



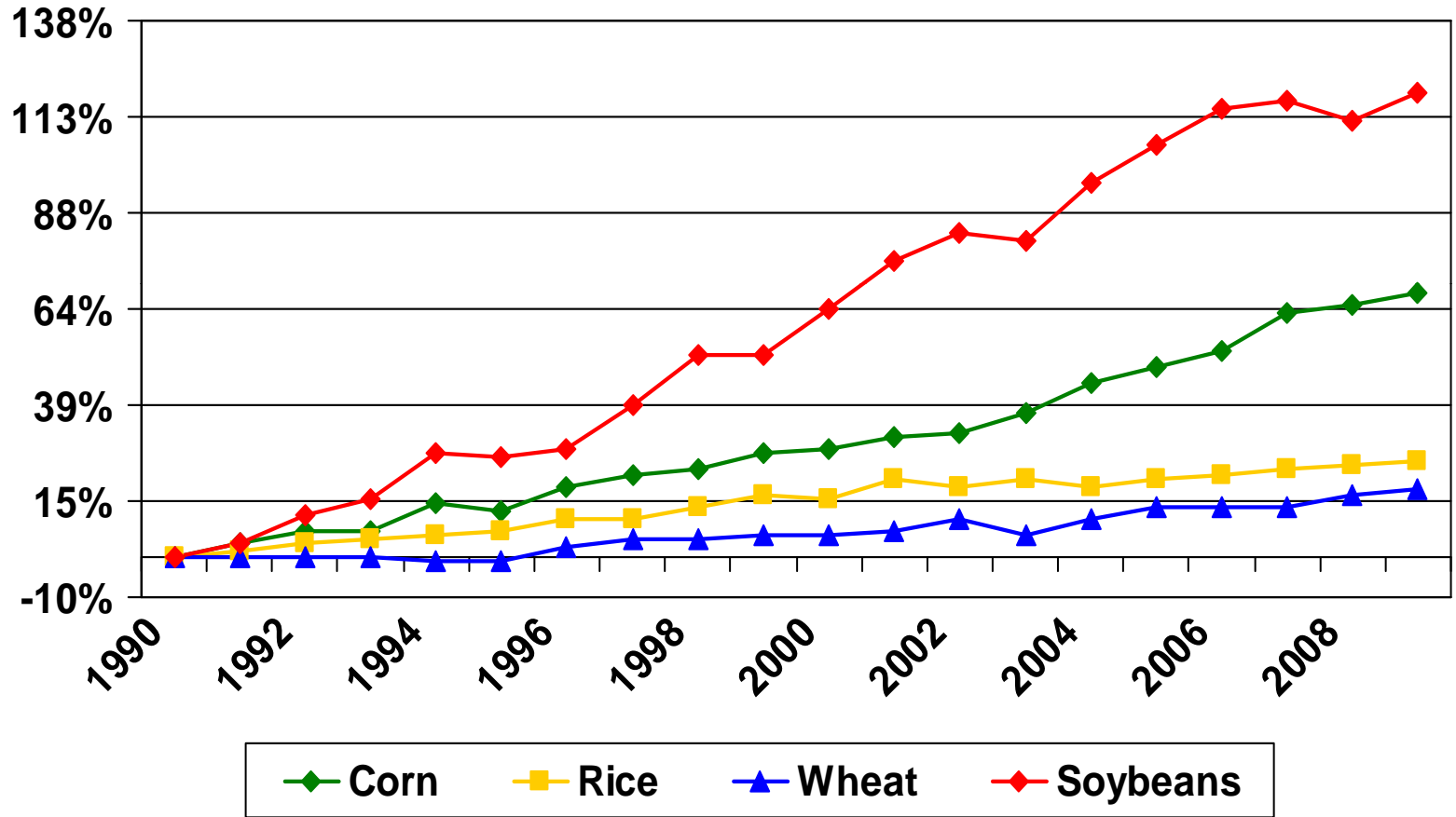
# **The World Soybean Situation and Outlook**

**January 2010**

**David Asbridge  
President / Senior Economist  
NPK Fertilizer Advisory Service  
[www.NPKFAS.com](http://www.NPKFAS.com)**

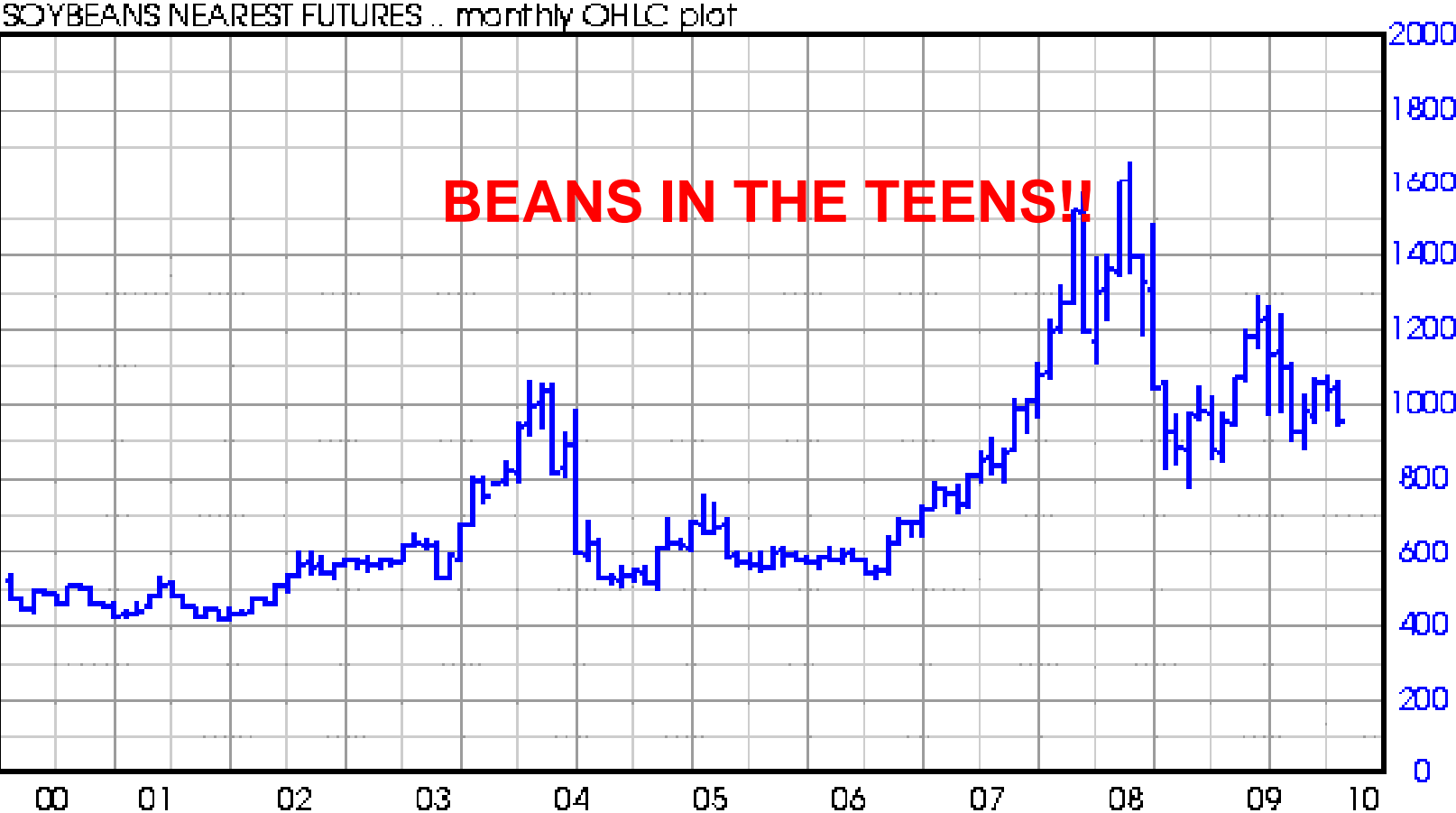
# Percentage Change in Global Consumption from 1990/91

Percentage Change



Source: USDA

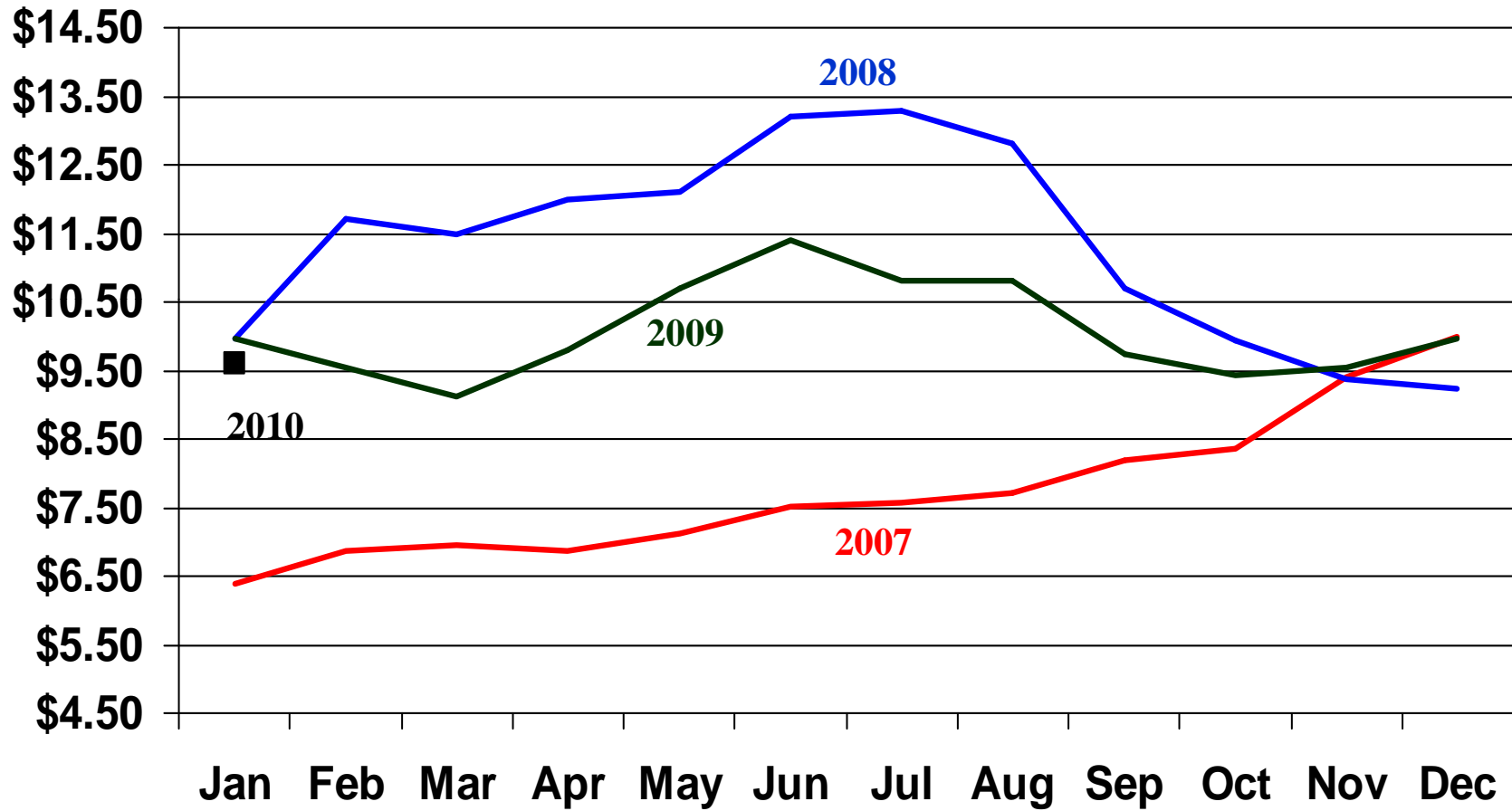
# Soybean Prices (CBOT Nearby Futures \$/bushel)



As of 01/01/10

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# U.S. Soybean Price Received by Farmers (\$/bushel)



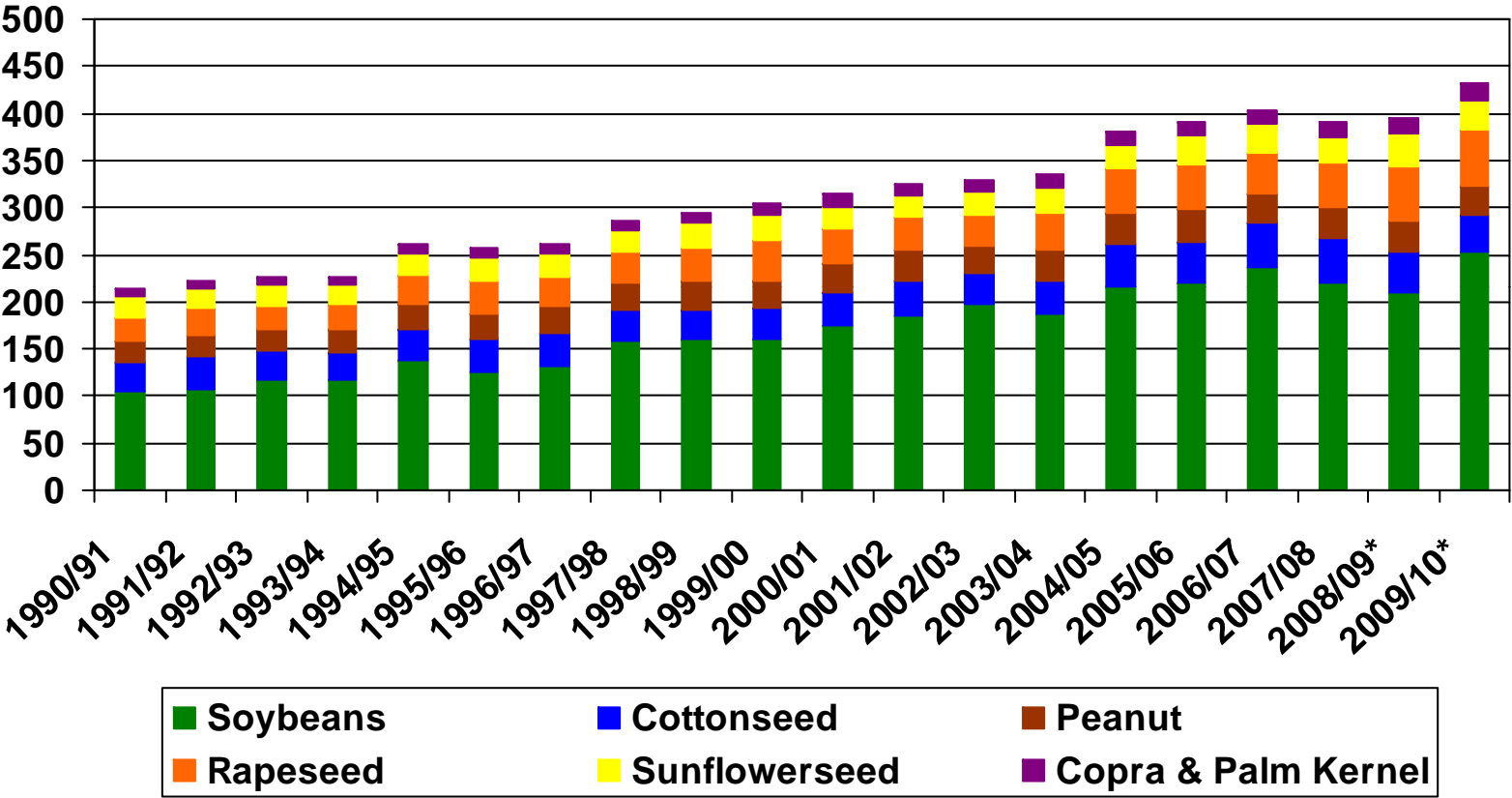
Source: USDA

## Soybean Situation and Outlook

- **World Supply/Demand Situation**
  - Soybean production and stocks hit record in 2006, then fell
  - Production and stocks in 2008 were the lowest in five years
  - Production is expected to hit new record in 2009 and stocks will climb
  
- **South America**
  - Brazil's 2008 production fell sharply from 2007 record and stocks fell
  - Brazil's 2009 crop is expected to increase to new record level
  - Argentina's 2008 crop fell over 30% and stocks were decimated
  - Argentina's 2009 crop is expected to be a record pushing stocks higher
  
- **United States**
  - U.S. 2008 production increased over 10% on sharply higher acreage
  - U.S. 2008 stocks fell to 5-year low, prices jumped
  - U.S. 2009 acreage and production will be record high
  - But, high demand will keep stocks very tight and prices relatively high

