

*High Agricultural Prices:
Current Reasons and
Prospects for the Future*

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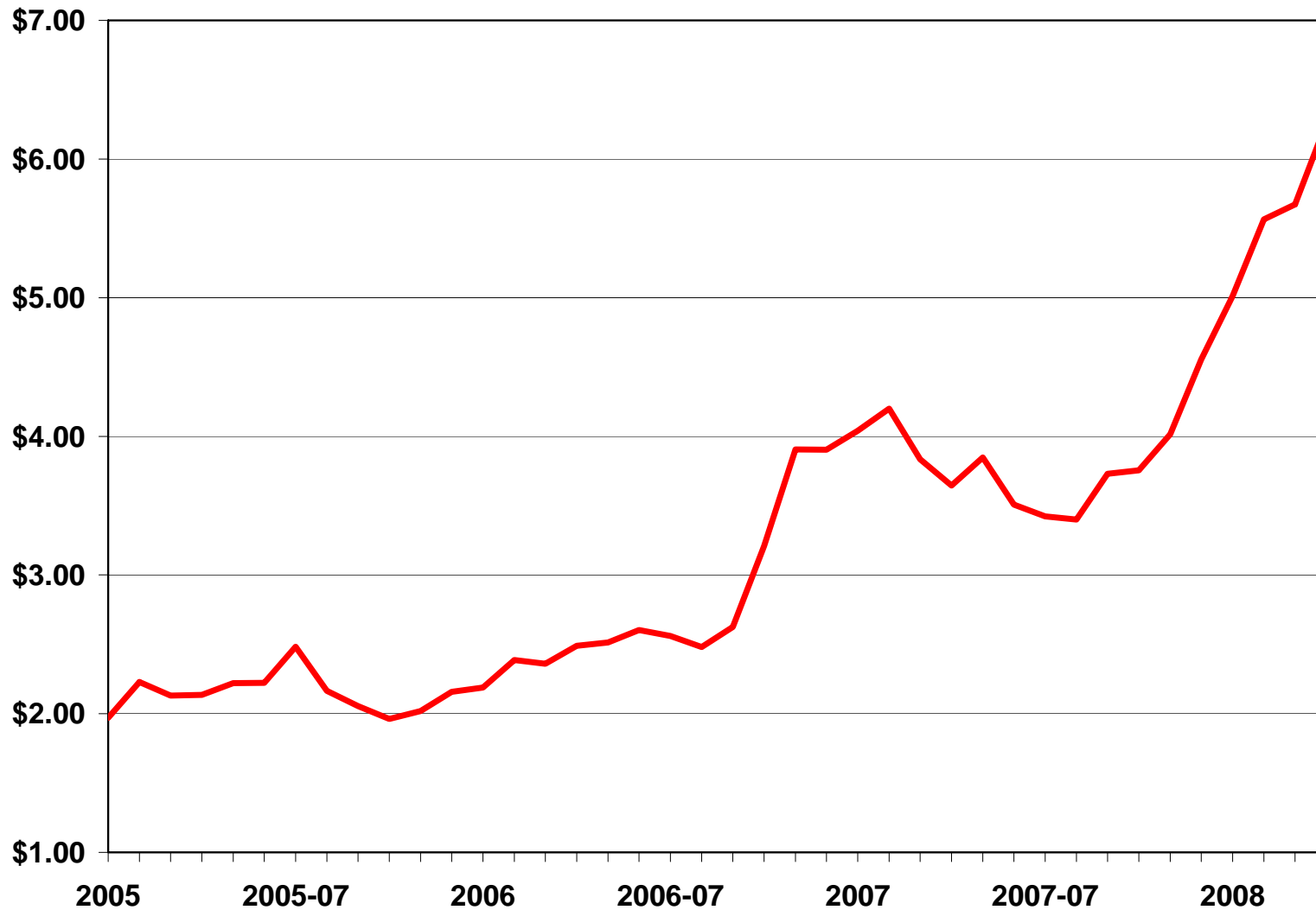
University of Tennessee
Agricultural Policy Analysis Center

