International Trade in DDGS Supply & Demand Outlook 2008-2015

The U.S. Grains Council
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“Emerging Issues in Global Meat Trade
Economic Research Service Headquarters

Presentation Outline

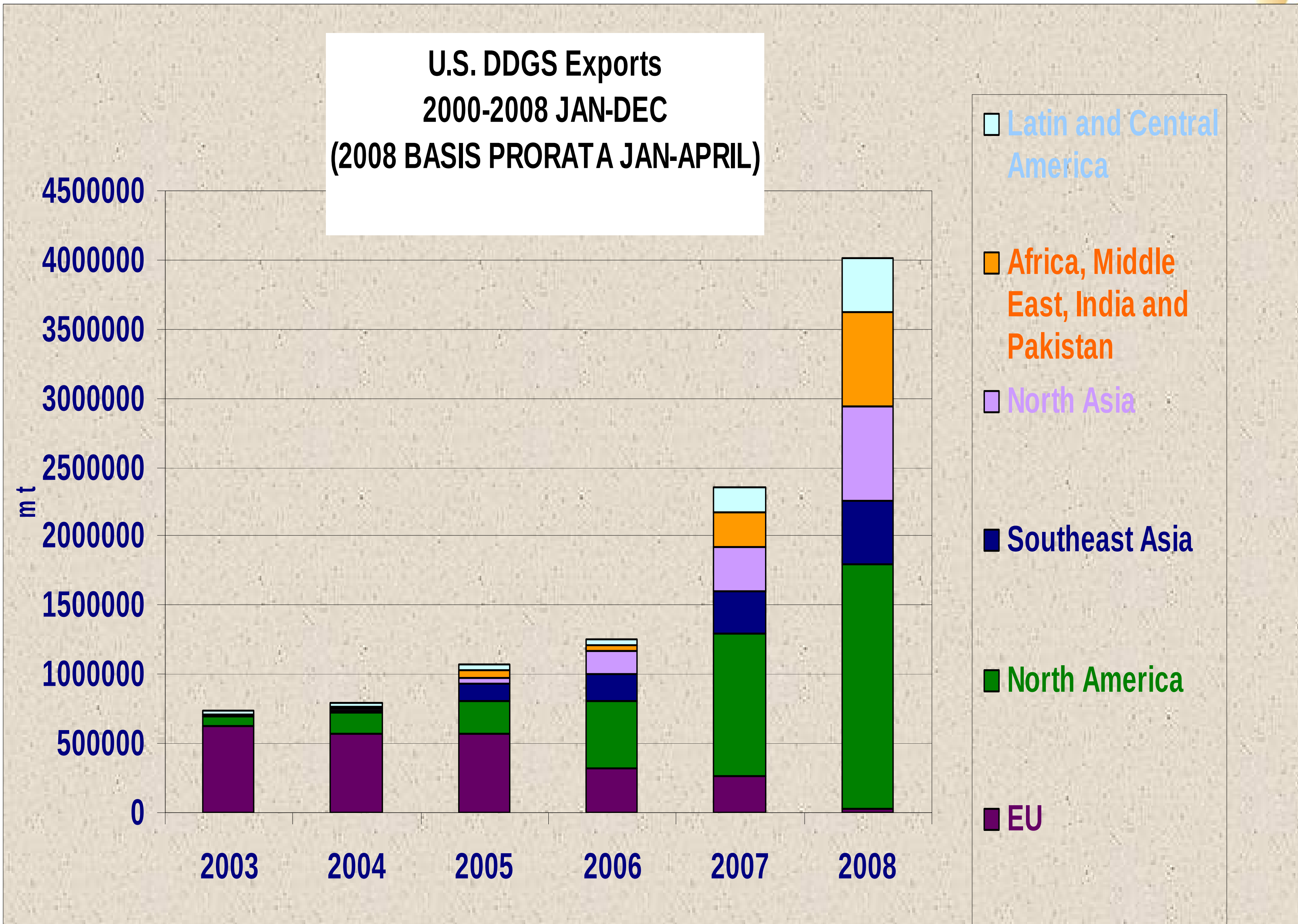
- DDGS Executive Summary
- DDGS Production & Export Projections
- The Cure to High Prices
- International DDGS Marketing 101
- Questions?

Executive Summary

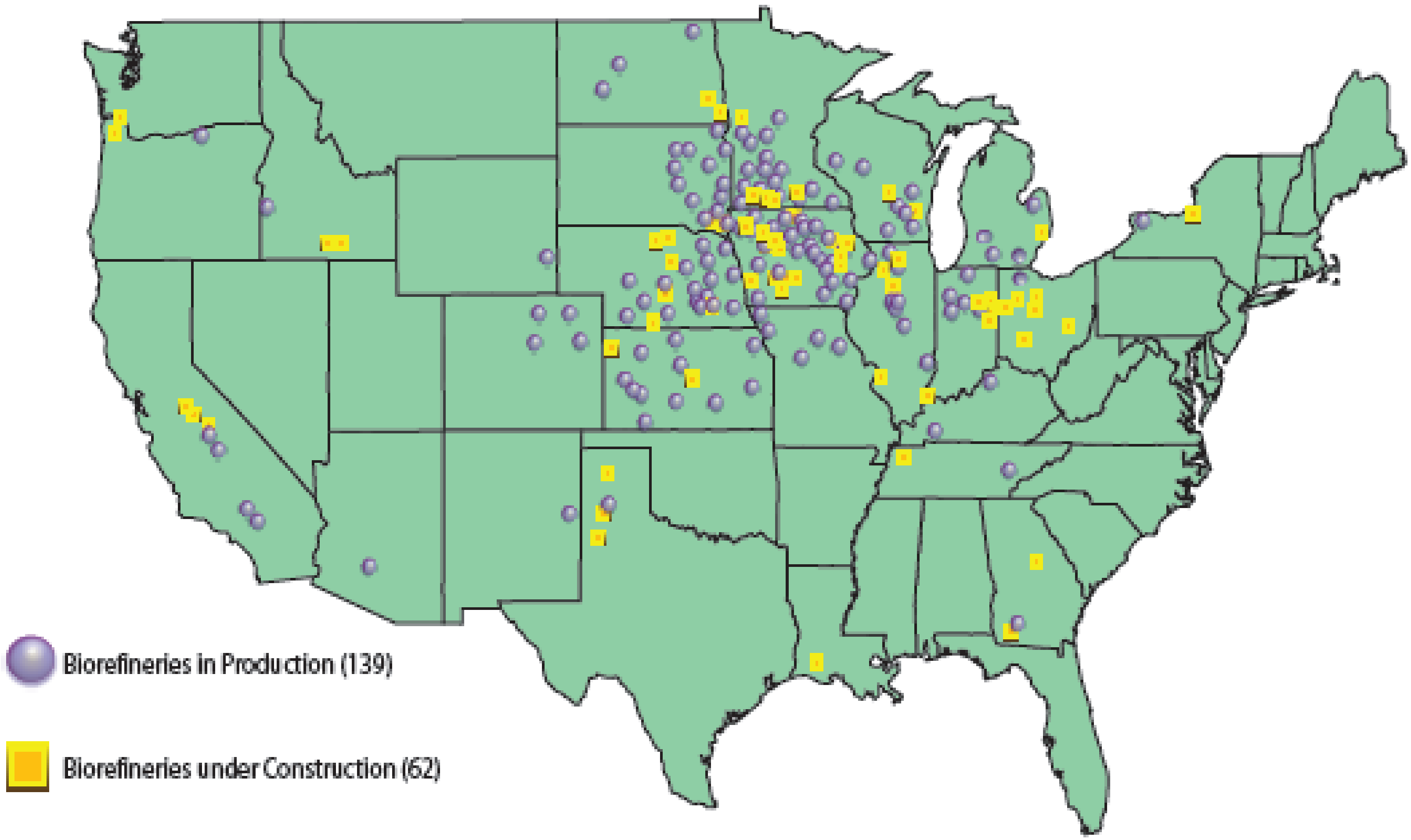
- In 2002/03 DDGS exports were valued at $76 million dollars.
- In 2006, the U.S. Grains Council's Board of Directors made DDGS export promotion the number marketing 1 priority globally.
- In 2008 Export Sales of DDGS will reach about $1 Billion dollars.
- By 2015 DDGS Exports could reach 14 million metric tons valued at $3.5 Billion
- As of the end of FY 2007 the "ROI" on Foreign Marketing programs is over $36.00 to $1.00

Executive Summary

- DDGS Export for January – July 2008 are at 2.4 million- MT (up over + 115% compared to Jan-July 2007)
- DDGS prices remain competitive in least cost feed formulations in nearly all of our foreign target markets.
- New obstacles and export competition have arisen.
- Export Demand is barely keeping up with supply increases for 2008/09
- Export demand growth potential remains primarily outside of the European Union


U.S. DDGS Exports
2000-2008 JAN-DEC
(2008 BASIS PRORATA JAN-APRIL)
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
m t
2003
2004
2005
2006
2007
2008
Latin and Central America
Africa, Middle East, India and Pakistan
North Asia
Southeast Asia
North America
EU

U.S. Ethanol Biorefinery Locations



Source: Renewable Fuels Association
01.24.08

The math:

- Dry grind ethanol production yields:
  - 1/3 ethanol
  - 1/3 carbon dioxide
  - 1/3 distillers grains
- Use of distillers grains in the USA:
  - ~40% steak, hamburger, roast (beef cattle)
  - ~40% milk, yogurt, cheese (dairy cattle)
  - ~12% ham, pork loin, bacon (swine)
  - ~6% eggs, chicken breast (poultry)

Typical Recommended Feeding

Species	% Inclusion in Feed	Max % Inclusion -Feed
Beef	10%	20%
Dairy-Beef Growing	10%	40%
Dairy-Beef Finishing	10%	20%
Dairy	5%	20%
Poultry	10%	15%
Swine	10%	25% (50%) finish

Export Supply vs. Demand Potential

Year	Export Supply Million MT	Export Potential Million MT
07/08	3.8	20
08/09	4.5	20
10/11	5.5	22
15/16	11-15	25

Executive Summary

- Our work has just begun… with barely 25% of our long term goal achieved.
- Pro Exporter estimated a 6.2 million ton increase in production from 06/07 to 07/08
- Pro Exporter predicts another 3.8 million ton increase from 07/08- to 08/09
- That is +10 mmt additional DDGS in 2 years, (but down about -2 mmt from forecasts of +12 mmt in February of 08).

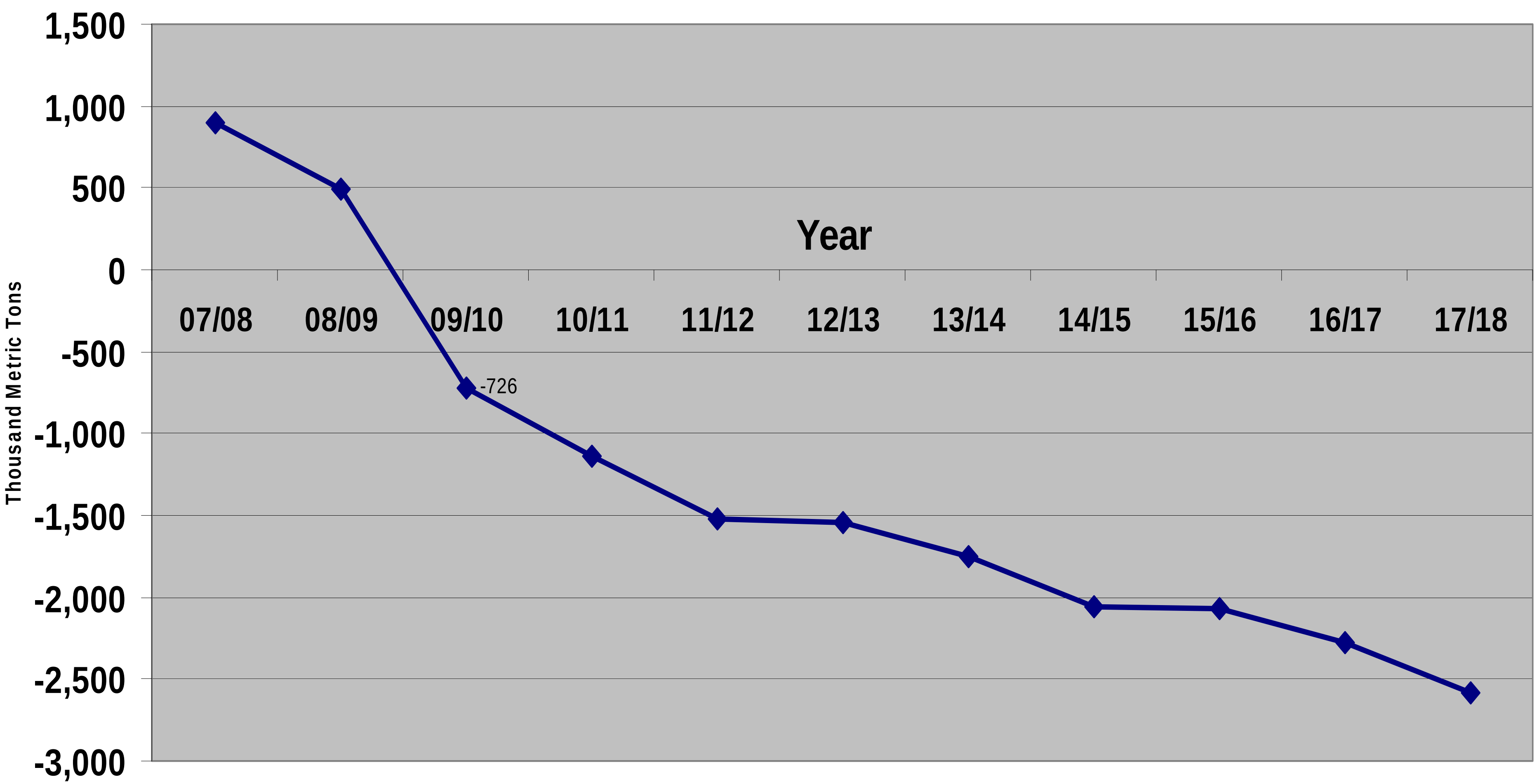
Top 20 DDGS Export Countries 08

Country	Exports in Metric Tons
1 Mexico	1,082,547
2 Canada	683,574
3 Turkey	341,727
4 Taiwan	300,000
5 South Korea	220,000
6 Japan	163,380
7 Viet Nam	135,831
8 Thailand	114,978
9 Costa Rica	84,642

