

World trade in Grains and Oilseeds: Milestones for 2010

By Dr. Robert Wisner

Biofuels Economist & University Professor

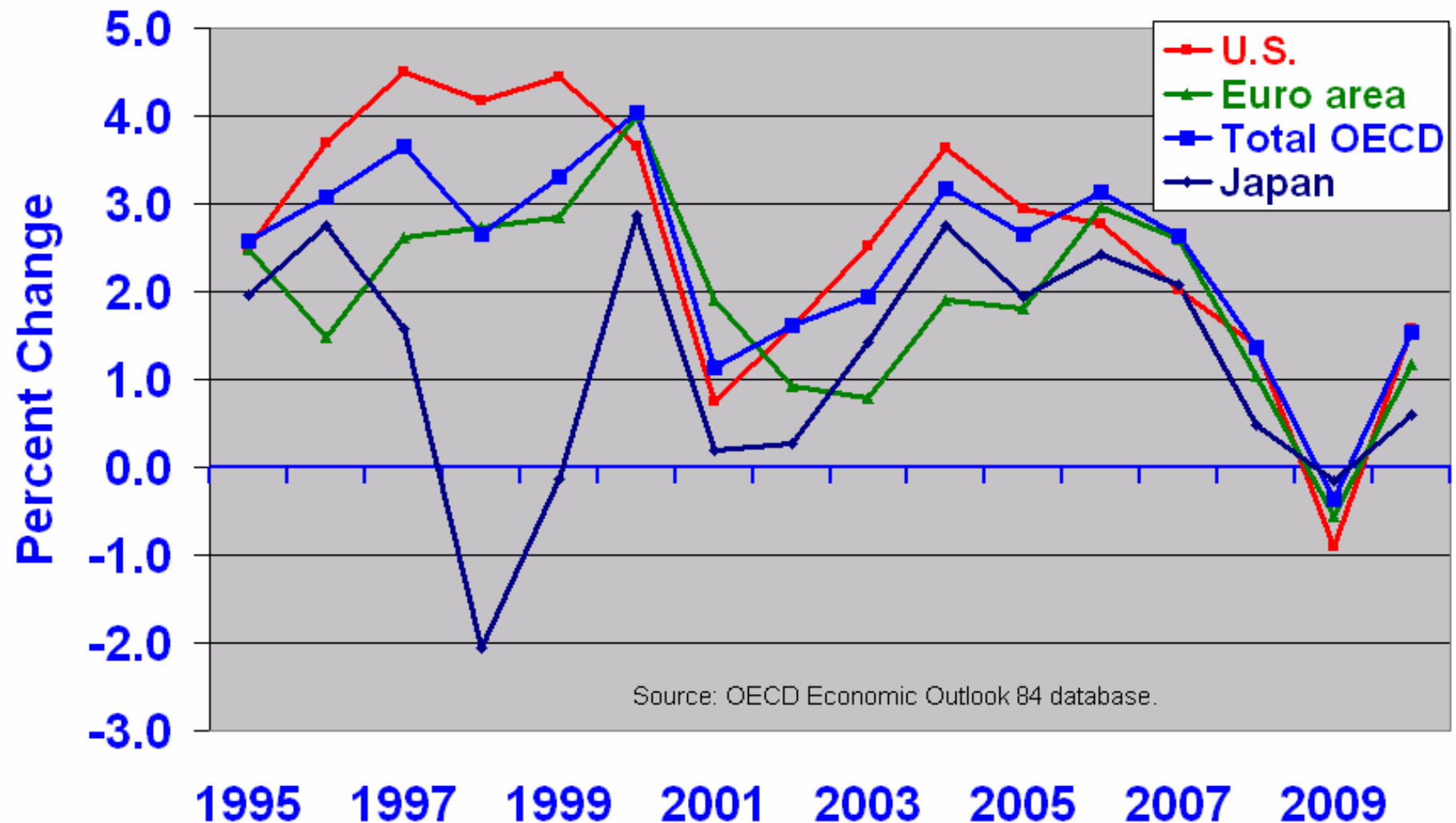
**AgMarketing Resource Center
Iowa State University
Ames, Iowa U.S.A.**

Topics to Be Discussed

- **Global Economic Prospects**
- **U.S. Ethanol Trends & Effects on Feed Supply**
- **Key Players in World Grain & Feed Trade**
- **Emerging Developments in China's Grain**
- **The Future: Potential Areas for Supply-Expansion**
 - **South America**
 - **Former Soviet Republics**

World Economy: Key to Export Demand & Feed Prices

Real Gross Domestic Product (GDP) History and OECD Projections to 2010



U.S. Economic Recessions I

<i>Starting Date</i>	<i>Months Duration</i>
March 1937 II	13
Feb. 1945 I	8
Nov. 1948(IV)	11
July 1953(II)	10
Aug.1957(III)	8
April 1960(II)	10
Dec. 1969(IV)	11
Nov. 1973(IV)	16
Jan. 1980(I)	6
July 1981(III)	16
July 1990(III)	8
March 2001(I)	8
Dec. 2007 IV	?

Post-WW II Extremes:
**16 months with oil shocks +
tax & monetary stimulus**

Avg. Duration, Post
WWII: 10.2 Months

Extremes: 43 months,
Aug. 1929 – March 1933

April 1865, 32 months

Oct. 1873, 65 months

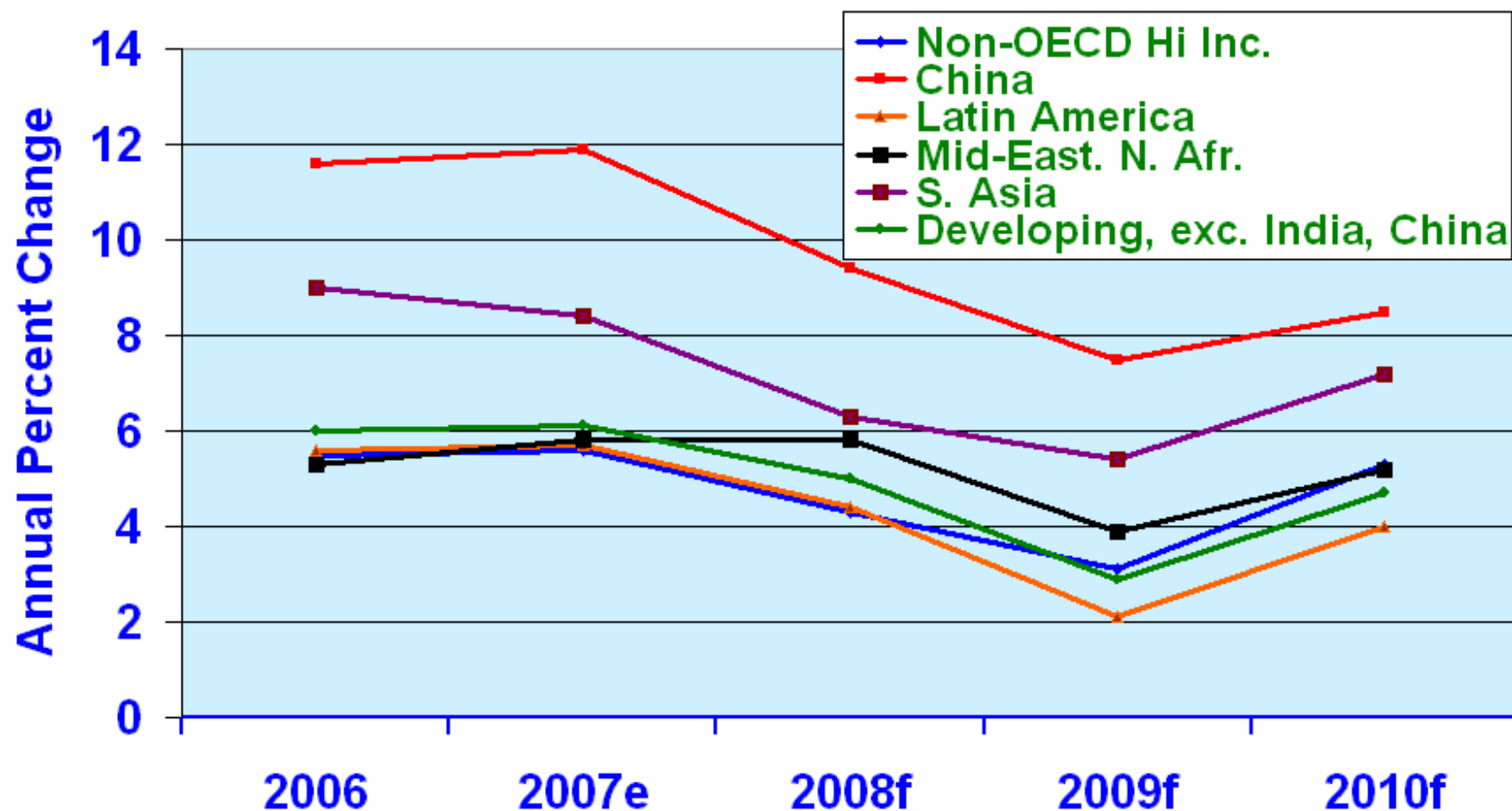
Mar. 1882, 38 months

**Source of data: St. Louis
Federal Reserve Bank**

Will World Economy Recover in 2010?

World Bank Real GDP Projections

December 1, 2008

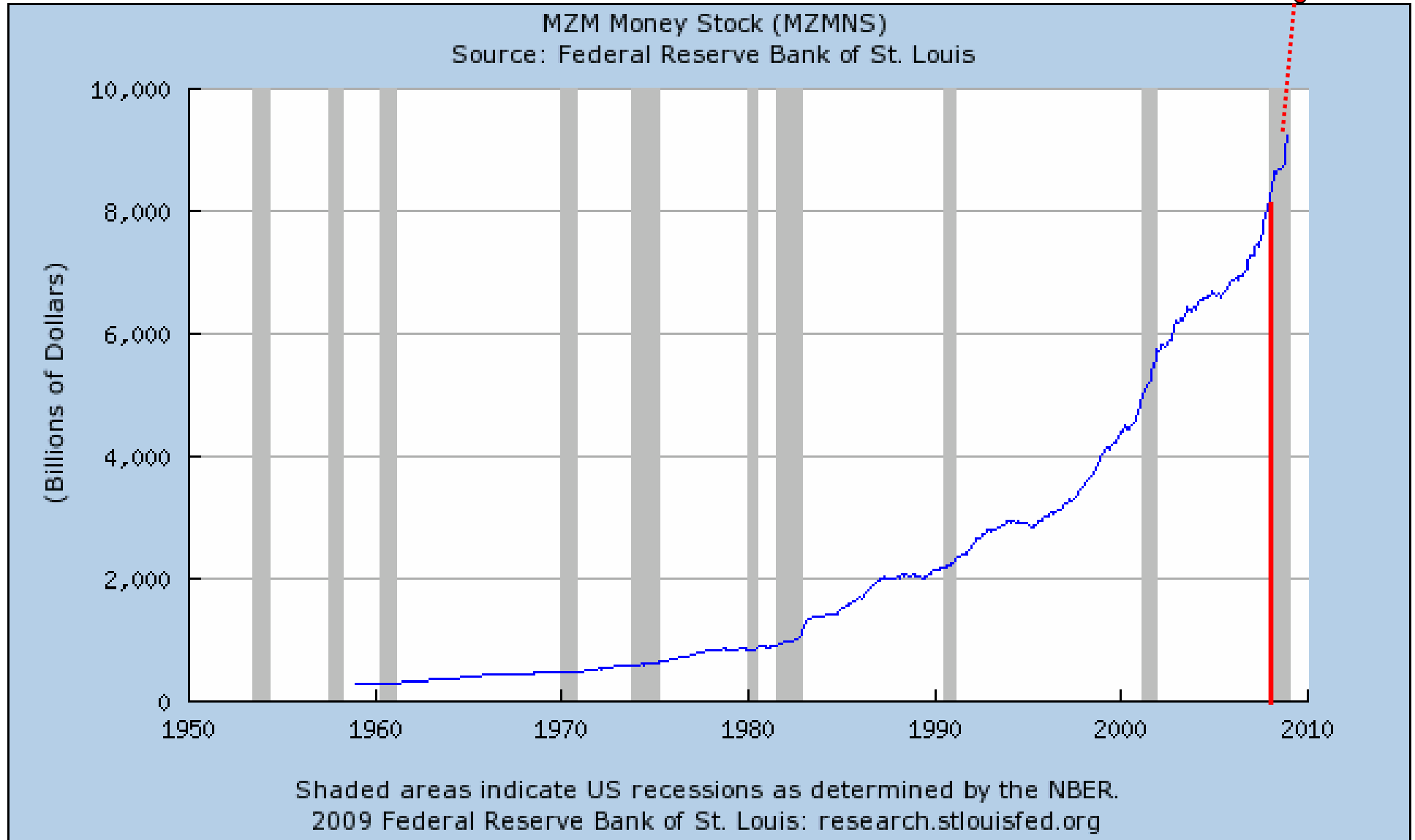


U.S. General Econ. Outlook

What Kind of Recovery?

- **V** – *looking less likely*
- **W** – temporary recovery
- **U** -- gradual recovery
- **L** -- *extended period of stagnation (with inflation) : can't be ruled out with higher taxes & cap & trade*

U.S. Money Supply



Expect Higher Inflation in 12 to 24 months + Weaker U.S. \$

U.S. General Econ. Outlook

3 Highly Likely Developments

- Trend toward weaker \$
- Increasing inflation, esp. in 2-3 years
- Higher interest rates— in 2-3 years, possibly sooner

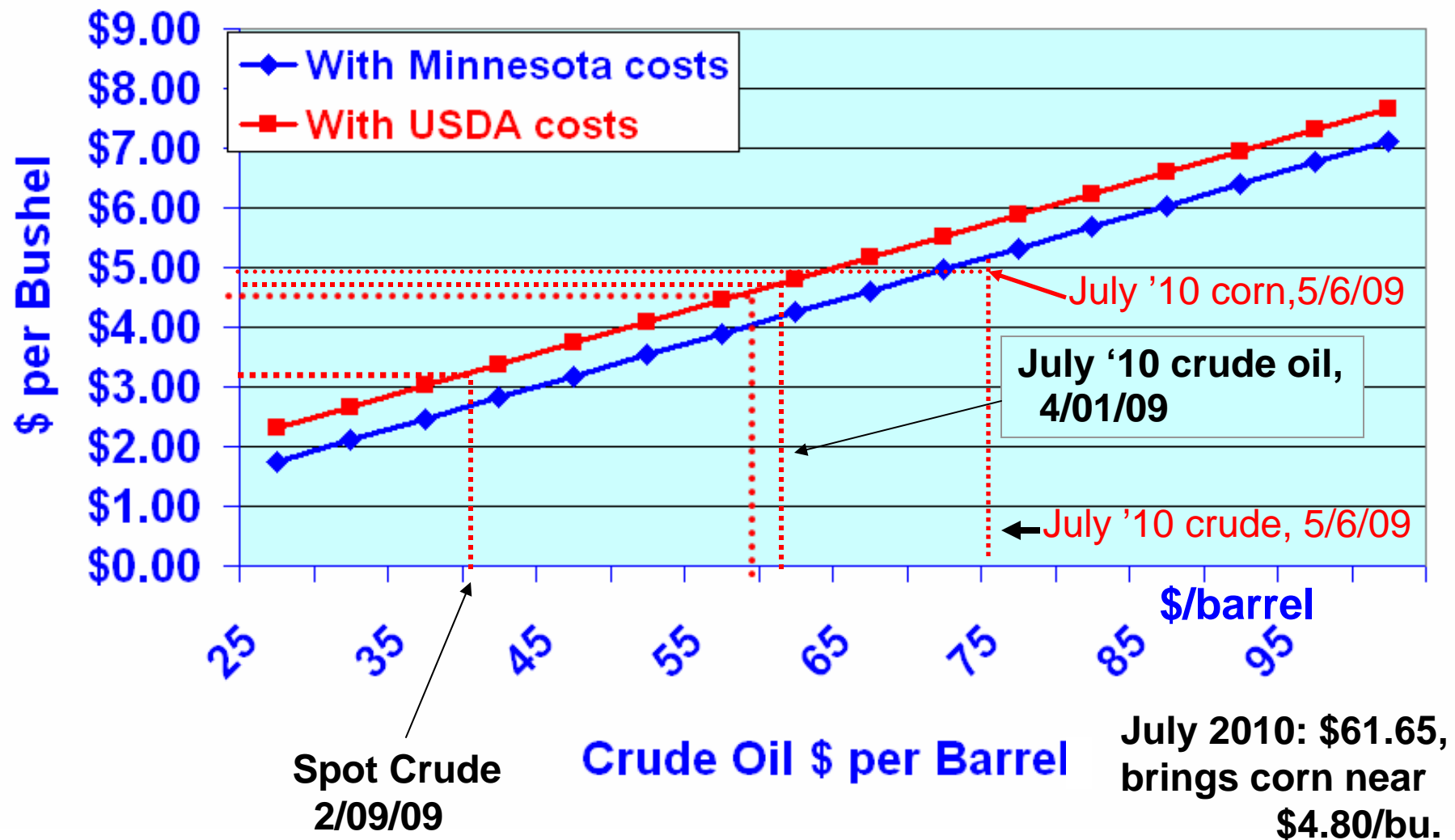
Driving forces: huge budget deficits and “cap & trade”

World Feed Trade Outlook

- 10 to 18 months of slow world growth
 - then inflation risk, weaker U.S. \$
 - Increased price volatility
 - slower growth in S. American Grain production
- Adequate grain supplies through late '09, then gradual export supply tightening
Adequate protein meal supplies through late 2010, then tightening
- 5 Keys to global feed trade: (1) *U.S. biofuels*, (2) U.S crop yields, (3) China, (4) FSU, (5) South America
- *Global warming: is it real?*
- *Will reason prevail in policies?*
 - impact of GHG emissions controls on economy, grain and animal production and trade?