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Dallas, Texas

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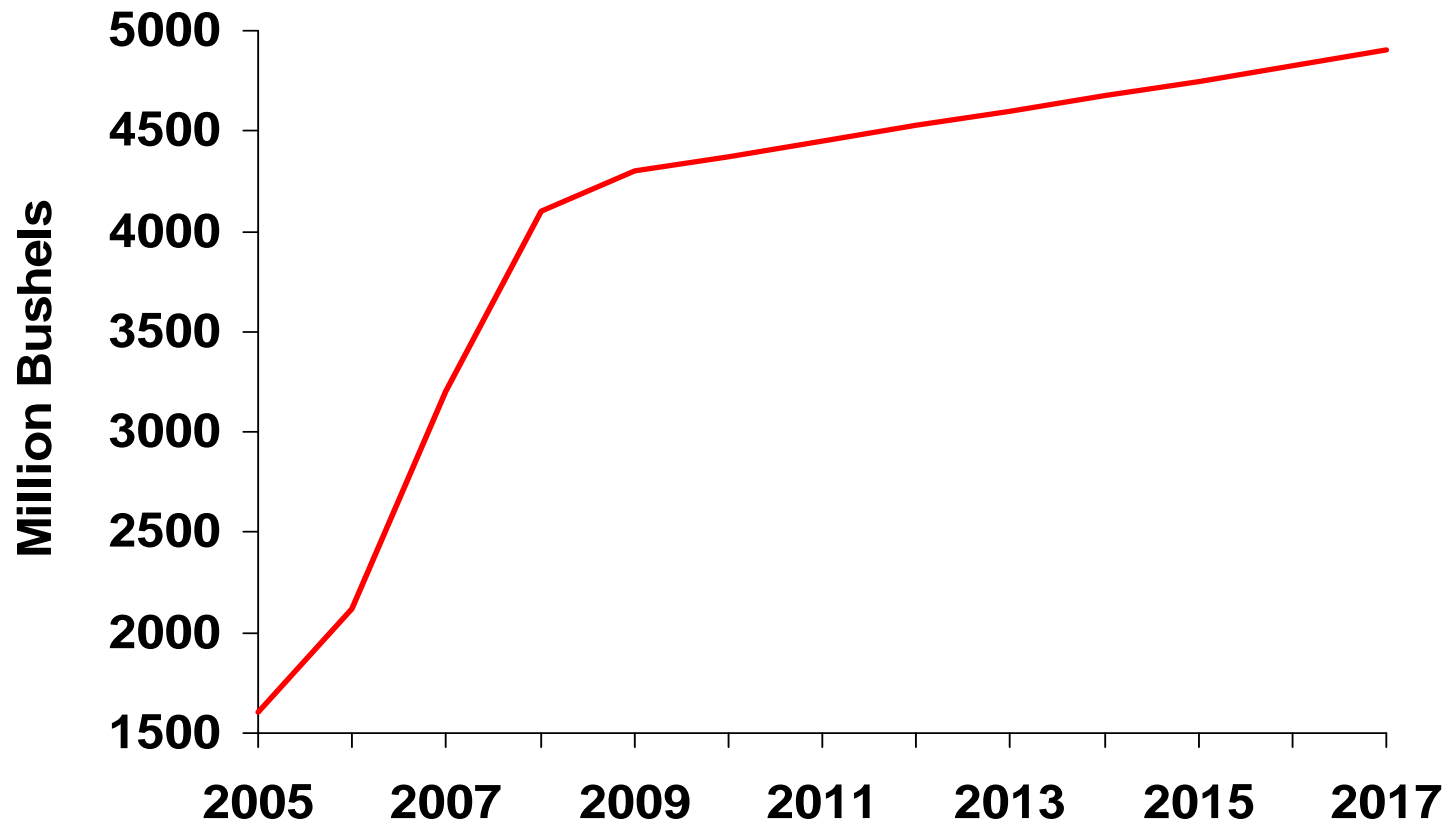
Recent Corn Prices



What are the Most Often Stated Triggers?