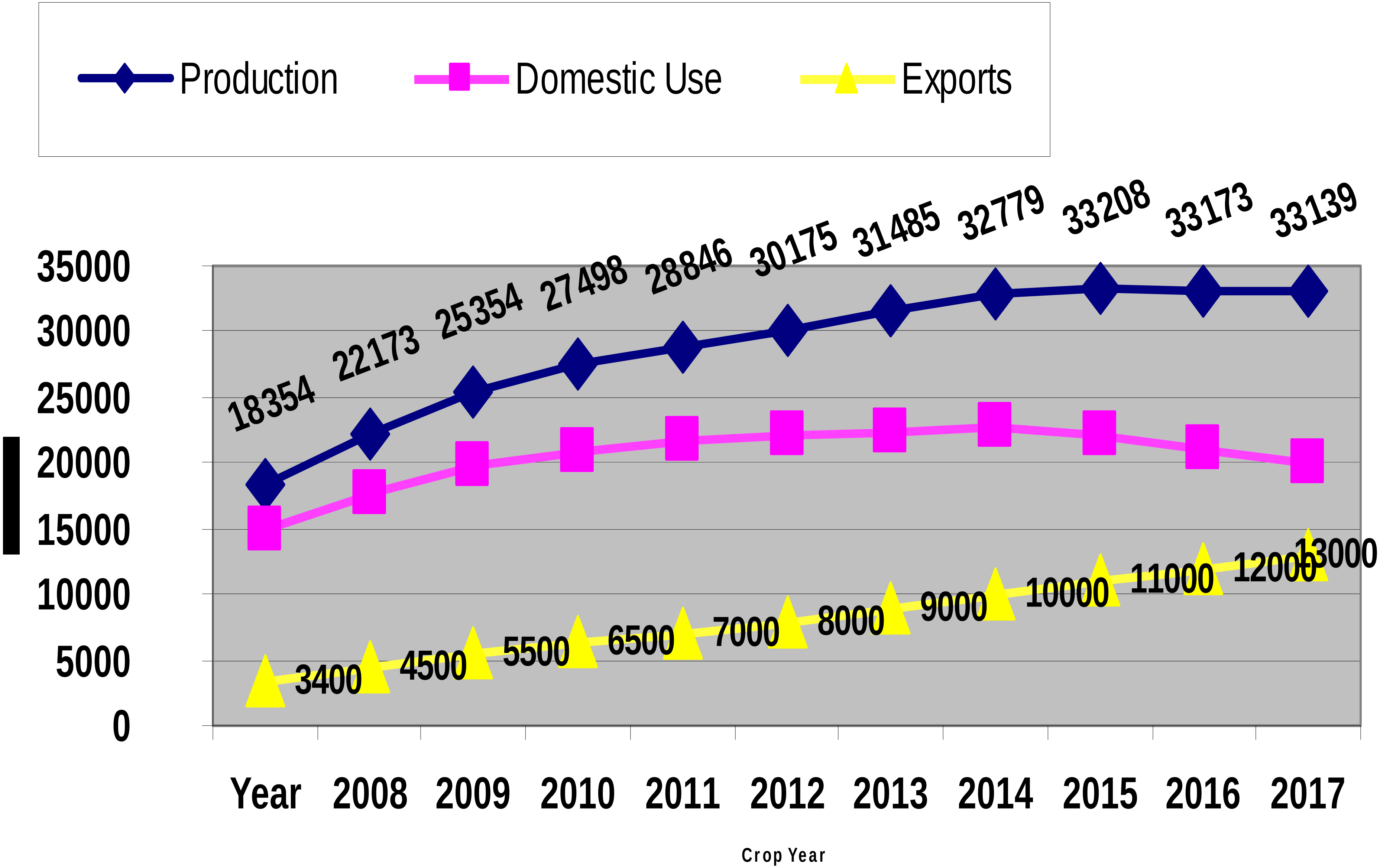
Top 20 Continued

10 Indonesia	84,642
11 Chile	70,851
12 Egypt	69,000
13 Cuba	67,854
14 Malaysia	65,232
15 Philippines	49,578
16 Guatemala	40,070
17 Morocco	38,592
18 Ireland	34,296
19 Honduras	31,131
20 Colombia	27,189

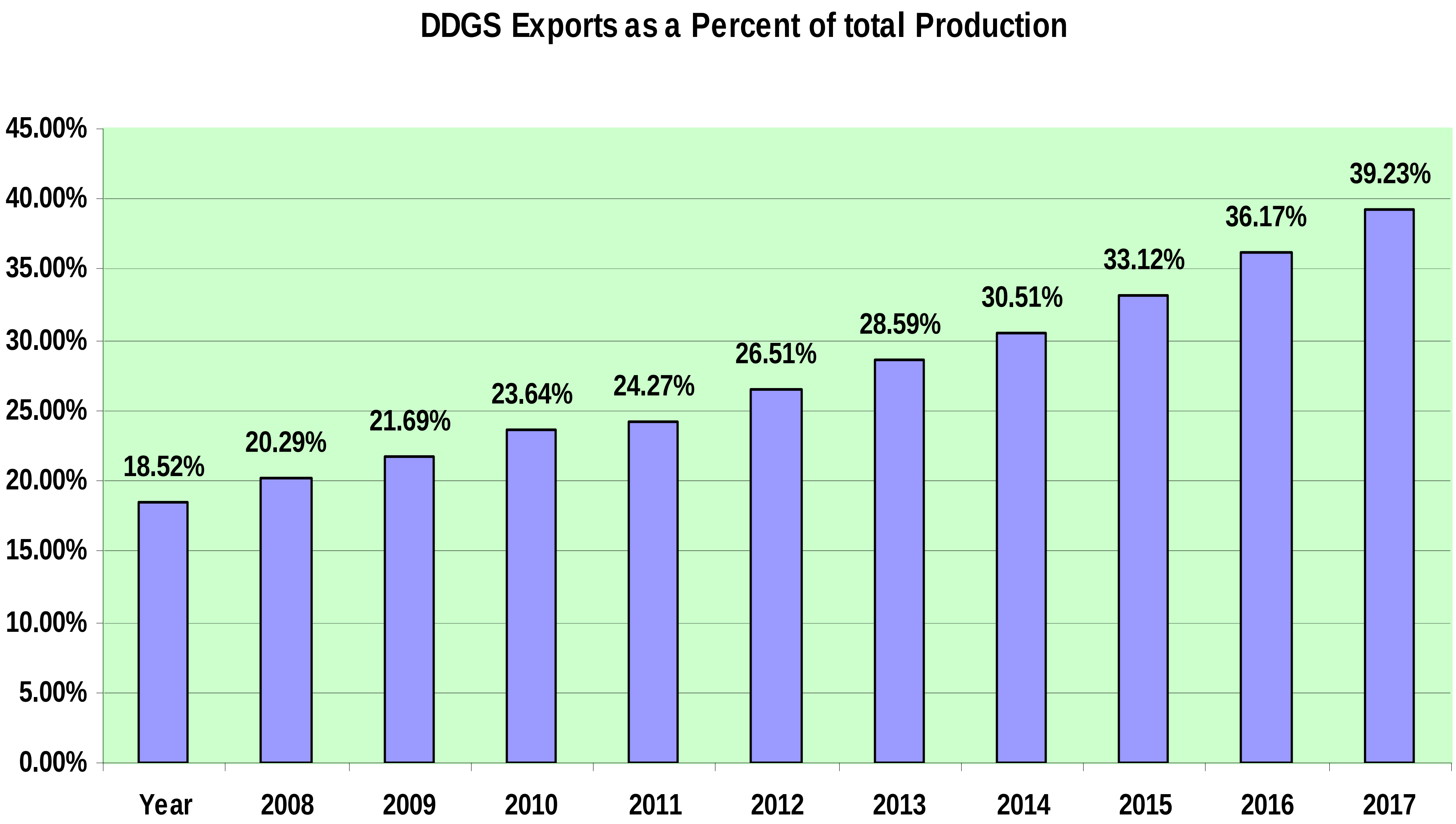
Chinese Corn Net Exports & Imports FAPRI 2008



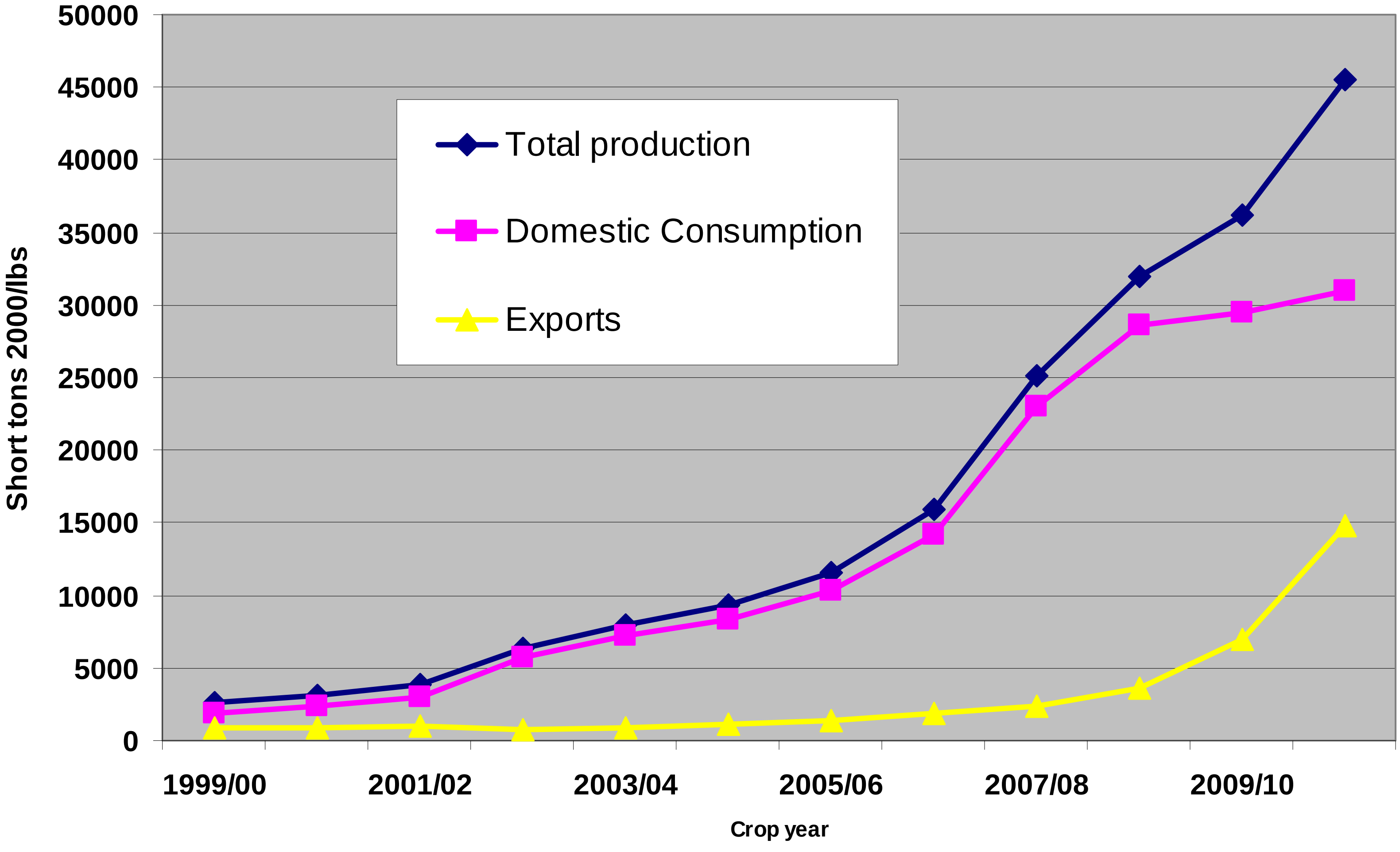
DDGS Production & Demand 2017
Source Pro Exporter