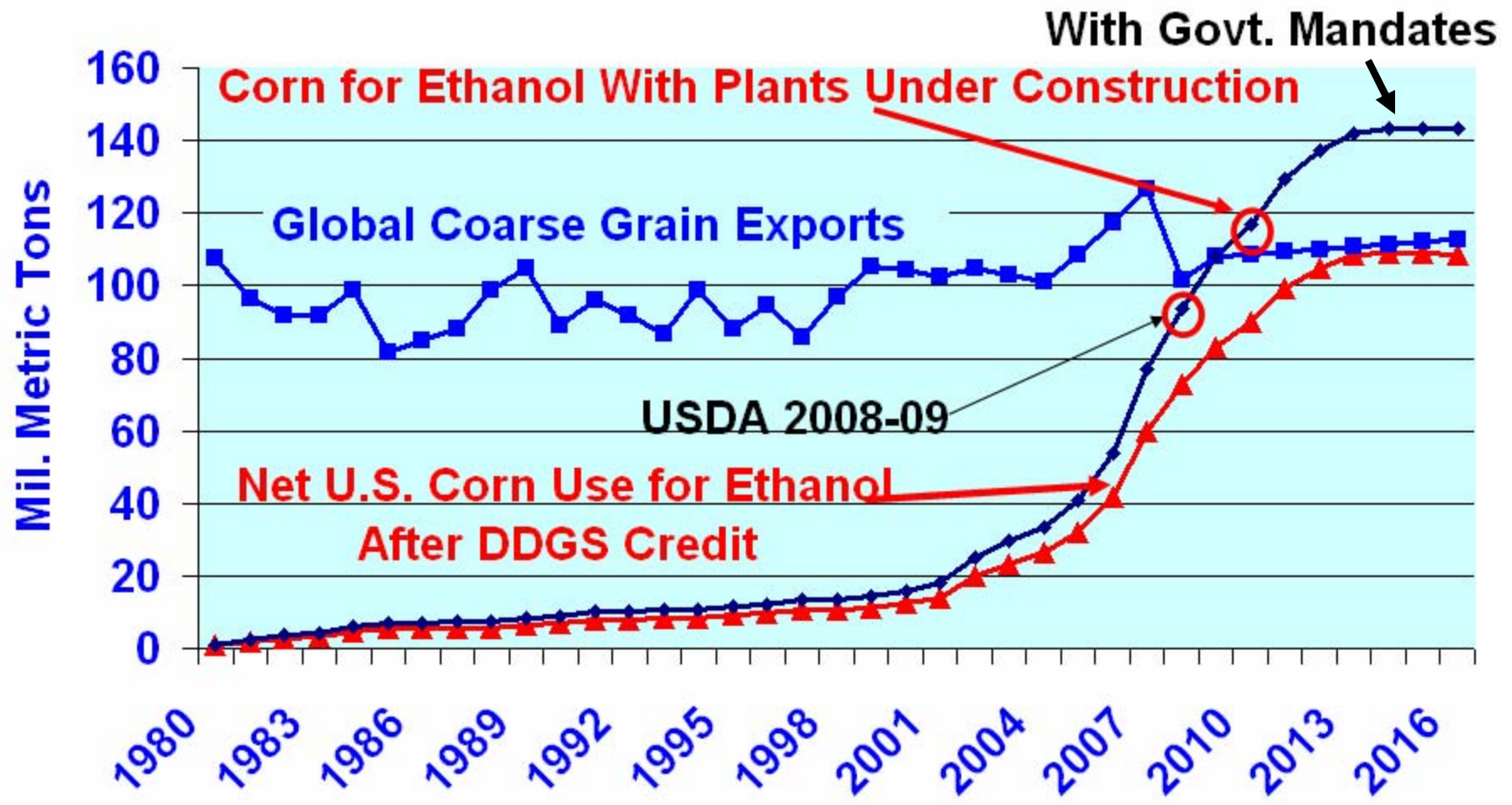
4/01/09 *updated 5/6/09*

Approximate Maximum Price Ethanol Plants to Pay for Corn with Varying Crude Oil Prices

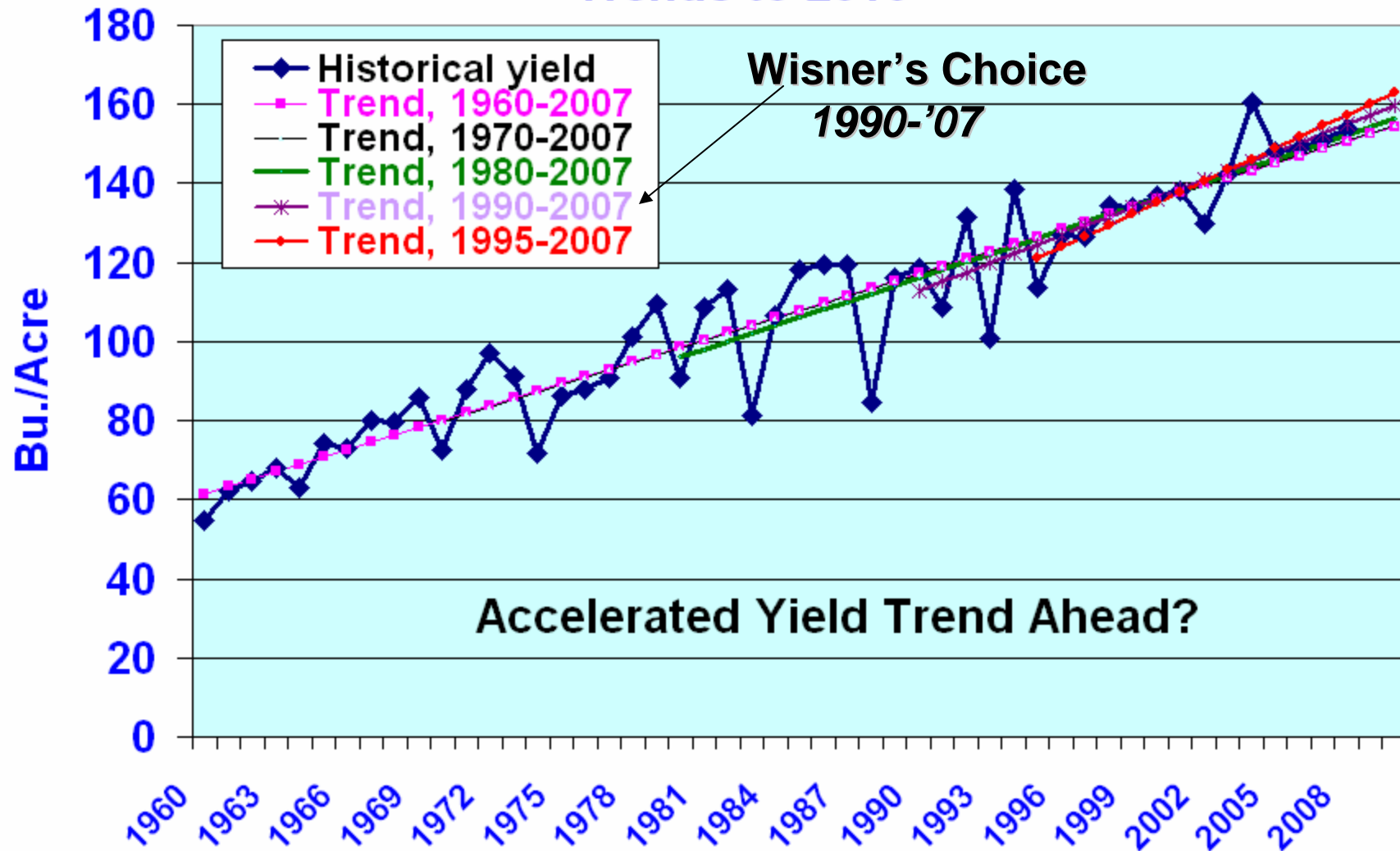


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Figure 3. Mil. Tons Global Coarse Grain Exports & U.S. Corn Use for Fuel Ethanol



U.S. Corn Yield & Alternative Long-Term Trends to 2010



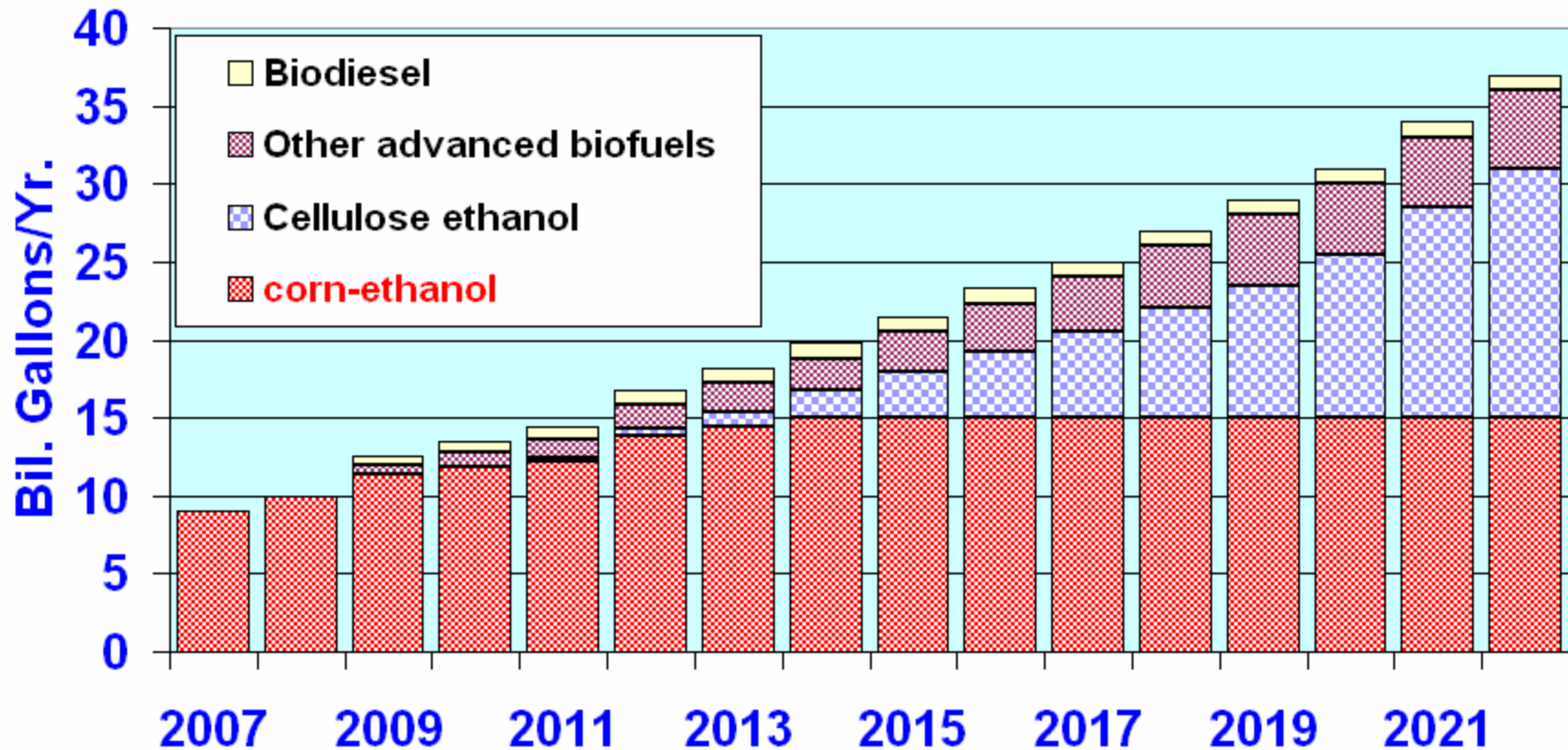
Current U.S. Ethanol Situation

- 2nd. Largest firm in bankruptcy
- 5-8 more in bankruptcy
- 24-28 formerly operating plants idled
- Several completed or nearly complete plants delay opening
- Returns: near break-even
- Severe loss in asset values
- Govt. Mandates support corn processing demand near current level -- “blending wall” issue
- Idle operating capacity: 13.5-15.0 mil. tons corn
- Idle plants =14%-18% of capacity

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H
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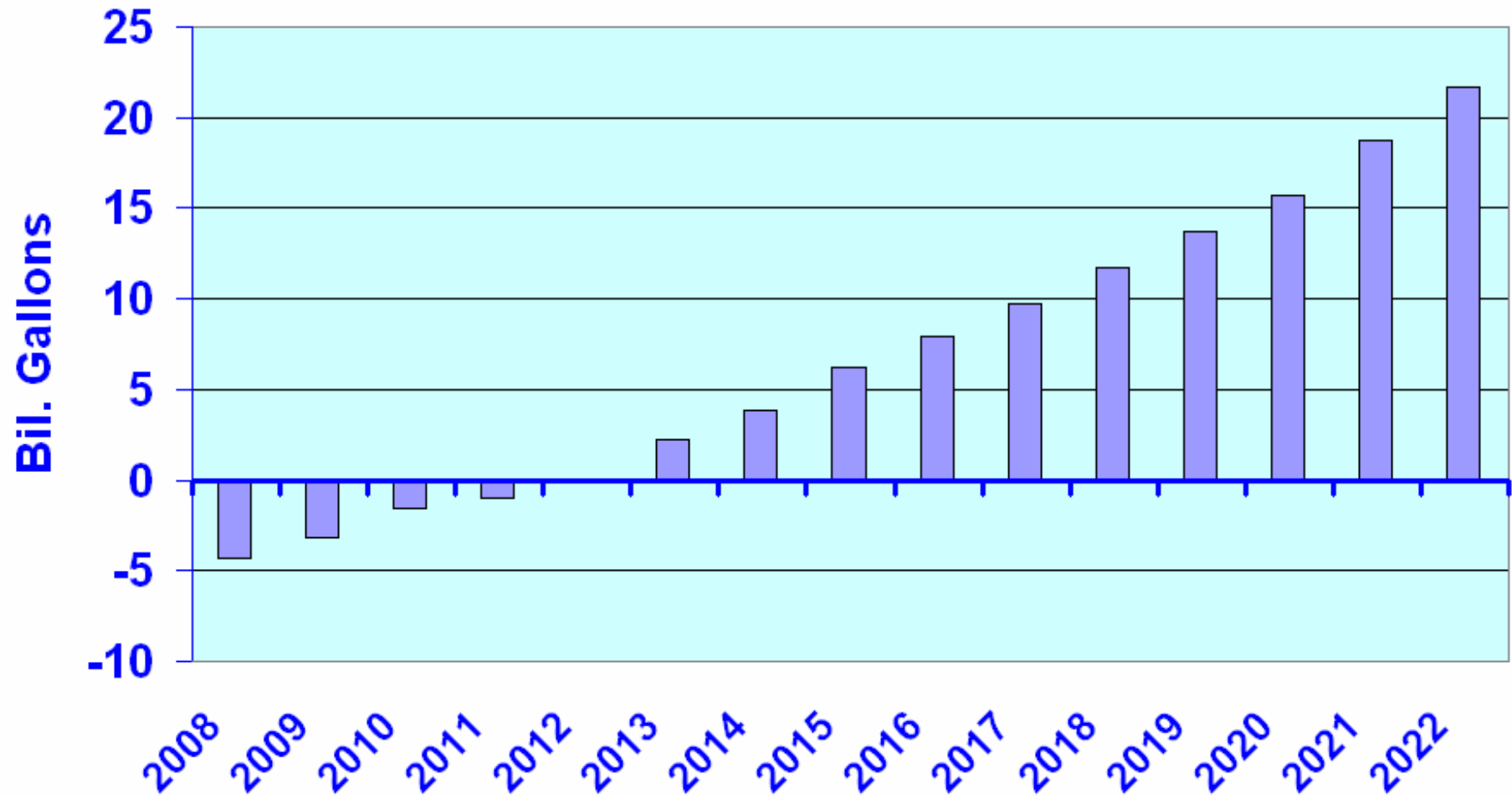
GHG Emissions Also a Big Issue