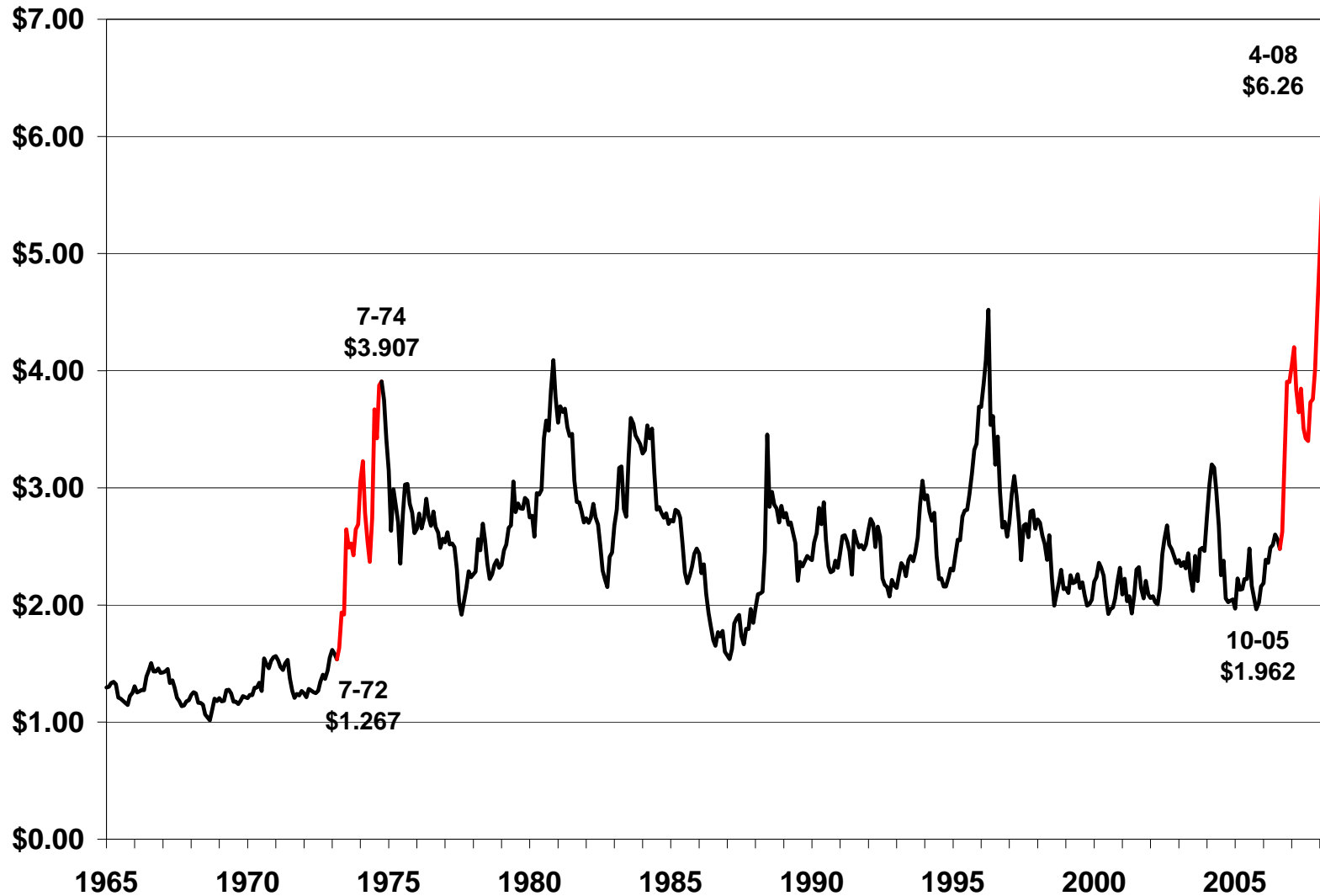
- **Ethanol**
 - US corn-based ethanol production is booming
 - Federal mandates for biofuels
- **Increasing meat consumption in China and India**
 - Middle class shift from grain-based to meat-based diets

Expected Ethanol Demand



Source: UDSA Baseline Projections to 2017

We Have Seen This Before



What Were the Triggers Then?