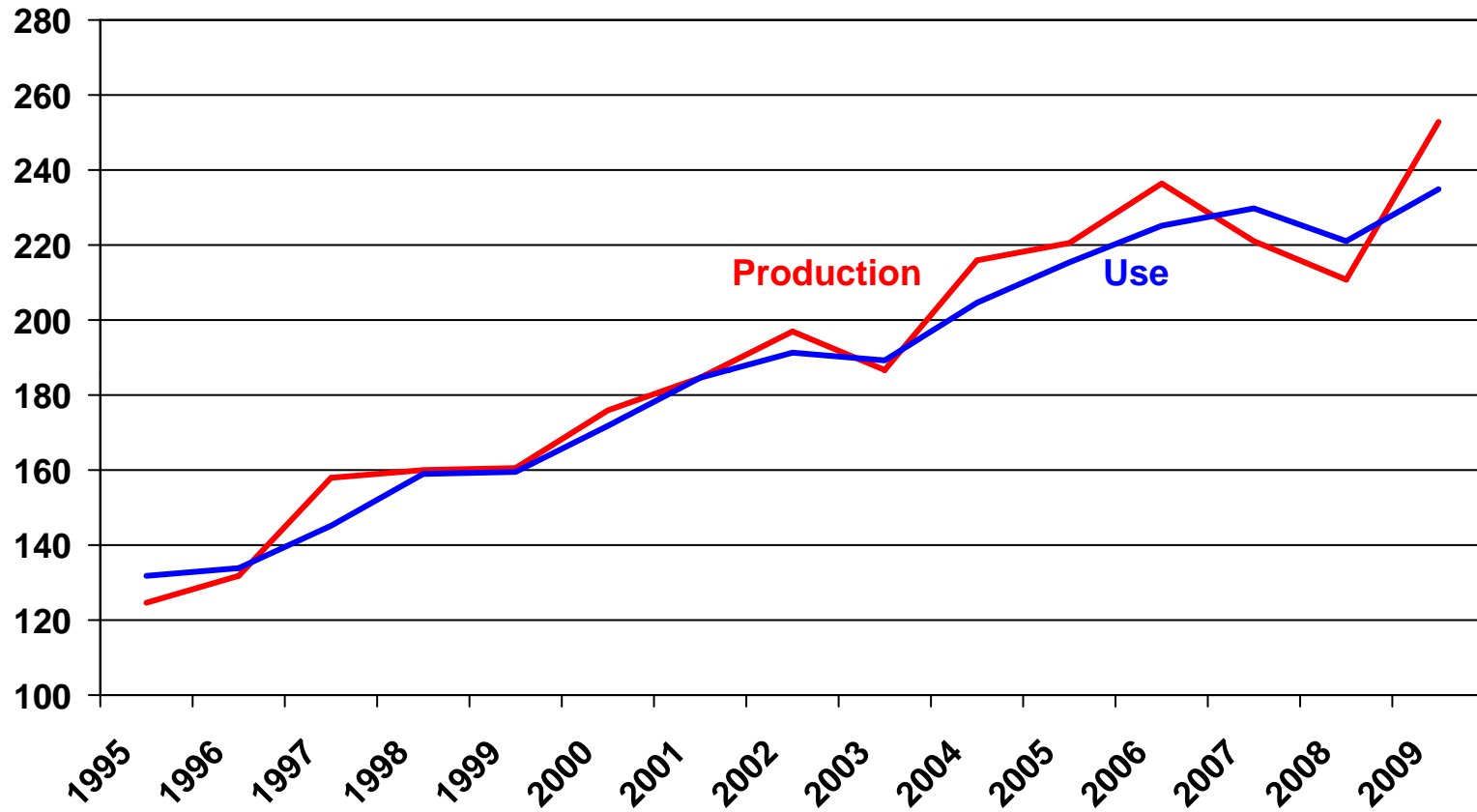
# Global Oilseed Production

Million metric tons



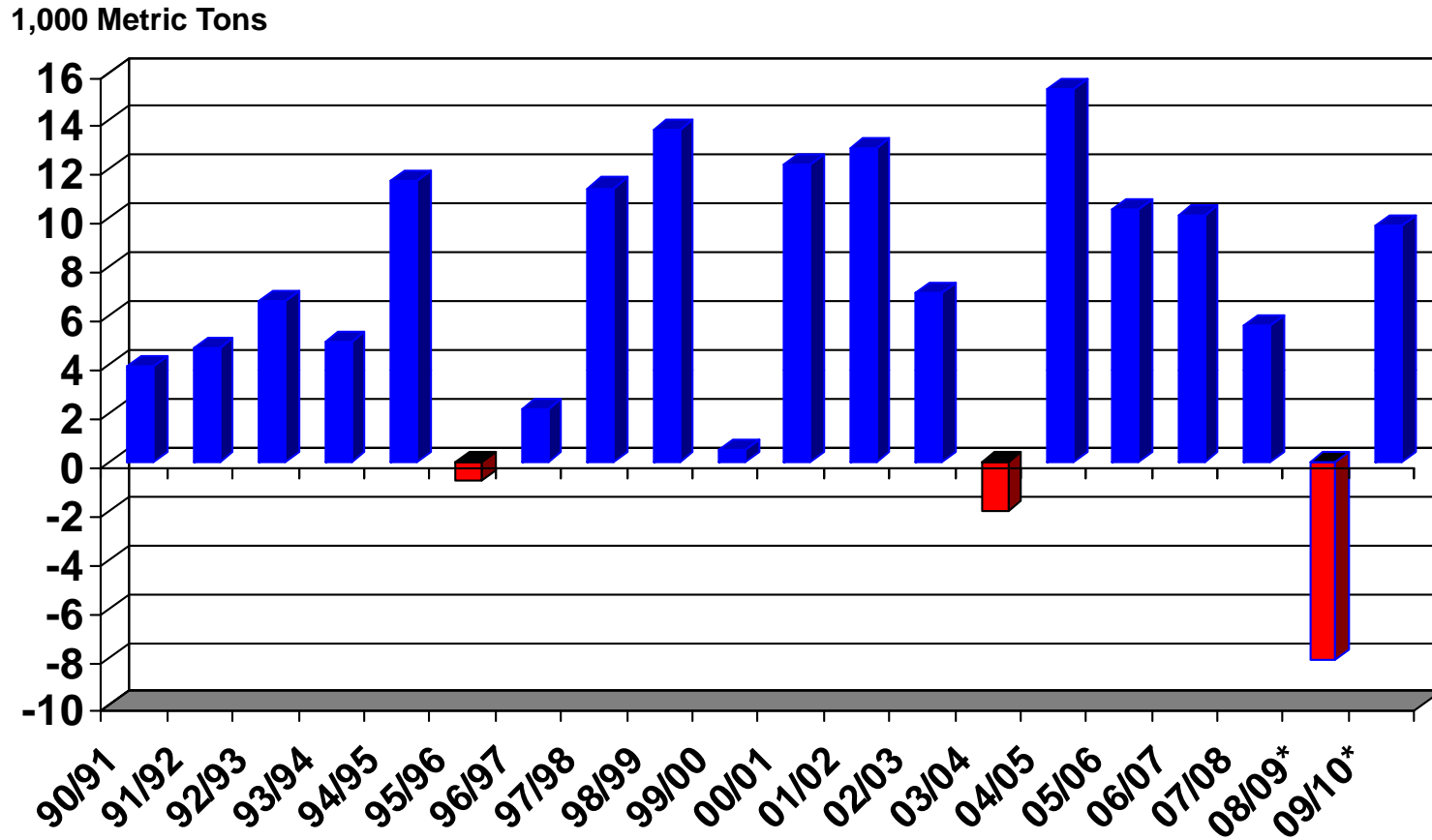
Source: USDA

# World Soybean Production and Use



Source: USDA

# Annual Change in World Soybean Domestic Disappearance

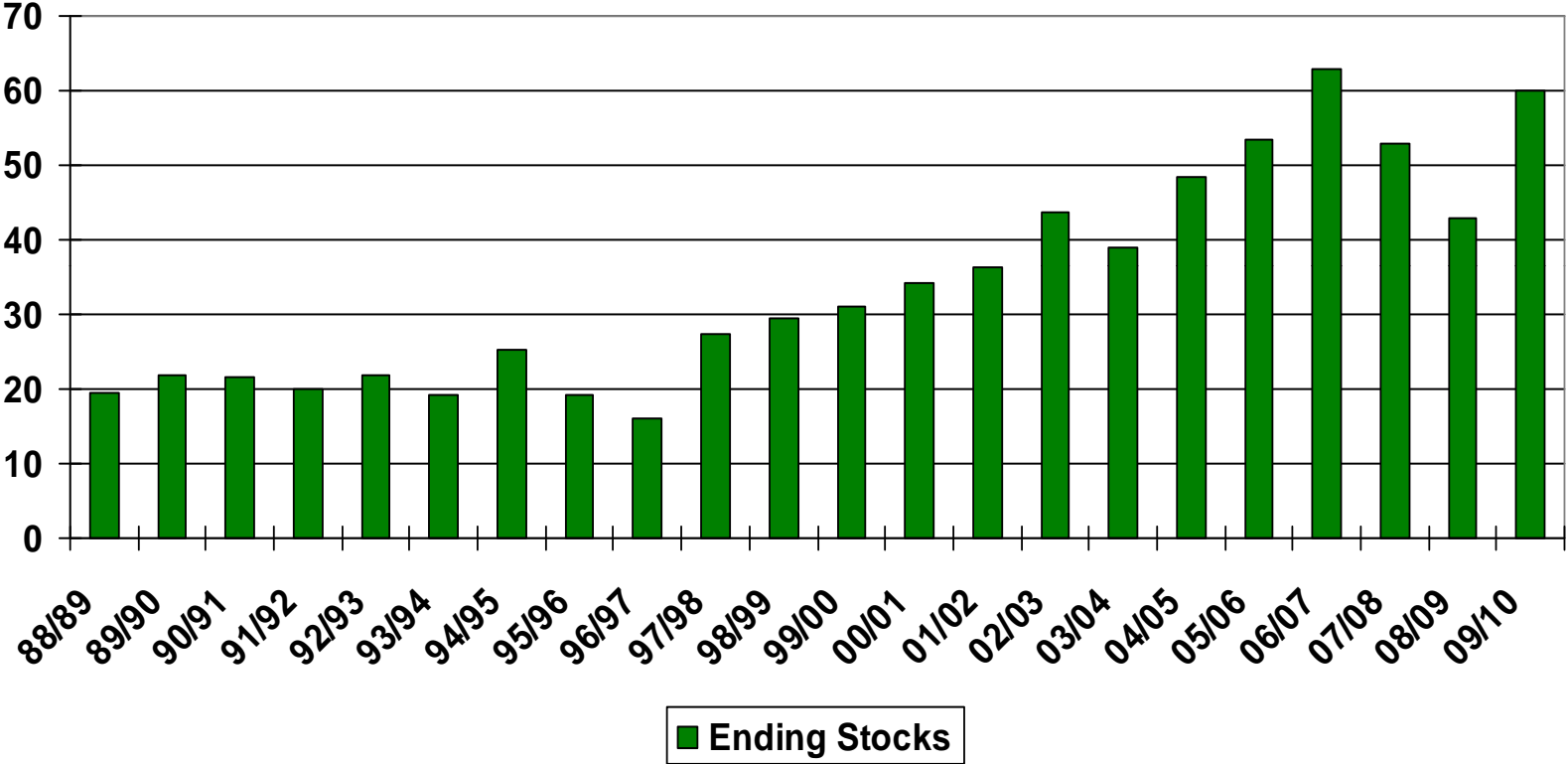


Source: USDA



# World Soybean Ending Stocks

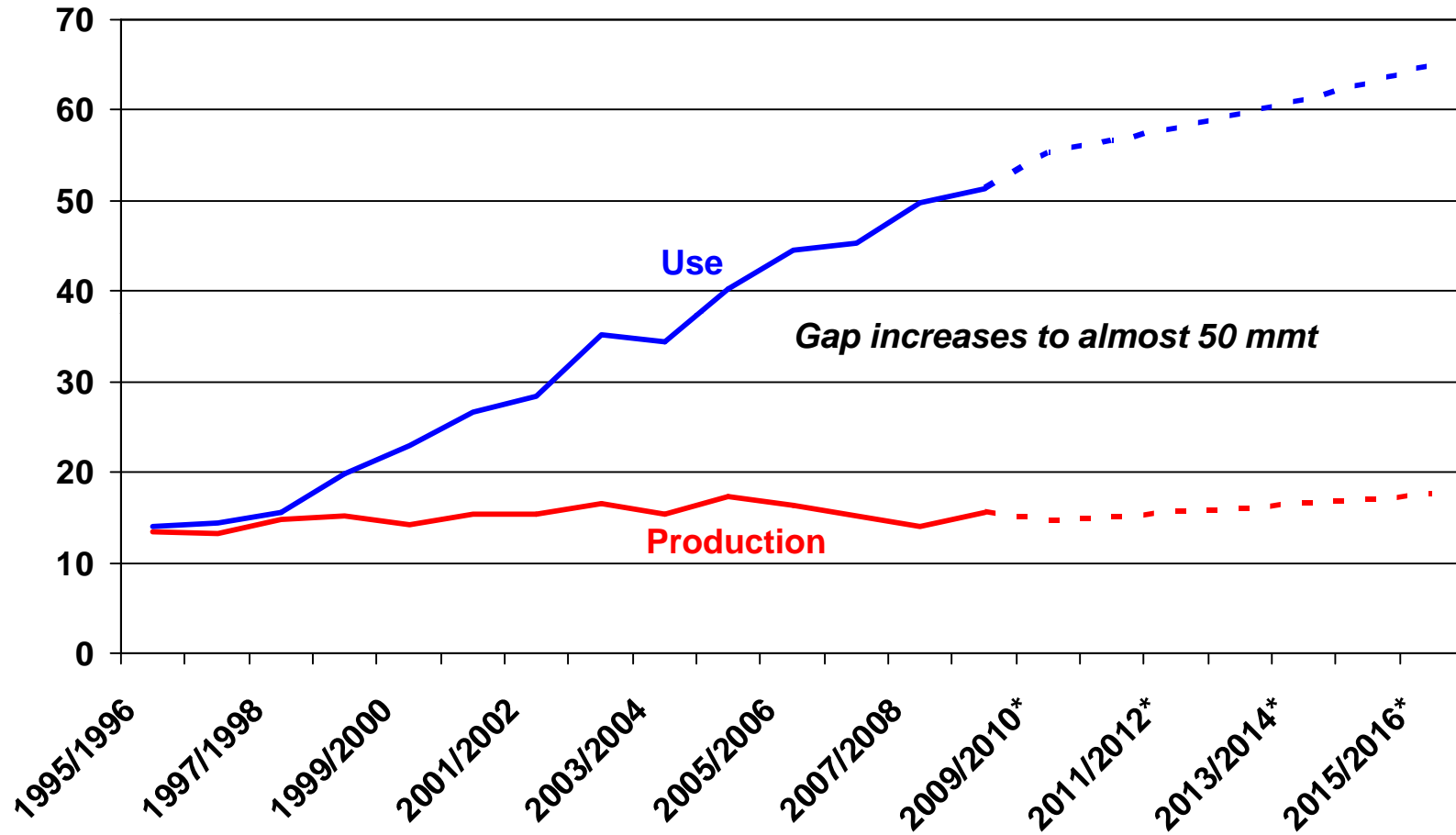
Million Metric Tons



Source: USDA

# China's Soybean Production and Use

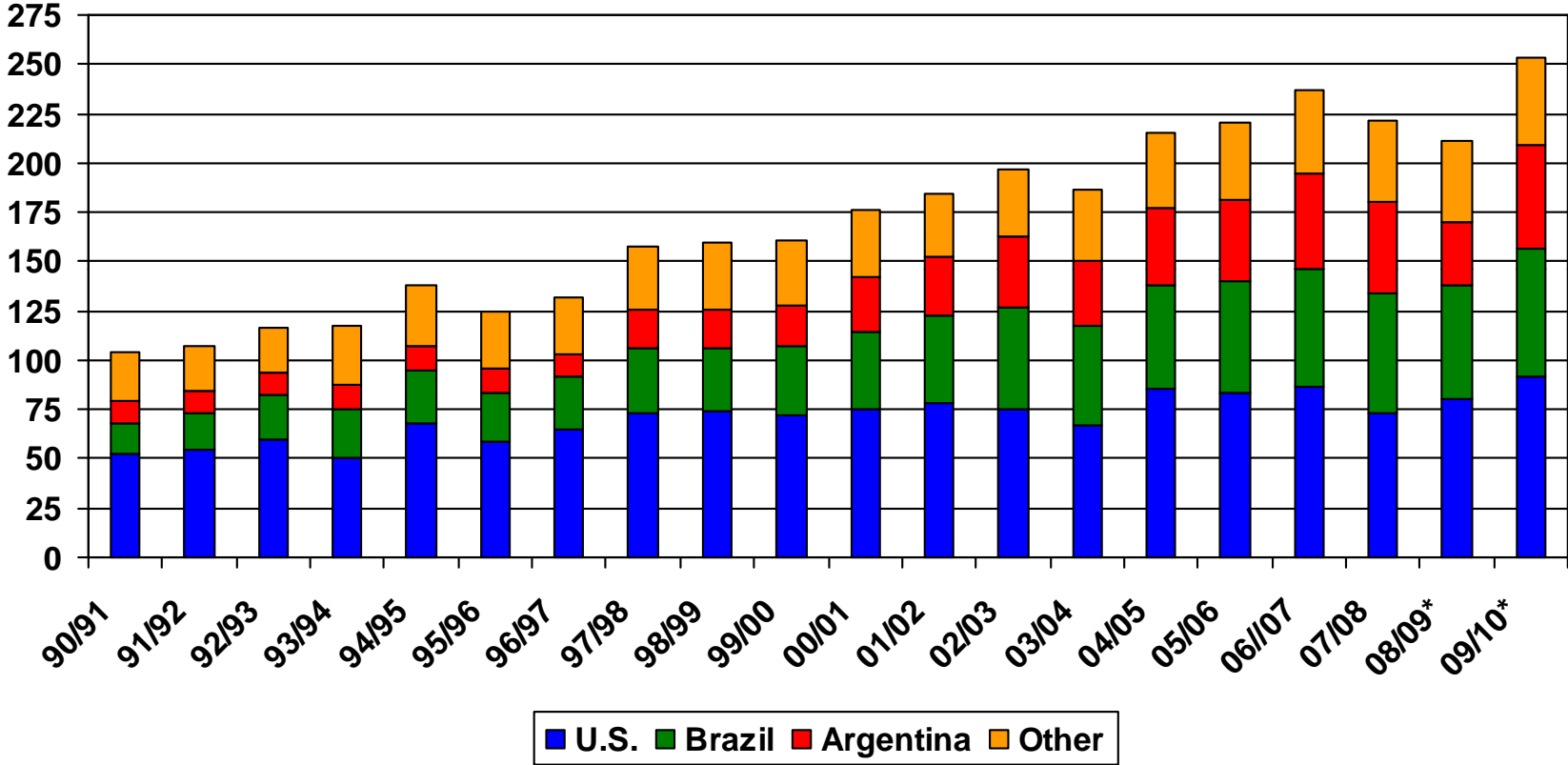
Million tonnes



Source: USDA  
\* NPKFAS Forecast

# World Soybean Production

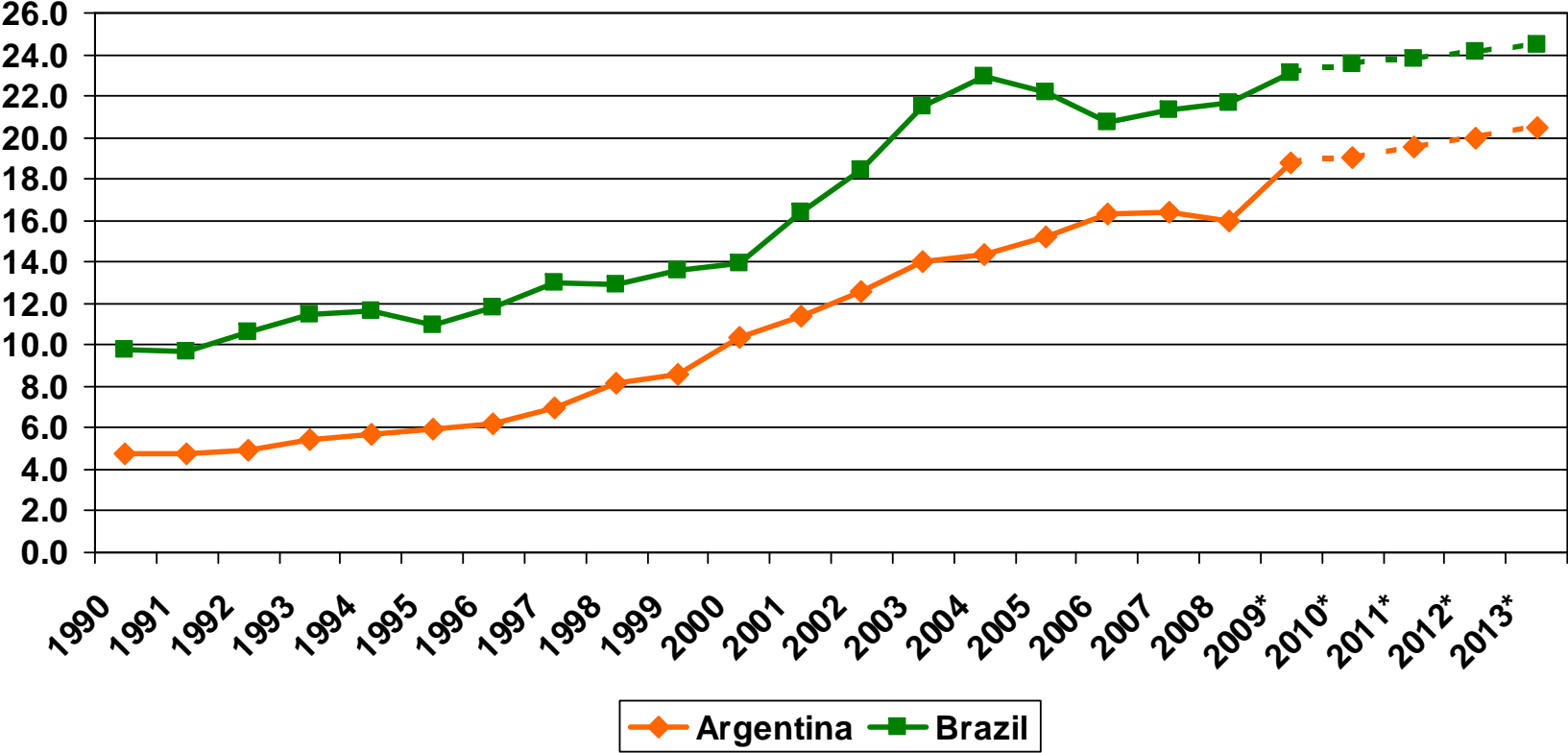
Million Metric Tons



Source: USDA