2007 U.S. Energy Act Biofuels Mandates



One gallon = 3.87 liters

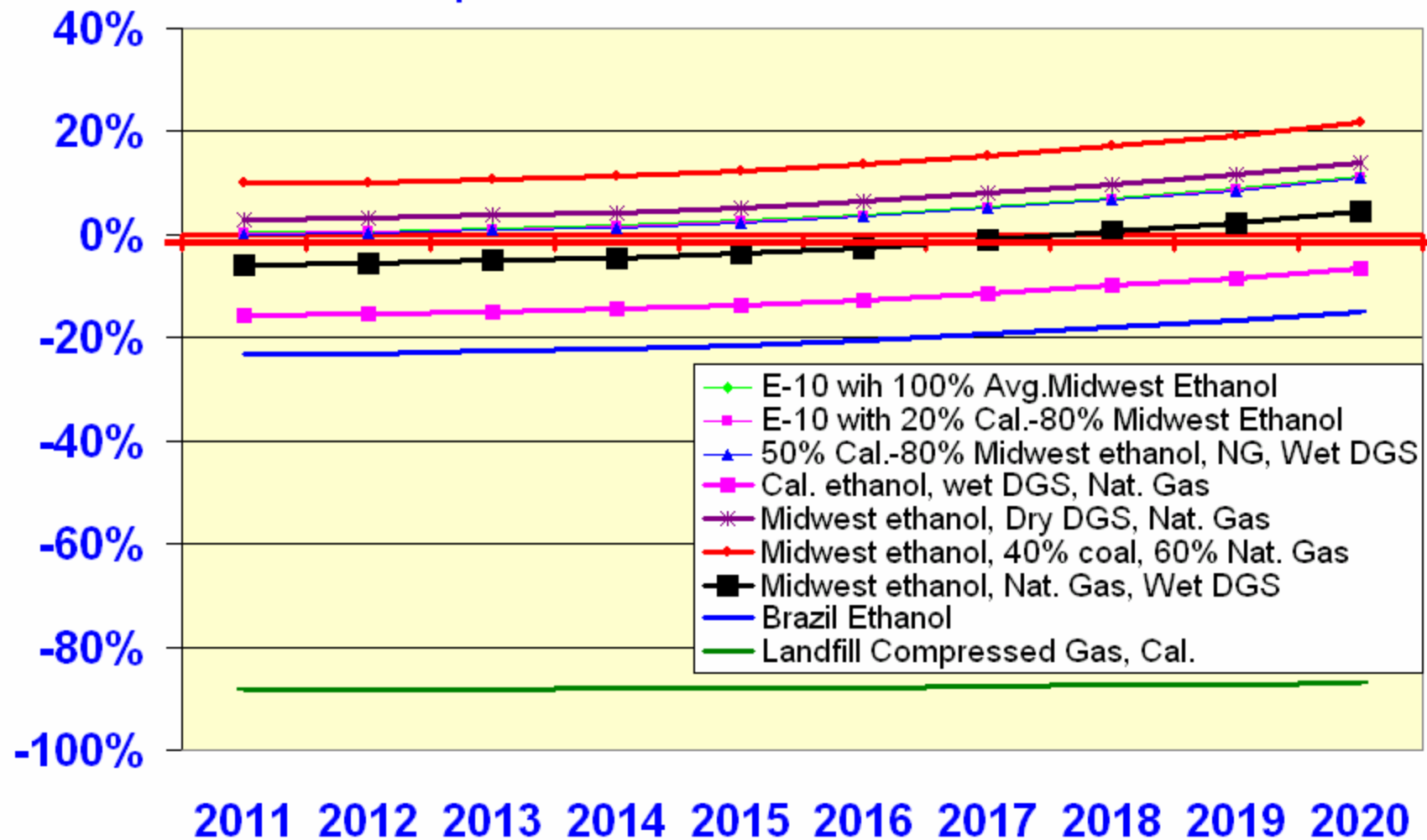
The Blending Wall: Ethanol Mandates in Billion Gallons Beyond the E-10 Market



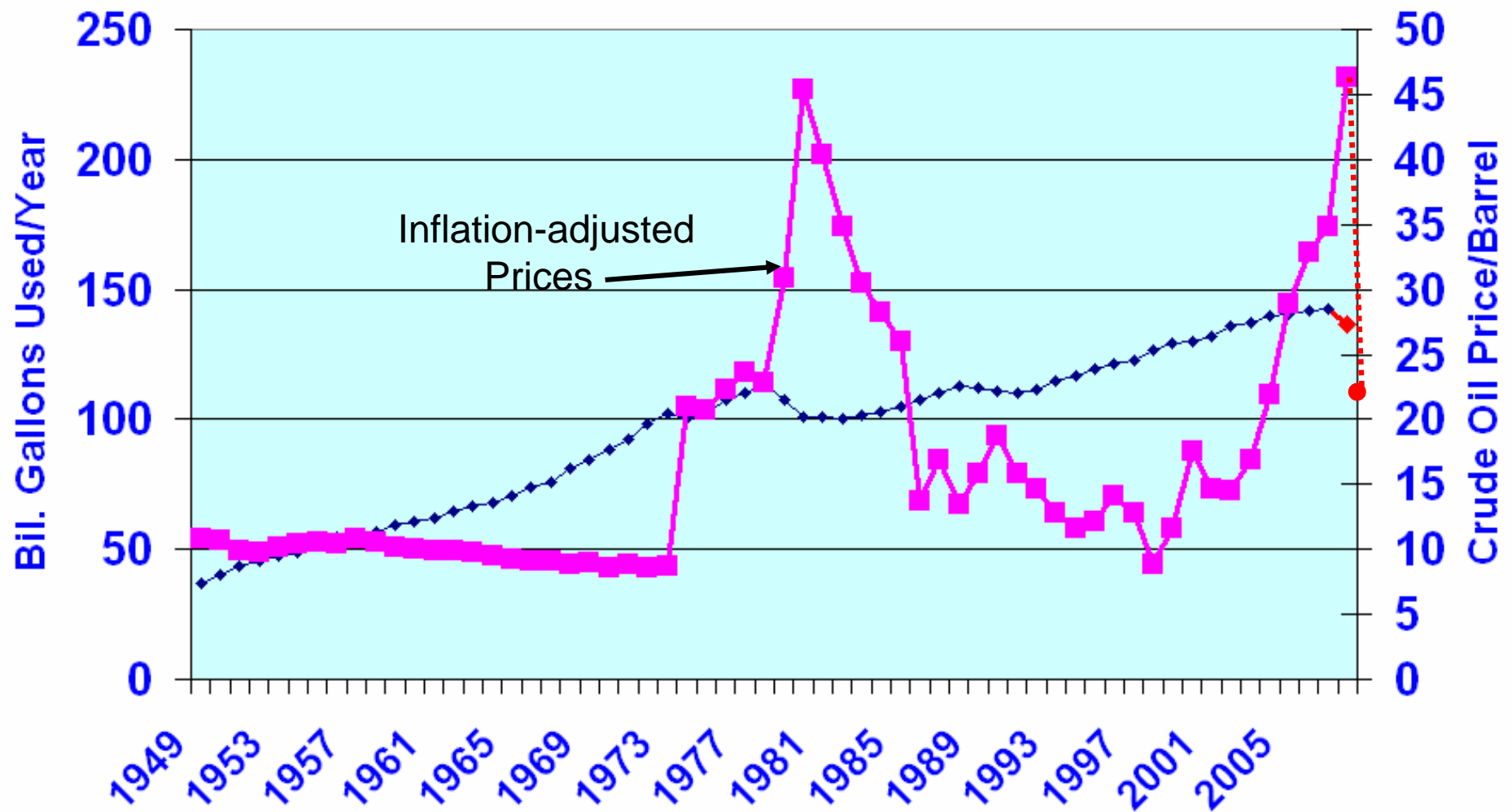
Current U.S. Ethanol Markets: E-10 & E-85

Biofuels: Problems with Greenhouse Gas Standards

Figure 1. CO₂ Emissions, Selected Biofuels as % Deviation from Proposed California Emissions Standards



How much recovery in oil price & how soon?
Figure 6. Annual U.S. Gasoline Consumption Since 1945 & Inflation-Adjusted Crude Oil Prices
(Crude oil prices are in 1982-1984 dollars)



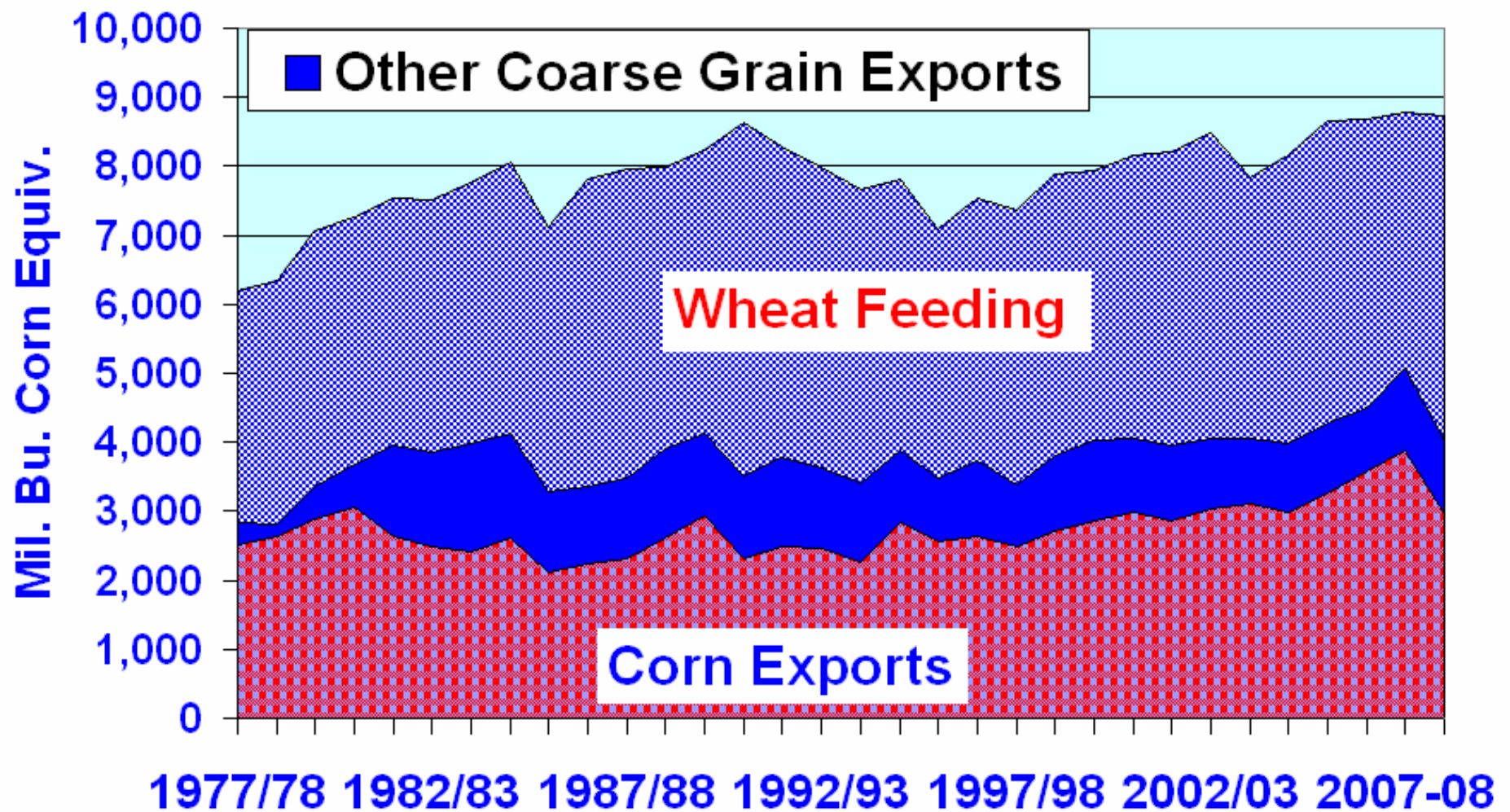
41 Countries Encourage Biofuels

Ethanol, demand growth & food inflation shifting
China from to corn exporter to importer?