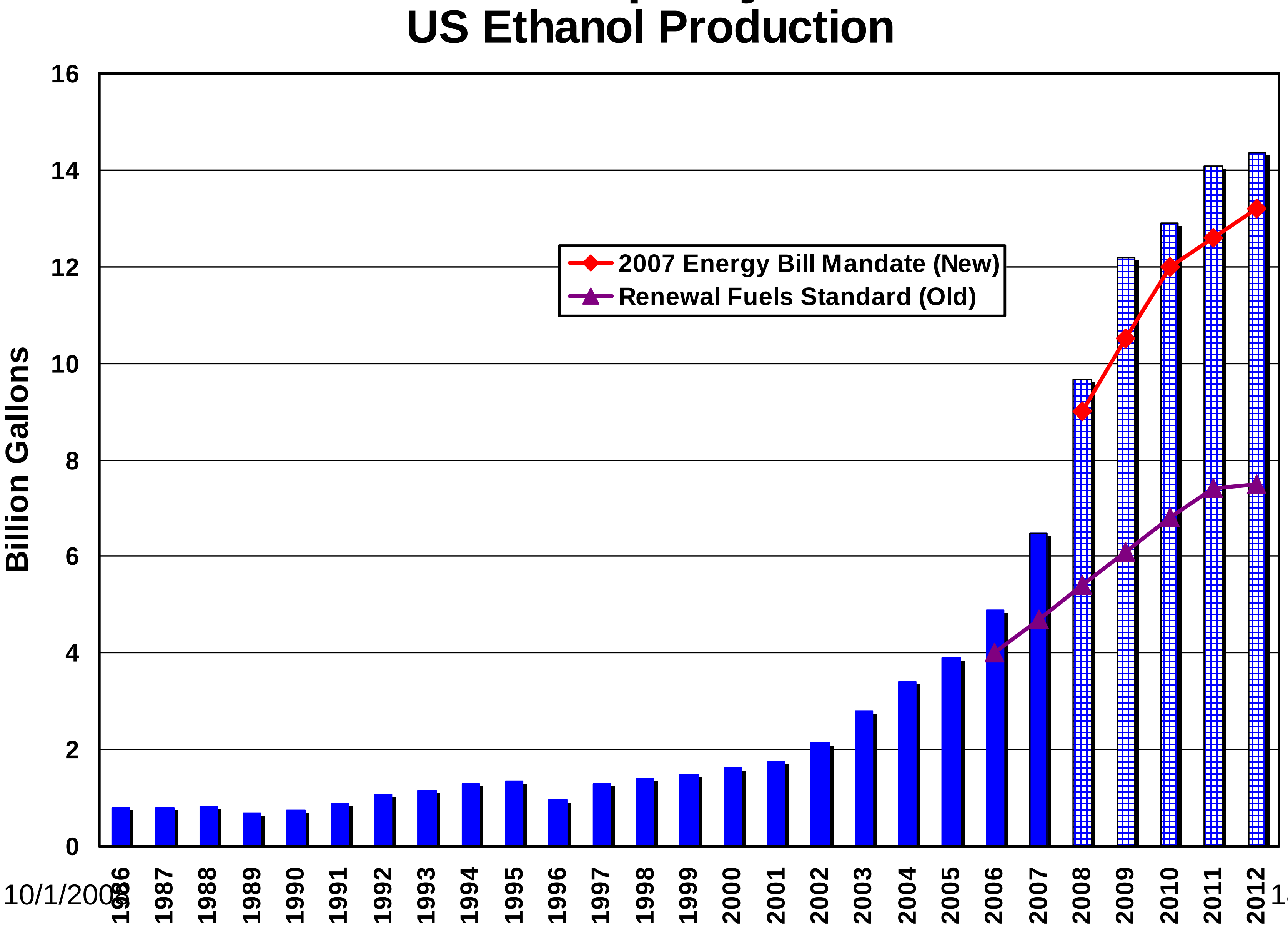
Exports Growing as % of Demand



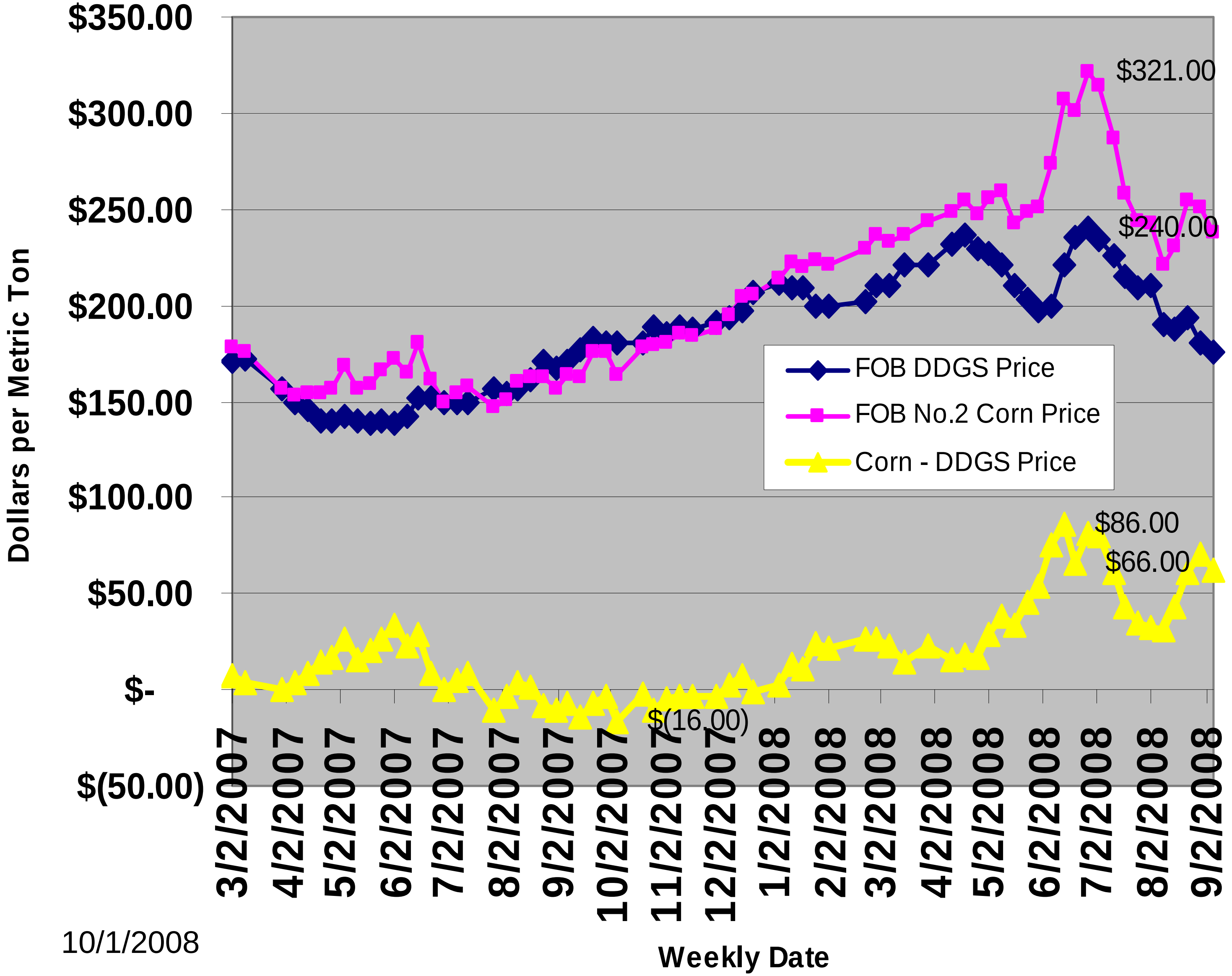
Informa DDGS PS&D Projection 07



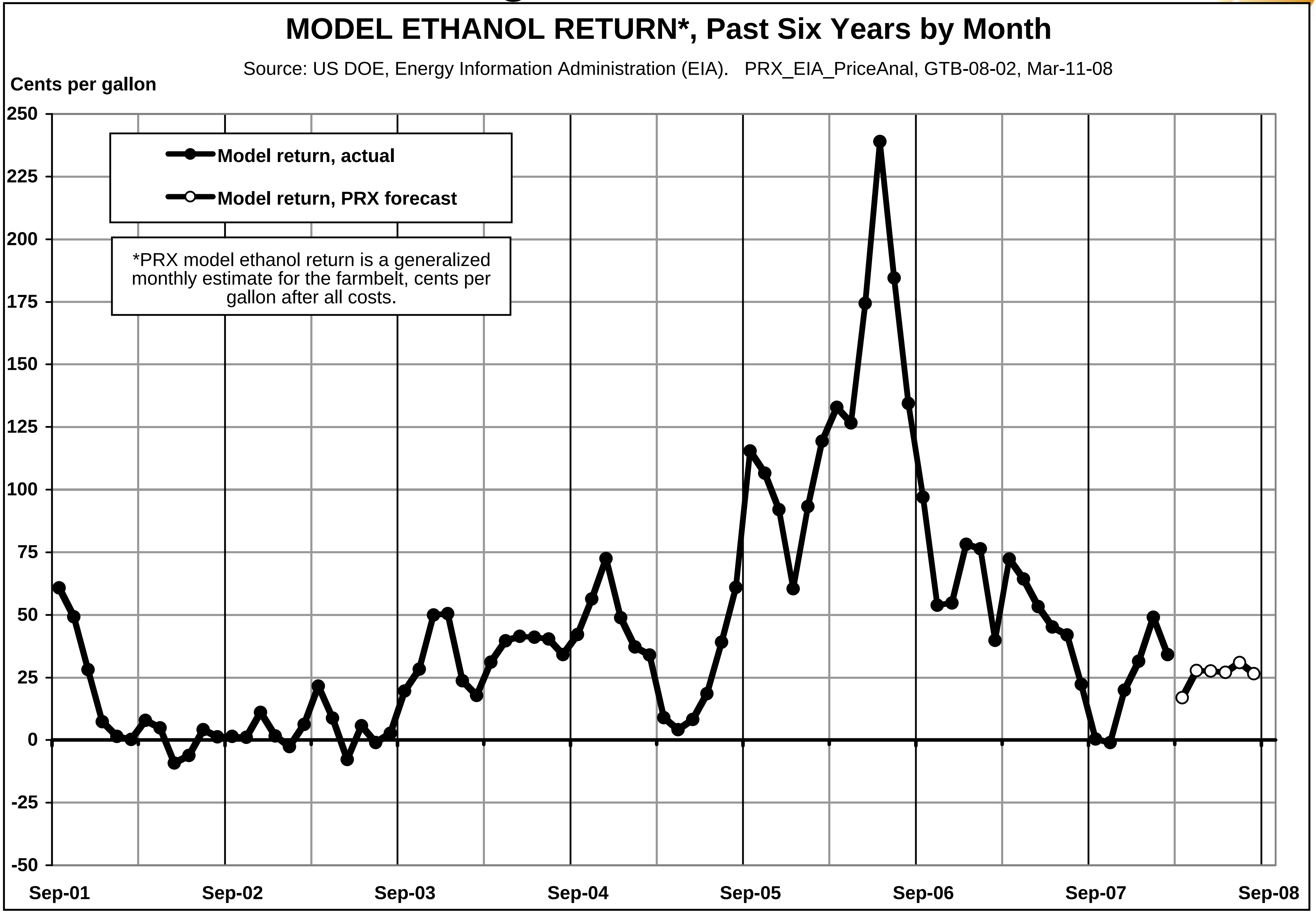
Informa projection



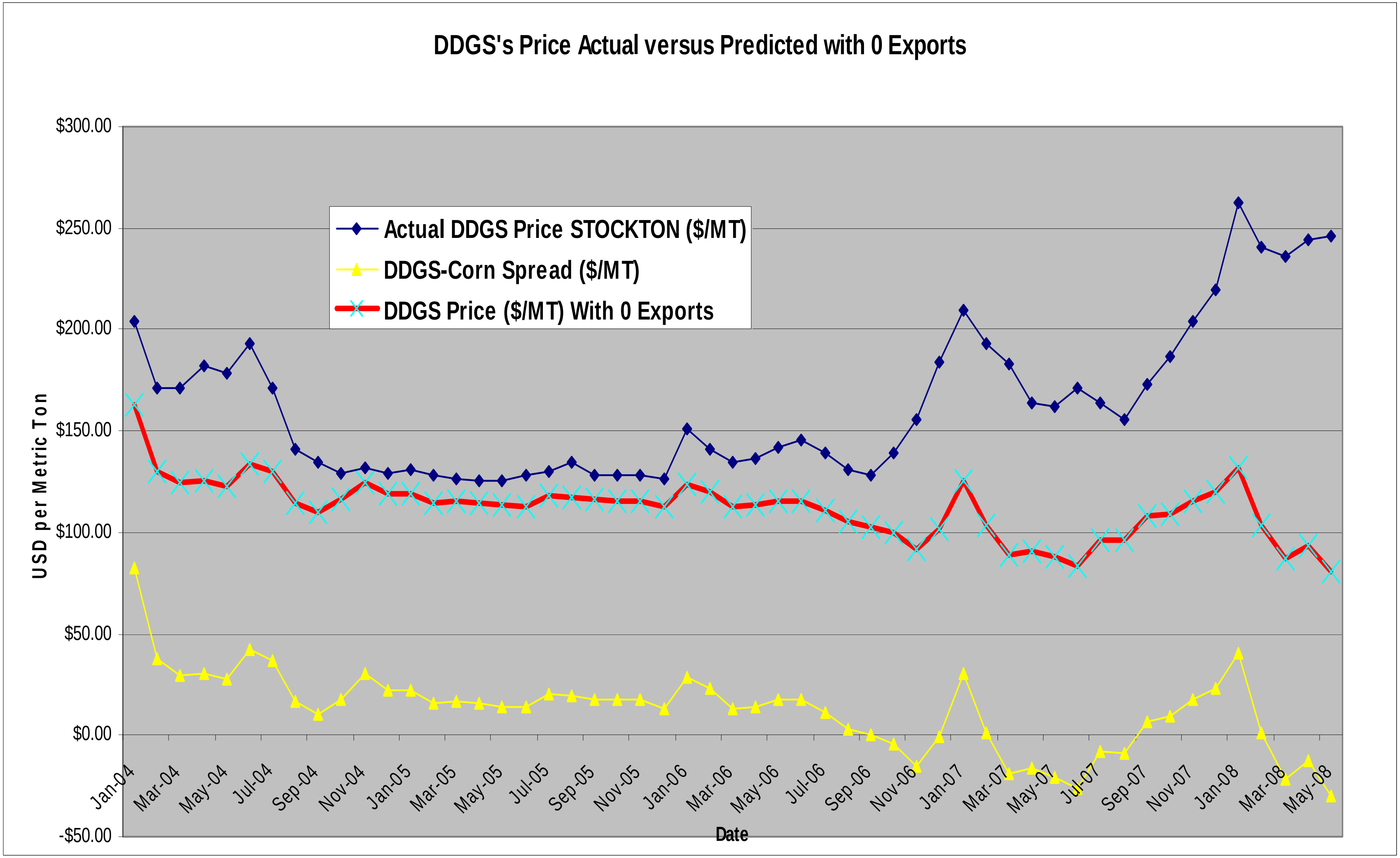