# Argentine and Brazilian Soybean Harvested Area

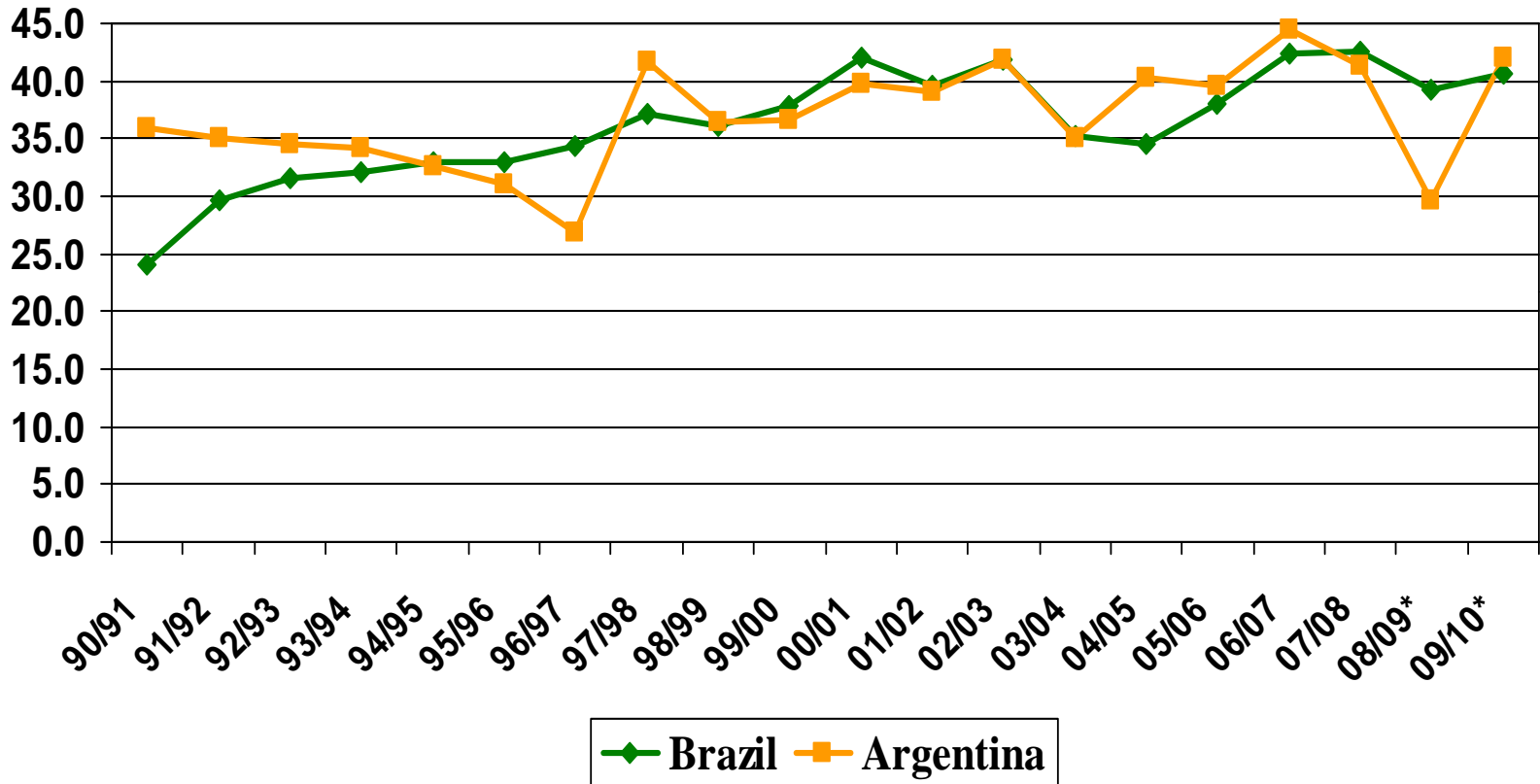
Million Hectares



Source: USDA  
 \* NPKFAS Forecast

# Argentina & Brazilian Soybean Yields

Bushels per acre



Source: USDA

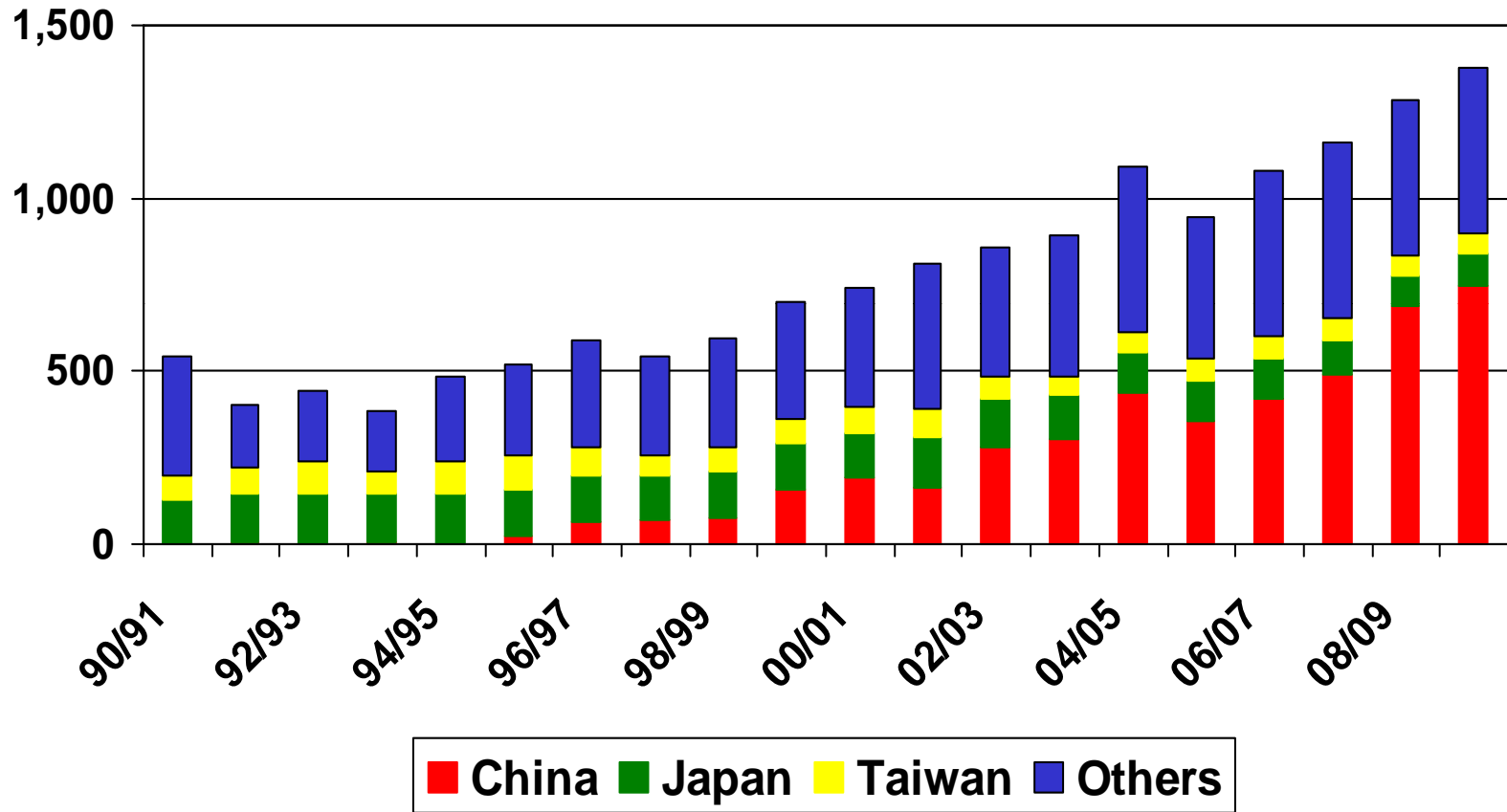
## U.S. Soybean Supply/Demand (million bushels)

	2006/07	2007/08	2008/09	2009/10
Planted Acres (mln)	75.5	64.7	75.7	77.5
Yield (bu./acre)	42.7	41.7	39.7	44.0
Production	3,188	2,677	2,967	3,361
Disappearance				
Crush	1,806	1,803	1,662	1,710
Exports	1,118	1,159	1,283	1,375
Total Disappearance	3,073	3,056	3,047	3,262
Ending Stocks	574	205	138	245
Stocks-to-Use Ratio (%)	18.7%	6.7%	4.5%	7.5%
Average Farm Price (\$/bu.)	\$6.43	\$10.10	\$9.97	\$9.65

