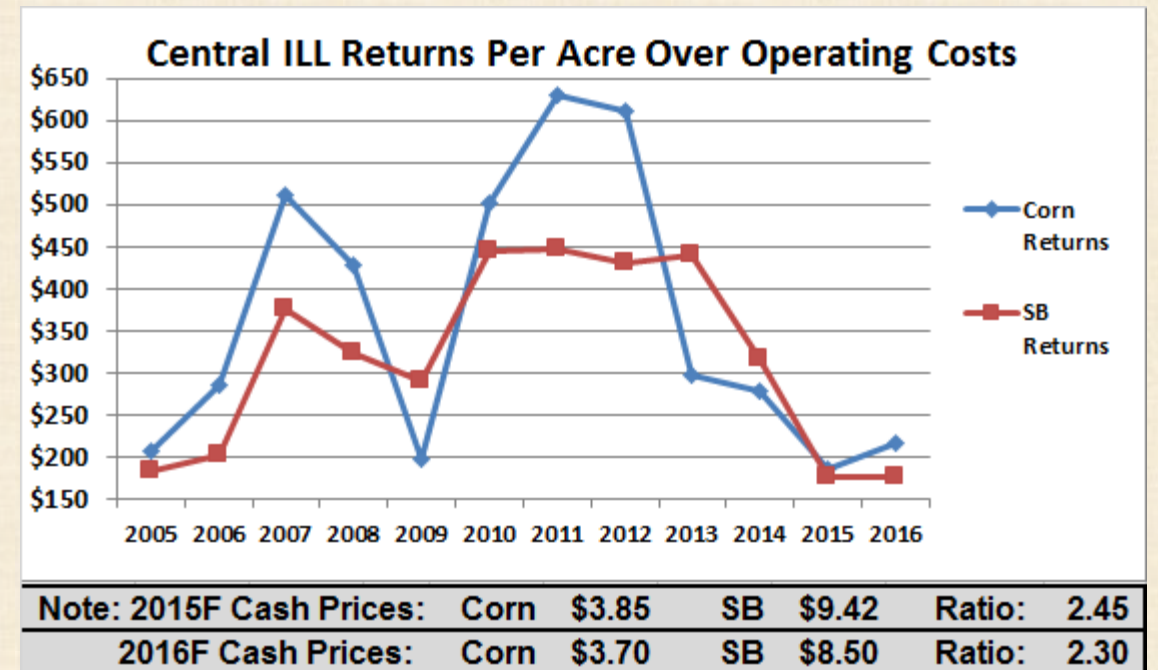
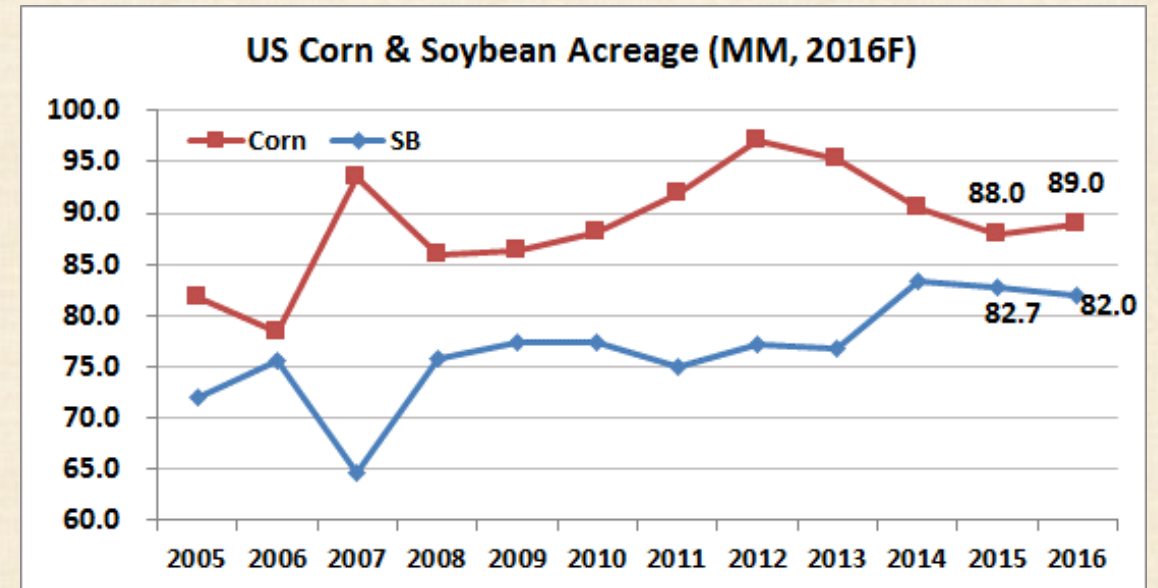
- **No significant shortfall at present**
- **However, output in Malaysia and Indonesia expected to fall below year ago levels in coming months**

World Vegoil Supply/Demand Becoming Very Tight



2016 US Corn/SB Acres

- Returns for both corn and soybeans will remain historically poor
- Combined corn and soybean acreage expected to remain about unchanged
 - Impact of lower returns offset by (expected) normal spring planting weather
- Net result is forecast of limited changes in planted acreage in 2016



El Nino/La Nina:

- Current event is strongest in 65 years
- But with ill-defined implications for Summer 2016 Weather

Ten Strongest El Ninos Since 1950

Crop Year	Peak SST Oct-March	Min SST April-Sept	Peak to Trough	SB Yld as % Trend
1998	2.32	(1.13)	3.45	103.4%
1983	2.21	(0.25)	2.46	82.7%
1973	2.03	(1.32)	3.35	100.2%
1966	1.87	(0.02)	1.89	101.7%
1958	1.80	0.31	1.49	110.9%
1992	1.65	(0.04)	1.69	106.7%
2010	1.42	(1.41)	2.83	102.7%
1988	1.40	(1.39)	2.79	80.2%
2003	1.36	(0.38)	1.74	85.6%
1964	1.31	(0.81)	2.12	94.3%

Ten Biggest El Nino-La Nina Transitions Since 1950

Crop Year	Peak SST Oct-March	Min SST April-Sept	Peak to Trough	SB Yld as % Trend
1998	2.32	(1.13)	3.45	103.4%
1973	2.03	(1.32)	3.35	100.2%
2010	1.42	(1.41)	2.83	102.7%
1988	1.40	(1.39)	2.79	80.2%
1983	2.21	(0.25)	2.46	82.7%
1964	1.31	(0.81)	2.12	94.3%
2007	1.09	(0.86)	1.95	101.3%
1995	1.14	(0.79)	1.93	96.9%
1966	1.87	(0.02)	1.89	101.7%
1970	0.95	(0.88)	1.83	100.5%

- It is a stretch to say anything about summer 2016 weather based upon the current El Nino