- **Russian grain imports**
 - Crop failure
 - Decision not to liquidate cattle herds
- **Petrodollar driven exports**
 - Loans to developing countries
 - Used to import food to feed people

Laying the Blame: Then & Now

- **Then**

- **Food vs. feed**—Western grain-based-meat diets
- Eat less meat so the poor of the world can have grain to eat

- **Now**

- **Food vs. fuel**—US ethanol mandates
- Eliminate grain-based biofuels so the poor of the world can have grain to eat

Looking More Closely

- **Low price regimen**
- **Dismantling of government stocks**
- **Random weather events**
- **Reduced world-wide grain stocks**
- **Increased demand for meat in China**
 - **But has this put significant upward pressure on international grain prices?**

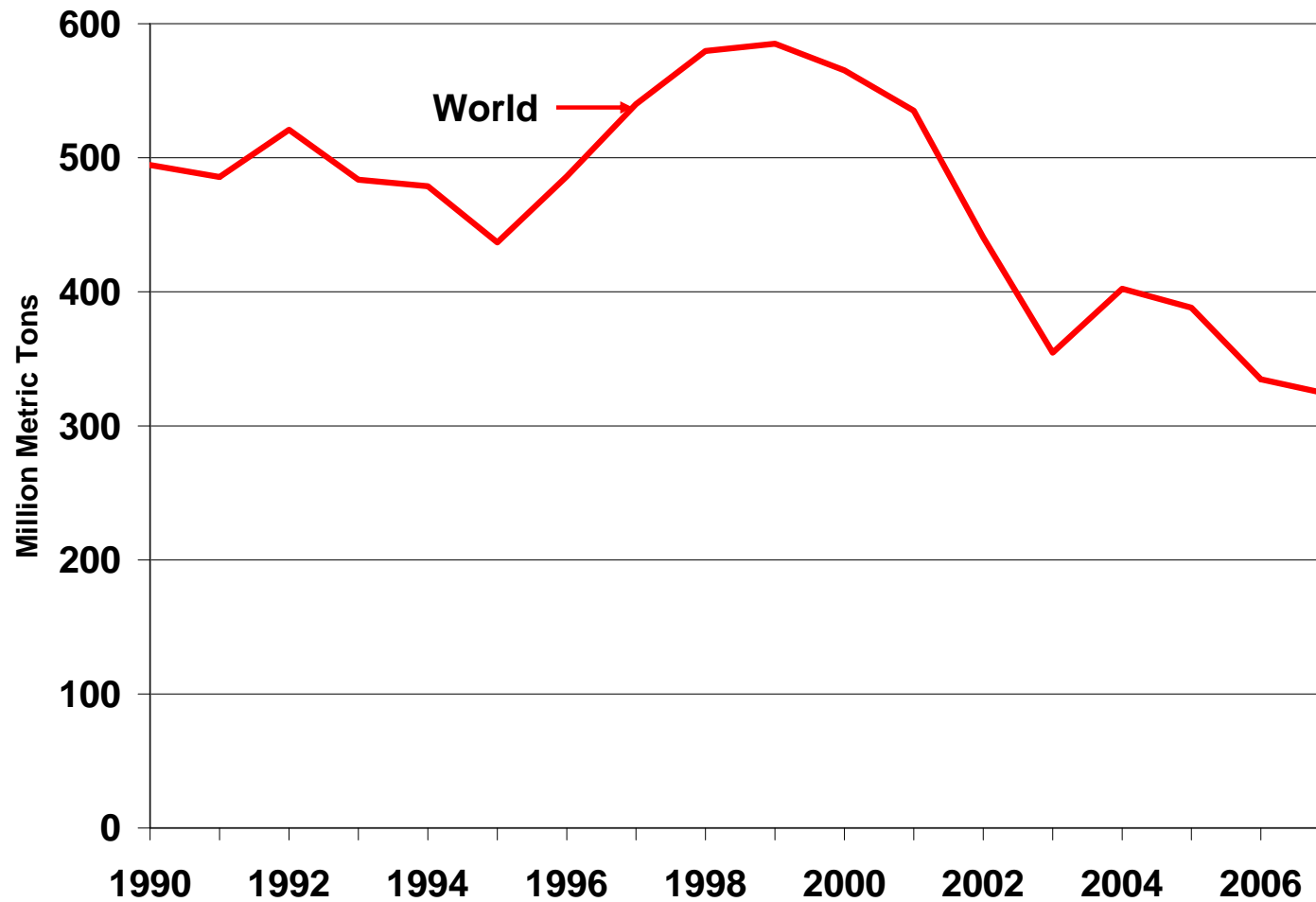
Looking More Closely

- **Low price regimen**
 - **US farm program design suppressed prices**
 - **Leaving little incentive to invest and expand production**
 - **This was also true for corn production in China beginning in 1999(?)**