Source: USDA

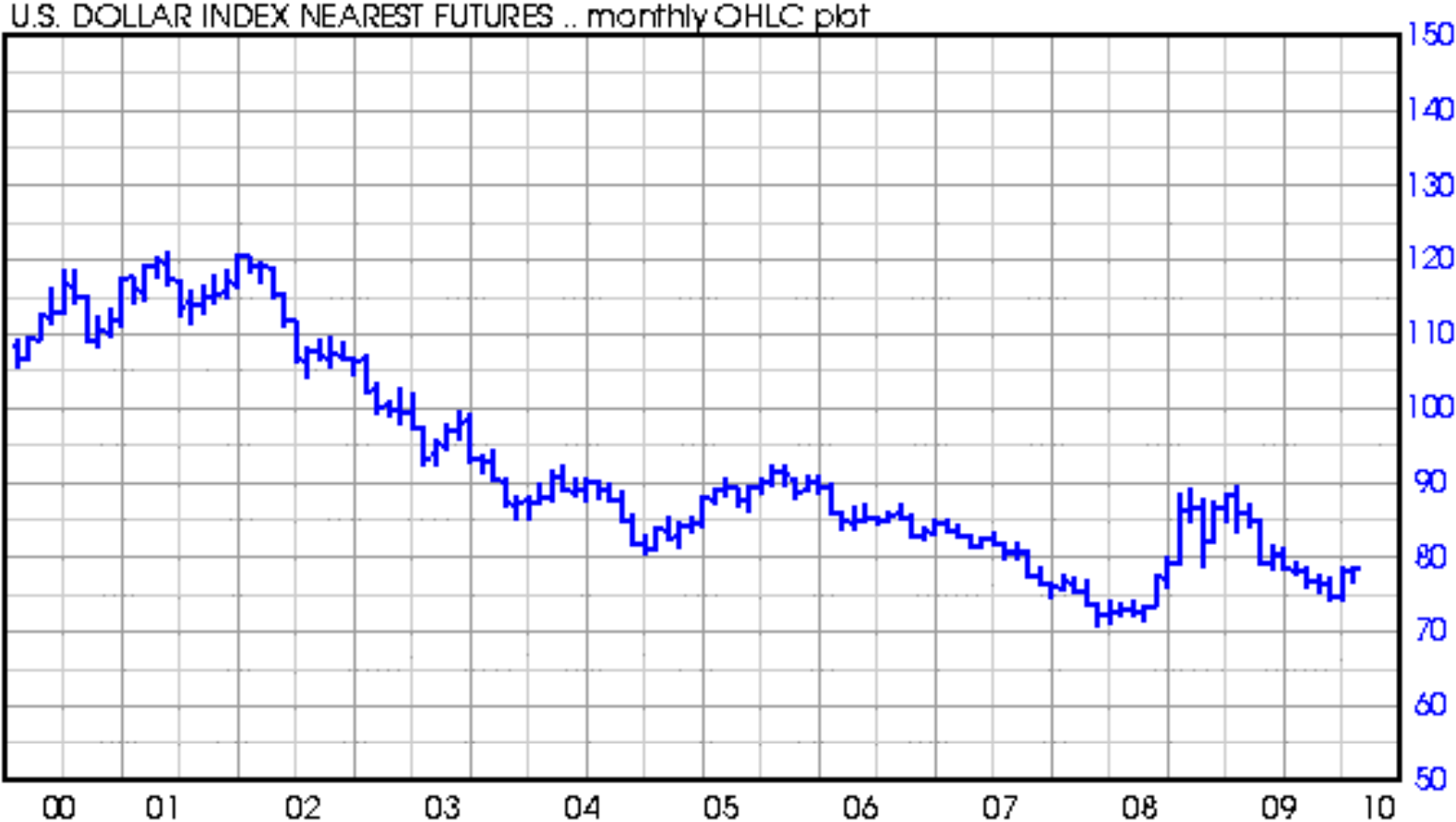
# U.S. Soybean Exports

Million Bushels



Source: USDA

# U.S. Dollar Index



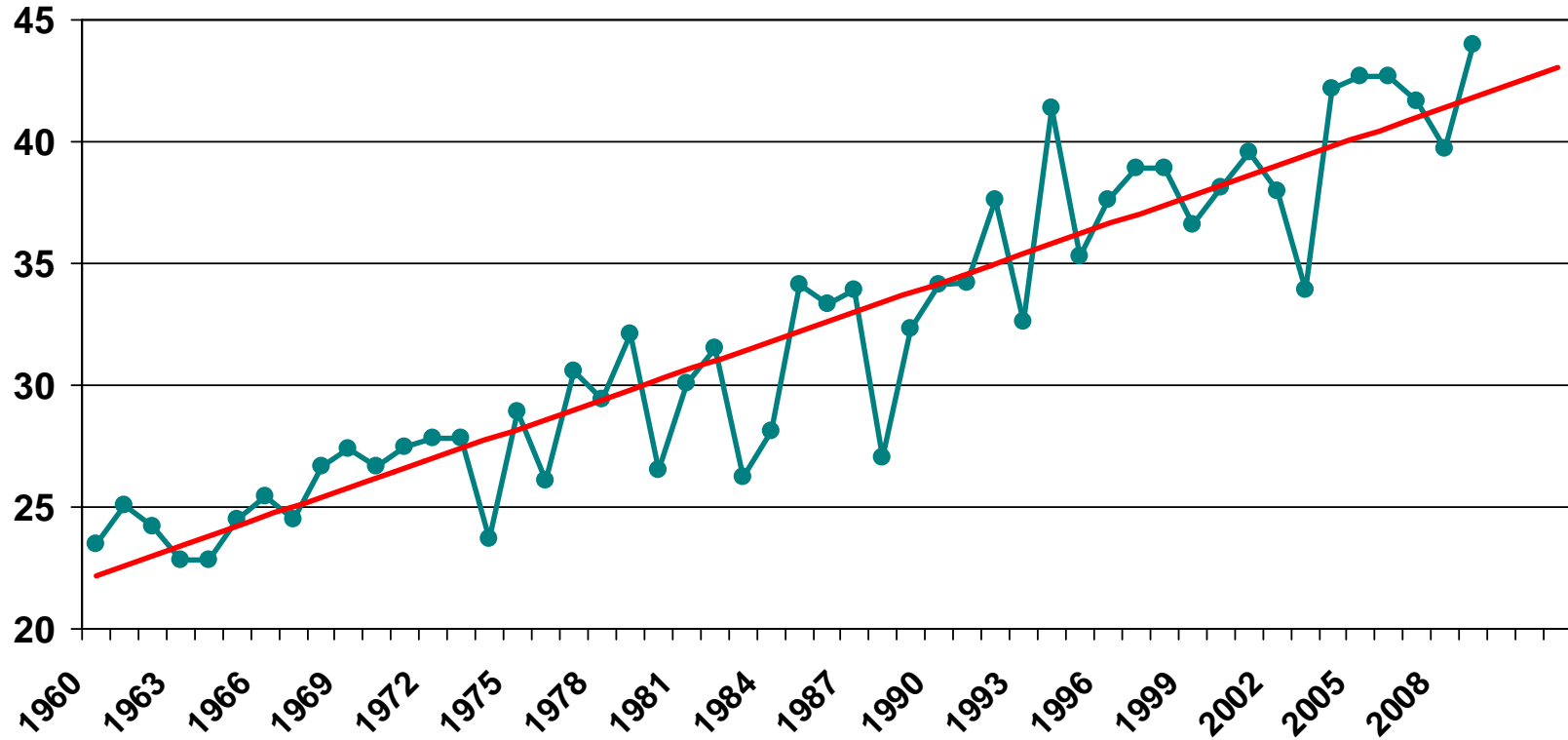
As of 01/01/10

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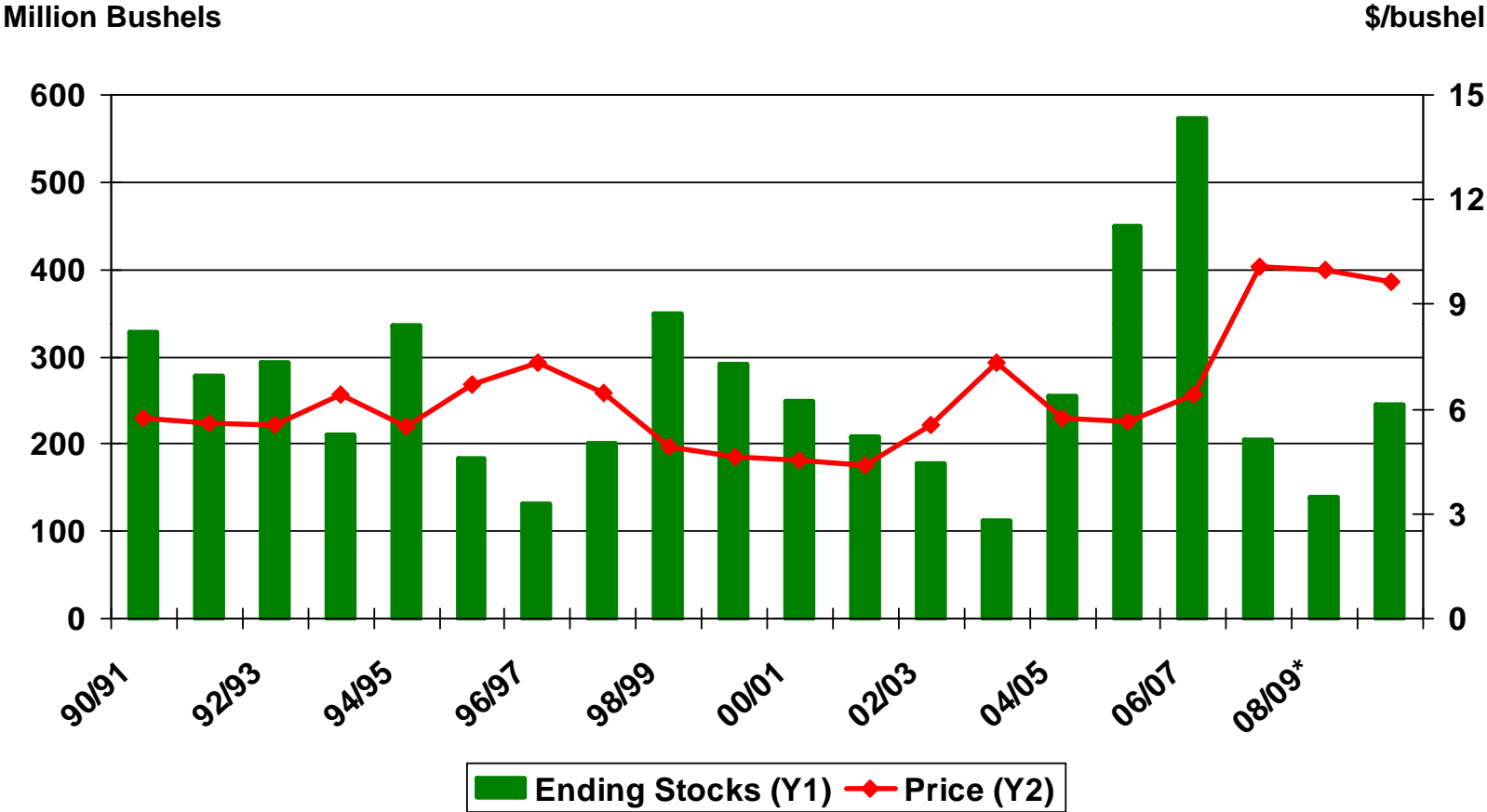
# U.S. Soybean Yield

Bushels per Acre



Source: USDA

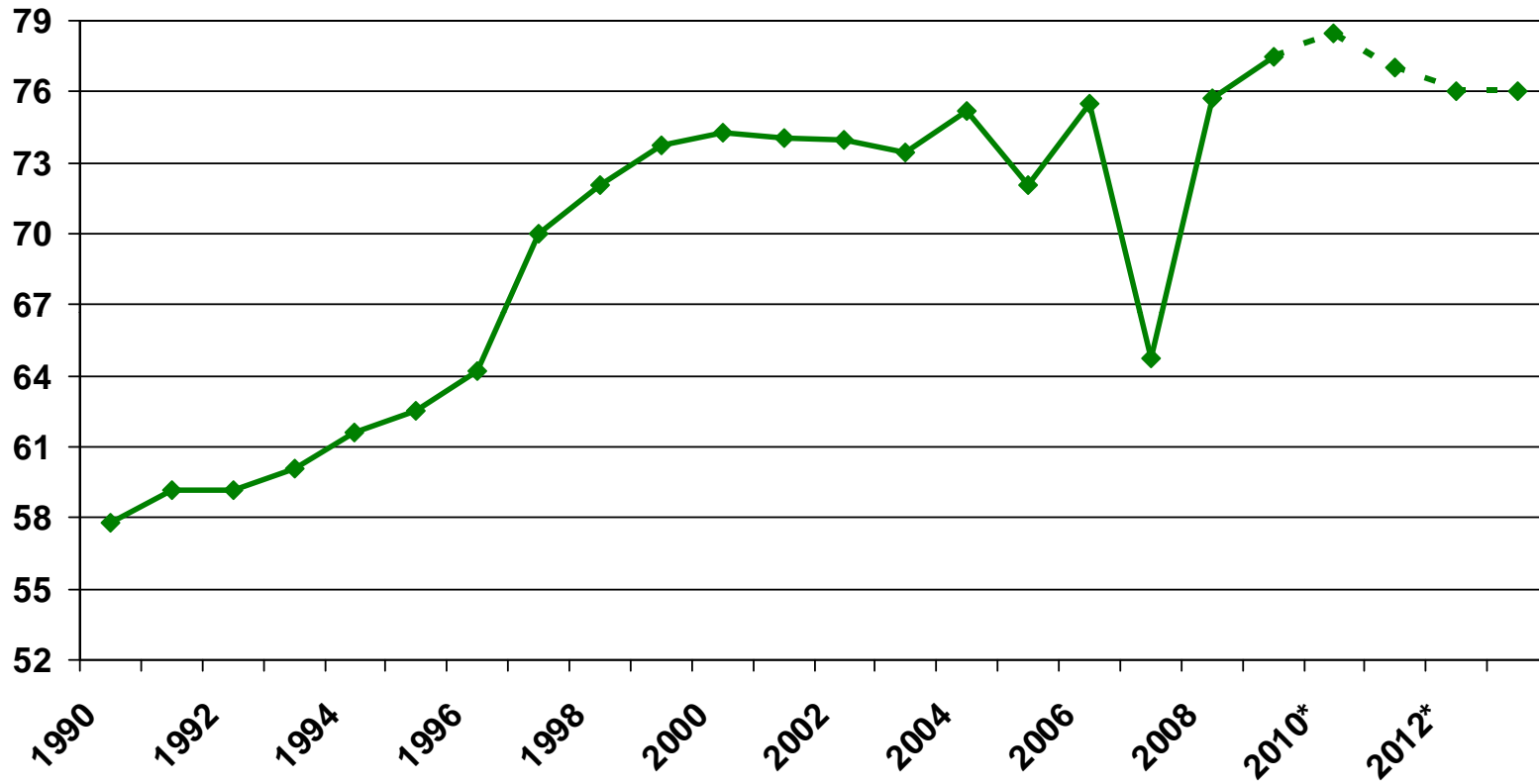
# U.S. Soybean Ending Stocks vs. Price



Source: USDA

# U.S. Soybean Planted Acres

Million Acres



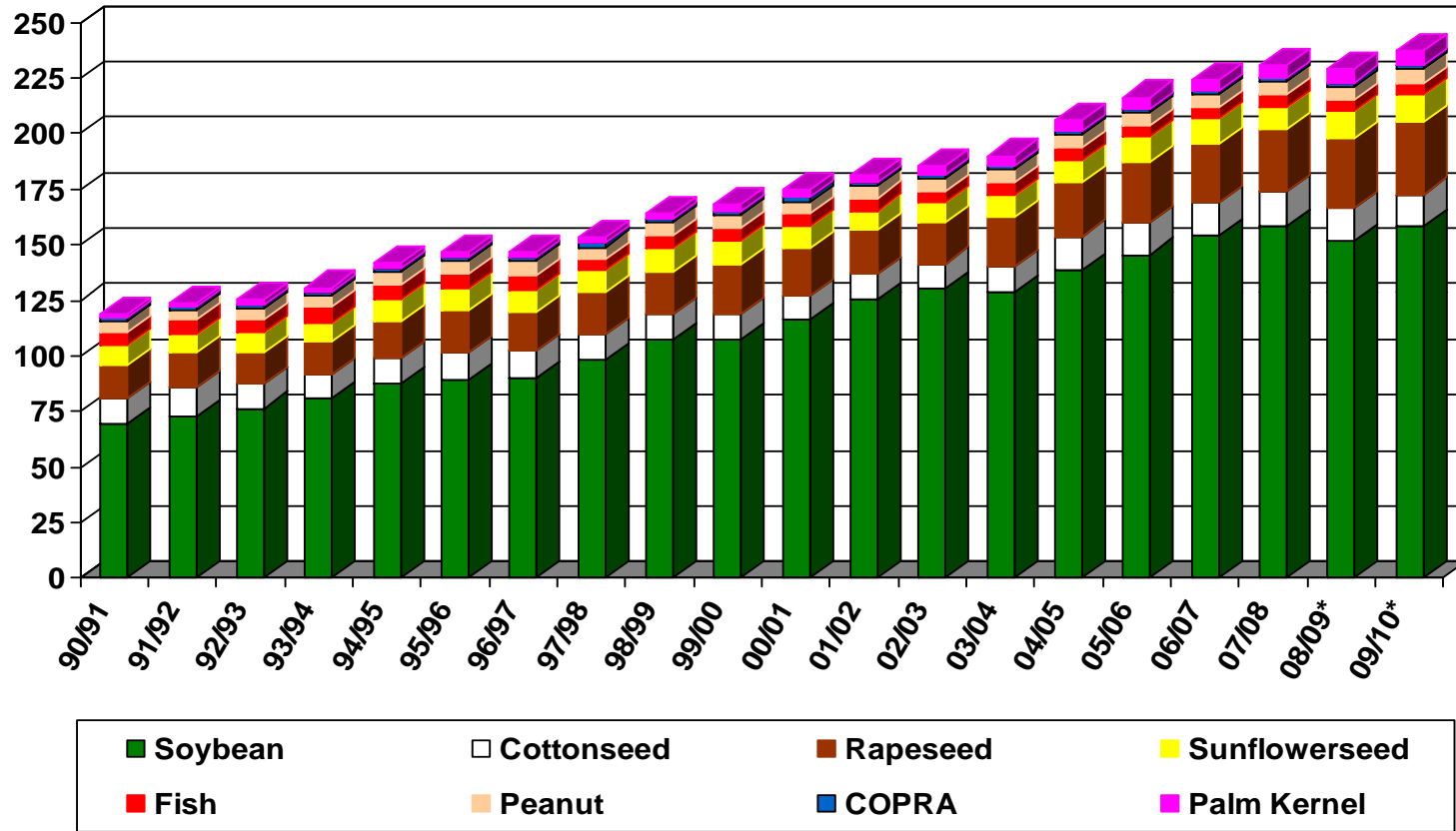
Source: USDA  
\* NPKFAS Forecast

# Soybean Meal Situation

- **World**
  - Increasing demand for protein globally after small dip in 2008
  - Growing livestock production in Brazil, China, India and S.E. Asia
  - Demand expected to increase as world economy improves
  