US Soybean Balance Table

US Soybean Supply/Demand (Million Acres/Bushels)					
(Sept-Aug, MM Bus)	12/13	13/14	14/15	15/16F Proj	16/17F Proj
Acres Planted (mil.)	77.2	76.8	83.3	82.7	82.0
Acres Hvstd. (mil.)	76.2	76.3	82.6	81.8	81.3
Yield (bu./acre)	39.8	44.0	47.5	48.0	46.7
Production	3034	3358	3927	3930	3797
Carryin	169	141	92	191	488
TOTAL SUPPLY	3243	3571	4051	4147	4315
Crush	1695	1730	1866	1862	1900
Exports	1318	1638	1843	1680	1800
TOTAL USE	3102	3479	3860	3659	3812
Ending Stocks	141	92	191	488	503
% of Use	4.5%	2.6%	4.9%	13.3%	13.2%

- Large stocks at end of 15/16 crop year
 - 488 mm (13% of use) – largest in 9 years
 - Record crop – record yields
 - Lower export demand for SB, SBM
- Smaller 2016 US soybean crop projected (-3%)
 - Slightly lower acreage
 - Yields decline to trend levels
- 2016/17 demand projected to rebound
 - Record crush 1900 mm (+2%)
 - Rebound in SB exports to 1800 mm (+7%)
 - *Is 16/17 demand over-stated?*
- **Net result: soybean stocks remain very large through end of 2016/17**

Slower SB Export Pace through January

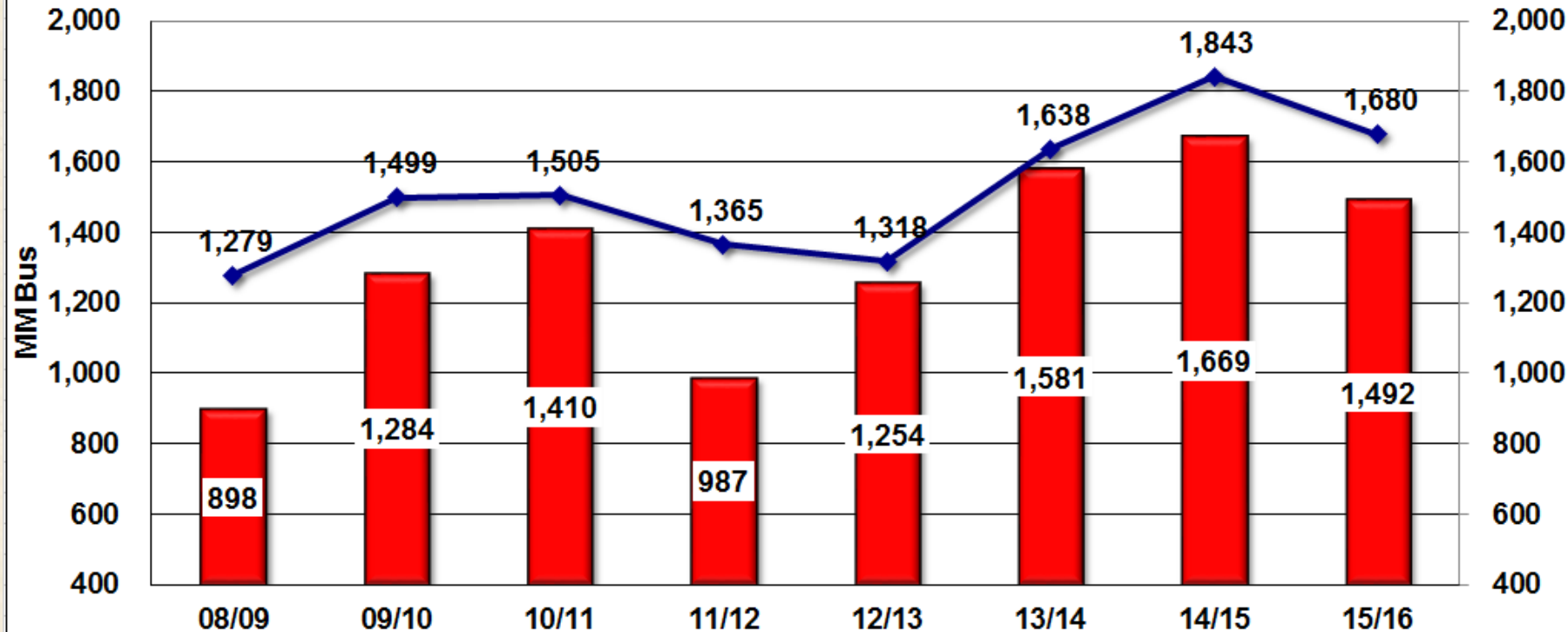
- 2015/16 shipments and sales both off 11%

Soybean Export Sales (bar) vs. Annual Exports (Line)

As of:

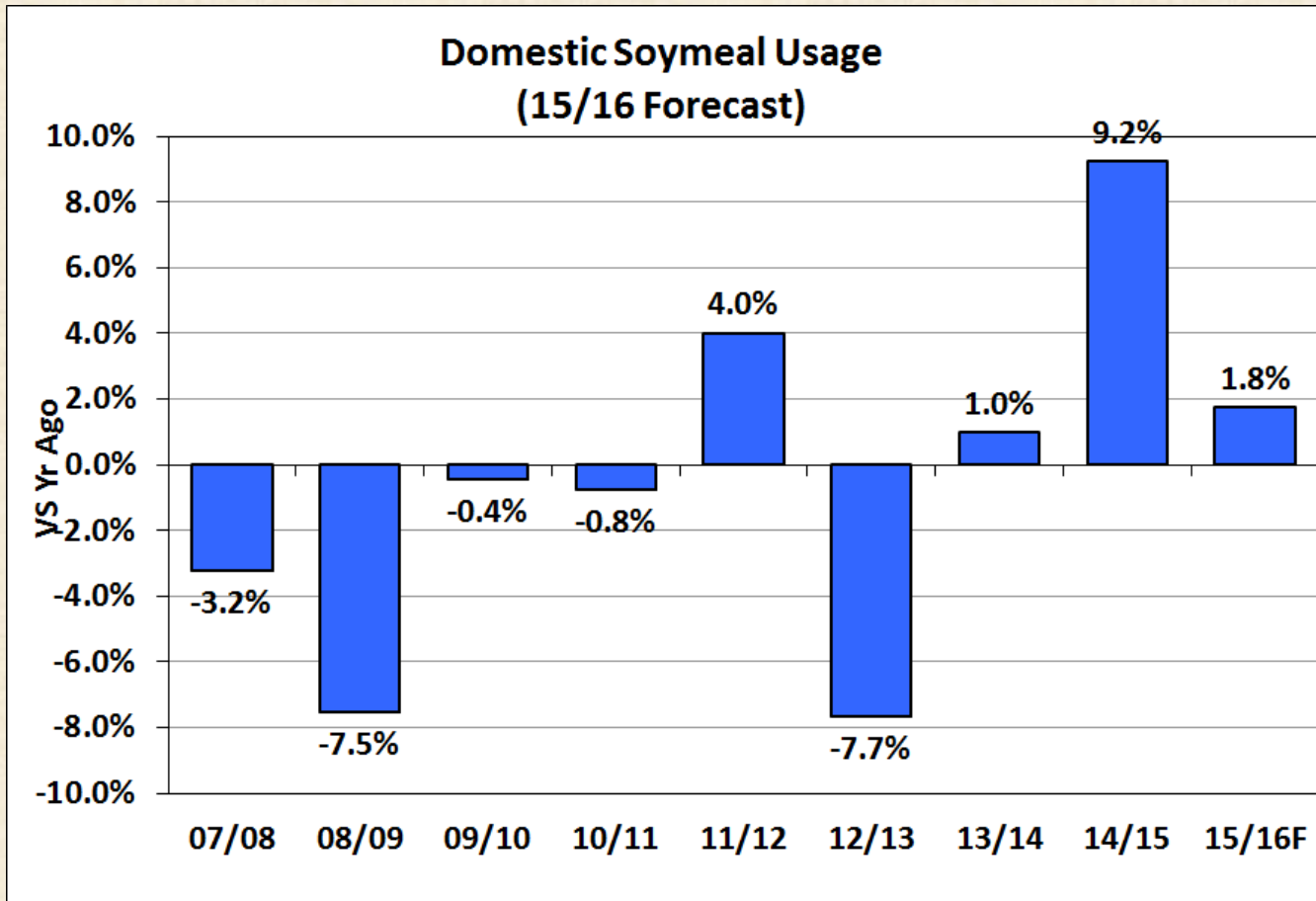
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Soybean Export Sales (bar) vs. Annual Exports (Line)