FOB GULF Corn - DDGS Prices



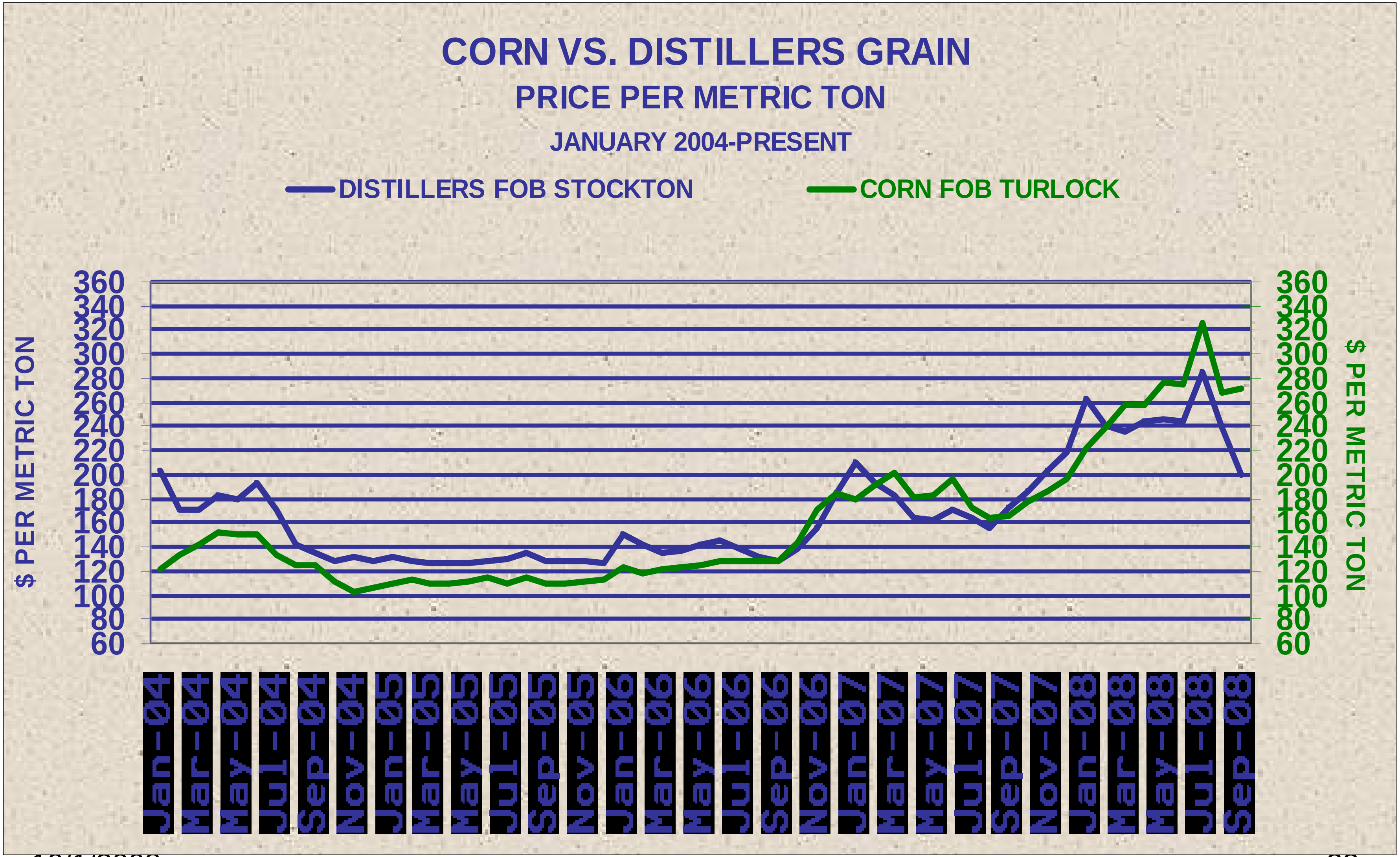
Ethanol Margins Source- Pro Exporter Network



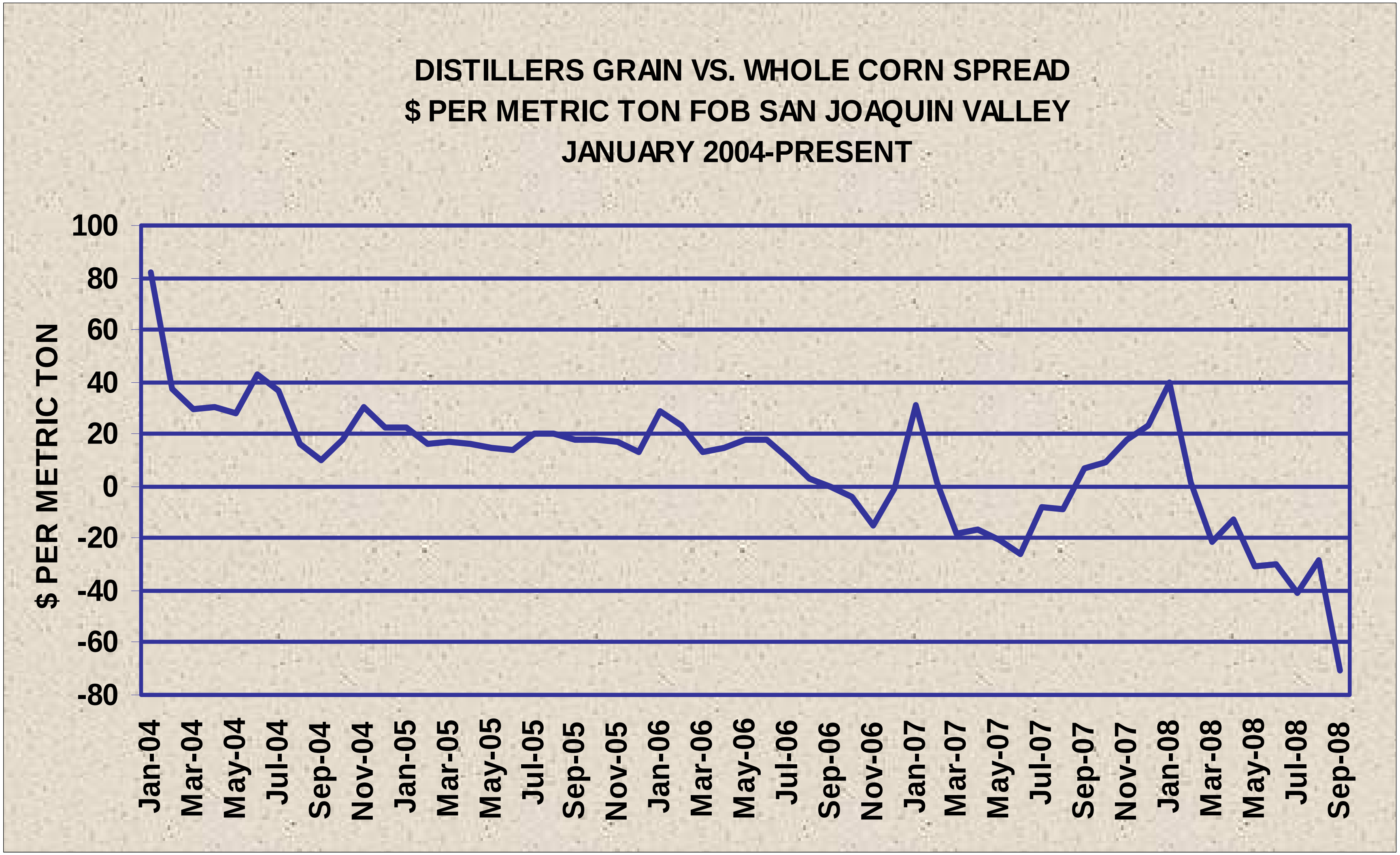
DDGS $Price Without Exports



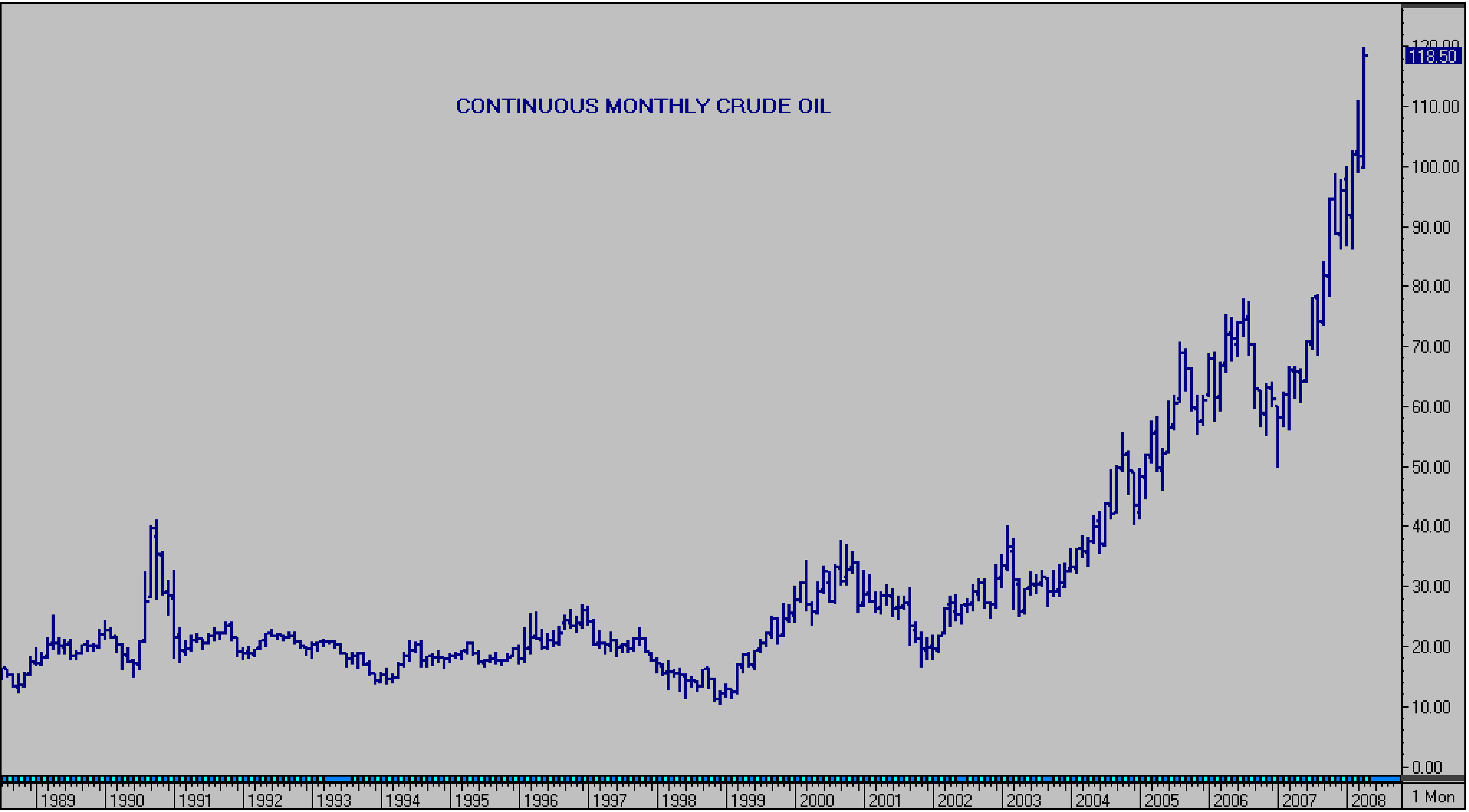
Domestic DDGS prices are linked to Export Markets