- **U.S.**
  - Crush has been declining since the record set in 2006/07
  - Poor profitability in U.S. livestock industry has cut demand
  - Crush will be up slightly in 2009/10 due to good SBM exports
  - Exports fell in 2008/09 and will likely hit a new record in 2009/10
  - Abundant supplies of DDGs will limit growth

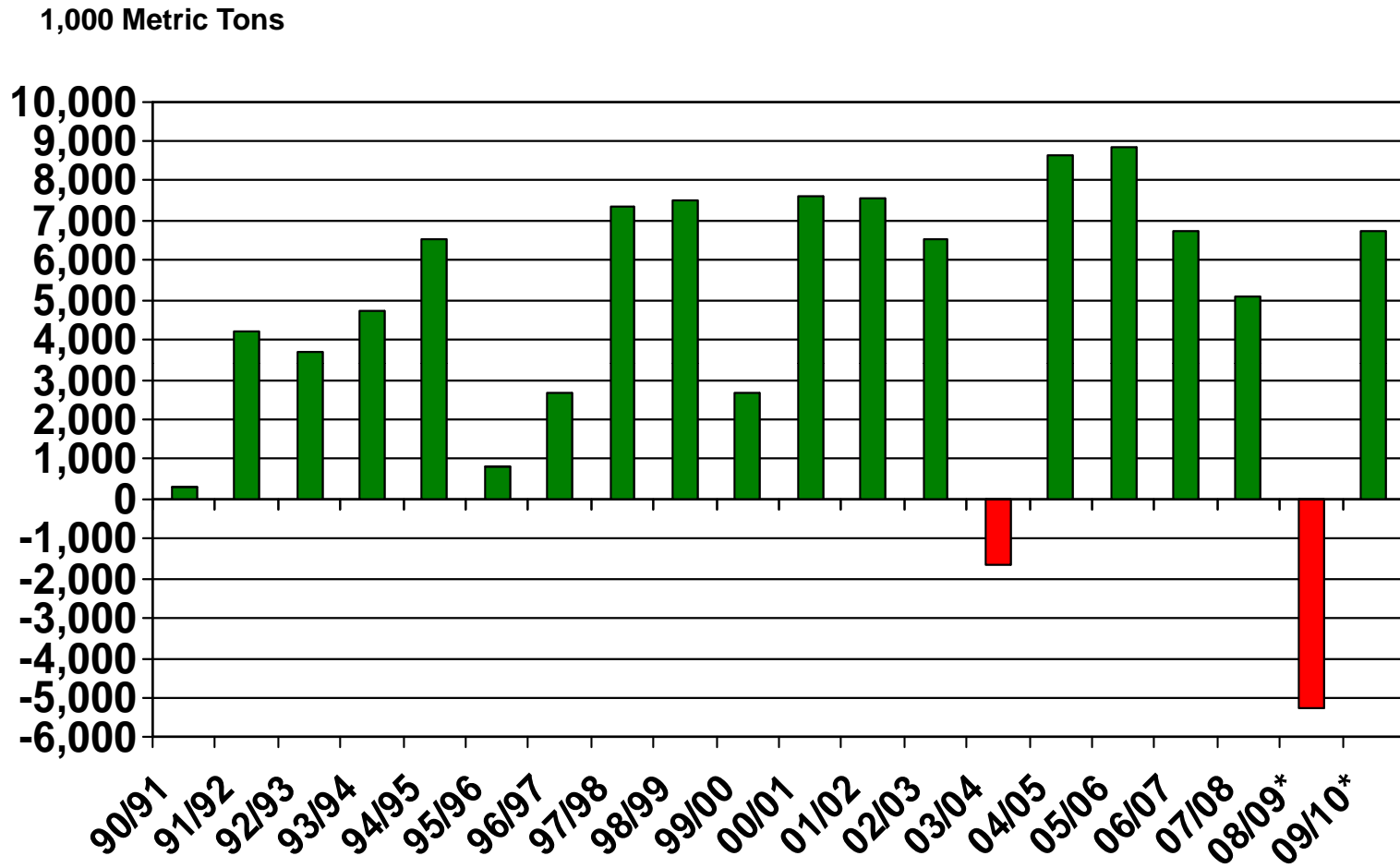
# Major World Protein Meal Production

Million Metric Tons



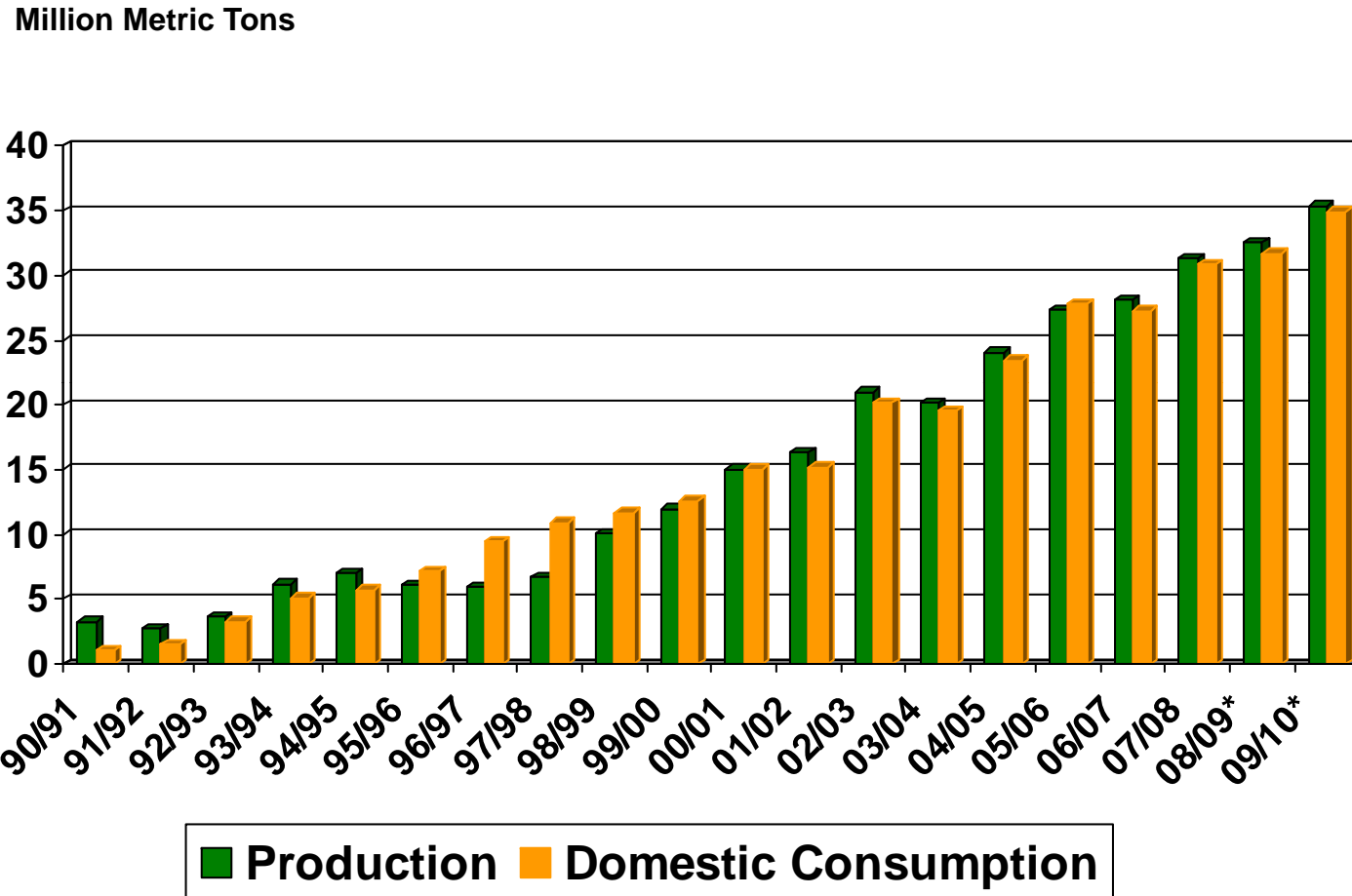
Source: USDA

# Annual Change in World Soybean Meal Domestic Disappearance



Source: USDA

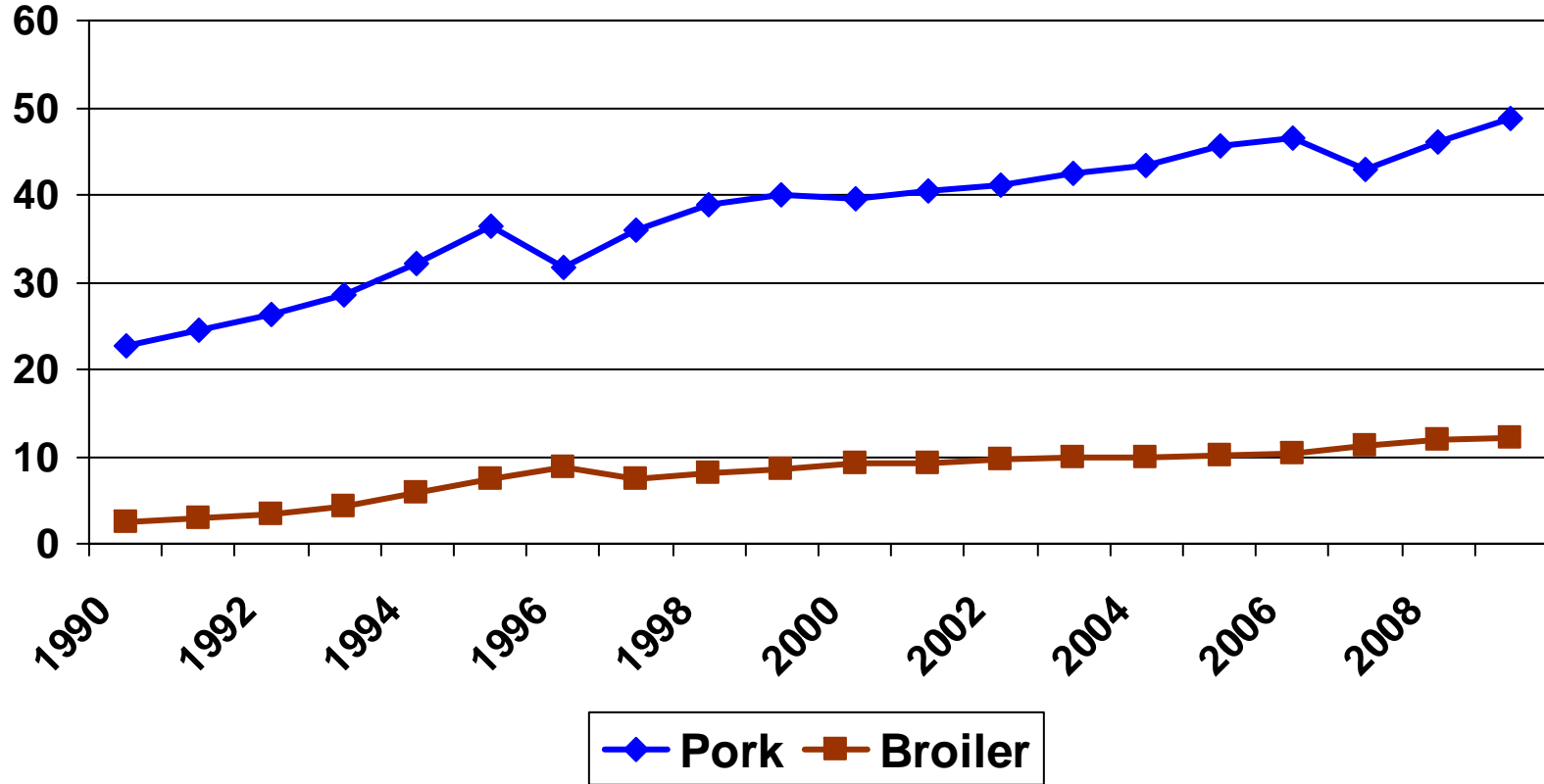
# China Soybean Meal Production and Domestic Consumption