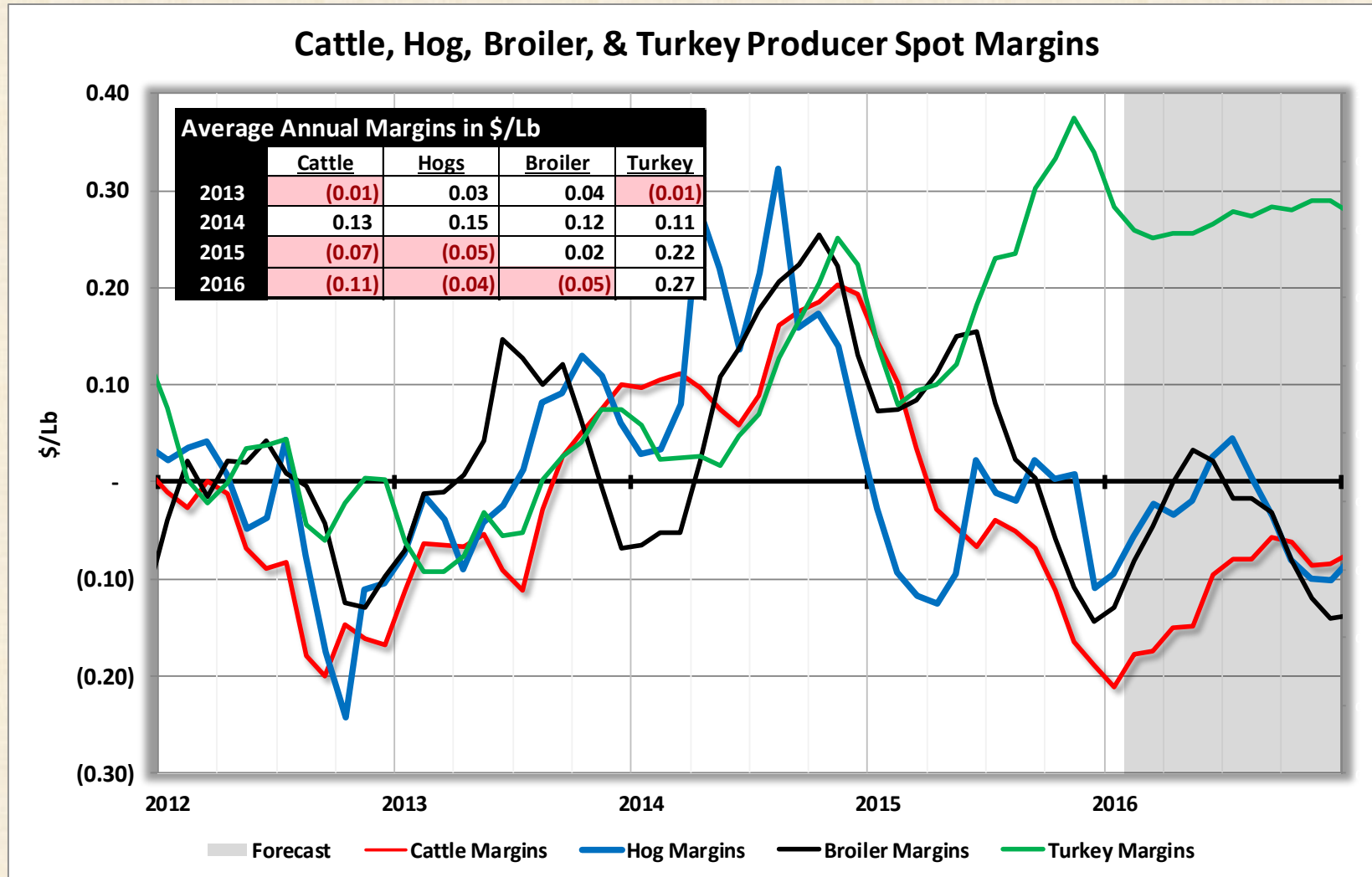
- Total sales off 11%
- Sales to China off 12%
 - (62% of total)
- Sales to all other off 9%
 - (38% of total)
- Forecast annual 2015/16 total: 1680 mm (-9%)