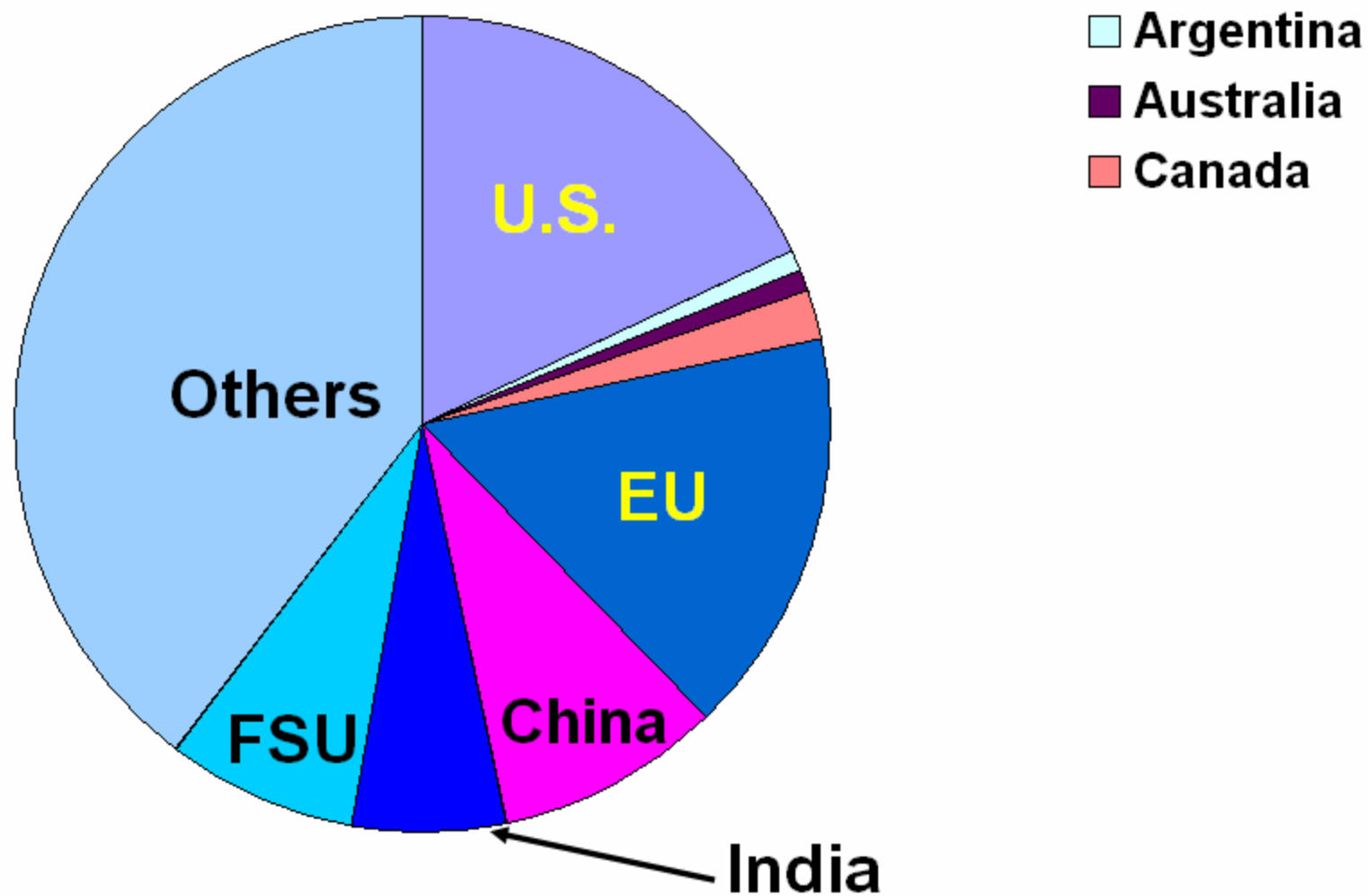


Temporary larger wheat feeding reduces coarse grain demand

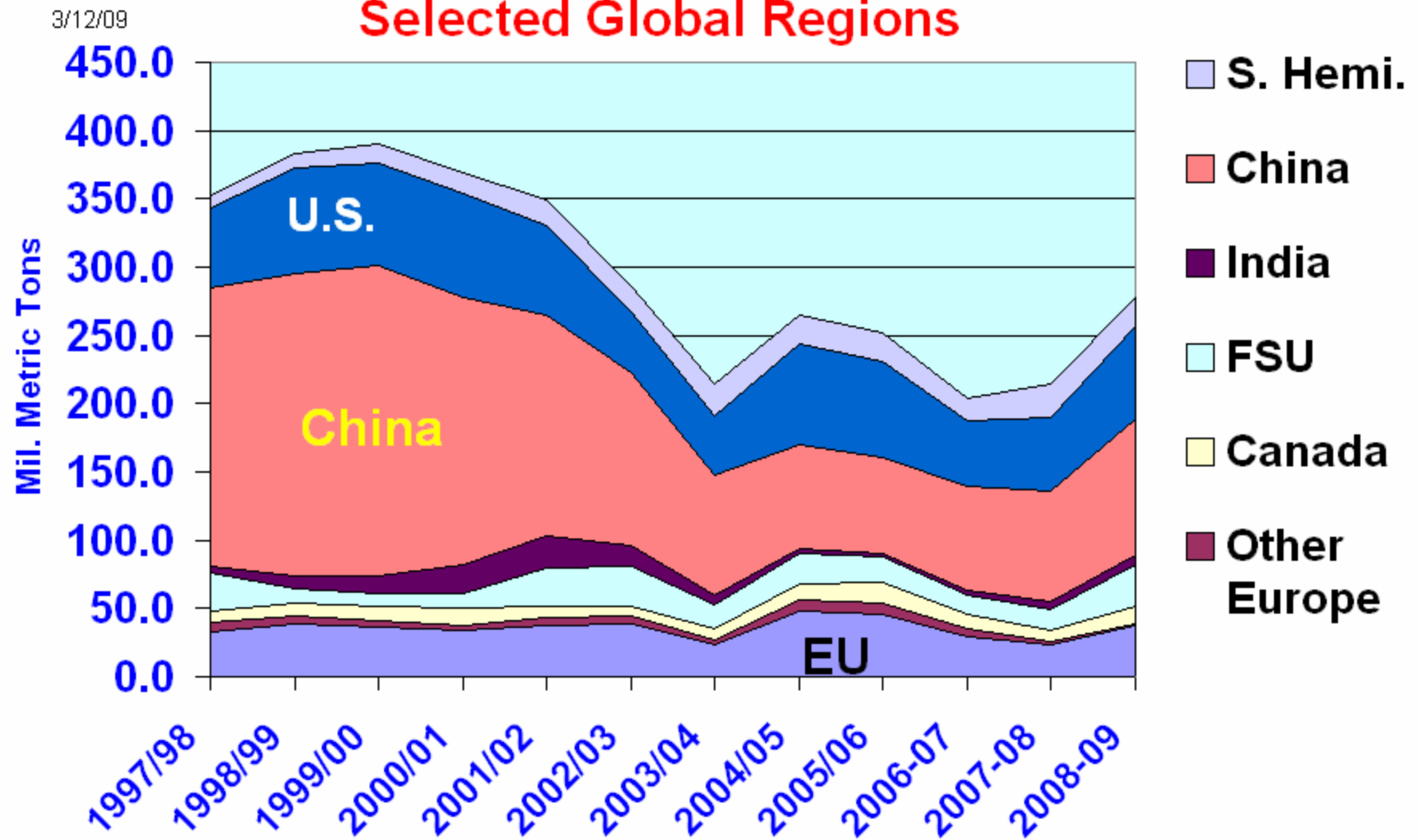
Global Corn & Other Coarse Grain Exports & Wheat Feeding



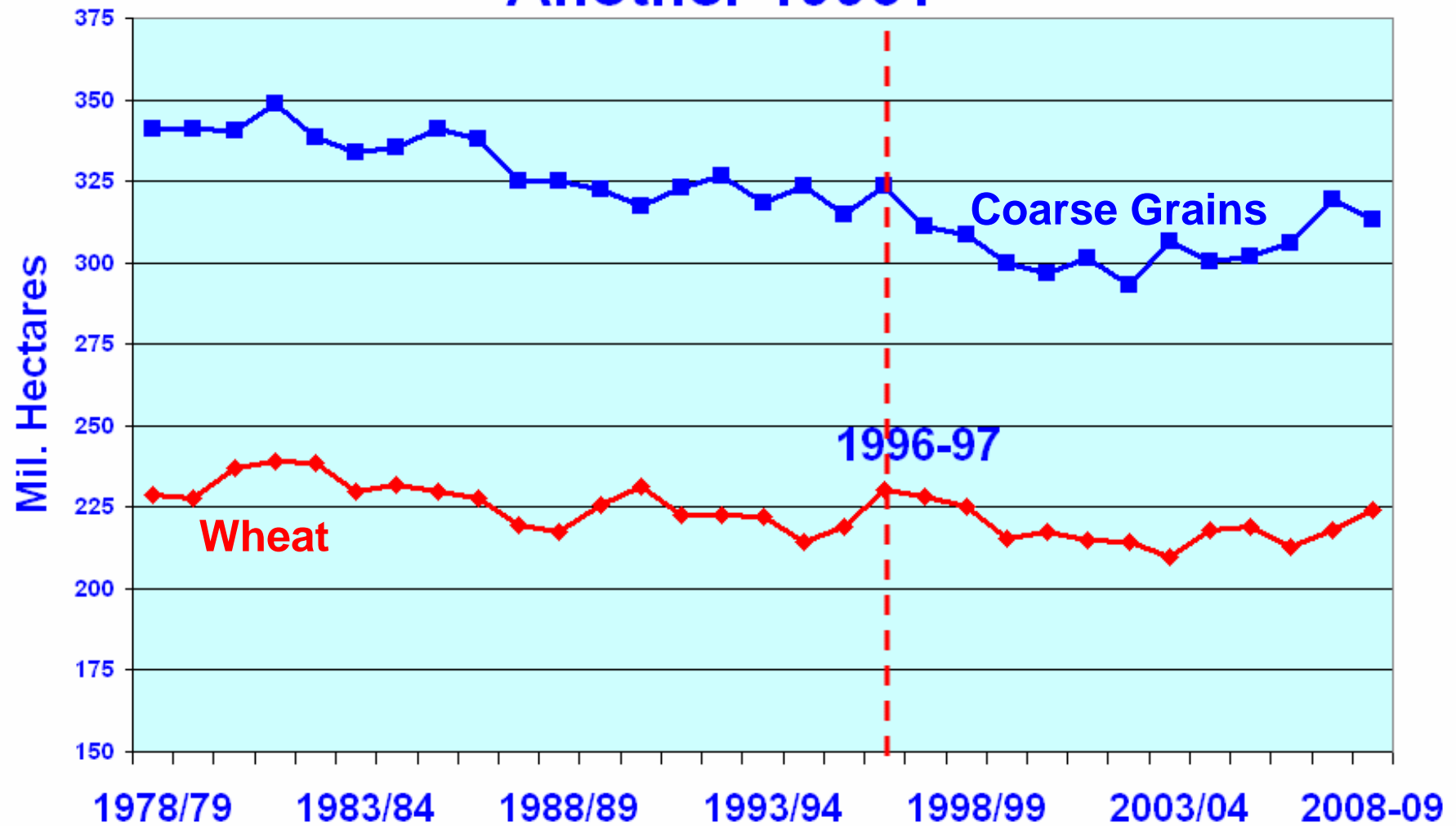
Wheat & Coarse Grain Use, 2007-08



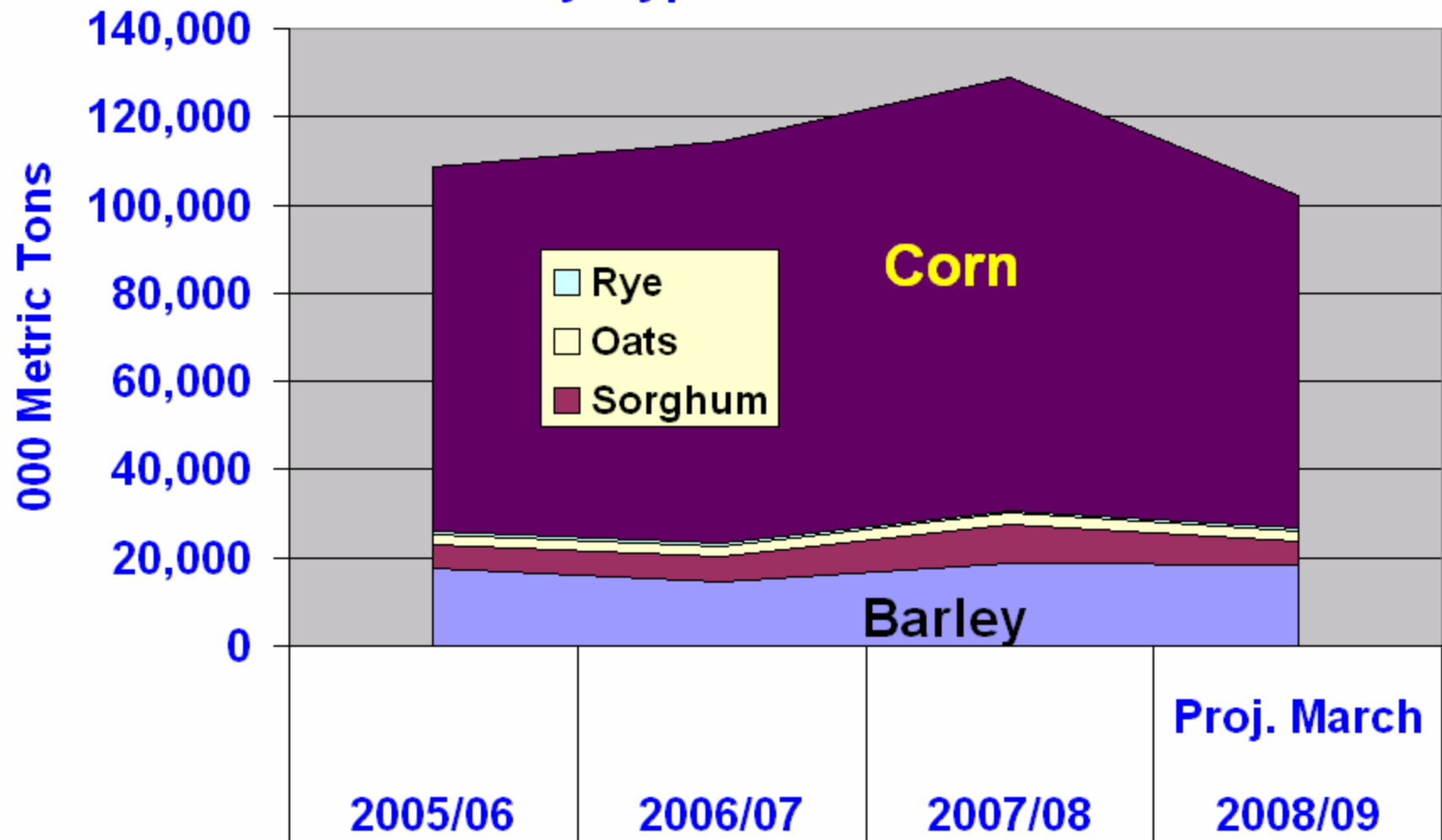
Wheat & Coarse Grain Carryover Stocks in Selected Global Regions



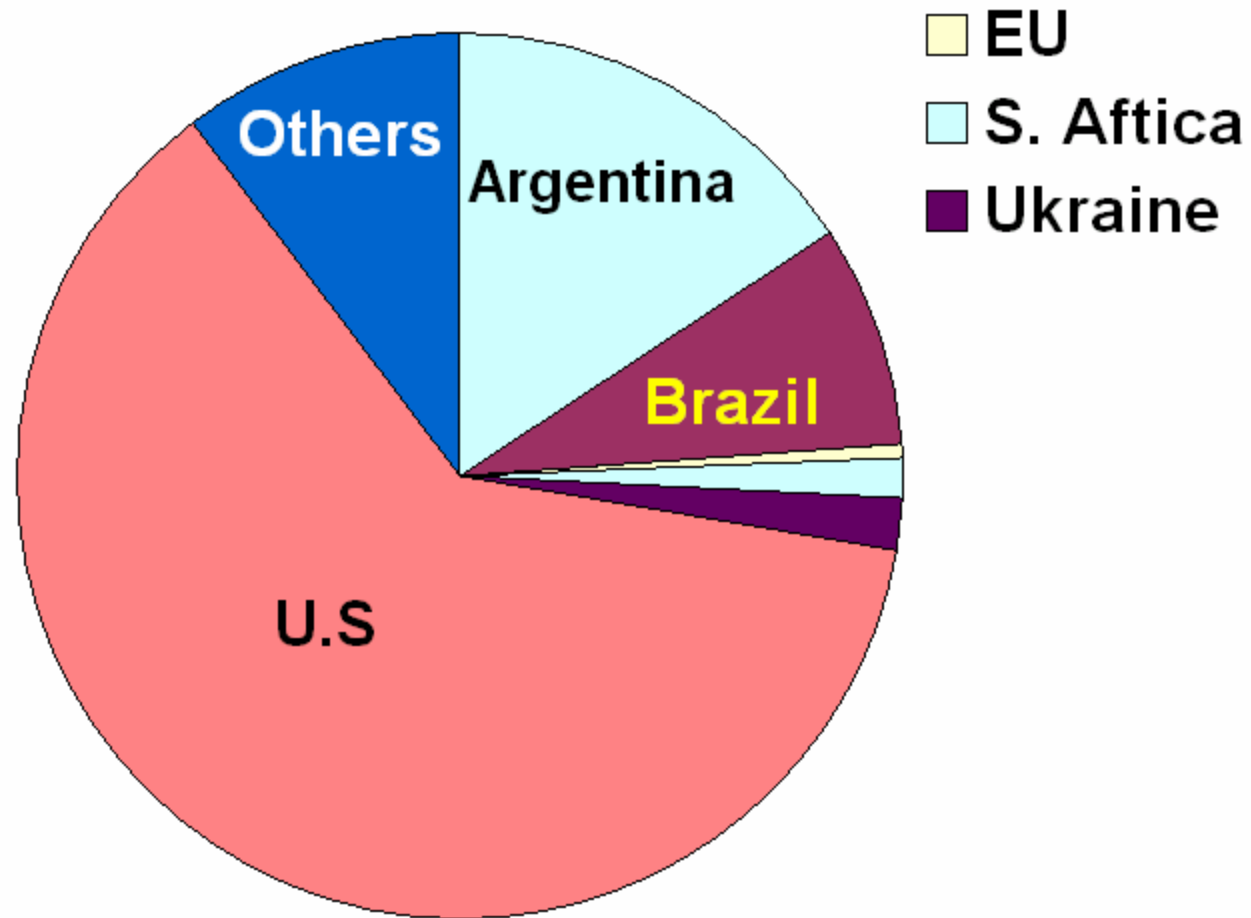
World Wheat & Coarse Grain Area: Another 1996?