Source: USDA

# China Broiler and Pork Production

Million Metric Tons

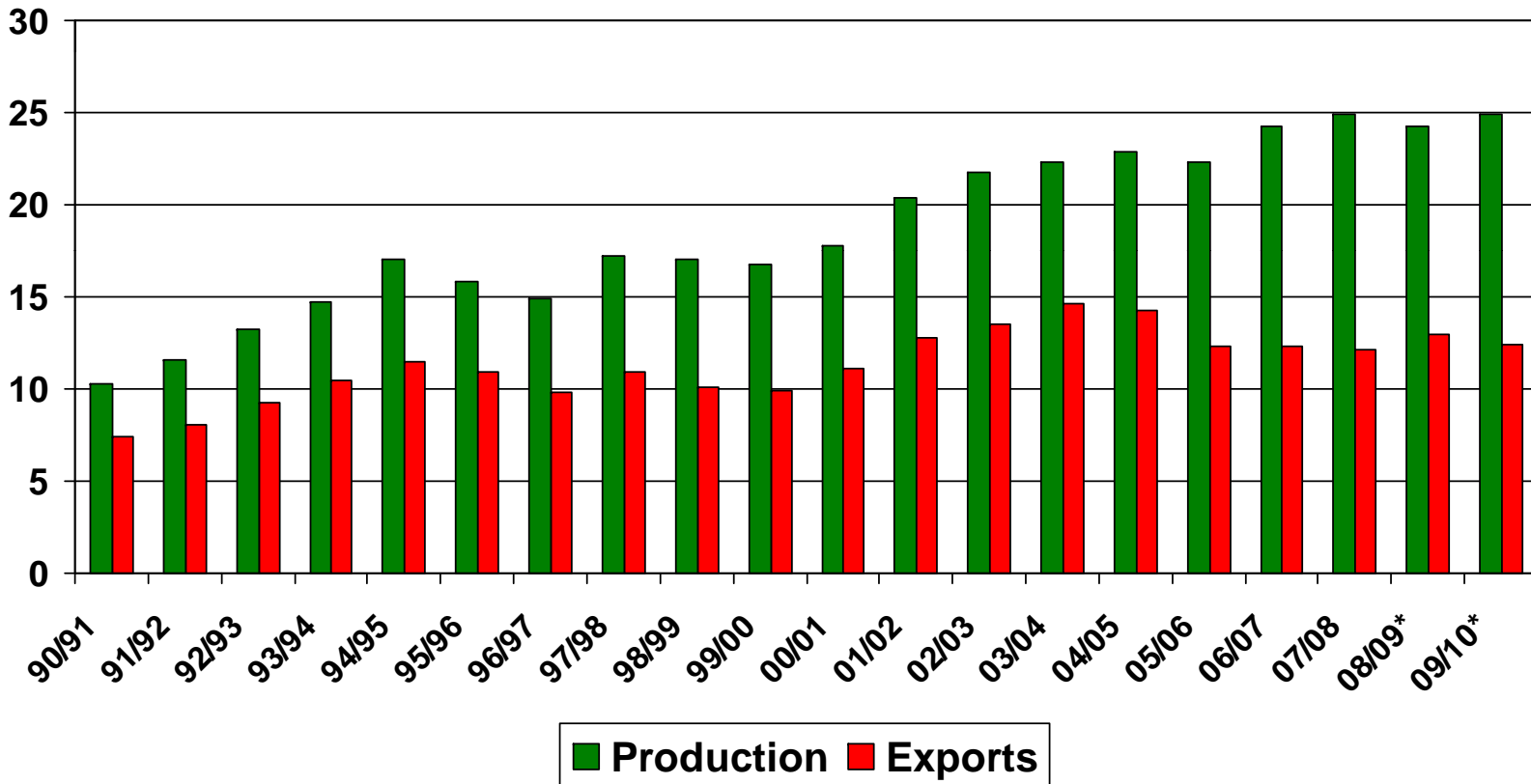


Source: USDA



# Brazil Soybean Meal Production and Exports (February/January)

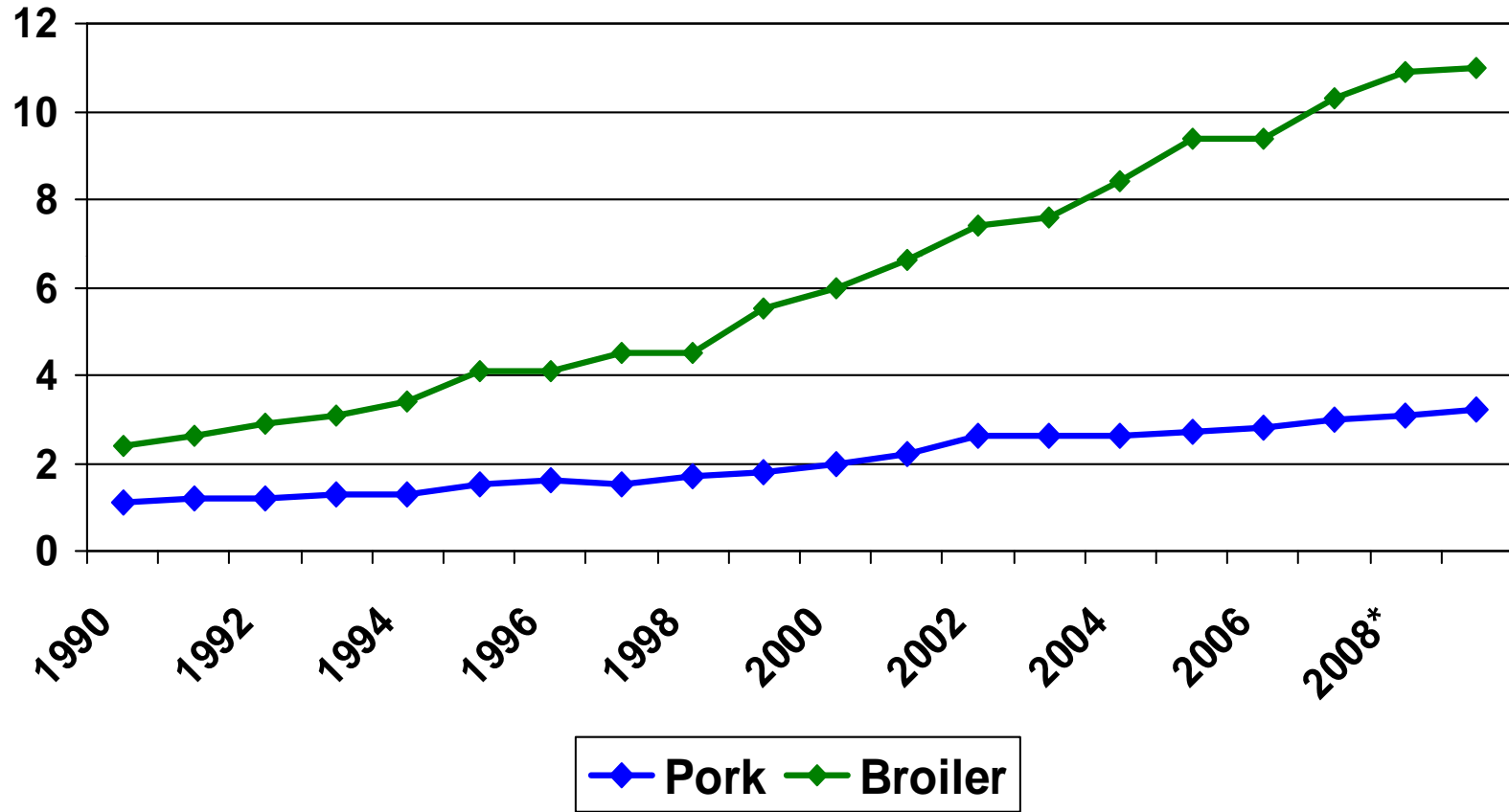
Million Metric Tons



Source: USDA

# Brazilian Broiler and Pork Production

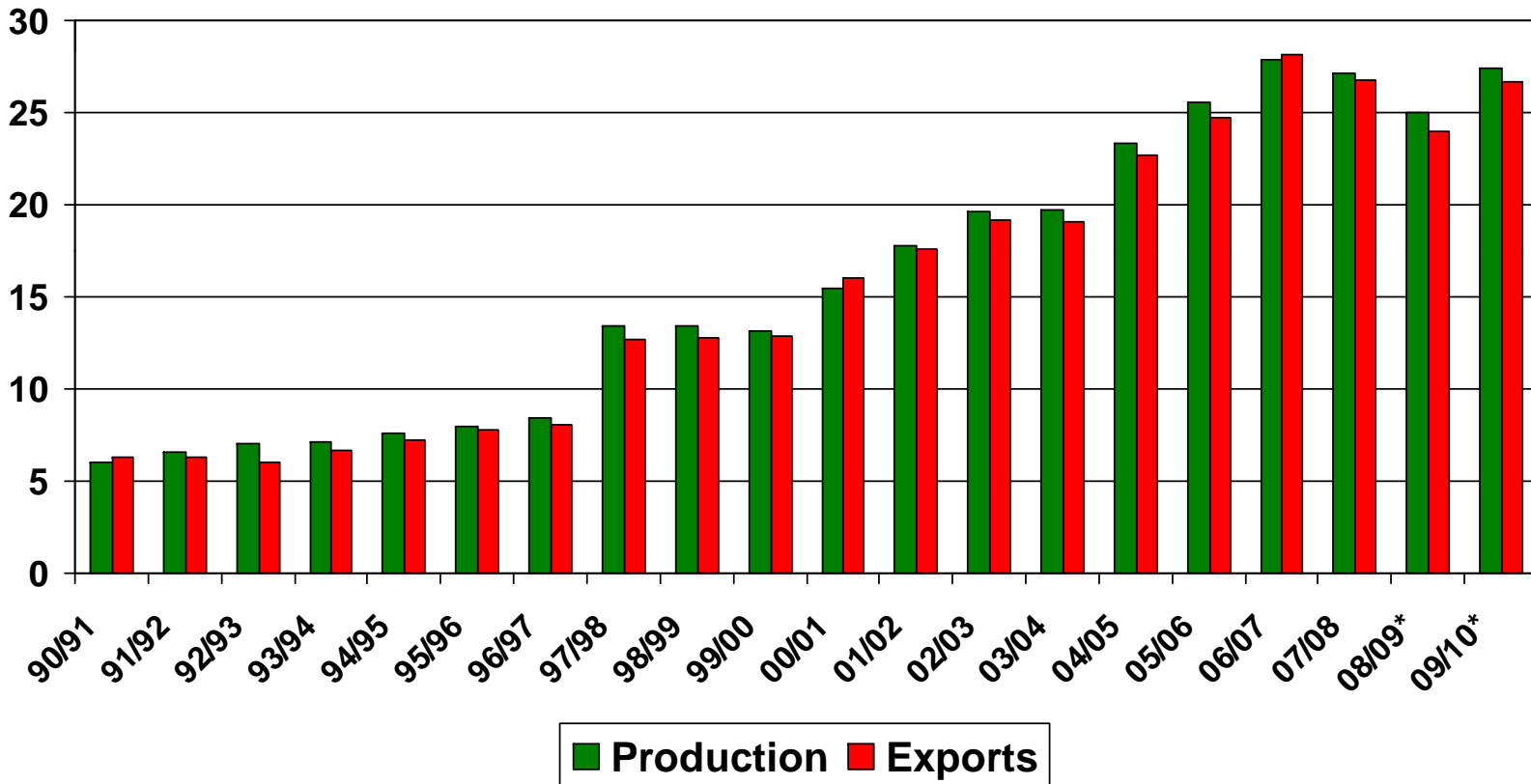
Million Metric Tons



Source: USDA

# Argentina Soybean Meal Production and Exports (February/January)

Million Metric Tons



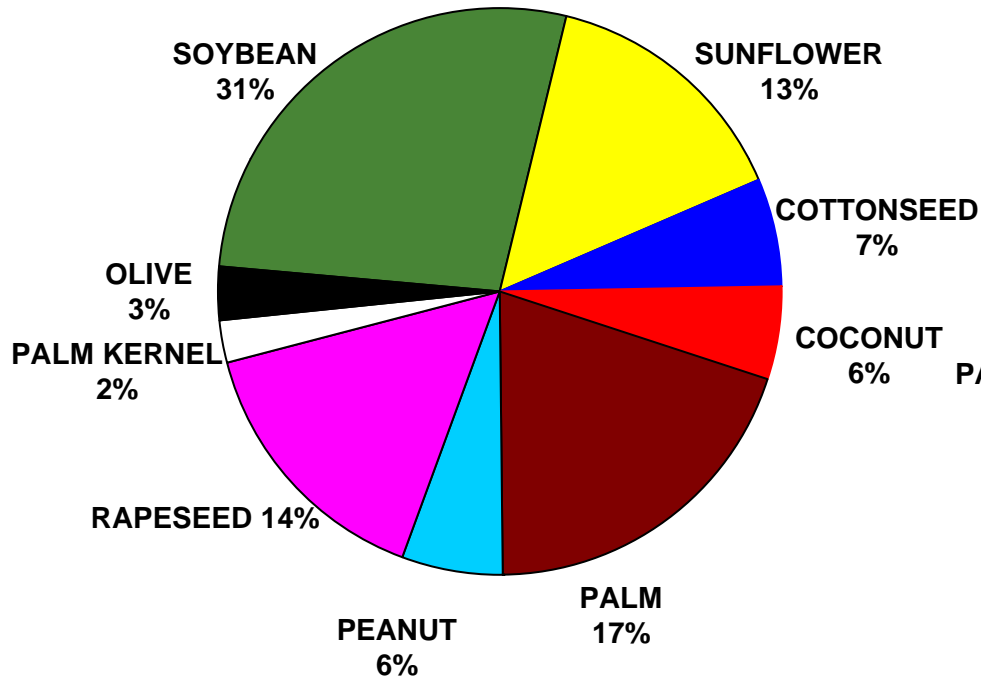
Source: USDA

## **World Vegetable Oil Situation**

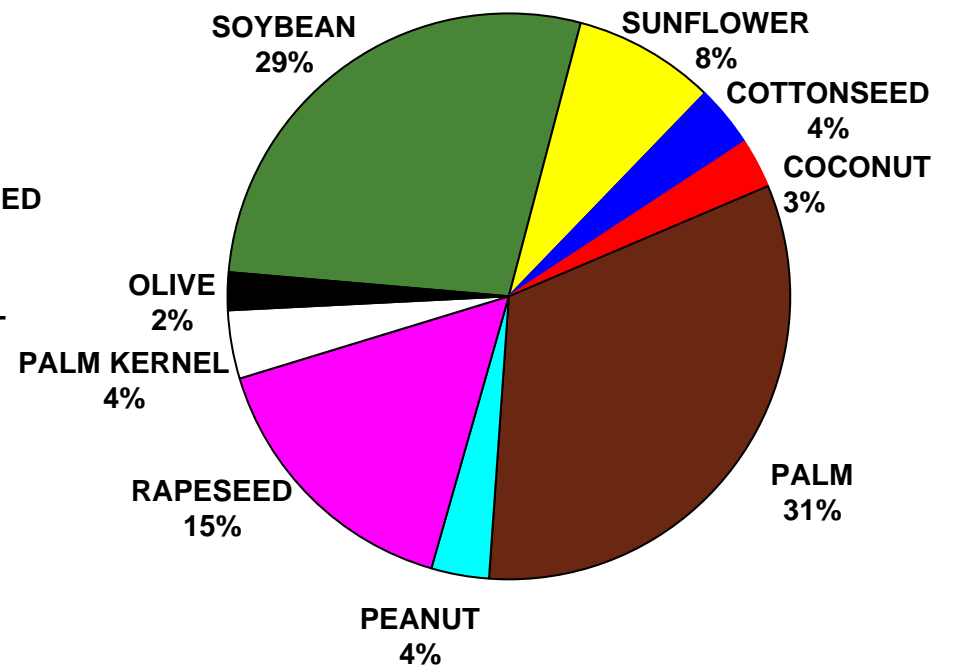
- **World**
  - **It is all about energy prices and biodiesel---waning?**
  - **European Biodiesel industry struggling**
    - **High vegetable oil prices has reduced profitability**
    - **Imposition of taxes in Germany has hurt biodiesel there**
  - **Record low world vegetable oil stocks-to-use ratio**
  - **High prices of vegetable oil impacting demand & production**
  - **Palm oil production is gearing up---new investments in Indonesia and Malaysia**