Domestic Soymeal Demand: 15/16F +1.8%



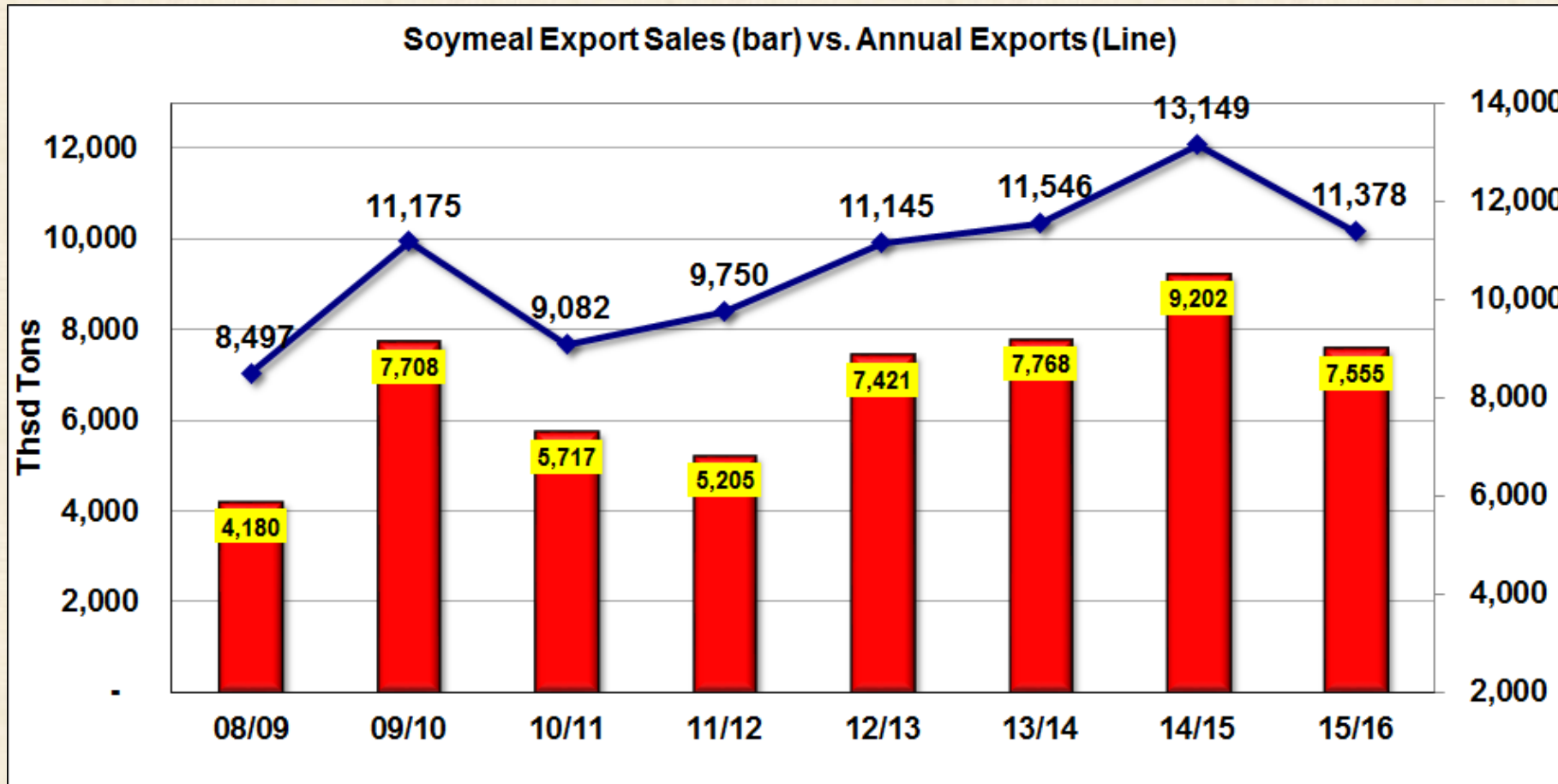
- Smaller gain, following the over-sized increase in 2014/15 (+9.2%)
- USDA estimating Protein-Consuming Animal Units (PCAUs) to increase 2.6% during 15/16
 - Poultry +1.6%
 - Hogs +1.2%
- YTD (Oct-Dec 2015) domestic soymeal usage estimated at much larger rate of increase (+9%)
- USDA 2015/16 forecast: +3.3%
 - Compared to AES, this adds 25 mm to crush demand and 290 mm pounds of SBO

Narrow/negative livestock producer margins - except turkey



Slower Soymeal Export Pace through January

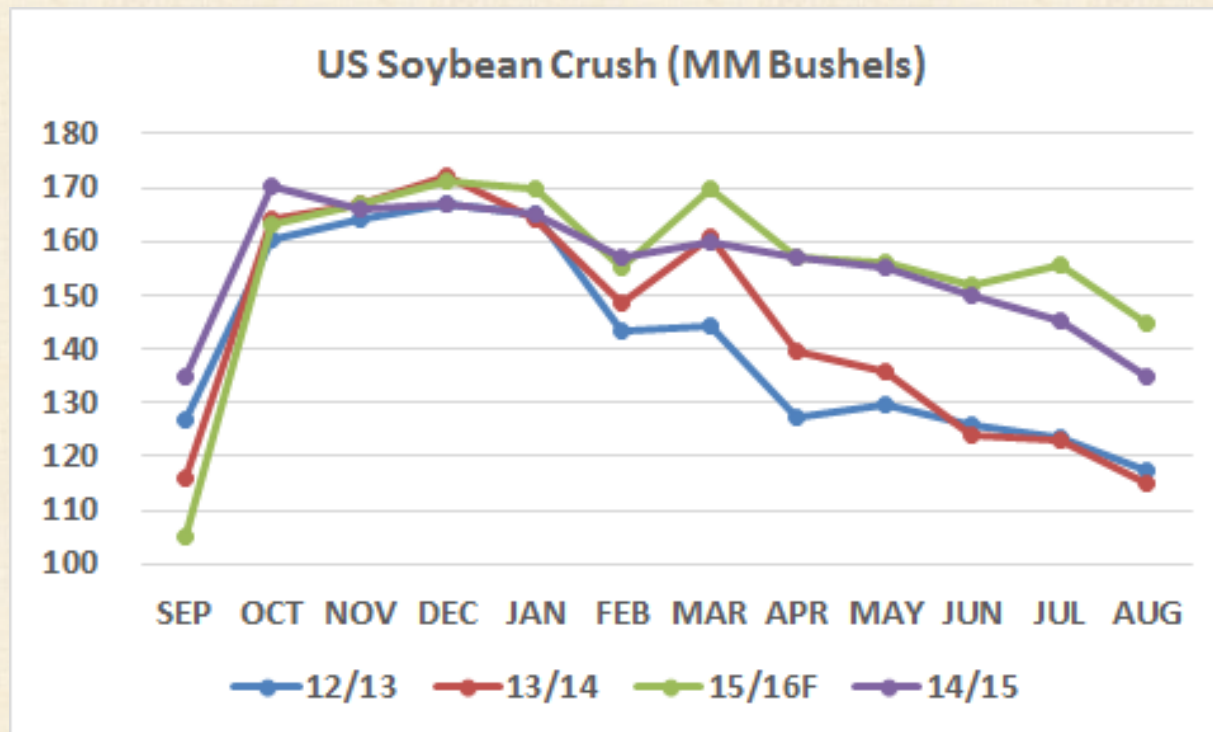
- 2015/16 shipments off 15%, sales off 18%



- Forecast annual 2015/16
total: 11.4 mm tons (-15%)