World Coarse Grain Exports by Type of Grain

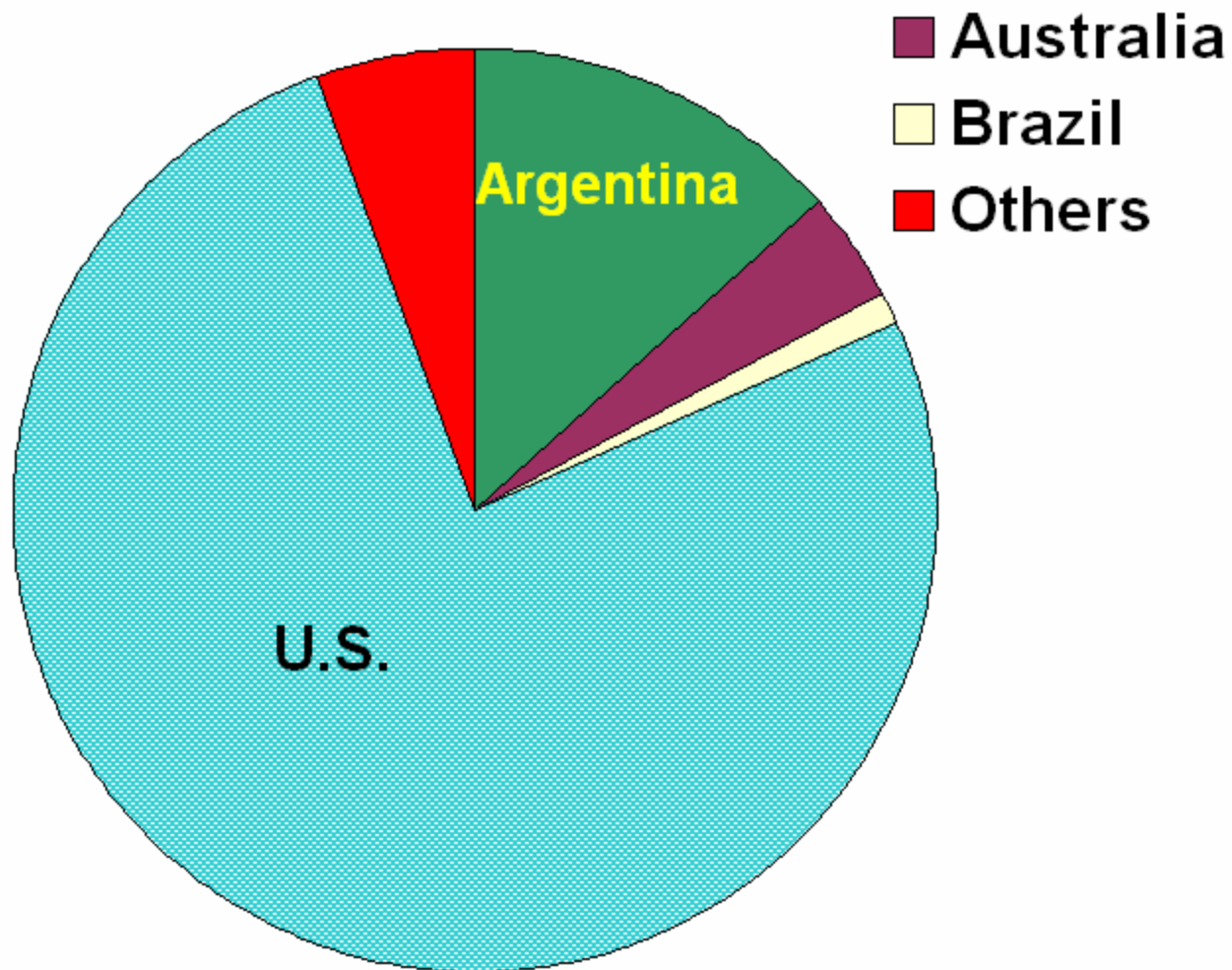


World Corn Exports by Source, 2007-08



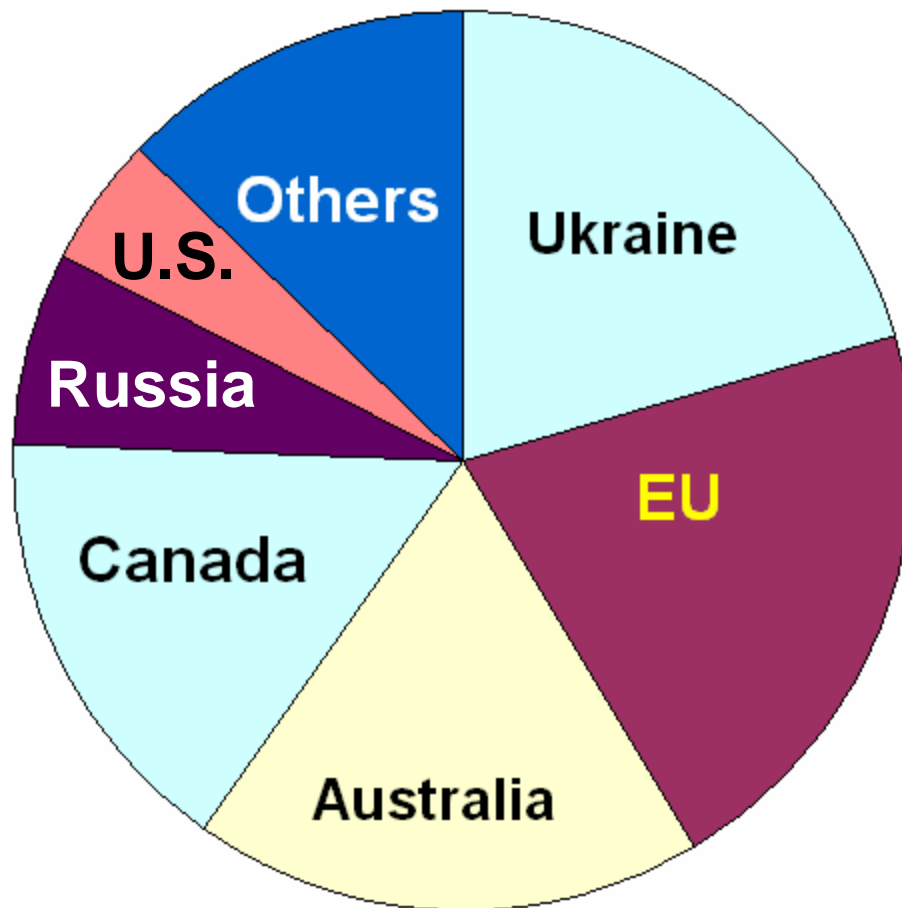
U.S. Ethanol & Yield Trend Have Big Implications for Corn Exports