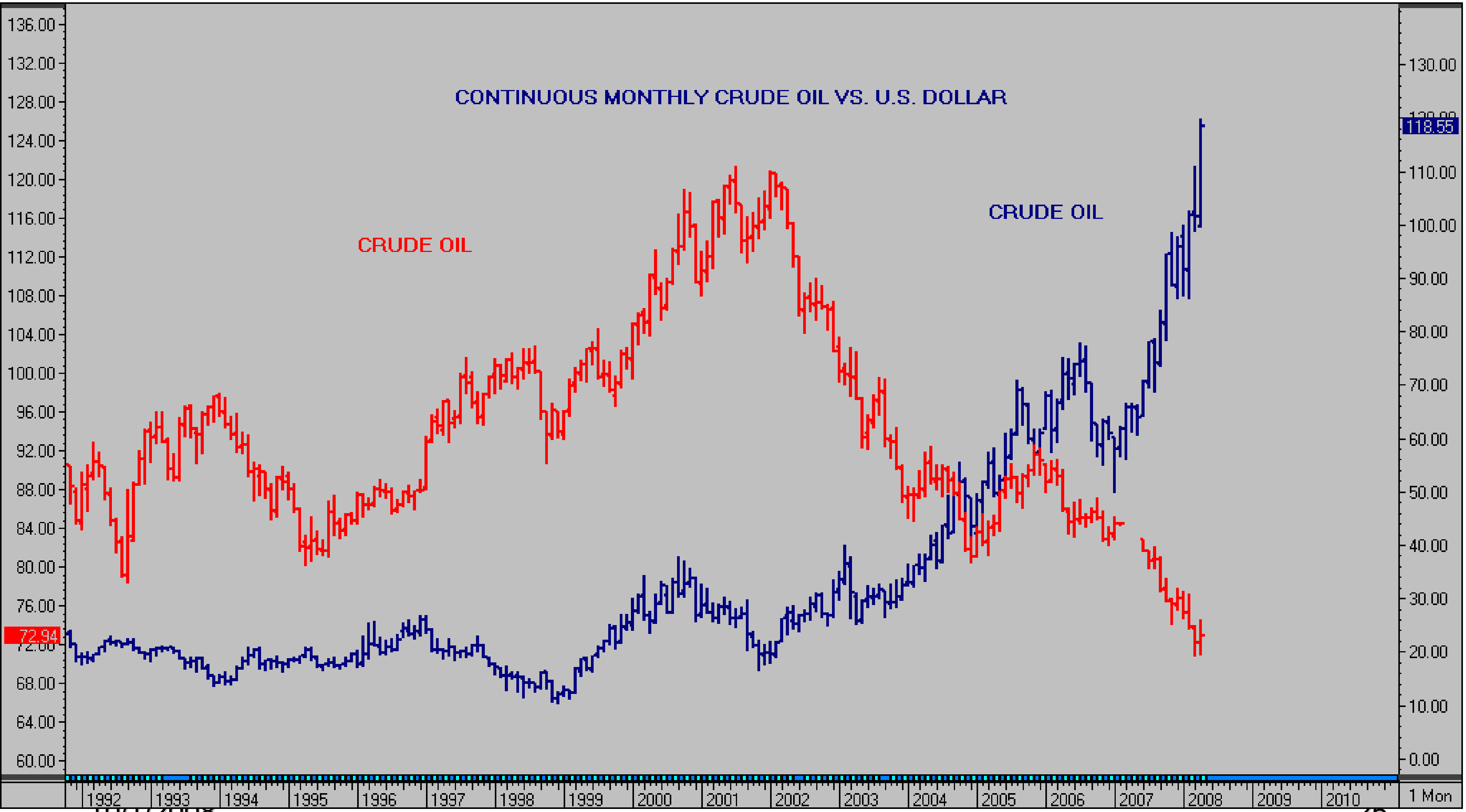
DDGS Premiums are Suffering



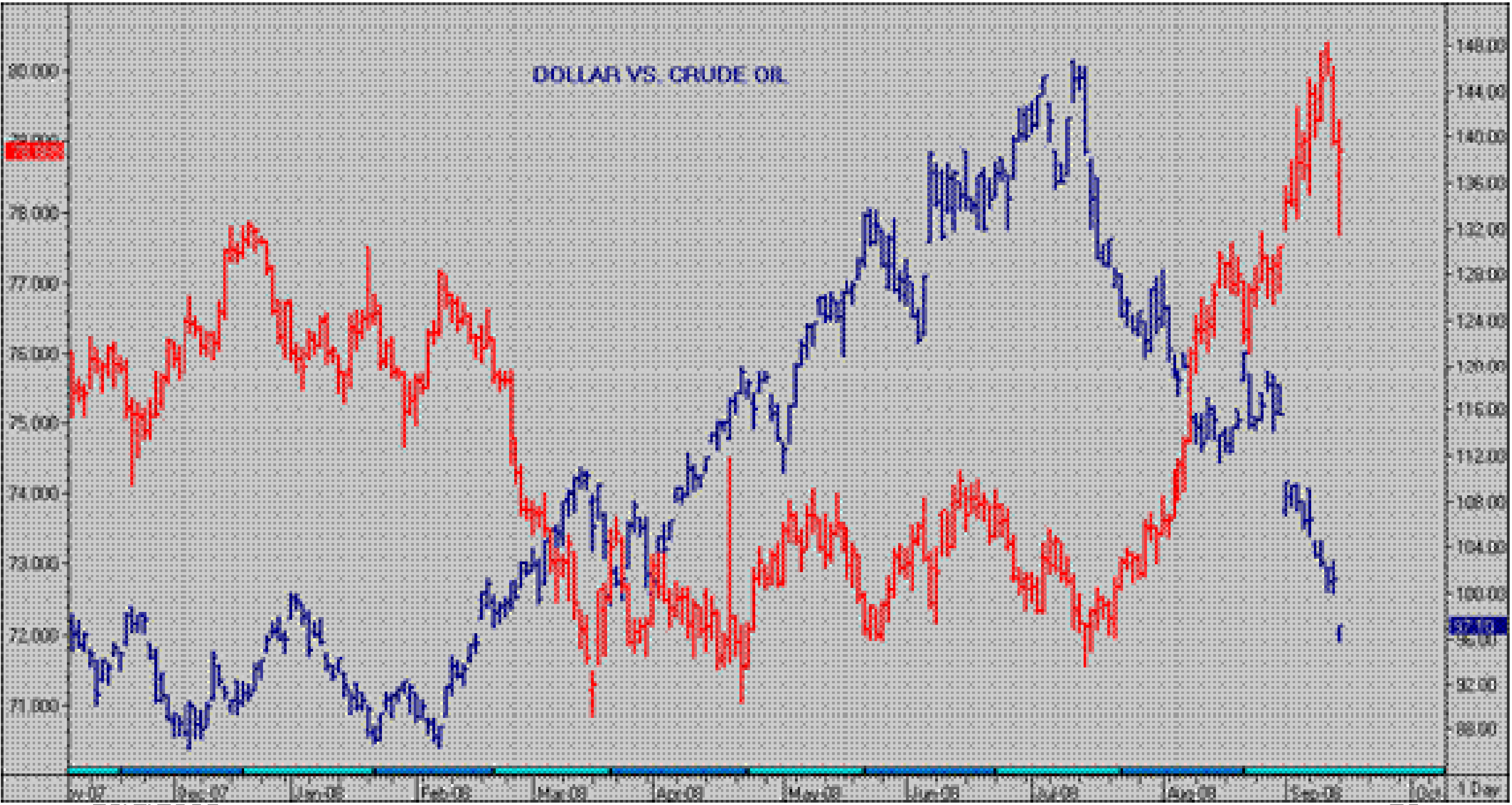
Oil Prices have Tripled since 2005!