2015/16F US soybean crush: 1862 mm (vs. 1866 YA)

- YTD crush (Sept-Dec) +5% vs. YA
- Key risk: larger crush, due to continued strong domestic meal disappearance

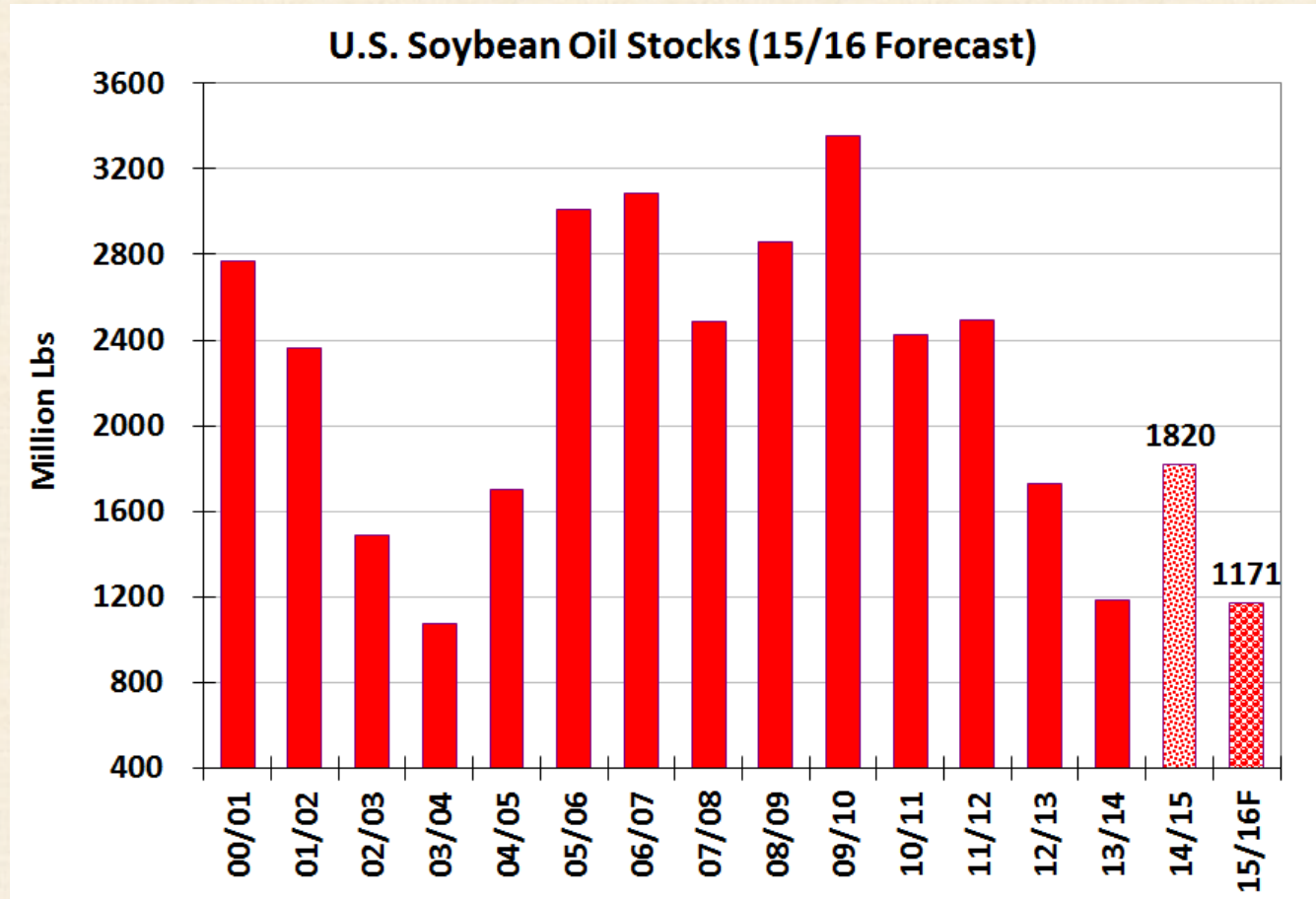


	CRUSH - MM Bus		
	NOPA	USDA CAIR	Spread
May-15	148.4	156.1	7.7
Jun-15	142.5	151.6	9.1
Jul-15	145.2	155.8	10.6
Aug-15	135.3	144.6	9.3
Sep-15	126.7	134.6	7.9
Oct-15	158.9	170.1	11.2
Nov-15	156.1	165.8	9.7
Dec-15	157.7	167.0	9.3

- USDA began release of monthly crush data during 2015
- Some variability in the spread between NOPA and USDA crush totals remains

US soyoil stocks expected to shrink sharply

- *AES forecasting 2015/16 end stocks of 1171 mm
(vs. USDA 2110 mm)*



US Soyoil Balance Table

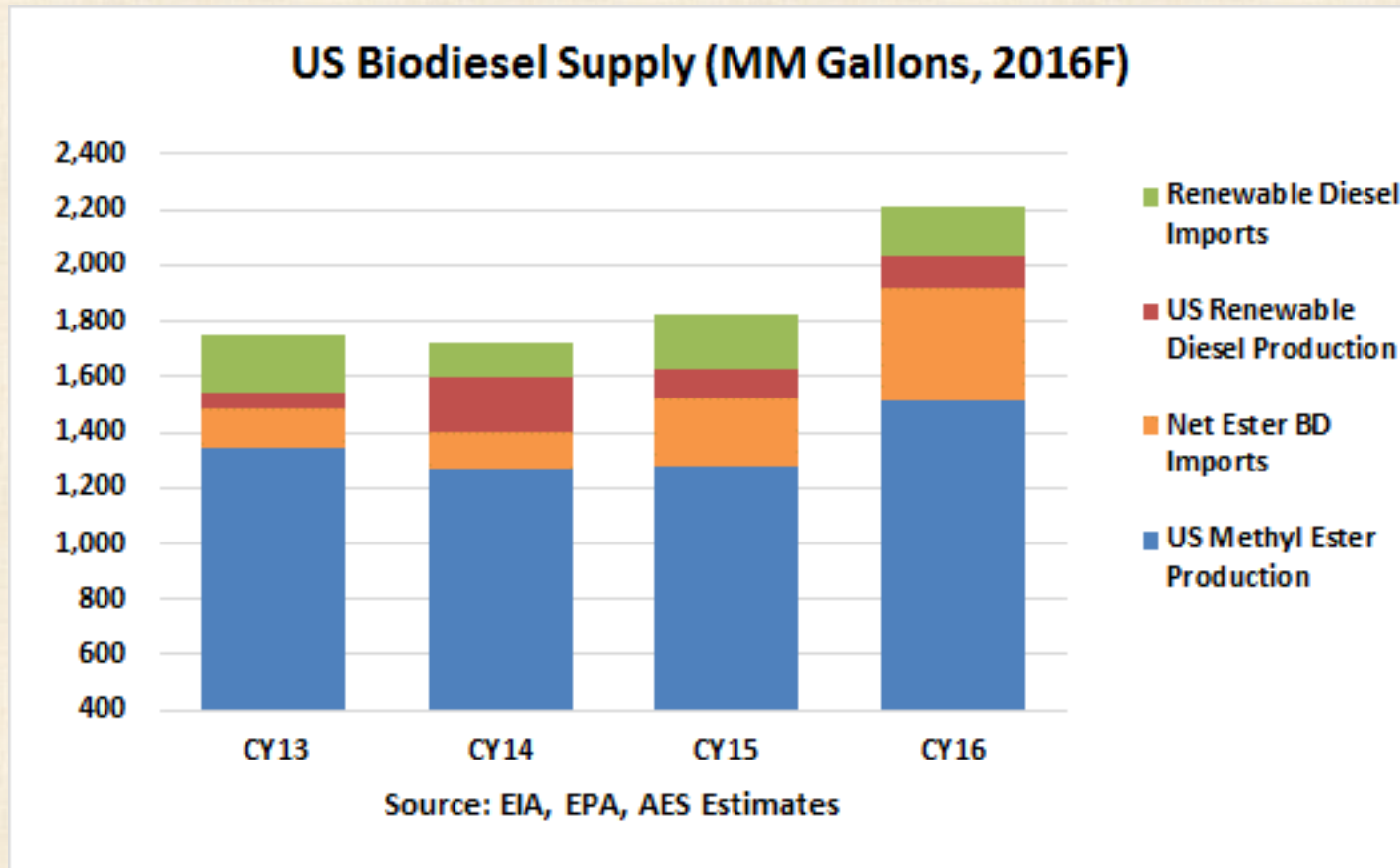
- How tight will stock get by end of 2015/16?