World Sorghum Exports by Source, 2007-08



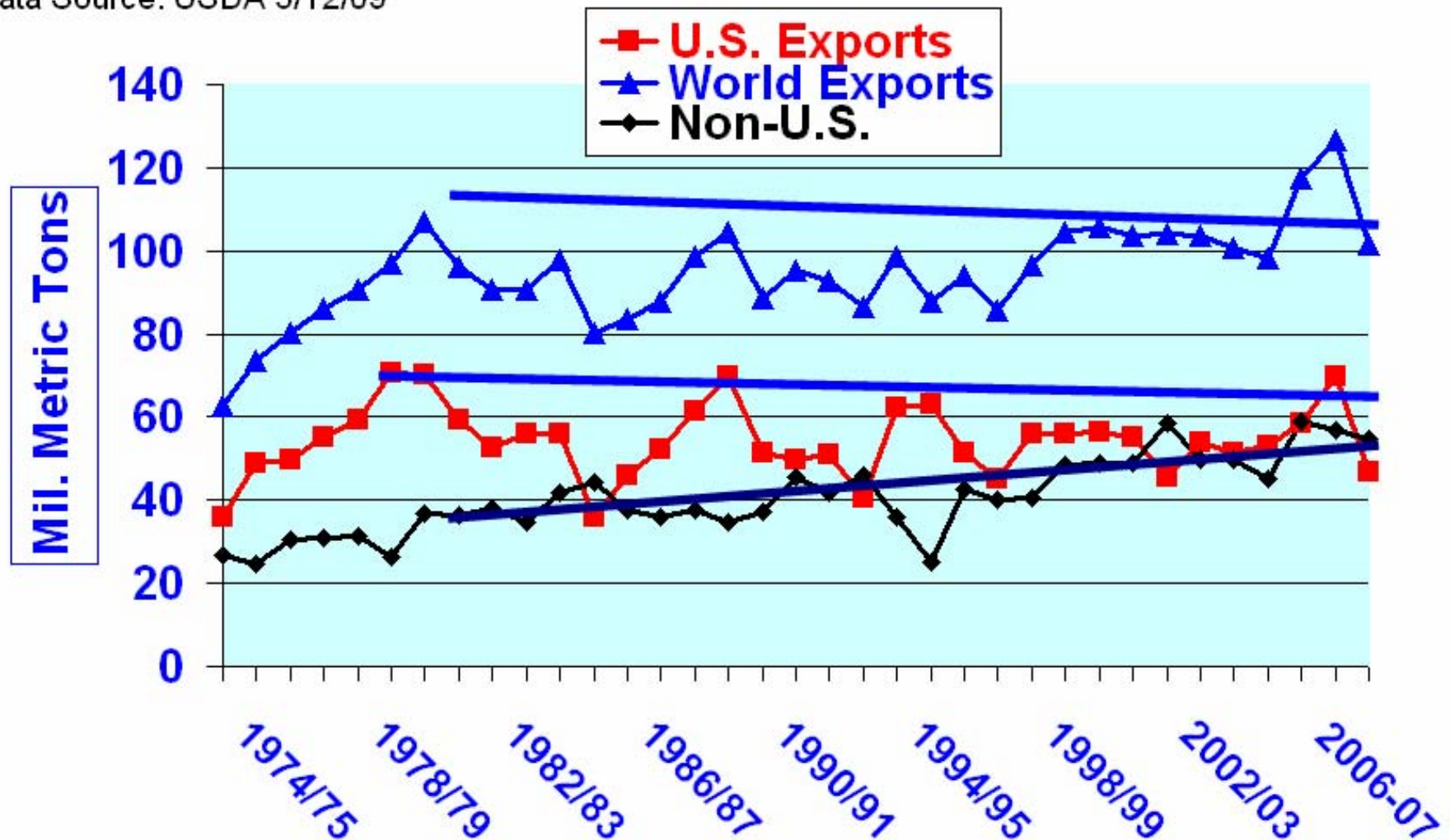
Sorghum Also is an Ethanol Feedstock

World Barley Exports by Source, 2007-08

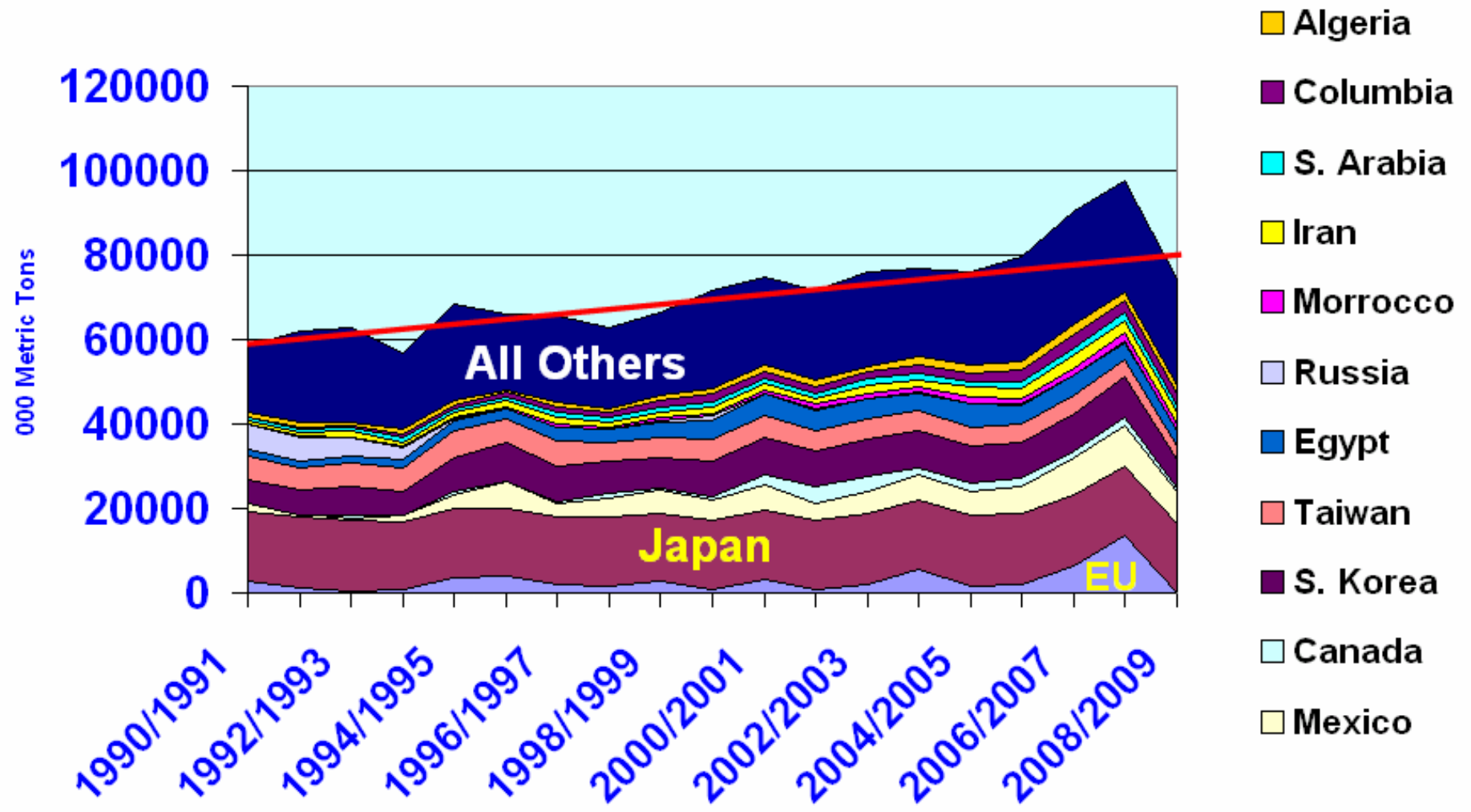


U.S., Foreign, and World Coarse Grain Exports

Data Source: USDA 3/12/09

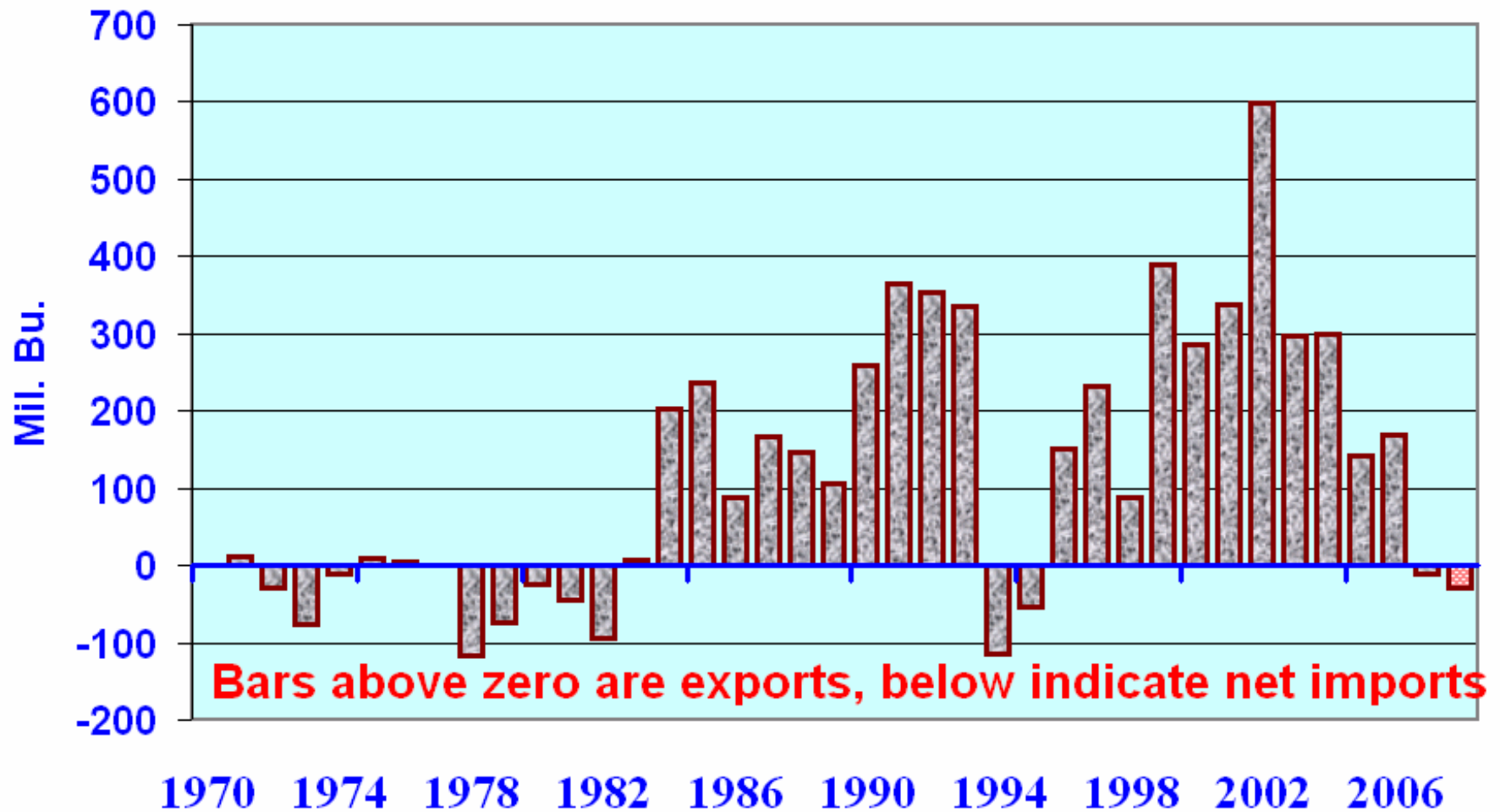


World Corn Imports, Selected Countries & Regions



China's Net Corn Exports, Marketing Years & USDA Projection for 2008-09

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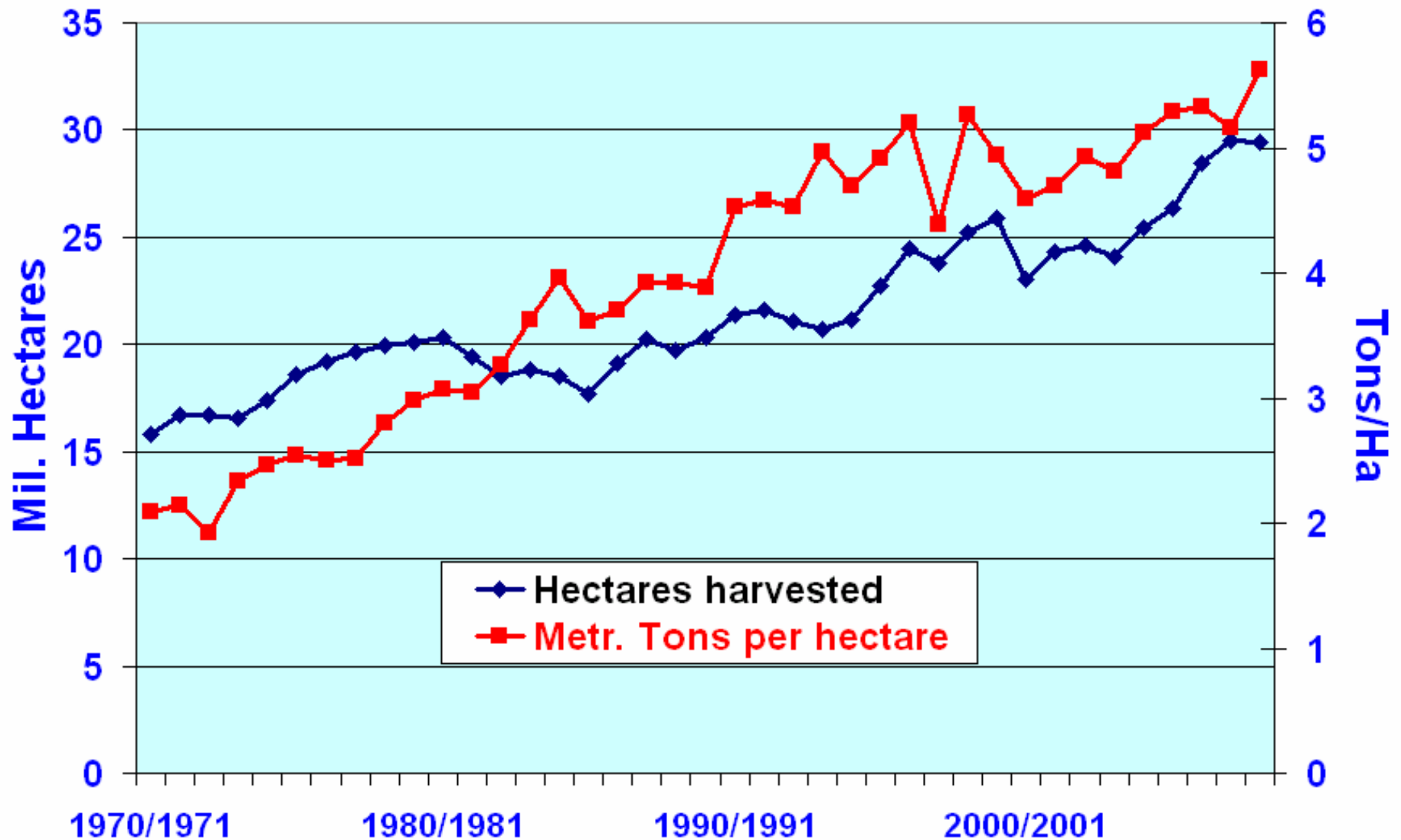


Corn Yield to Affect China Export Availability



Normal Yield: about 68-70% of U.S.

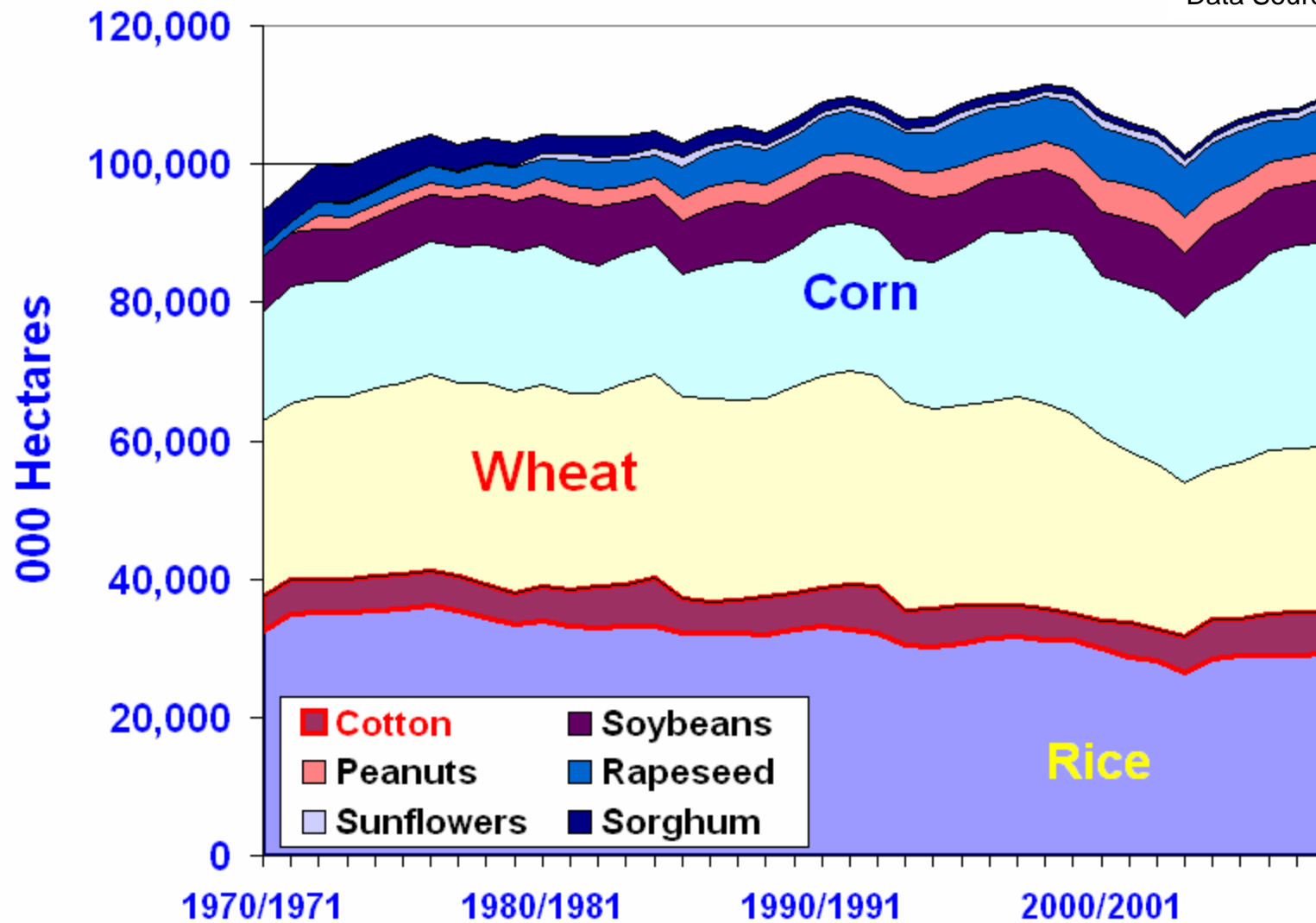
China Corn Area and Yield, Metric Tons Per Hectare



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China Major Crop Area Harvested

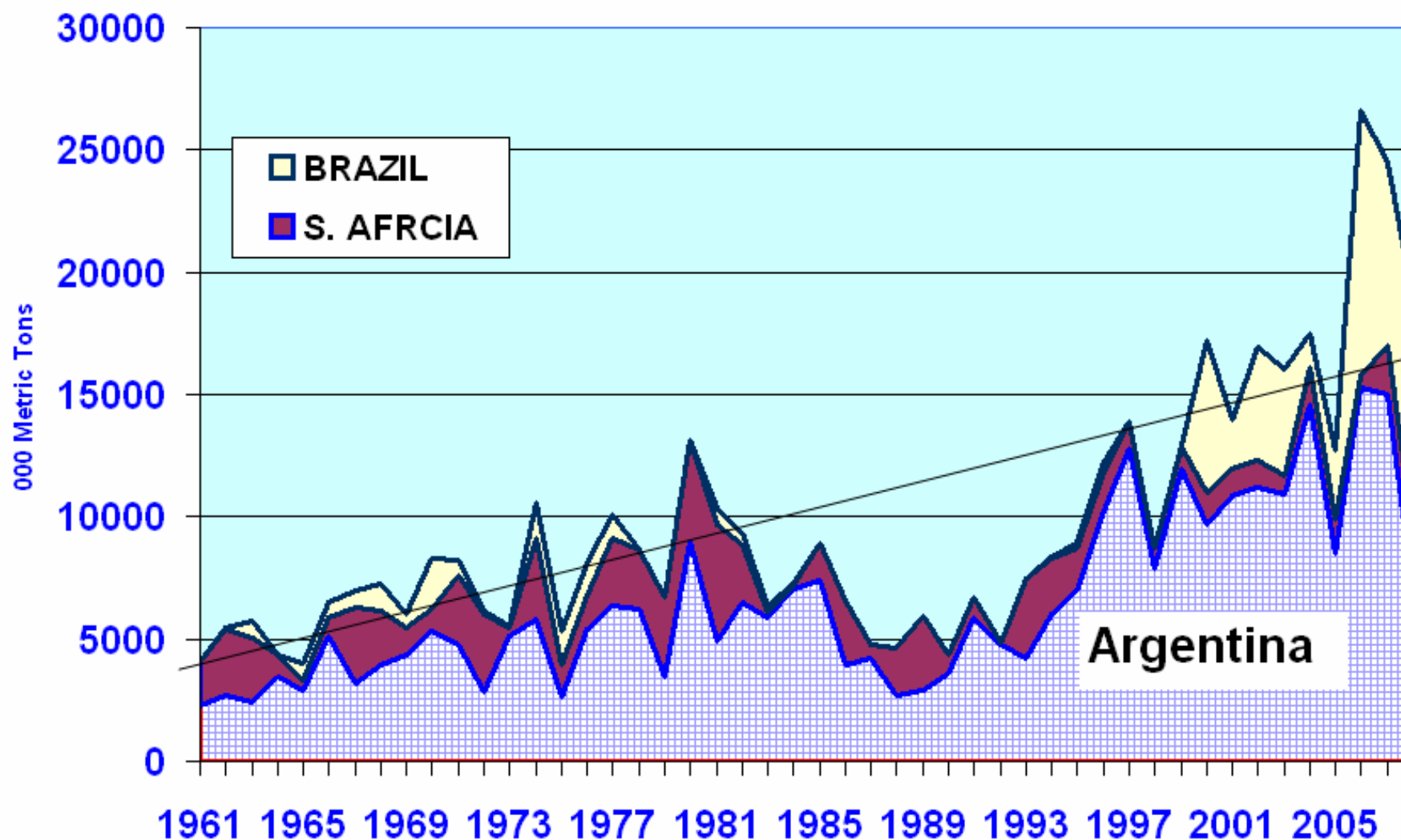
Data Source: USDA, FAS



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Southern Hemisphere Corn Exports

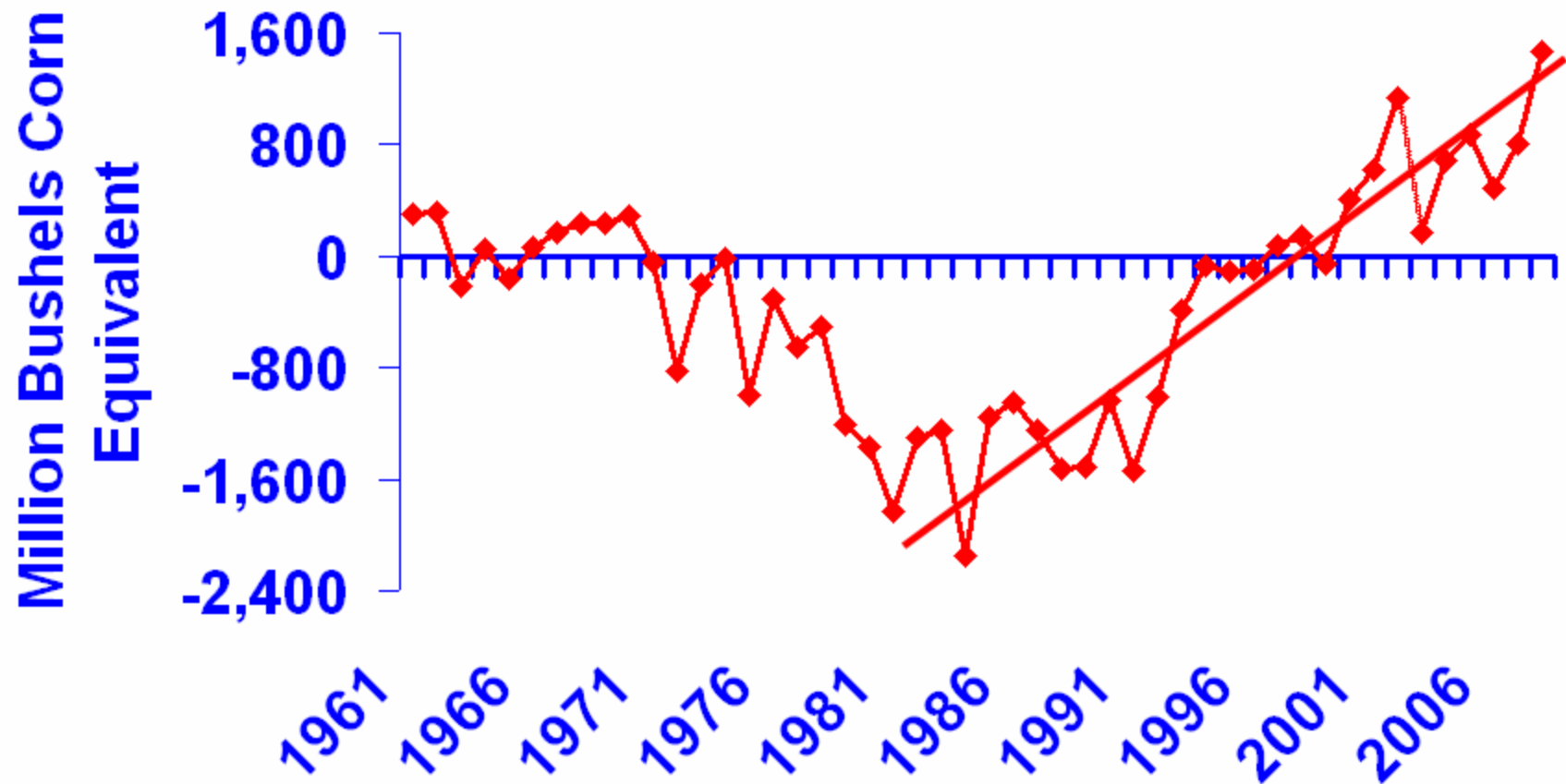
'08-09 down 5.5 mil. Metr. Tons or 217 mil. Bu. vs '07-'08