# Major World Vegetable Oil Consumption Market Share

**1990/91**  
**58.5 M.M.T.**



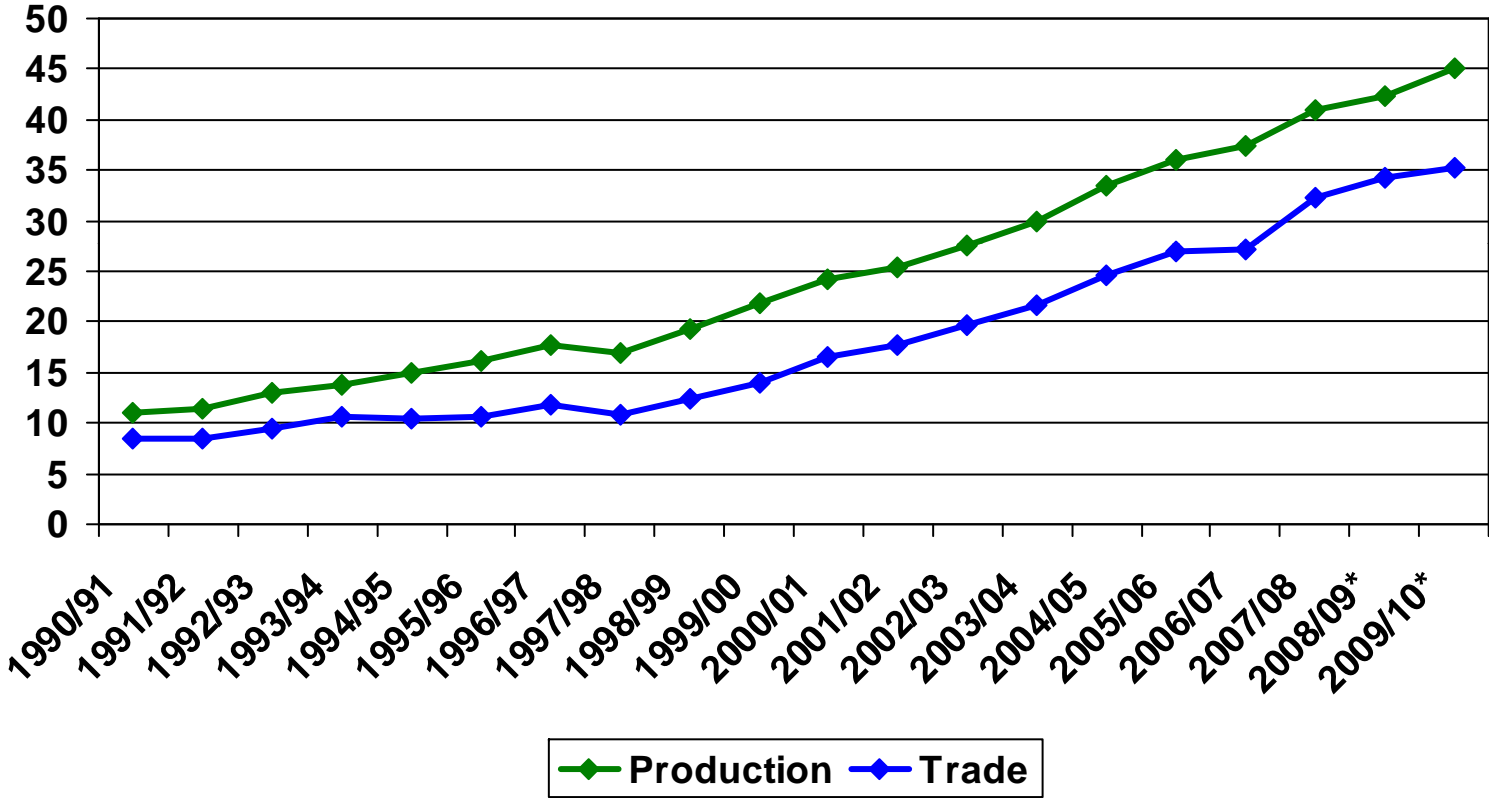
**2009/10**  
**142.0 M.M.T.**



Source: USDA

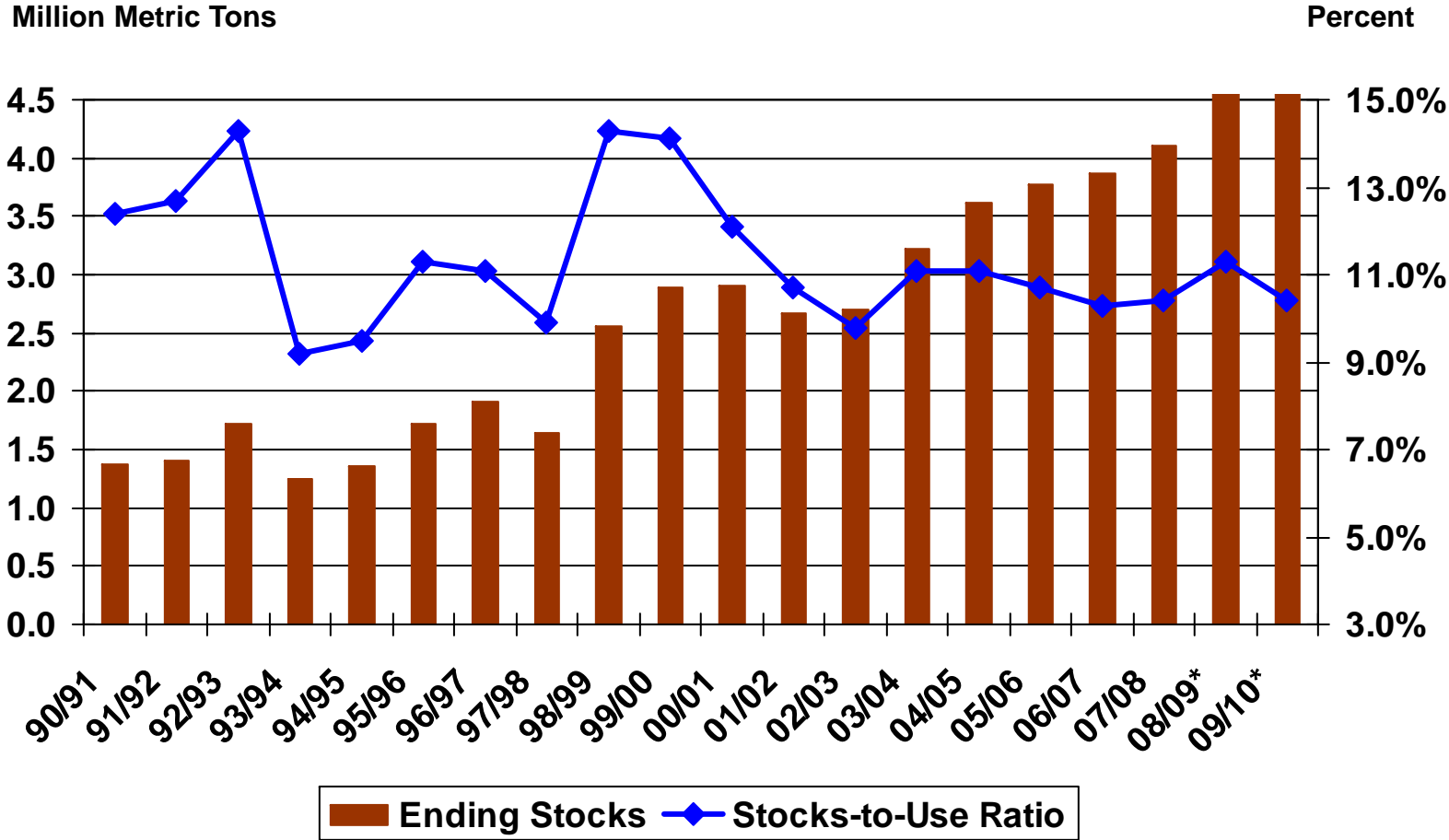
# World Palm Oil

Million Metric Tons



Source: USDA

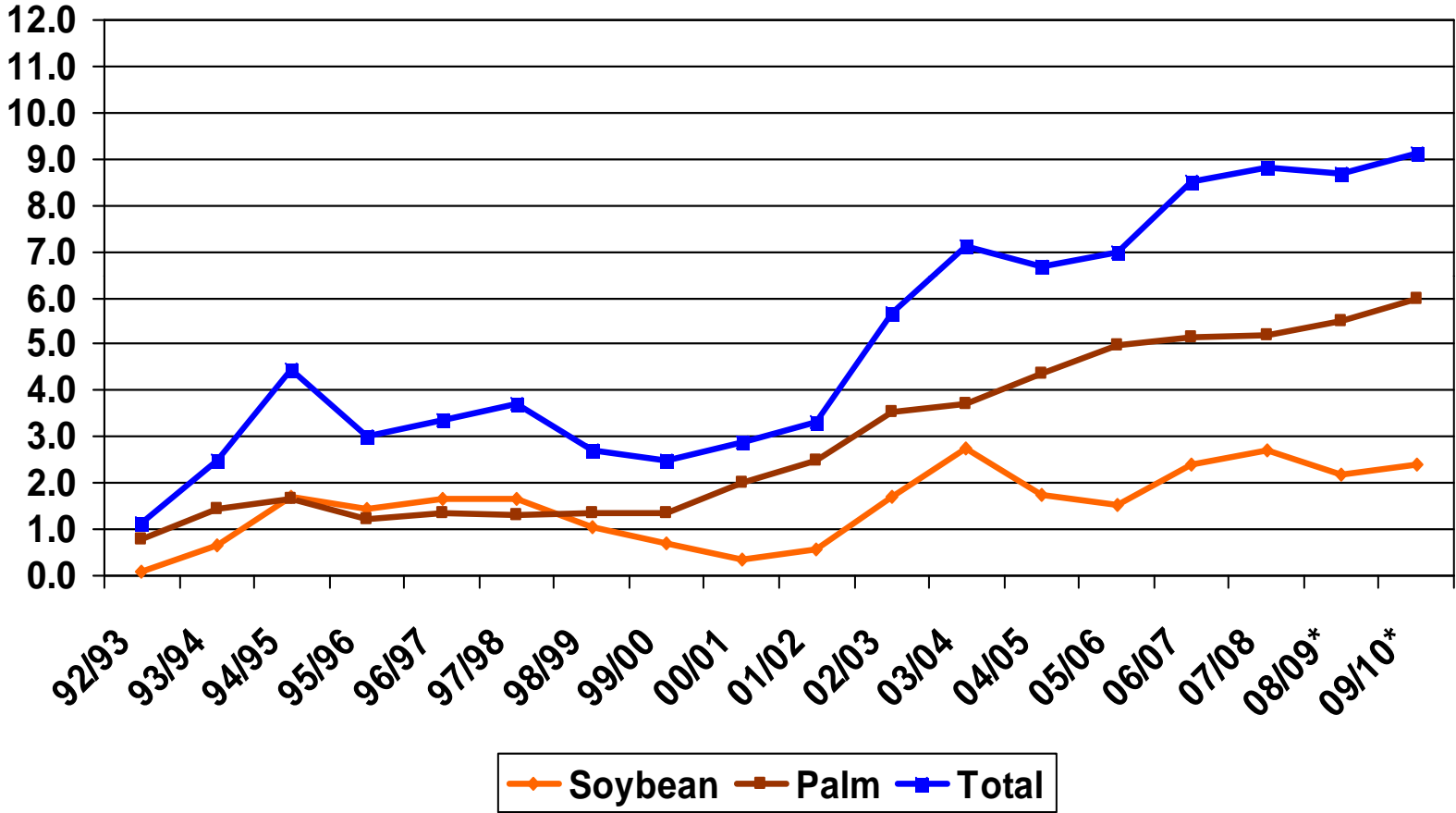
# World Palm Oil Stocks



Source: USDA

# China Vegetable Oil Imports

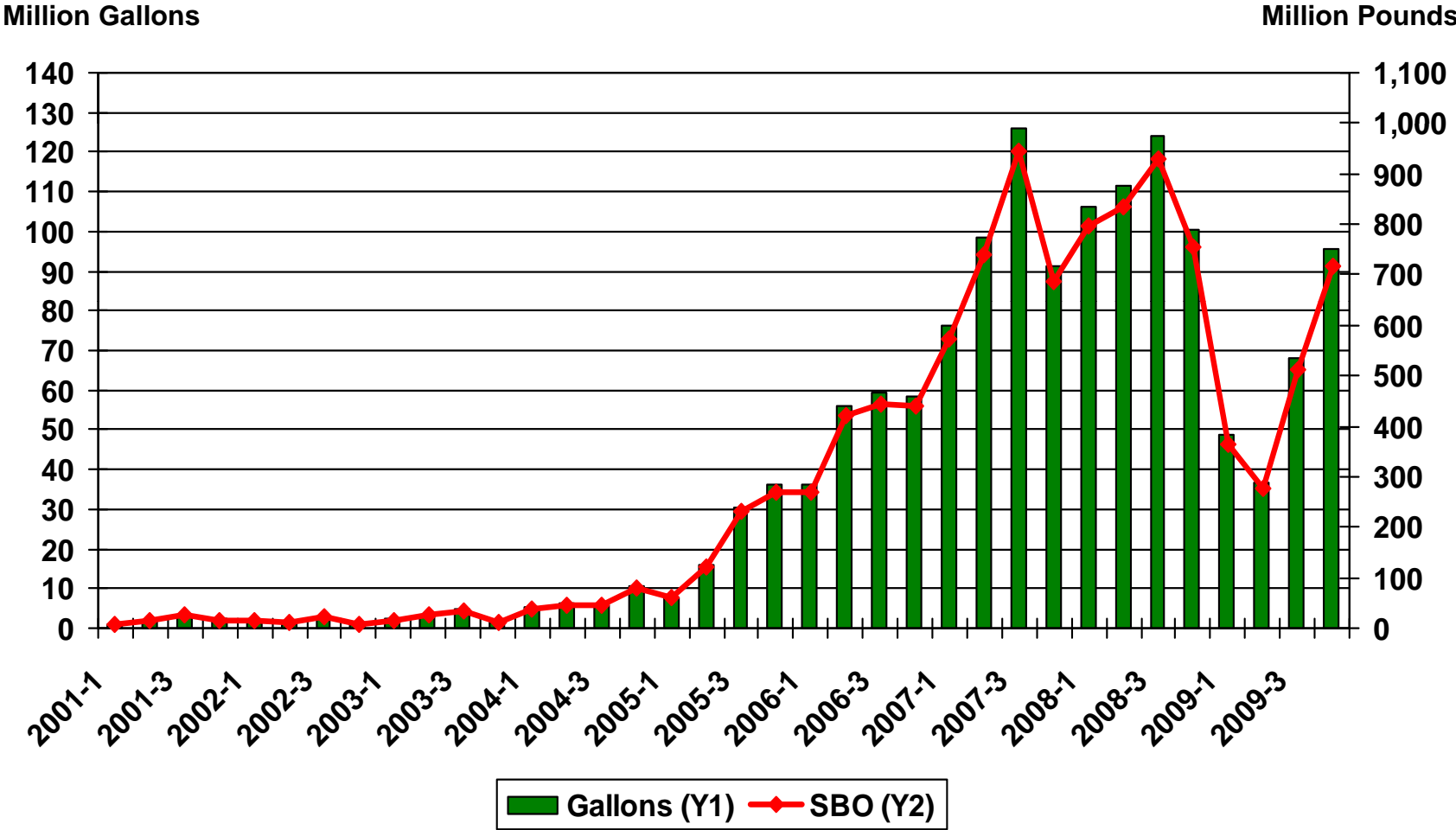
Million Metric Tons



Source: USDA

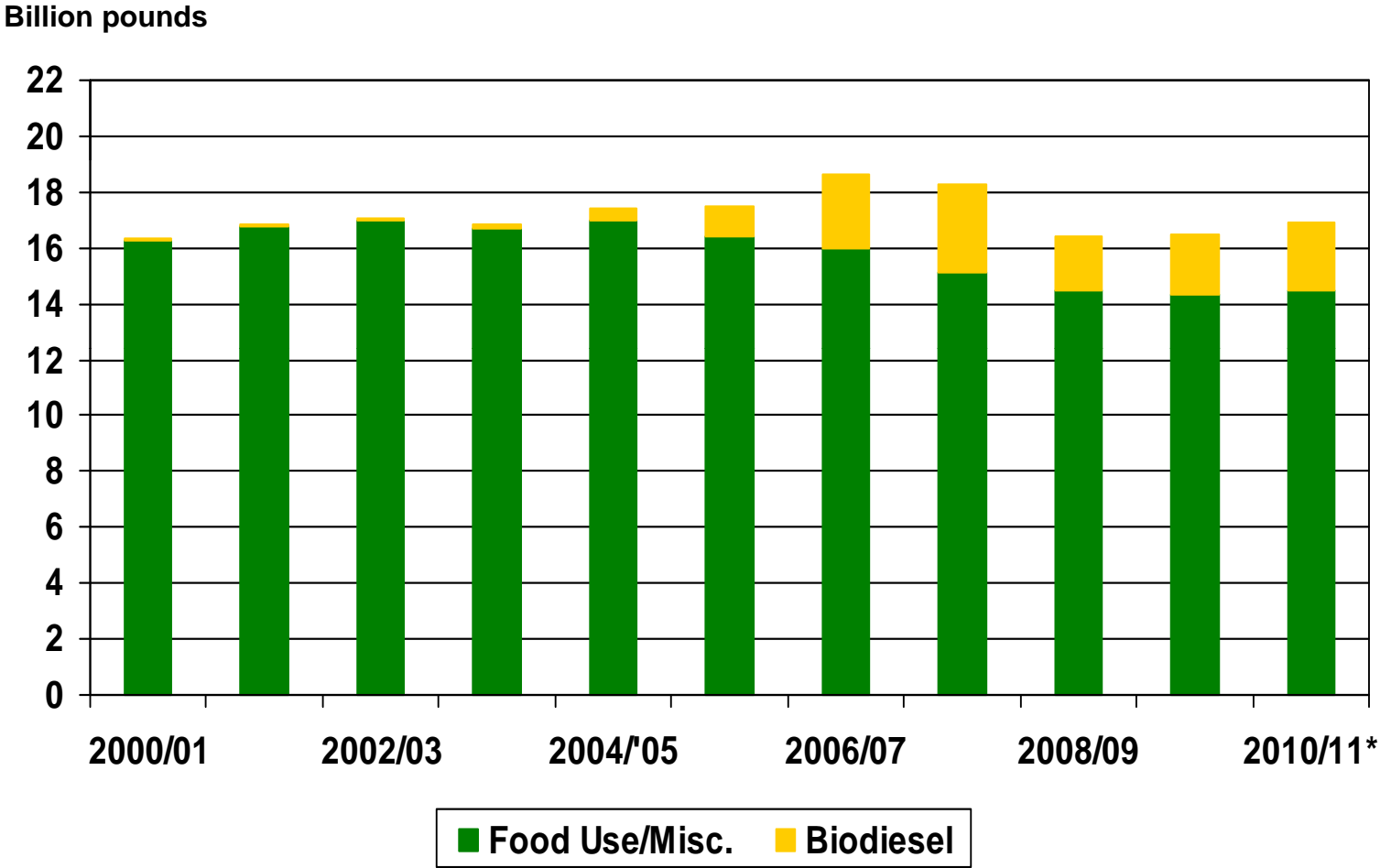


# U.S. Biodiesel Production – Soybean Oil



Source: USDA/Census

# U.S. Soybean Oil Domestic Disappearance



Source: USDA  
\* NPKFAS Forecast

## U.S. Average Cost and Returns for Soybeans

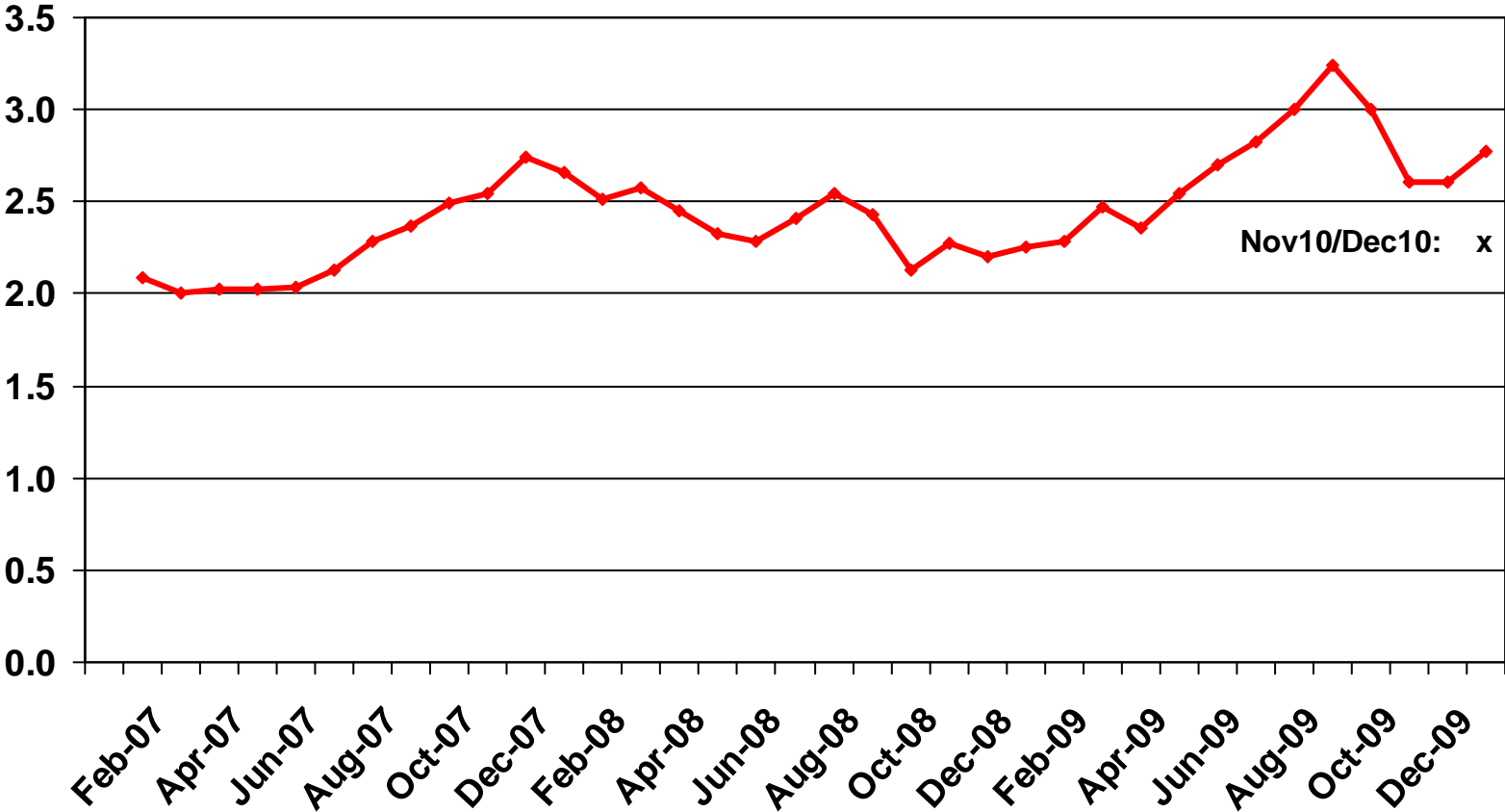
(dollars per planted acre)

	<u>2009</u>	<u>2010*</u>	<u>% Change</u>
<b><u>Operating Costs:</u></b>			
Fertilizer	\$ 18	\$ 22	22.2%
Seed	\$ 51	\$ 57	11.8%
Fuel	\$ 13	\$ 15	15.4%
Chemicals	\$ 17	\$ 16	-5.9%
Other Variable	<u>\$ 20</u>	<u>\$ 22</u>	<u>10.0%</u>
<b>Total Operating Costs</b>	<b>\$ 119</b>	<b>\$ 132</b>	<b>10.9%</b>
<b>Gross Revenue</b>	<b>\$ 405</b>	<b>\$ 383</b>	<b>-5.4%</b>
<b>Returns over Operating Costs</b>			
	<b>\$ 286</b>	<b>\$ 251</b>	<b>-12.2%</b>

Source: USDA

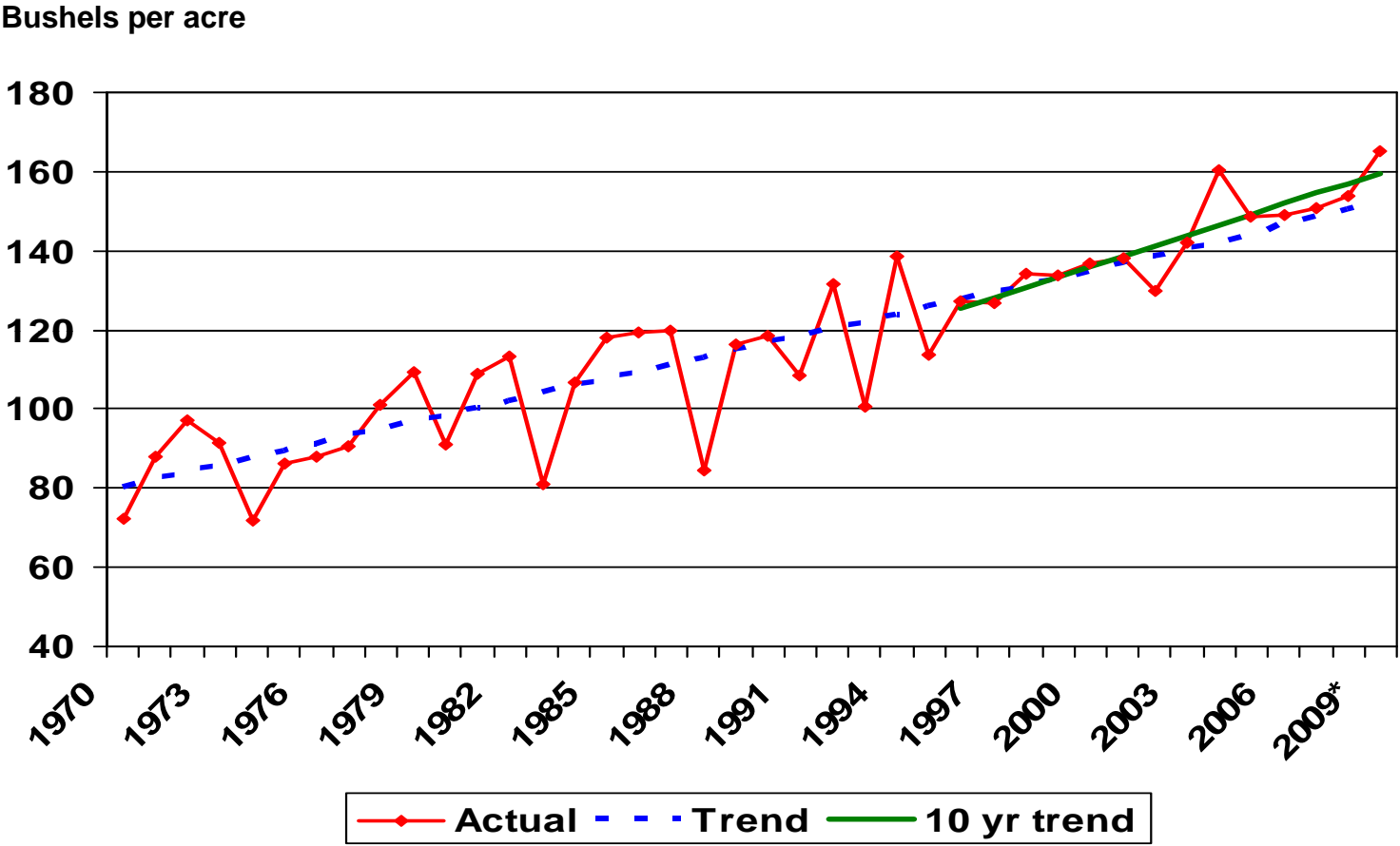
\* NPKFAS Estimate