Soyoil Supply/Demand (Million Pounds)					
(Oct-Sept, MM Lbs)	12/13	13/14	14/15	15/16F AES	15/16F USDA
Carryin	2494	1726	1188	1820	1820
Production	19854	20079	21311	21351	21925
Imports	196	165	264	246	265
TOTAL SUPPLY	22544	21970	22764	23417	24010
Oil Yld (Oct-Sep)	11.79	11.68	11.24	11.53	11.60
Bio-Diesel Use	4689	5011	5037	5683	5500
Food Use	13965	13894	13893	14212	14100
	4.1%	-0.5%	0.0%	2.3%	-0.8%
Exports	2163	1877	2014	2350	2300
TOTAL USE	20818	20782	20944	22246	21900
Ending Stocks	1726	1188	1820	1171	2110
SBO Stks-Use	8.3%	5.7%	8.7%	5.3%	9.6%

AES vs. USDA:

- AES using 47 mm smaller crush
 - Equal to 540 mm pounds of oil
- AES has larger biodiesel use than USDA
 - Expecting larger use of soyoil to produce biodiesel, due to increased EPA mandates
- Smaller differences in food use and exports
- Net Result: AES is forecasting very tight 2015/16 ending stocks of 1171 mm pounds
 - Versus USDA forecast of 2110 mm

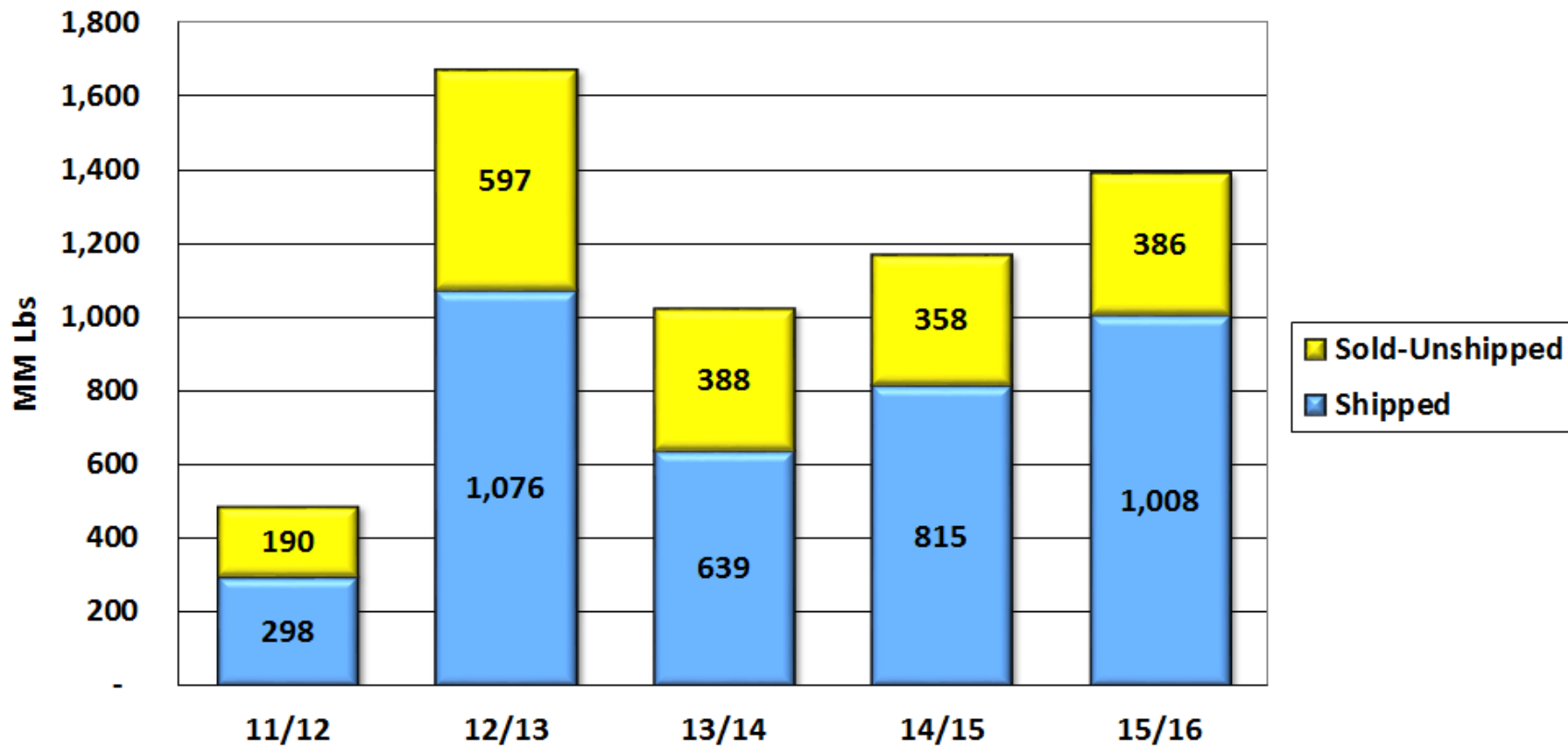
Biodiesel Supply: Rising Sharply in 2015/16