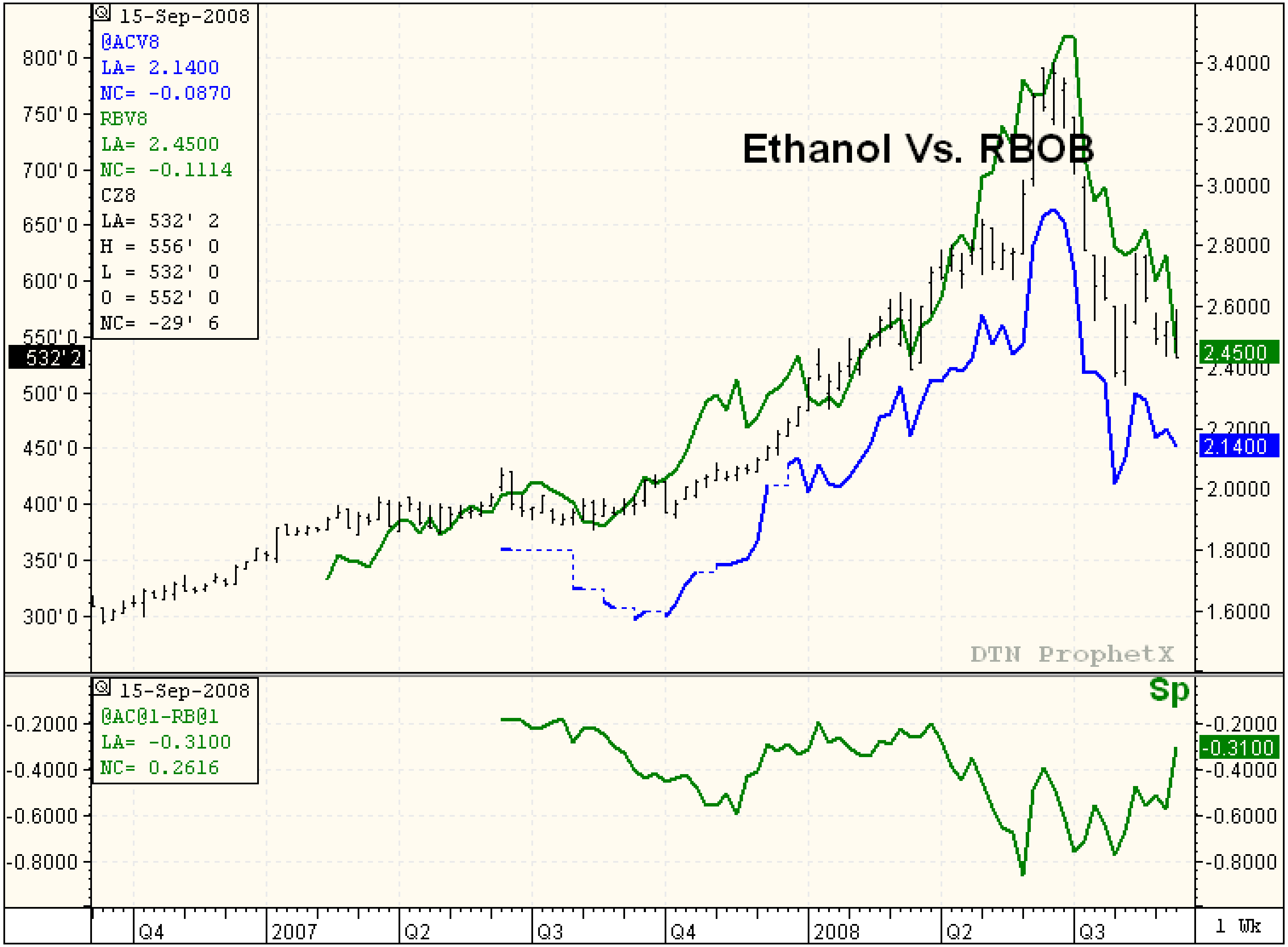
Oil Rises Dollar Value Drops



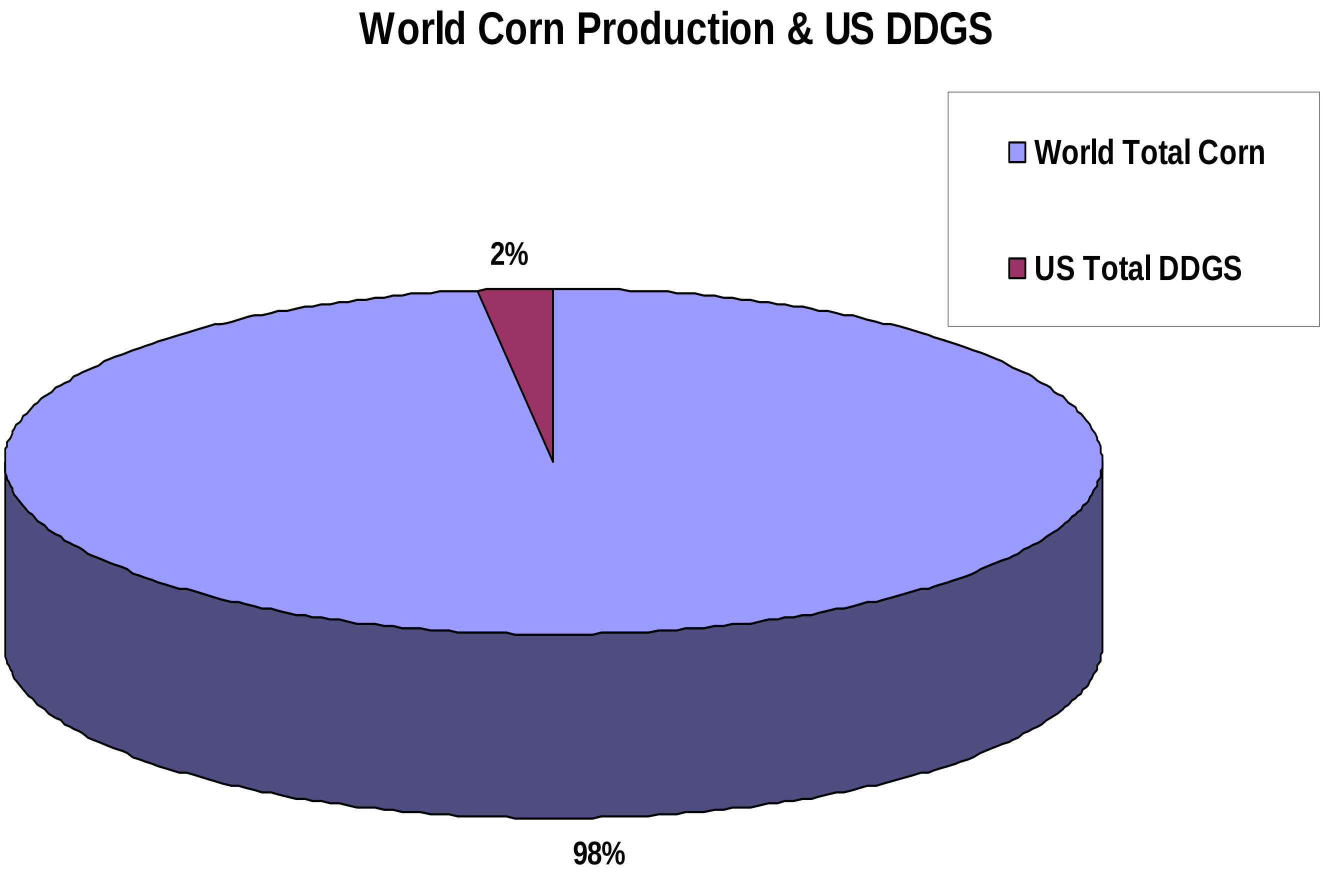
Oil Drops- Dollar Rallies



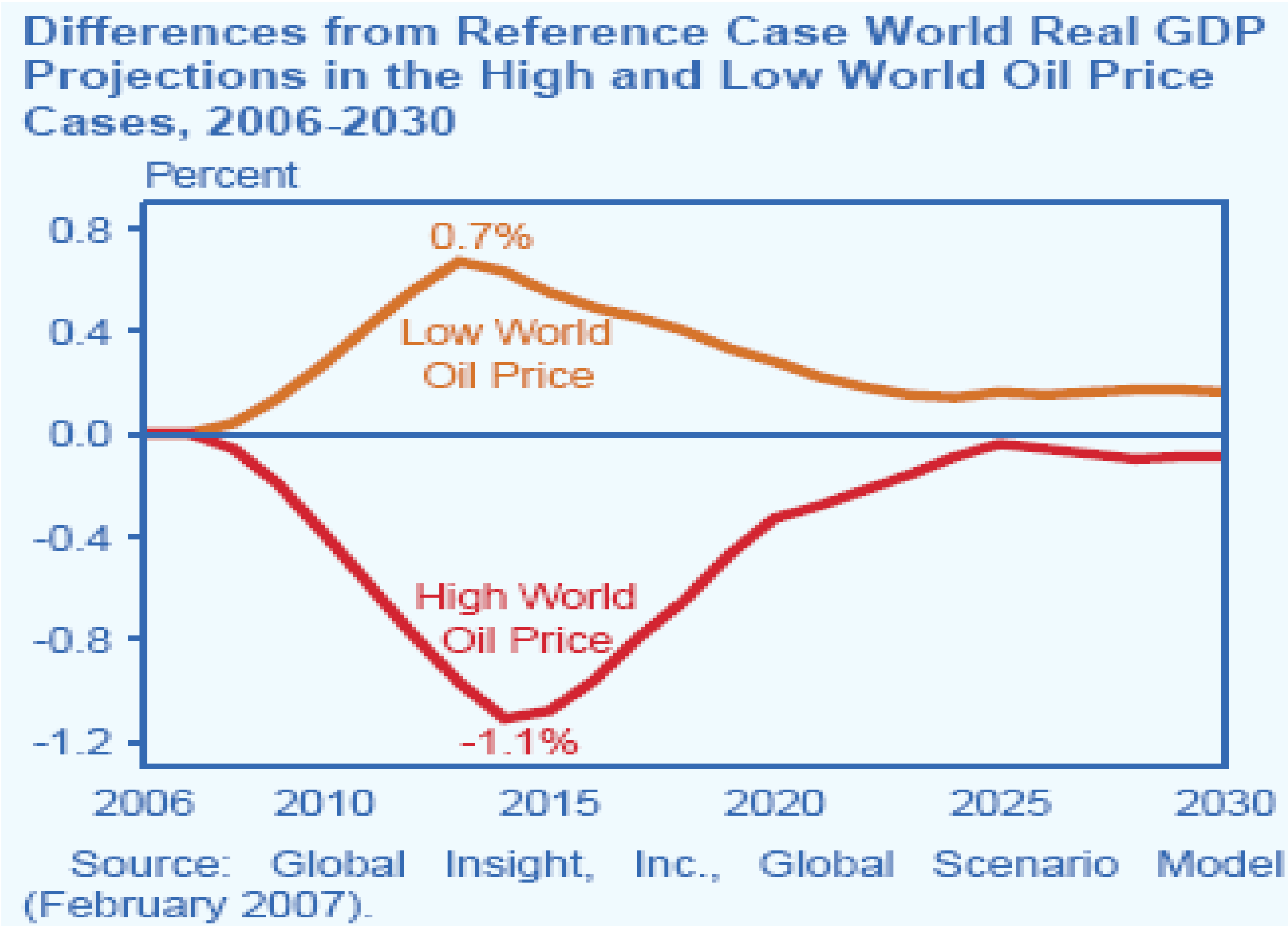
Corn Follows Gasoline



Corn Drives DDGS Prices

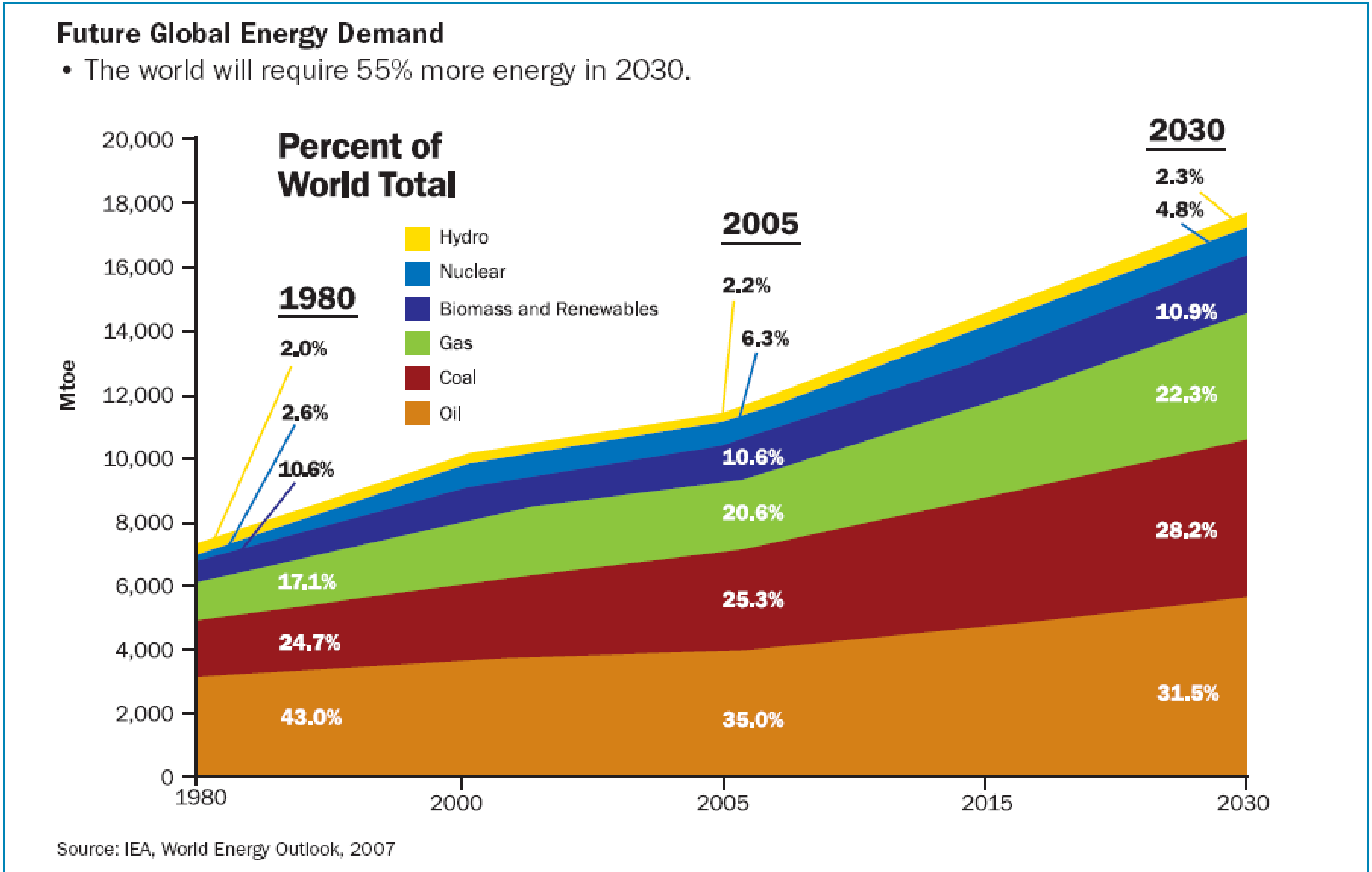


High Oil prices spark recessions



10/1/2008 29

Biomass & Renewable Fuels projected to be about 11% of World Demand



Ocean Freight Rates Decline

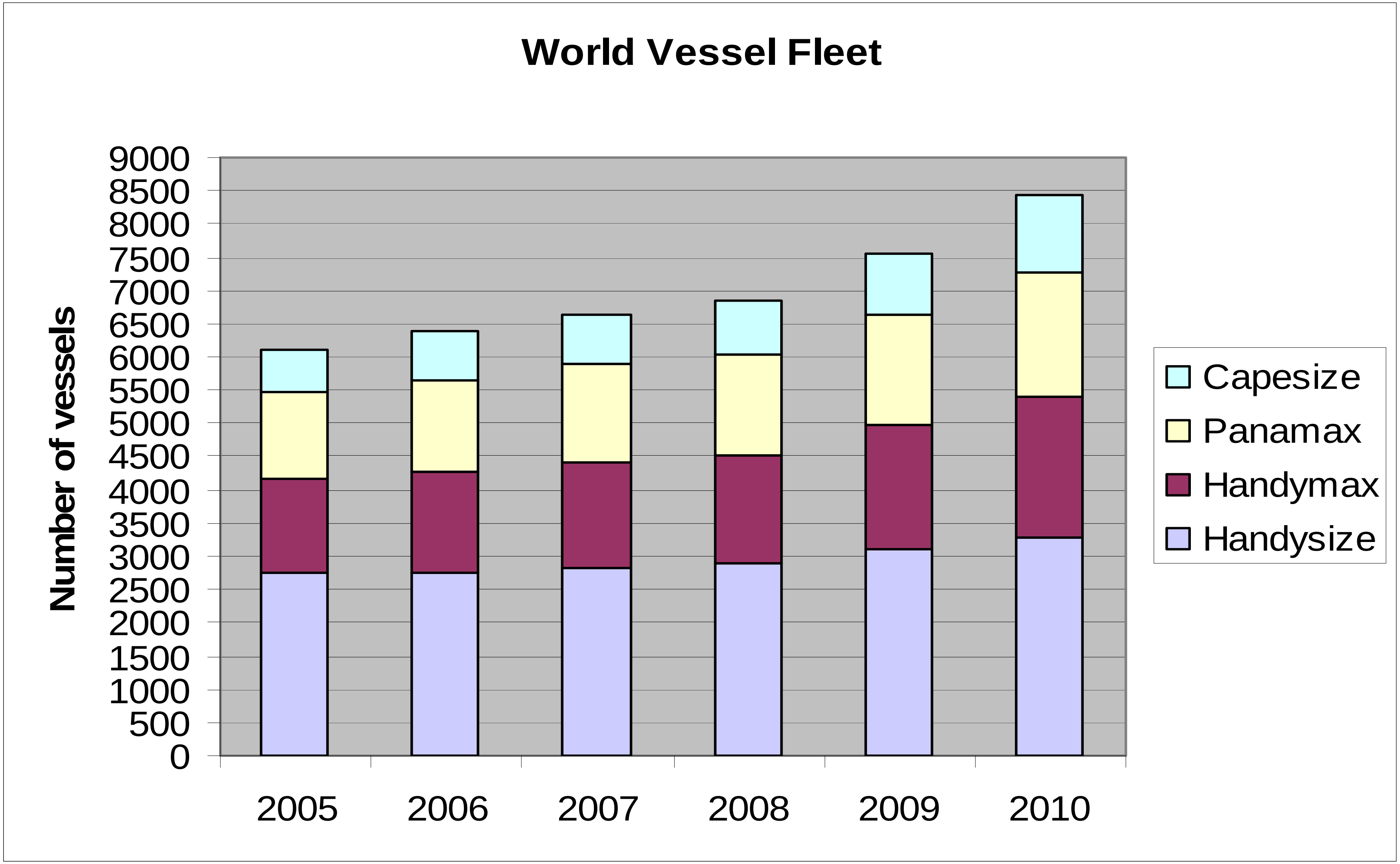
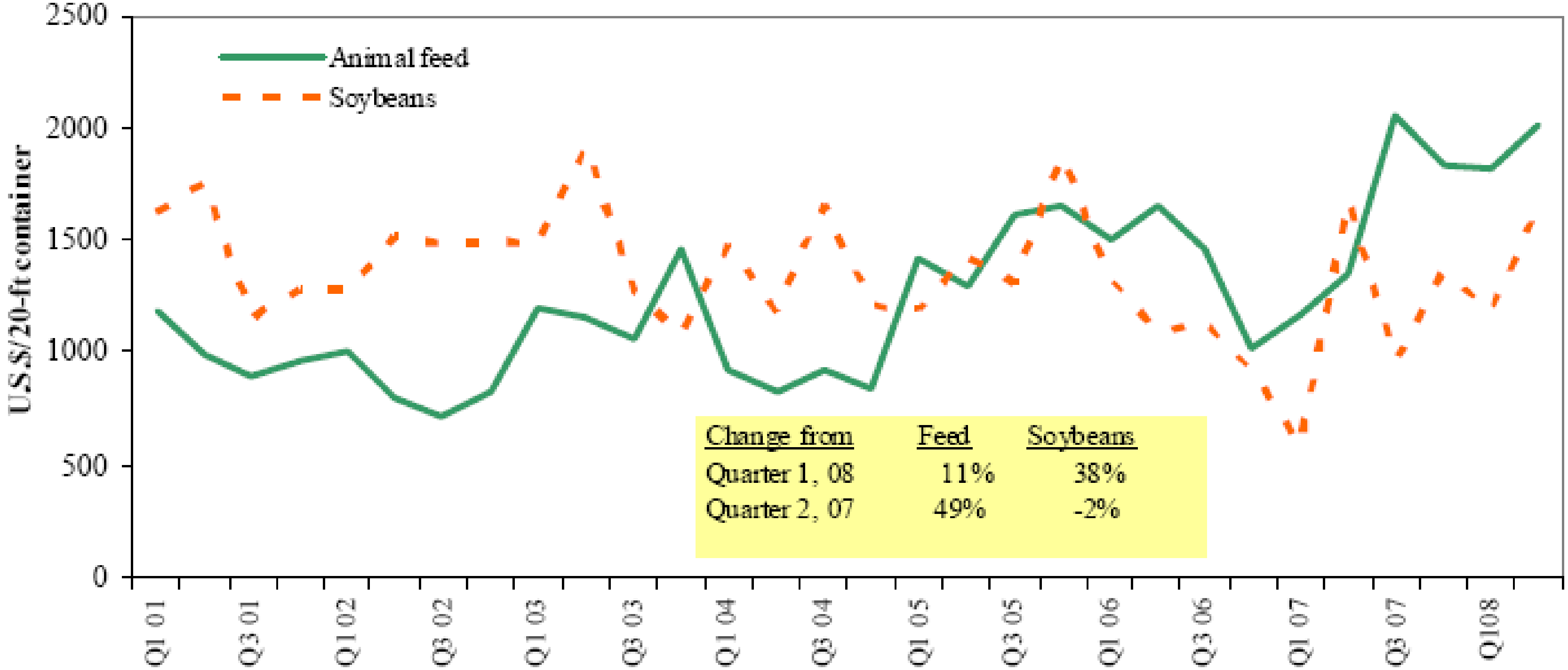