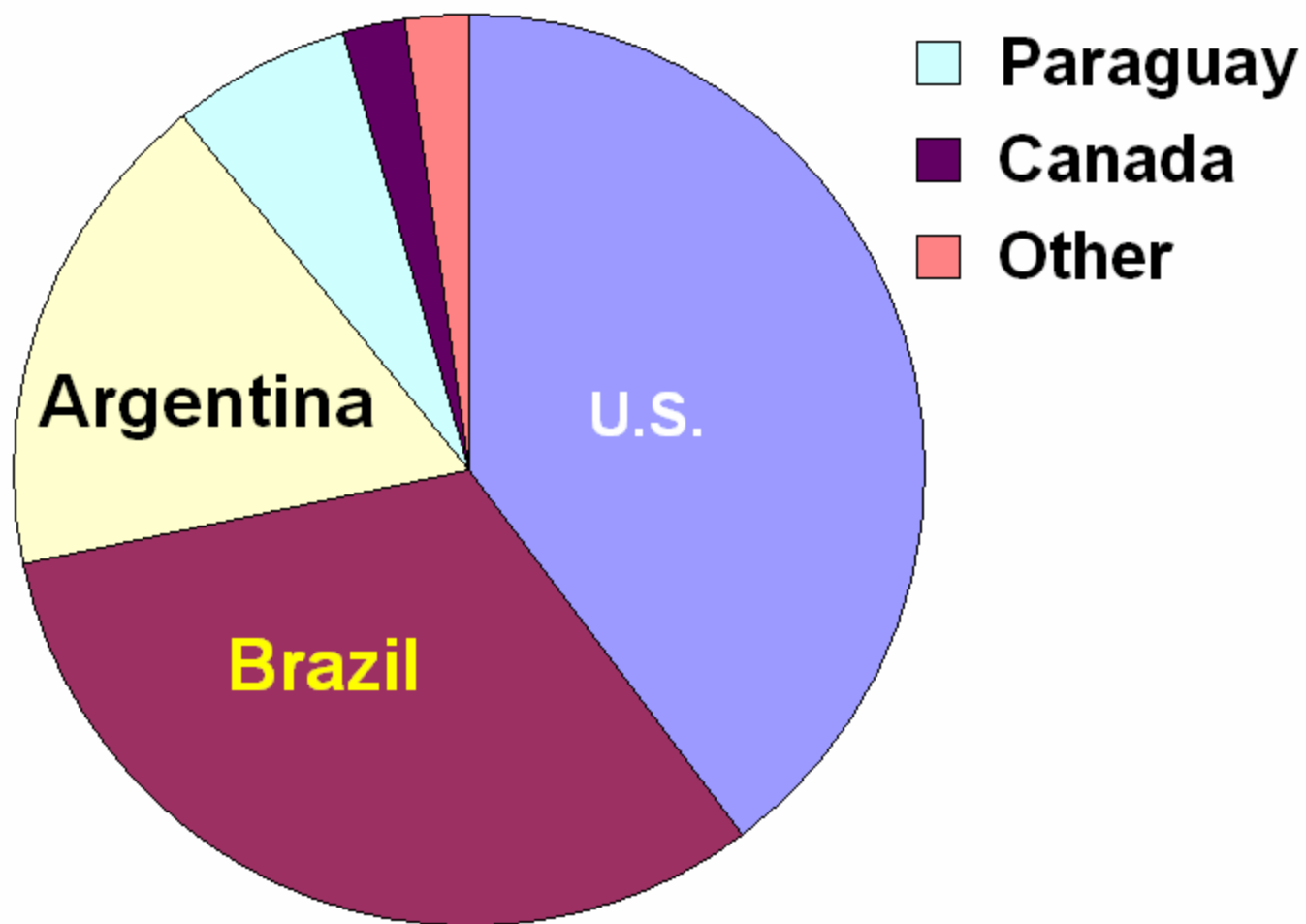
Net Grain Exports, Former Soviet Union, 1961-2008

3/12/09

Source of data: USDA, FAS, PSD & WAOB Projections



World Soybean Exports-2007-08



S. America Soybean Crop

3/11/09 USDA

Mil. Ton

Chg. Vs. last yr.

• Argentina SB	-3.2
• Brazil SB	-4.0
• Paraguay SB	-0.8
Total SB change	-8.0



S. America Crop Prospects

5/12/09 USDA

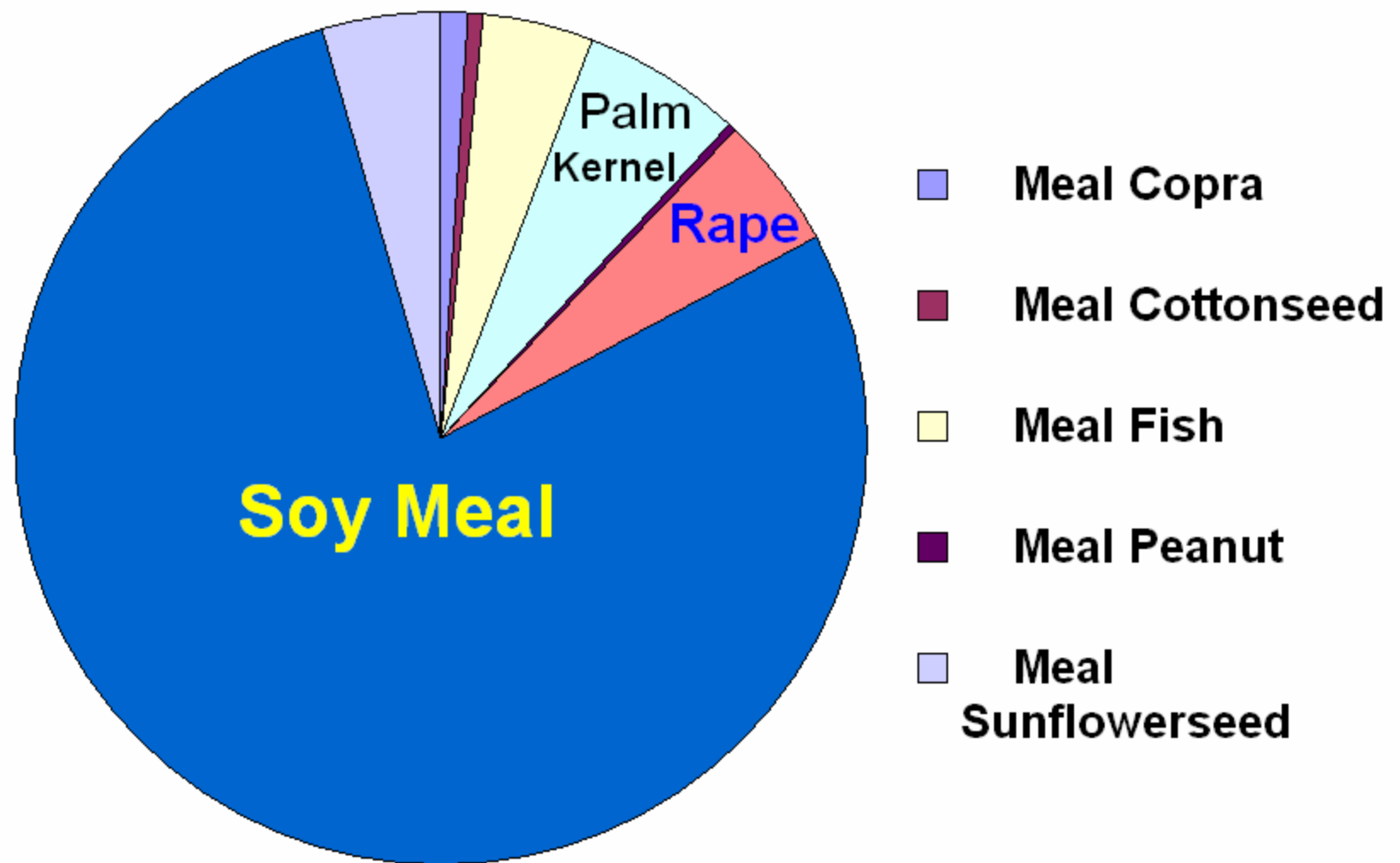
Mil. ton

Chg. Vs. last yr.

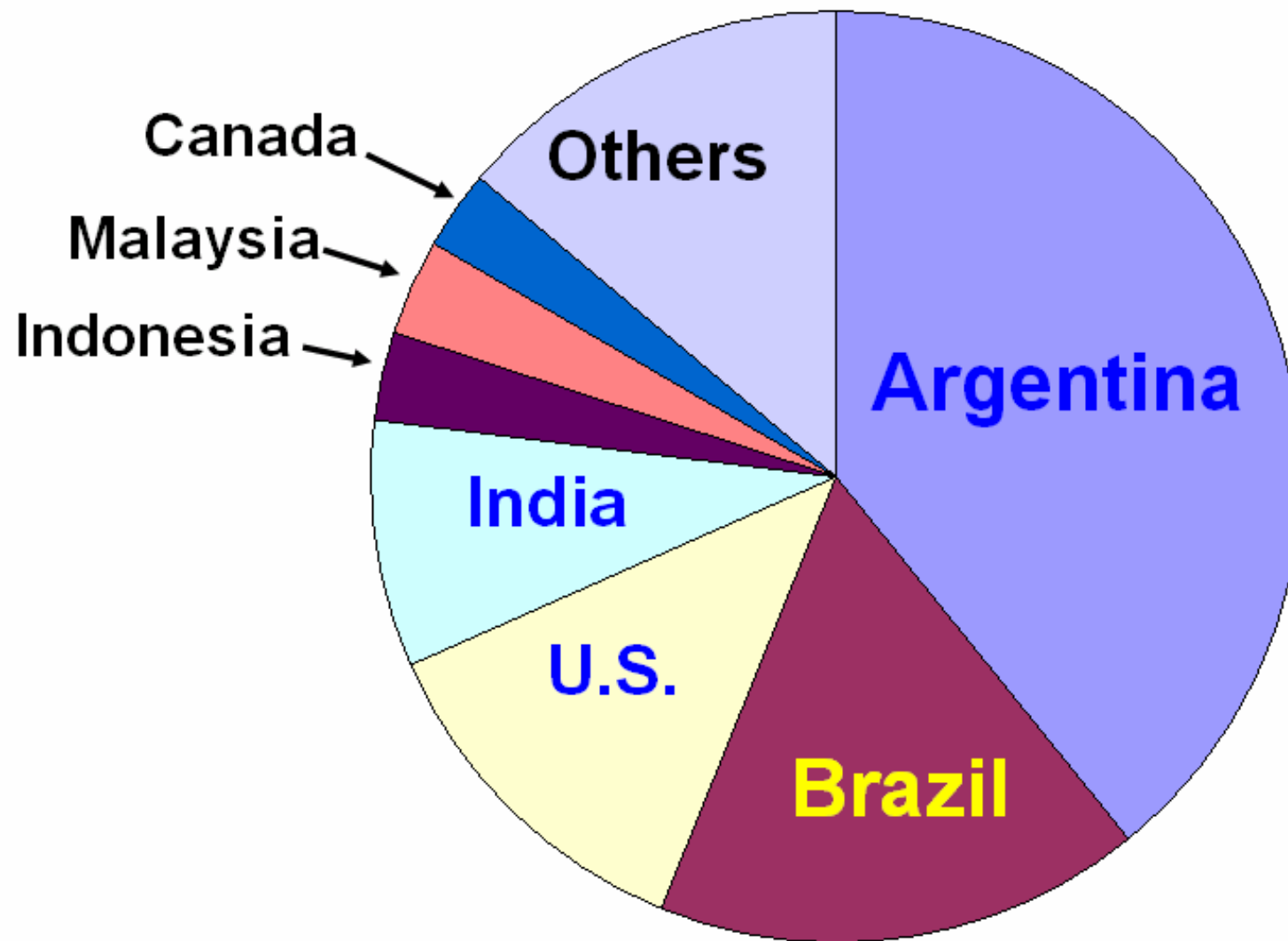
- **Argentina corn** **-9.0**
- **Argentina SB** **-12.2**
- **Brazil corn** **-8.1**
- **Brazil SB** **-4.0**
- **Paraguay SB** **-3.1**