- Total BD supply forecast to rise sharply in CY2016
 - 2.2 B gallons (vs. 1.8 B gallons in 15)
- Larger supply required to meet increased EPA mandates for advanced biofuels
- Larger supply met by both increase in domestic production & imports
 - Most of gain from Argentina

Export sales of SBO: Largest in 4 years

Soyoil Export Commitments: Shipped v. Unshipped



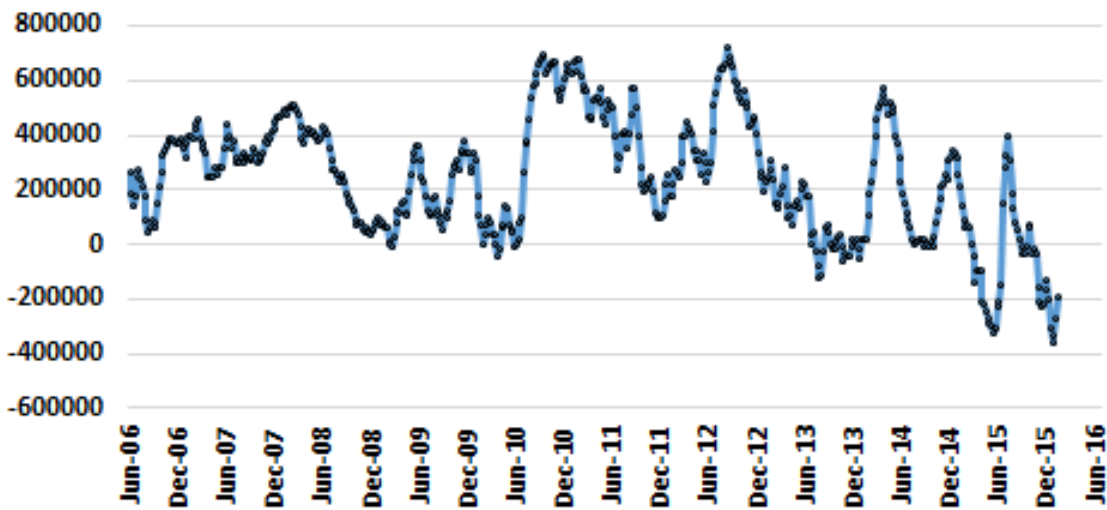
- Annual forecast: 2300 mm (vs. 2014 mm YA)

Sales through late Jan:

- TTL 1394 mm (+ 193 mm)
- Latin Amer. 417 mm (-37 mm)
- Africa 116 mm (+149 mm)
- China 44 mm (+44 mm)

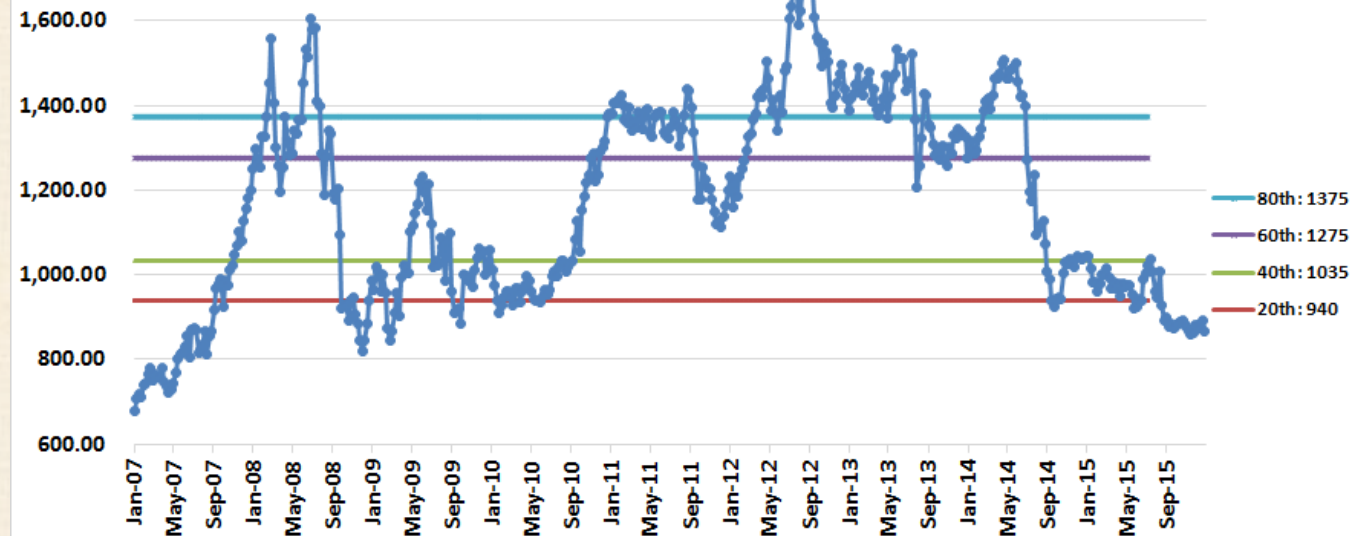
Price Ideas: Funds are short, and prices are historically low

Spec Position: Corn/Wheat/SB (contracts)



Source: CFTC

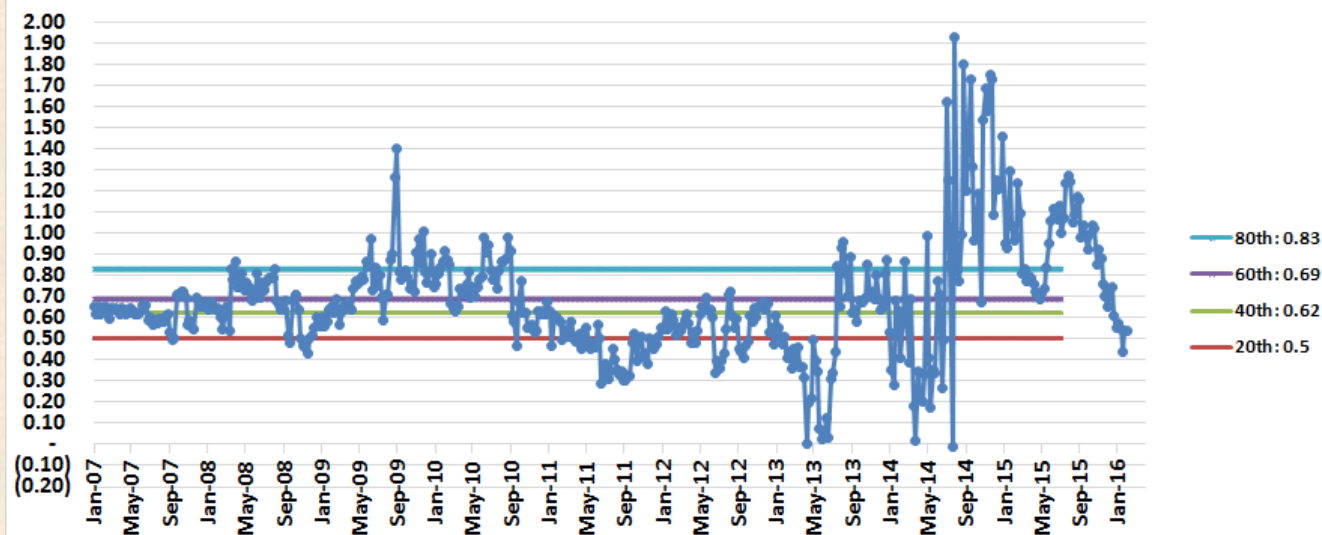
Historic prices and percentiles (2007-15): Soybean