Figure 18

Ocean Rates[1] for Containerized Shipments to Selected Asian Countries



Change from	Feed	Soybeans
Quarter 1, 08	11%	38%
Quarter 2, 07	49%	-2%

[1]Rates are weighted by shipping line market share and destination country. Rates provided are publicly filed tariff rates, not those negotiated in a confidential service contract.

Countries include: Animal Feed: Bangkok-Thailand (12%), Busan-Korea (40%), Hong Kong (17%), Kaohsiung/Keelung-Taiwan (16%), Tokyo-Japan (15%). Soybeans: Busan-Korea, (1%), Kachsiung/Keelung-Taiwan (96%), Tokyo-Japan (3%)

Source: Ocean Rate Bulletin, Quarter 2, 2008, Transportation & Marketing Programs/AMS/USDA

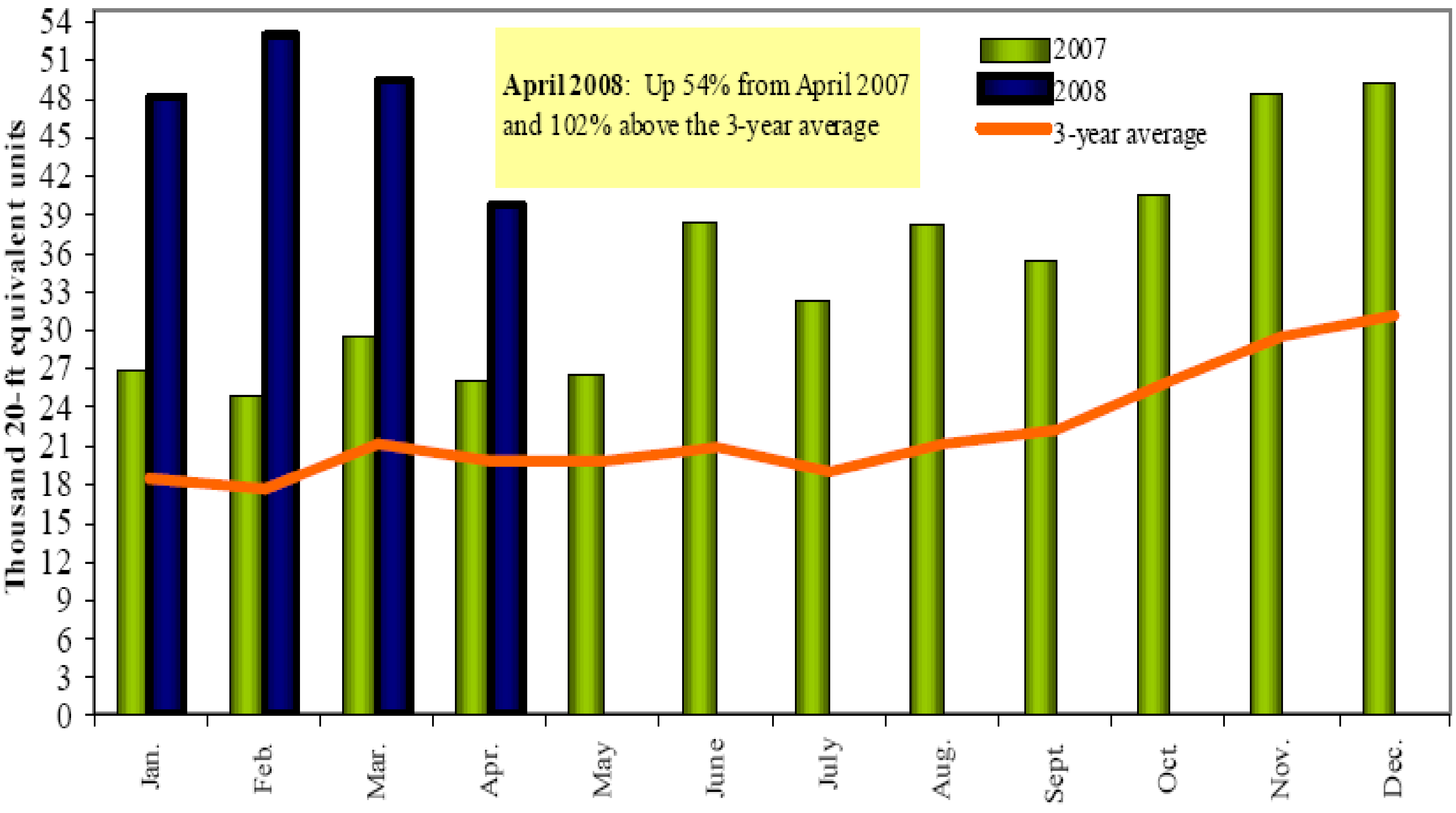
Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

During 2007, containers were used to transport 5 percent of total U.S. waterborne grain exports, and 9 percent of U.S. grain exports to Asia.

Grain in Containers competes with DDGS

Figure 19

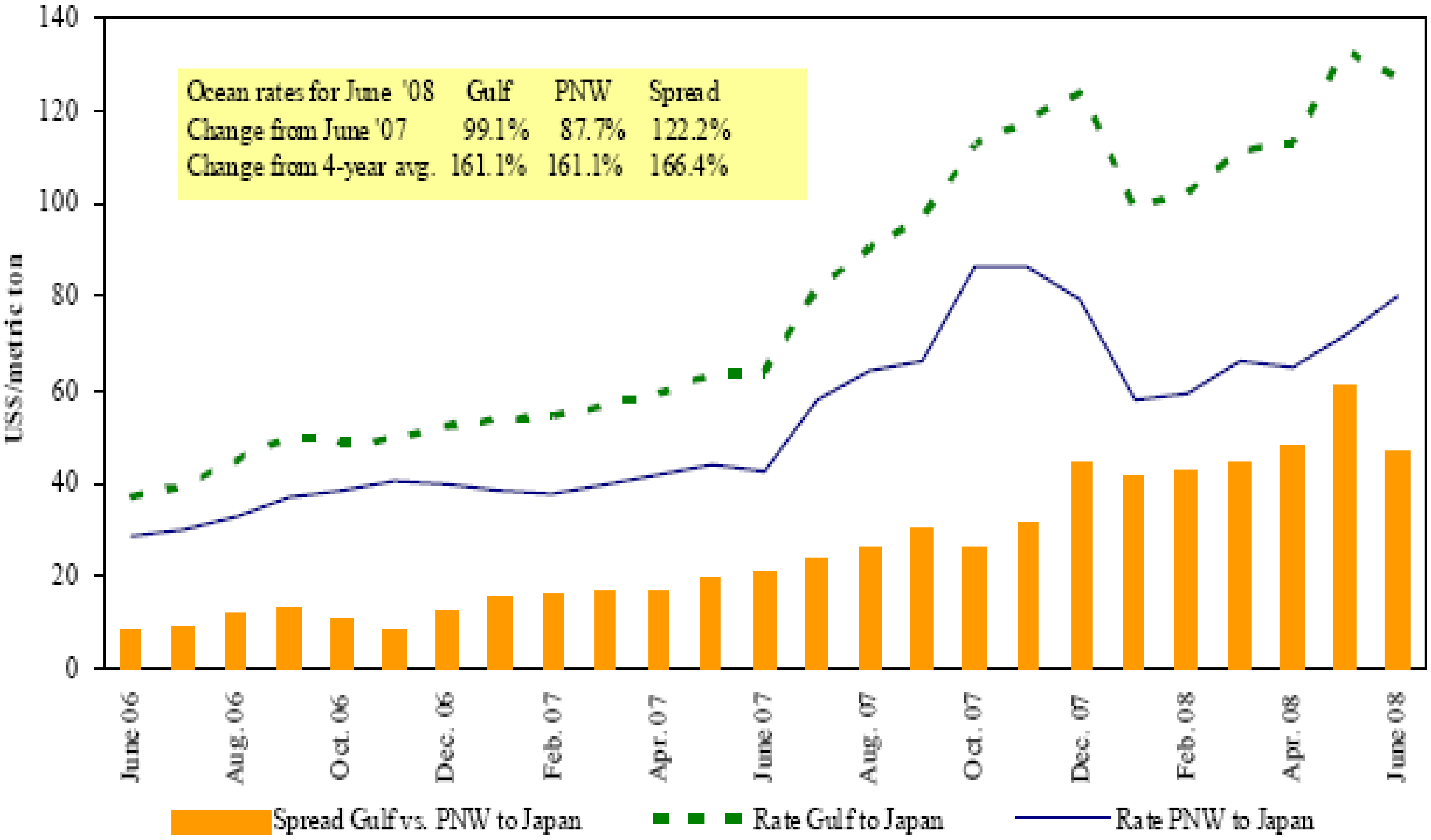
Monthly Shipments of Containerized Grain to Asia



Source: Port Import Export Reporting Service (PIERS), *Journal of Commerce*

Figure 17

Grain Vessel Rates, U.S. to Japan



DDGS Marketing 101

U.S. GRAINS COUNCIL

What is our marketing objective?

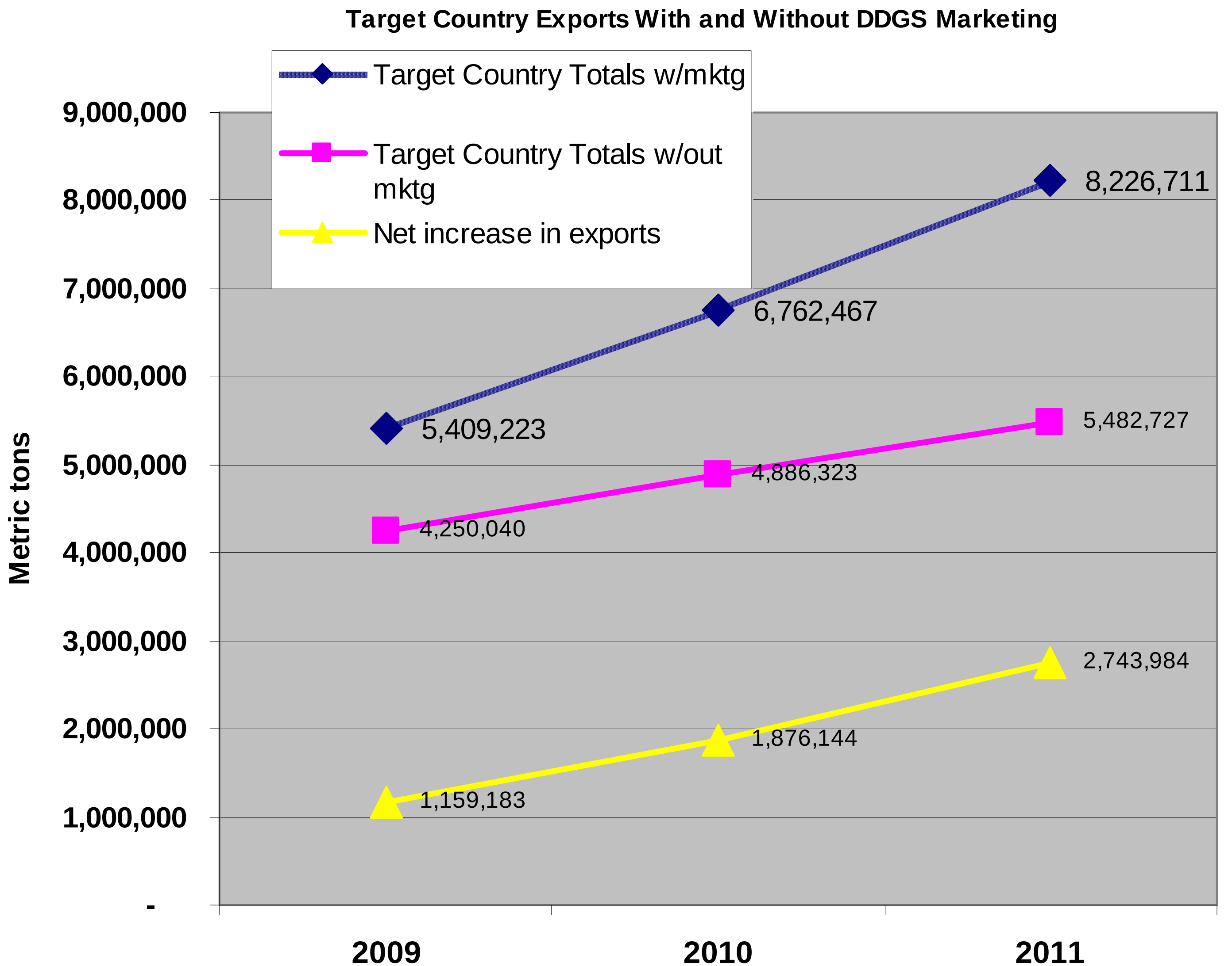
"To increase the rate of adoption of DDGS in feed rations in targeted foreign markets"