# U.S. Crop Price Ratios: Soybeans/Corn

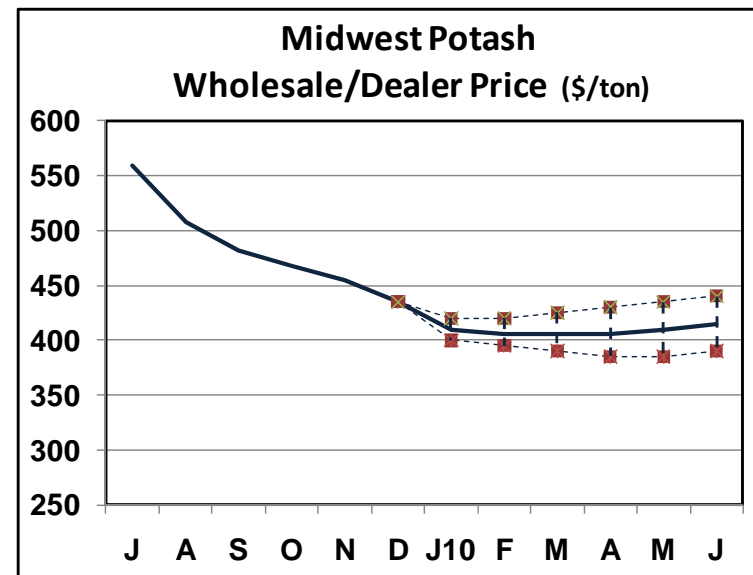
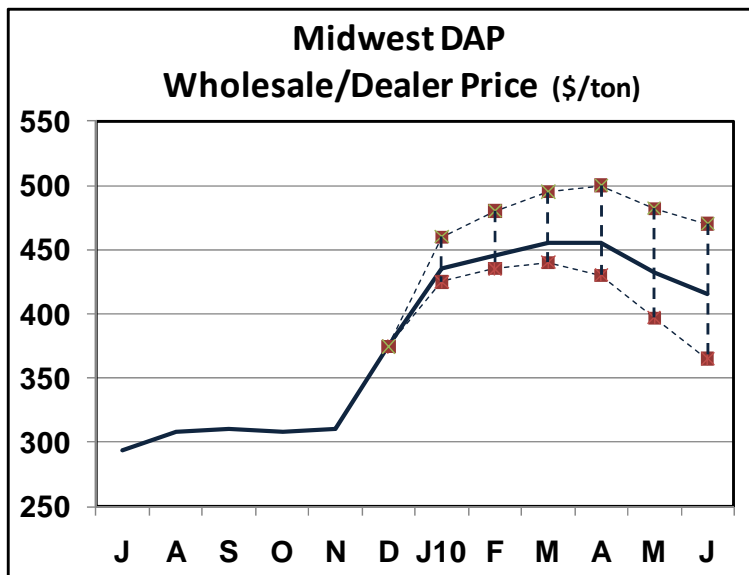
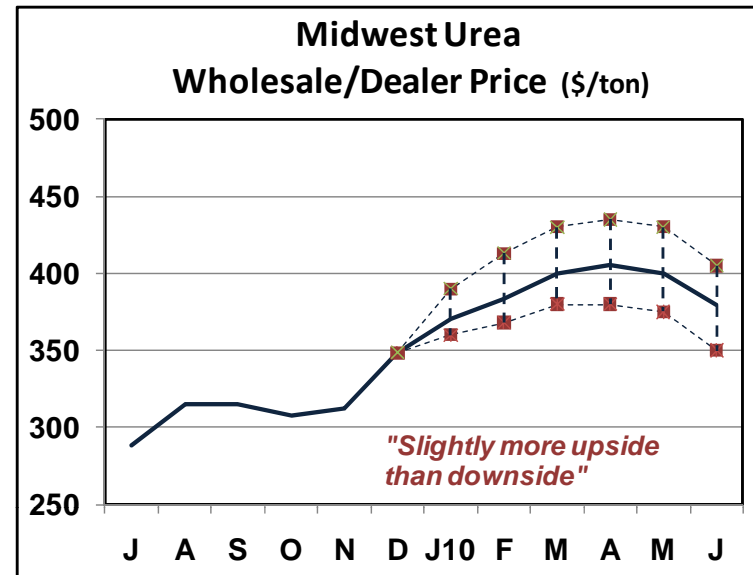
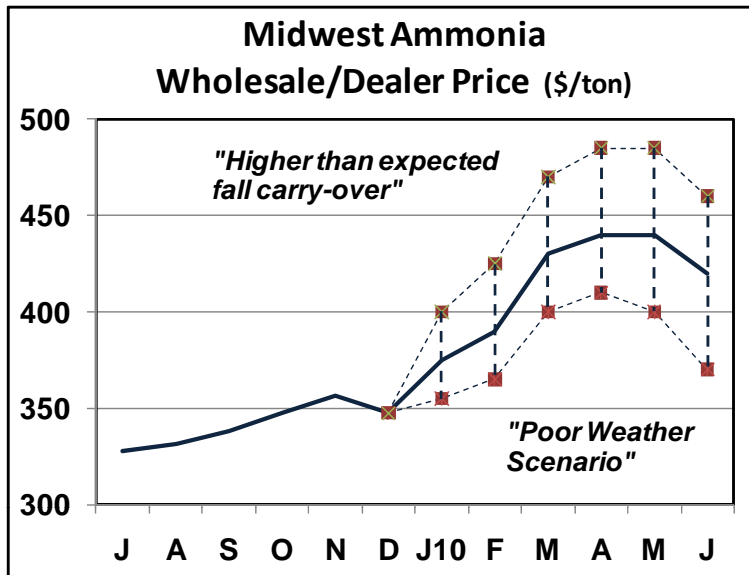


Source: USDA

# Corn Yield Growth is Accelerating



Source: USDA



\*NPKFAS projection

## U.S. Average Cost and Returns – 2010\*

(dollars per planted acre)

	<u>Corn</u>	<u>Soybeans</u>	<u>Difference</u>
<b><u>Operating Costs:</u></b>			
Fertilizer	\$ 110	\$ 22	\$ 88
Seed	\$ 76	\$ 57	\$ 19
Fuel	\$ 30	\$ 15	\$ 15
Chemicals	\$ 25	\$ 16	\$ 11
Other Variable	<u>\$ 28</u>	<u>\$ 22</u>	<u>\$ 6</u>
<b>Total Operating Costs</b>	<b>\$ 269</b>	<b>\$ 132</b>	<b>\$ 137</b>
<b>Gross Revenue</b>	<b>\$ 544</b>	<b>\$ 383</b>	<b>\$ 161</b>
<b>Returns over Operating Costs</b>	<b>\$ 275</b>	<b>\$ 251</b>	<b>\$ 24</b>

Source: USDA

\* NPKFAS Estimate

## **Some Final Observations**

- **Higher crop Prices are here to stay**
  - Especially for corn and soybeans
- **Total U.S. crop acreage will increase to keep pace with demand growth.**
- **However, foreign crop acreage will also have to increase.**
- **World grain demand is rising faster than world production.**
- **There will be a battle for acreage in 2010 and beyond.**



# QUESTIONS?

*David Asbridge  
NPK Fertilizer Advisory Service  
January, 2010*

*[www.npkfas.com](http://www.npkfas.com)*