– Total corn change	-17.1
– Total SB change	-19.4

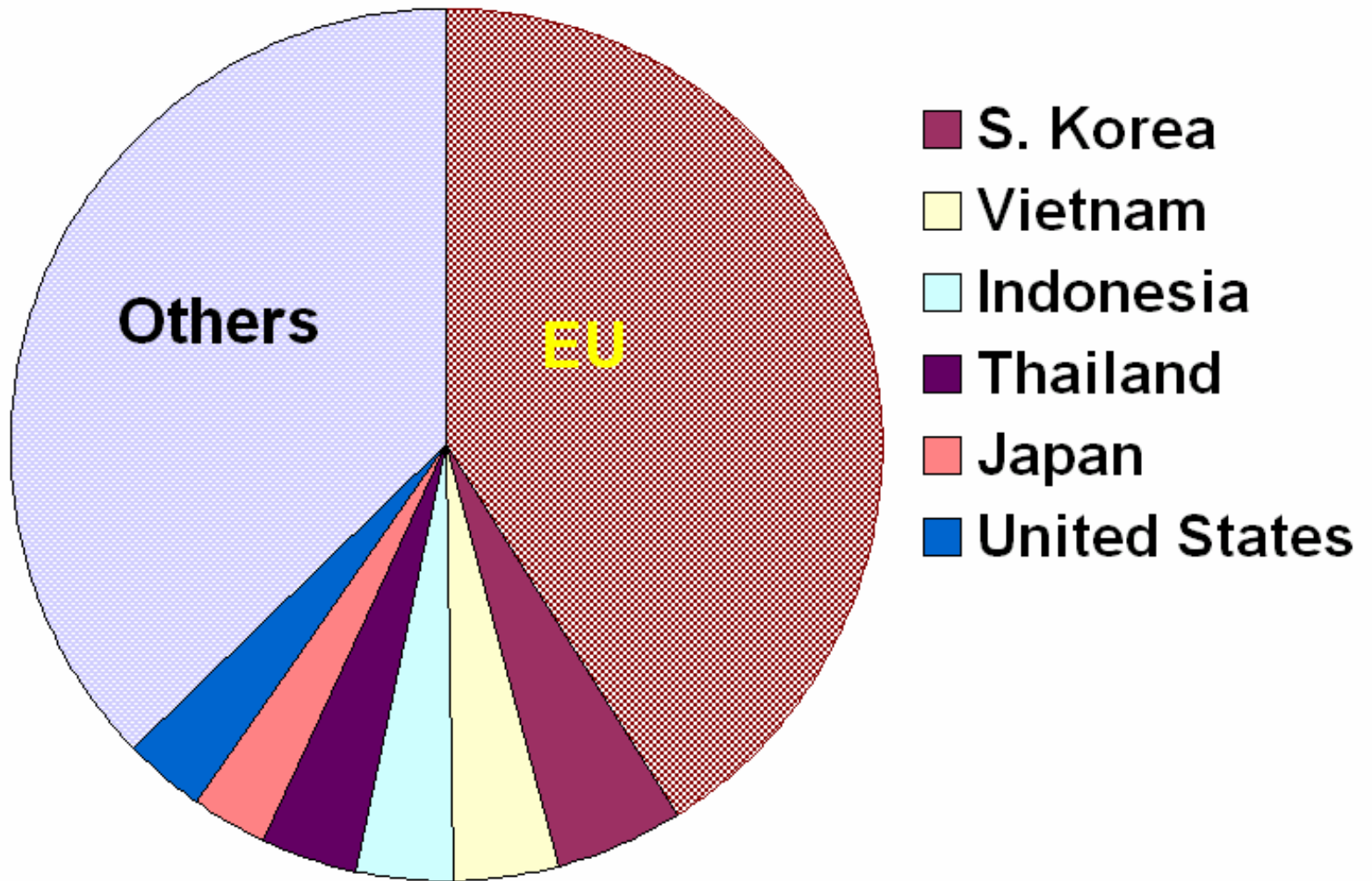
Major World Protein Exports, 2007-08



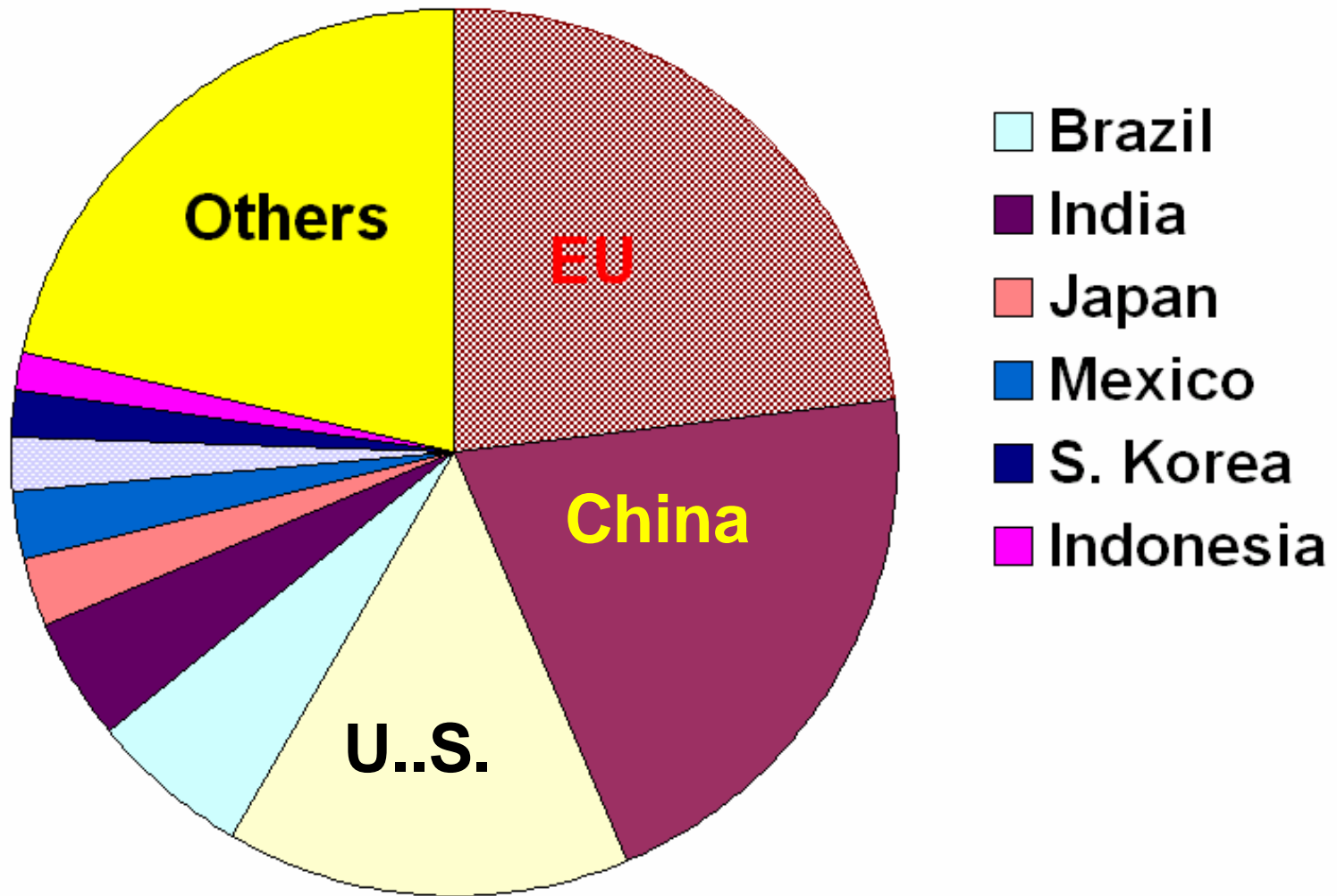
World Protein Meal Exporters, 2007-08



Major Protein Meal Importers, 2007-08

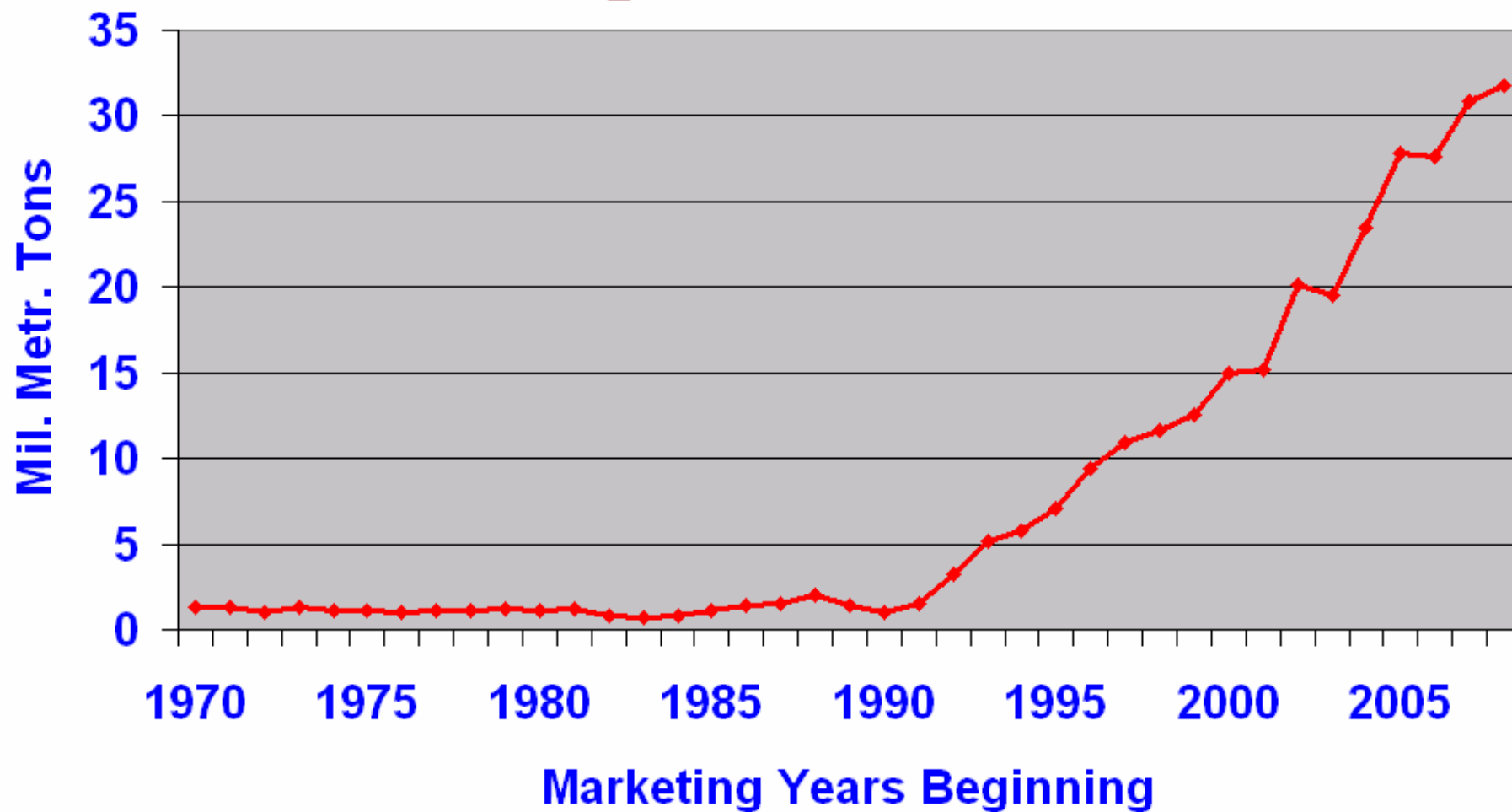


Major Protein Meal Consumers, 2007-08

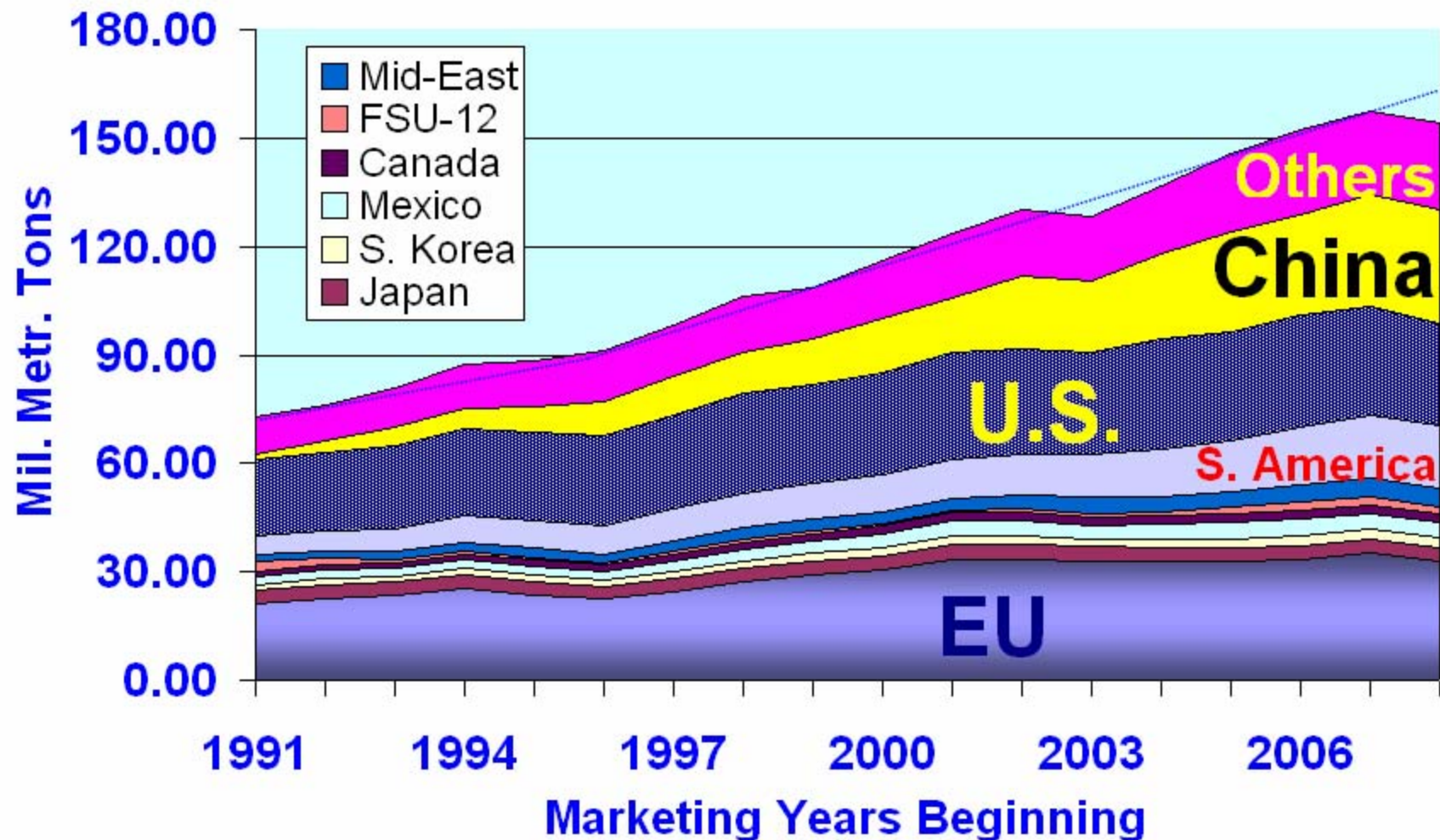


China Soybean Meal Use

Slower growth in the Future?



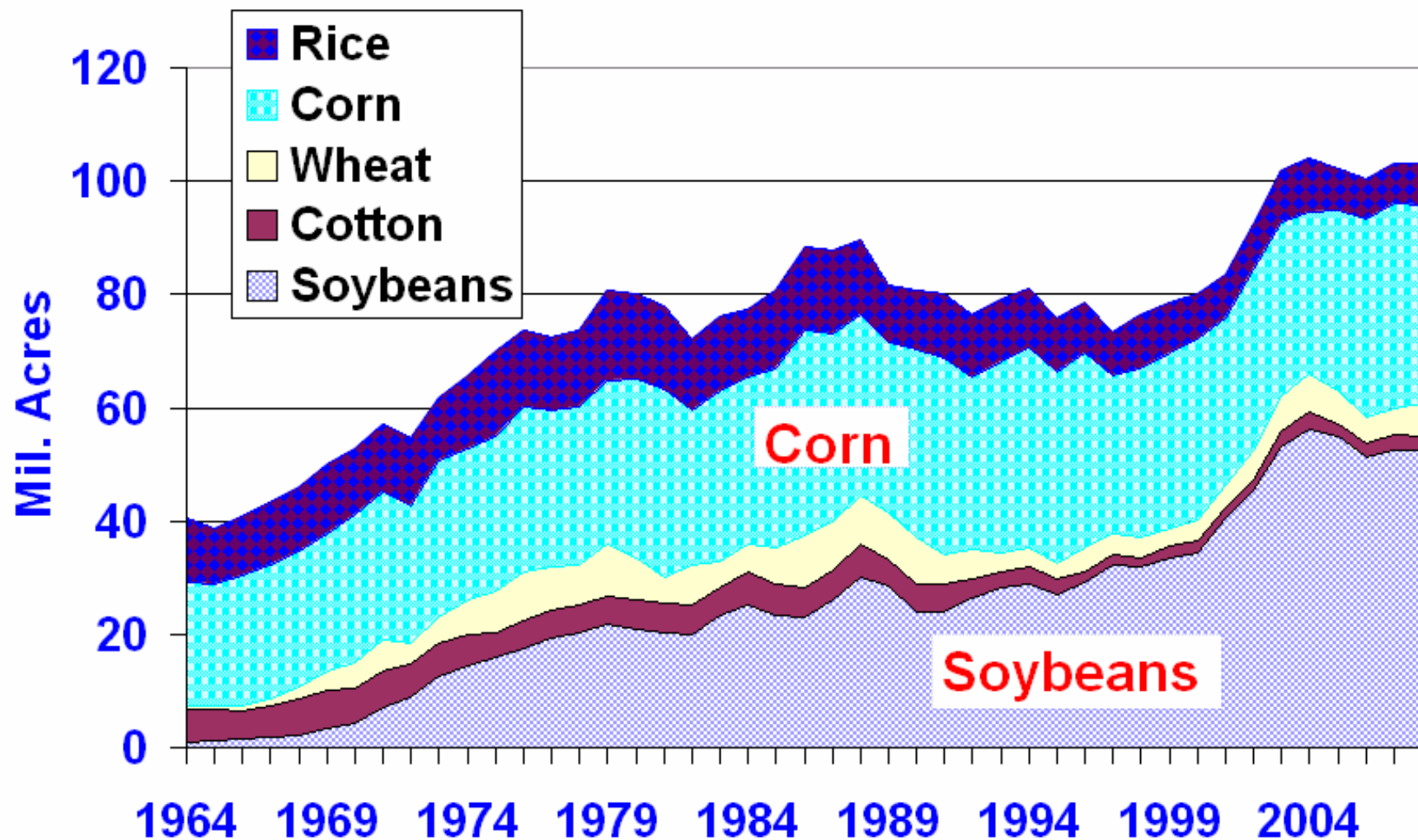
World Soybean Meal Use



2/09

Excluded Crops: Sugar, Coffee, Citrus & Other

Brazil Major Crop Acres



Newly Cleared Land In Brazil

Planted to Upland Rice



Potential area to be cleared for crops

West Central Argentina, 2007



Four Key Areas to Influence Future Feed Exports

- **U.S. -- Biofuels Policies & Crop Yields**
 - Less restrictive GHG regulations?
- **China**
 - Will its SBM growth slow?
 - Will it be a corn importer?
- **South America – can it continue to expand?**
- **Former Soviet Republics – political stability?**

Biofuels & Feed Trade

Key Issues for the Near-Future

- **Antibiotic residues in DDGS– Are they a problem?**
- **Will the U.S. allow intermediate ethanol fuel blends?**
- **Measurement of GHG emissions for biofuels**
- **Ethanol mandates for Australia, other countries**
- **Future of world economy & U.S. dollar**

The Future

- *Grain & oilseeds will be energy crops*
- Cellulose crops will compete with other ag production
- Global supplies will tighten some, next 2 to 3 years as economy recovers
- China may be modest corn importer
- Non-U.S. feedstuff sources will gradually expand supplies
- U.S. will see significant crop yield increases, helping to supply biofuels growth
- Prices will be volatile

Thanks!

Questions?

Web Sites

<http://www.econ.iastate.edu/faculty/wisner/>

http://www.agmrc.org/renewable_energy/agmrc_renewable_energy_newsletter.cfm