1. The overall marketing process entails…
2. An Evaluation of each market
3. Create tailored marketing plans for each country, sector, and buyer.
4. Leverage our reputation, FAS Funds, and Membership Dues to accomplish the plans
5. Implementing the marketing plans effectively by catering to the buyer's needs
6. (Then Start Over Again)

Typical USGC DDGS Marketing Methodologies

1. Product Registration with foreign Government & lower import tariff barriers.
2. Product Education; Inform Buyers (What is DDGS and how is it made?)
3. Product Application; Inform buyers on how to use it efficiently in the feed rations for the various species.
4. Product Safety and Wholesomeness: Convince the buyers that the product is safe and effective through U.S. (& local feed trials), testing research, and reminding them that over 18 mmt is being consumed globally with good performance.
5. Product Pricing: Market reports & links to buyers
6. Supply Chain information: Transportation & Supplier Information
7. Establish relationships and confidence through trade shows and missions.

Export Marketing Goals



Are these programs effective?

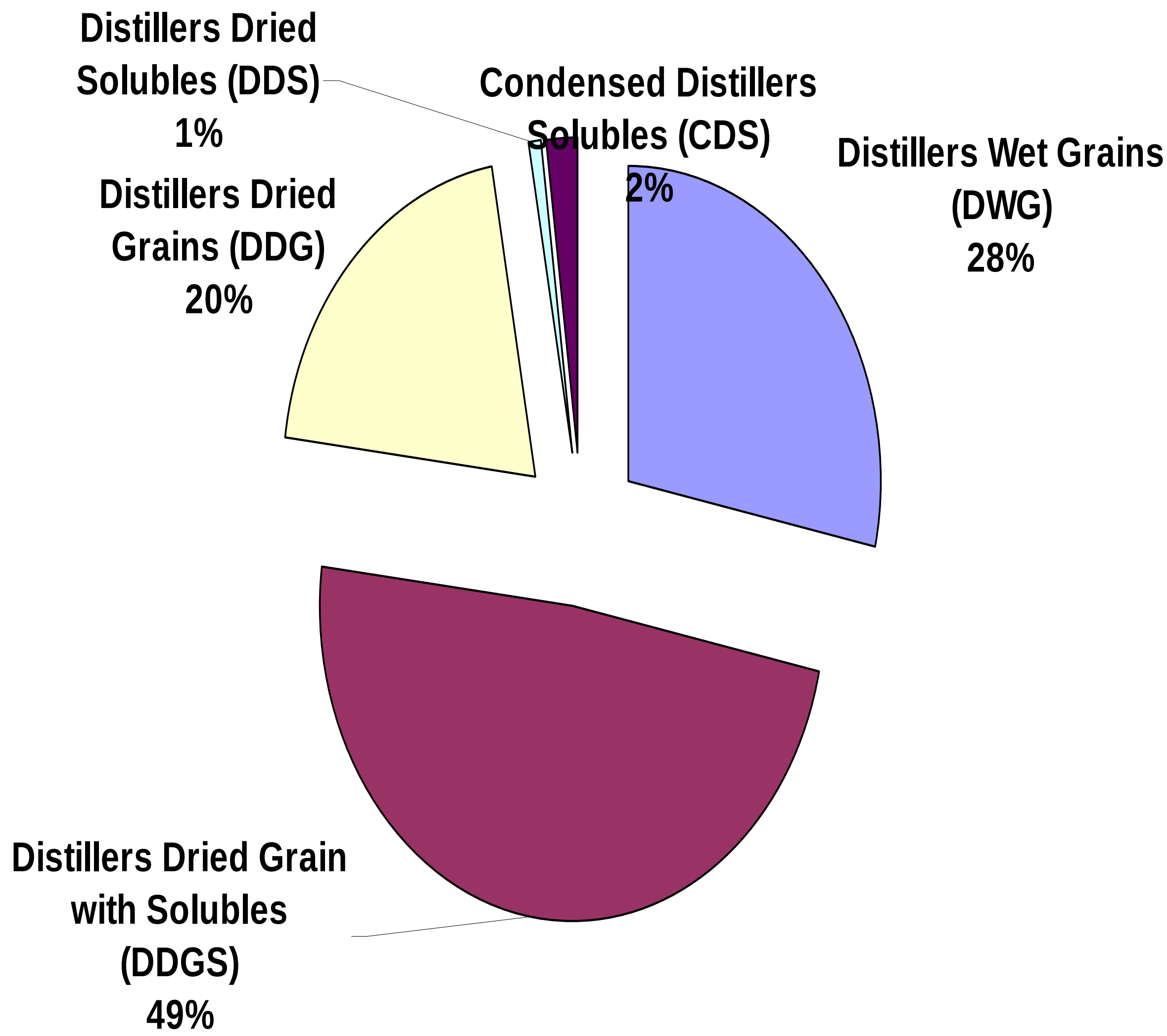
- "From my many years of experience serving as a consultant for the U.S. Grains Council, the technical nutrition seminars and face-to-face meetings and discussions with nutritionists for leading feed manufacturers have been the very effective and the primary reason for increasing demand for DDGS in foreign markets."
- ***Gerald C. Shurson, Department of Animal Science, University of Minnesota***
- “I strongly encourage you to continue your support of the U.S. Grains Council’s efforts to increase the international demand for U.S.-produced DDGS and other ethanol-based co-products. They have a 48 year history of providing programs that help international producers and enhance the use of US products. They are greatly respected and trusted world-wide, and with all the other competing forms of protein from other countries, it is essential that there is a trusted partner working with our international colleagues informing them about the benefits U.S. products if we are to be successful long-term.”
- ***Dr. Bob Thaler, Head, Dept of Animal & Range Sciences, South Dakota State University***

Are DDGS competitively Priced?

Country	Poultry	Swine	Cattle	Aquaculture
Canada	Yes	Yes	Yes	Unknown
Mexico	Yes	Yes	Yes	TBD
Taiwan	Yes	Yes	Yes	No
Japan	Yes	Yes	Yes	Yes
Korea	Yes	Yes	No	NA
Malaysia	Yes	No	No	No
China*	No	No	No	No
Indonesia	Yes	Yes	No	No
Vietnam	Yes	Yes	No	No
Thailand	Yes	Yes	No	No
Philippines	Yes	Yes	No	No
Australia	Yes	Yes	Yes	No
Tunisia	Yes	N/A	Yes	N/A
Morocco	Yes	N/A	Yes	N/A

Different DDGS qualities come from Different Ethanol Plants

Breakdown of Distillers Co Products



Fractionated Ethanol Co-Products

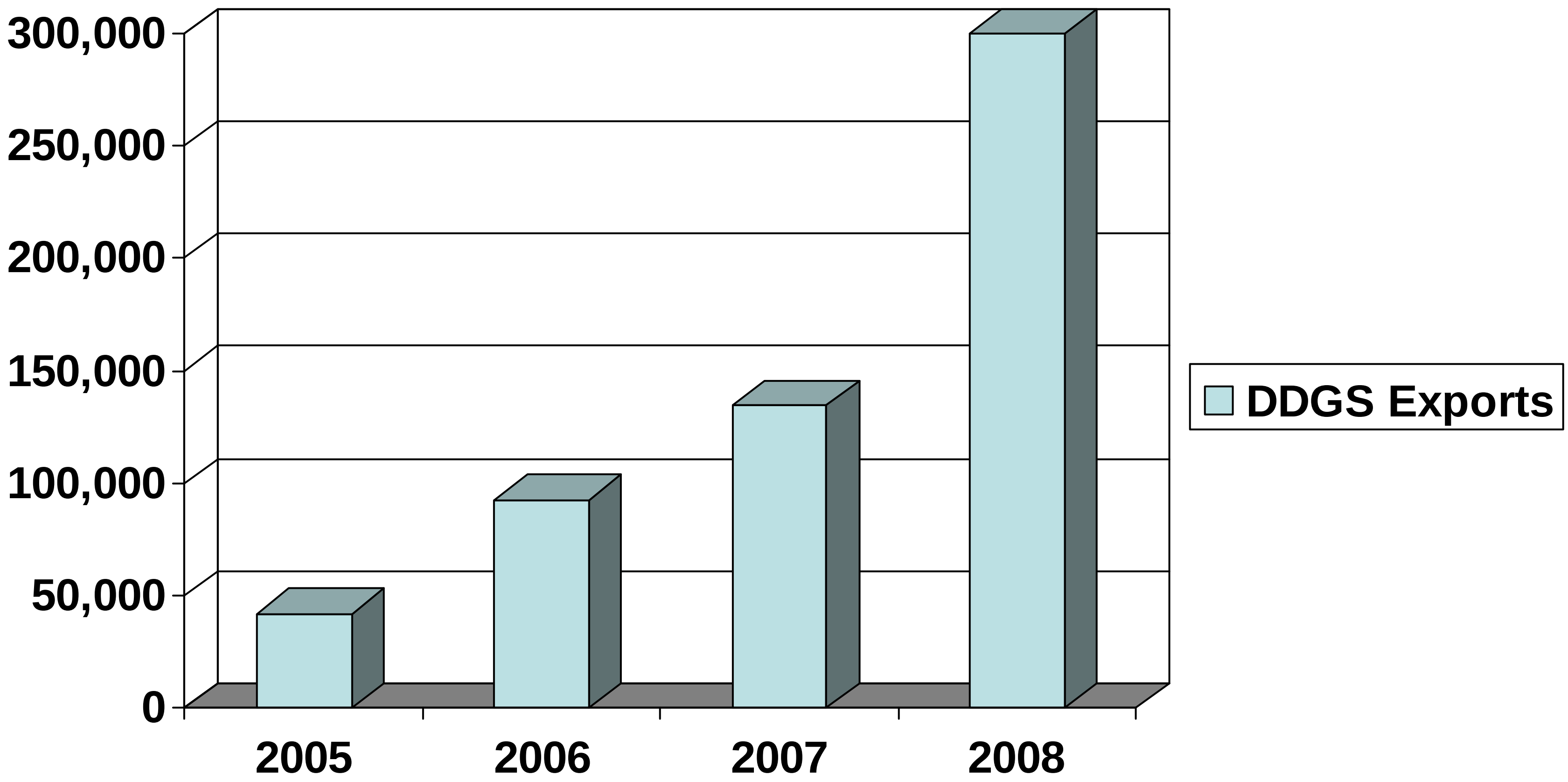
Dry Fractionation Systems:

Company	Commercial?
POET	Yes
ICM	Yes
CPT (Cereal Process Tech.)	Yes
MOR Technology	No
Renessen	No
Delta T	No
Buhler	No
FWS Technologies	No
Ethanex	No

Wet Fractionation Systems:

Company	Commercial?
Corn Value Products	Yes
FC Stone/MPI	No

Focus on Korea



Korea Marketing Strategy

- Feed Trials
- Engage the local Feed Associations and Universities
- Seminars (Nutritional & Trade)
- Buyer Missions to the USA
- Support the US Exporters in establishing relations with importers
- Hiring local Nutritional Expertise

Korea has more work to do..

Total Feed Demand	**2007**	**2008**	**2009**	**2010**
Poultry	4,403	4,400	4,300	4,550
Swine	5,409	5,300	5,500	5,500
Beef	3,881	3,900	3,800	3,800
Dairy	1,449	1,390	1,400	1,400
Aquaculture	111	100	100	100
Others*	895	890	900	910
Total Feed	16,148	15,980	16,000	16,260
US DDGS Imports	**2007**	**2008**	**2009**	**2010**
Poultry				
Swine				
Beef				
Aquaculture				
Total DDGS	202 (138)	420 (350)	700 (500)	1,050 (800)
DDGS % of total feed	**1.25%**	**2.63%**	**4.37%**	**6.46%**

Continued Challenges to Increasing Exports:

- Responsiveness to importer requests from suppliers
- Bulk Freight prices are high & Containers are limited (transportation)
- Quality is variable from one plant to the next.
- Mycotoxins remain a concern to be addressed
- Handling costs are high (clumpy due high fat/moisture)
- E-Coli in cattle is a growing issue
- Canadian and Japanese Government regulations on process additives and residuals.
- Lack of Storage (Foreign and US)
- Consistent availability of supply of same quality
- New DDGS products coming on the market each year.

Questions???
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