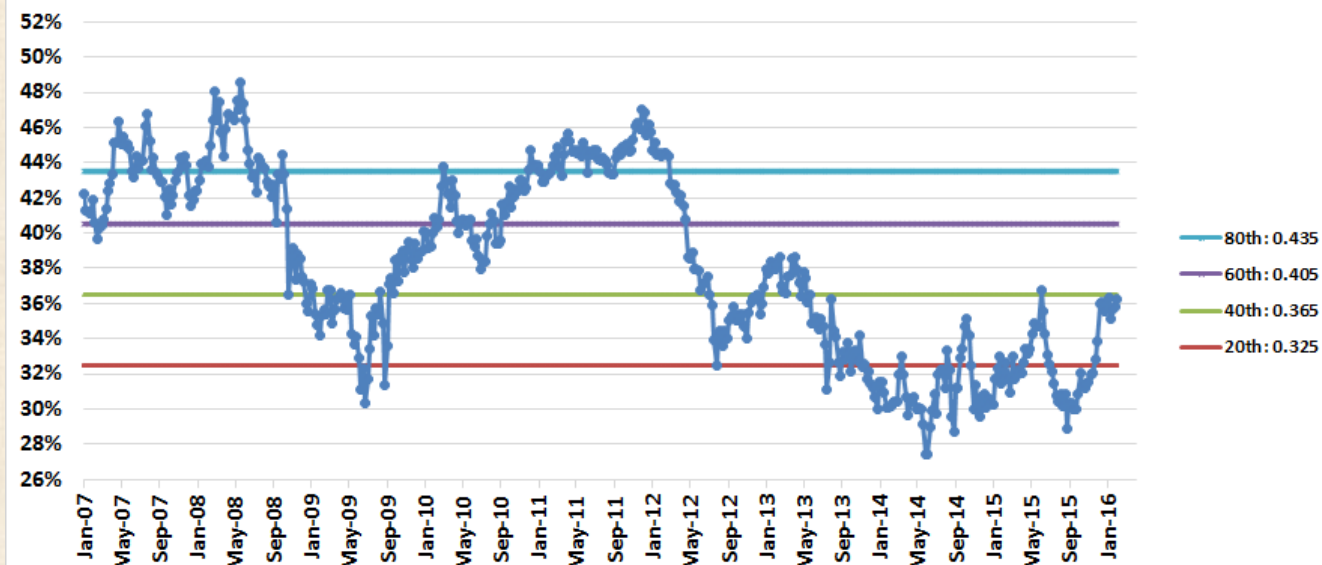
Price Ideas:

- Fundamentals for soybeans/soymeal are generally bearish, with very large US/S. American supplies
- Direction of US\$ will to continue to play an abnormally large role in price direction during 2016
- Direction of crude oil prices will play a large role in direction of vegoil prices during 2016
- El Nino / La Nina will help drive weather concerns
 - In spite of it flaky relevance to Midwest weather
- Oil share appears bound to move higher during 2016

Historic prices and percentiles (2007-15): Board Crush



Historic prices and percentiles (2007-15): Board Oil Share



Futures Prices / Outlook



Soybean futures:

- May have bottomed out
- Downside risk from farmer selling or strong US\$ to \$8.25 by April
- Upside risk from weather events or weak US\$ to \$9.50 by mid-May

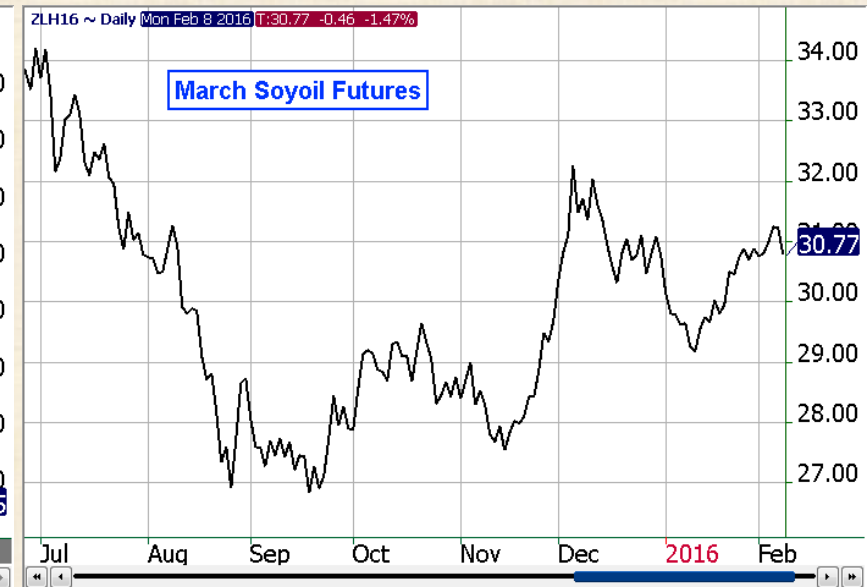
2/10/2016



Soybean meal futures:

- Downside risk to \$245-255 by April if demand weakens further
- Upside risk from weather events or weak US\$ to \$280-290

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Soybean oil futures:

- Expect further gains in oil share
- Downside risk to \$.28-.29 if crude oil prices move back below \$28
- Upside risk to \$.35-.40 from tighter end stocks and strong demand pull from biodiesel/xpts

Other issues to be aware of....

- Resumption of monthly US crush reports from USDA
 - Still a few discrepancies vs. NOPA monthly reports
- Passage of TPP by Congress would support greater market access for US soy products
- USDA will release first estimate of 2016 US plantings on March 31
 - AES forecasting US soybean acreage at 82.0 mm (vs. 82.7 mm YA)
- USDA will release March 1 stocks report on March 31
 - Indicator of potential revisions to the 2015 US soybean crop
- November 2016 elections – probably limited implications for oilseeds

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