Looking More Closely

- **Dismantling of government stocks**
 - Expectation that commercials would hold any needed stocks
 - Concerns about cost of government stocks programs
 - Stocks discouraged by trade policies that put decisions in the hands of markets
- **Random weather events**
 - Australia and Ukraine

World Ending-Year Stocks



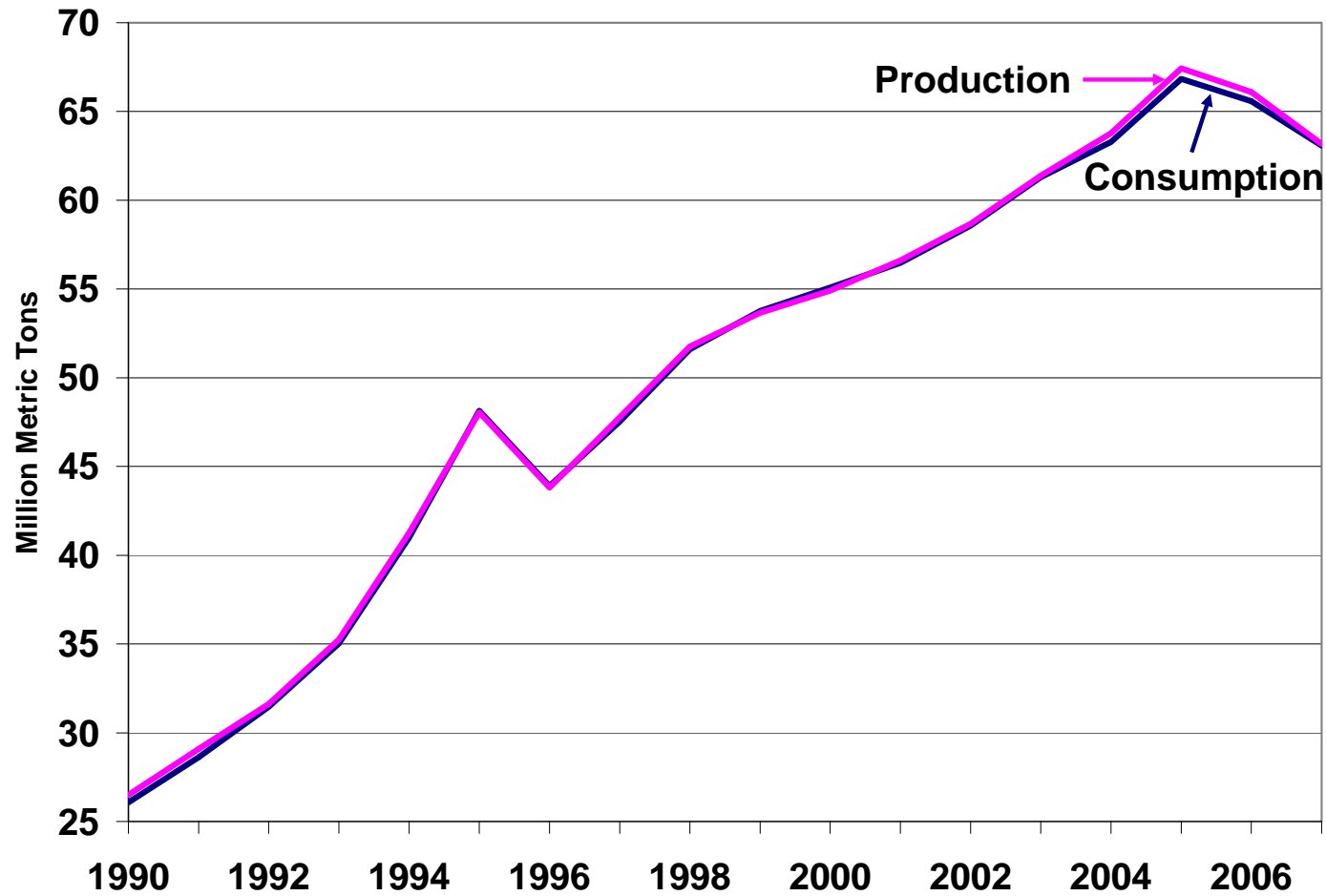
Grains: Ending Crop Year Stock Levels

Source: USDA PS&D

Looking More Closely

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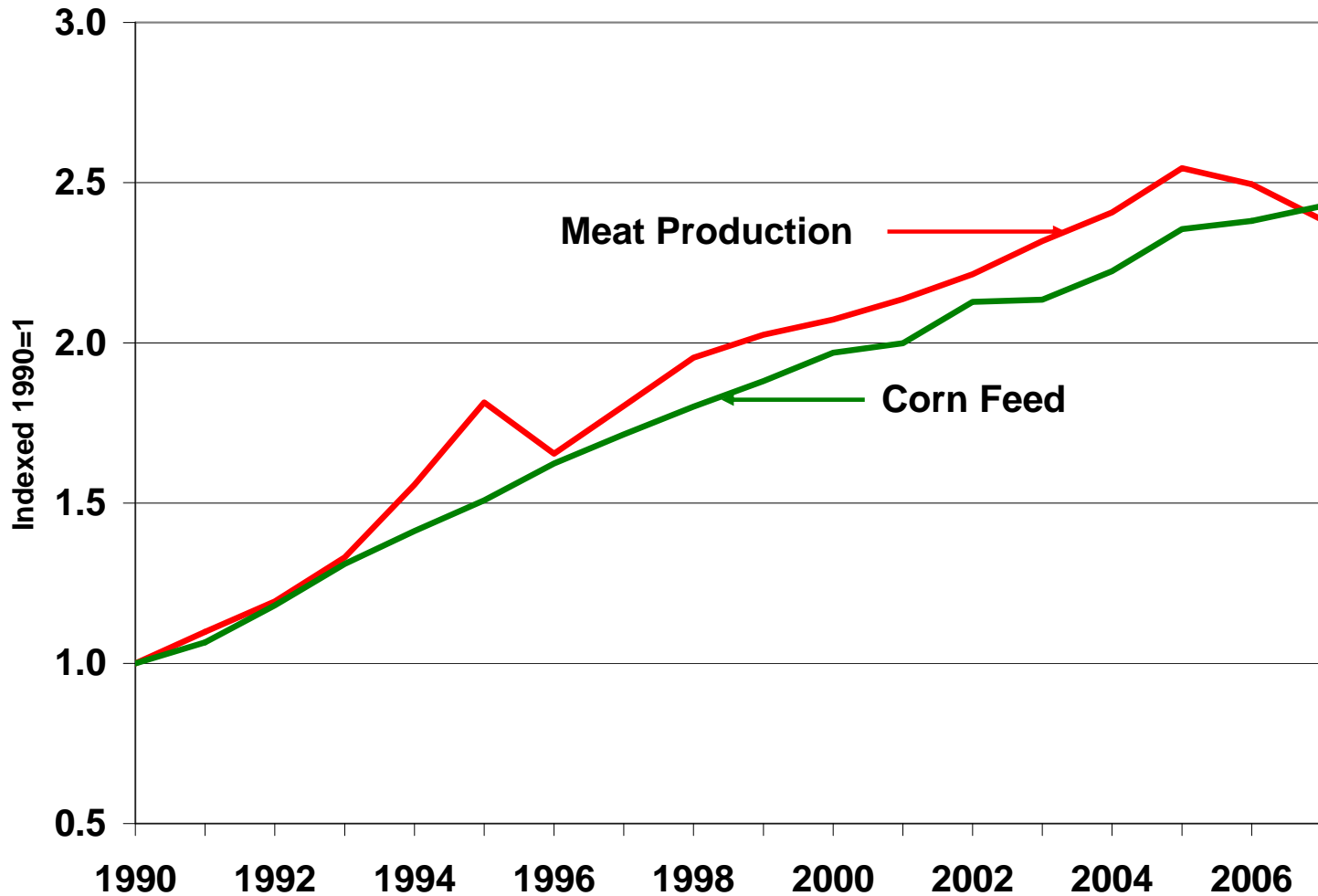
China Meat



Production and Consumption of Beef, Pork, and Broilers

Source: USDA PS&D

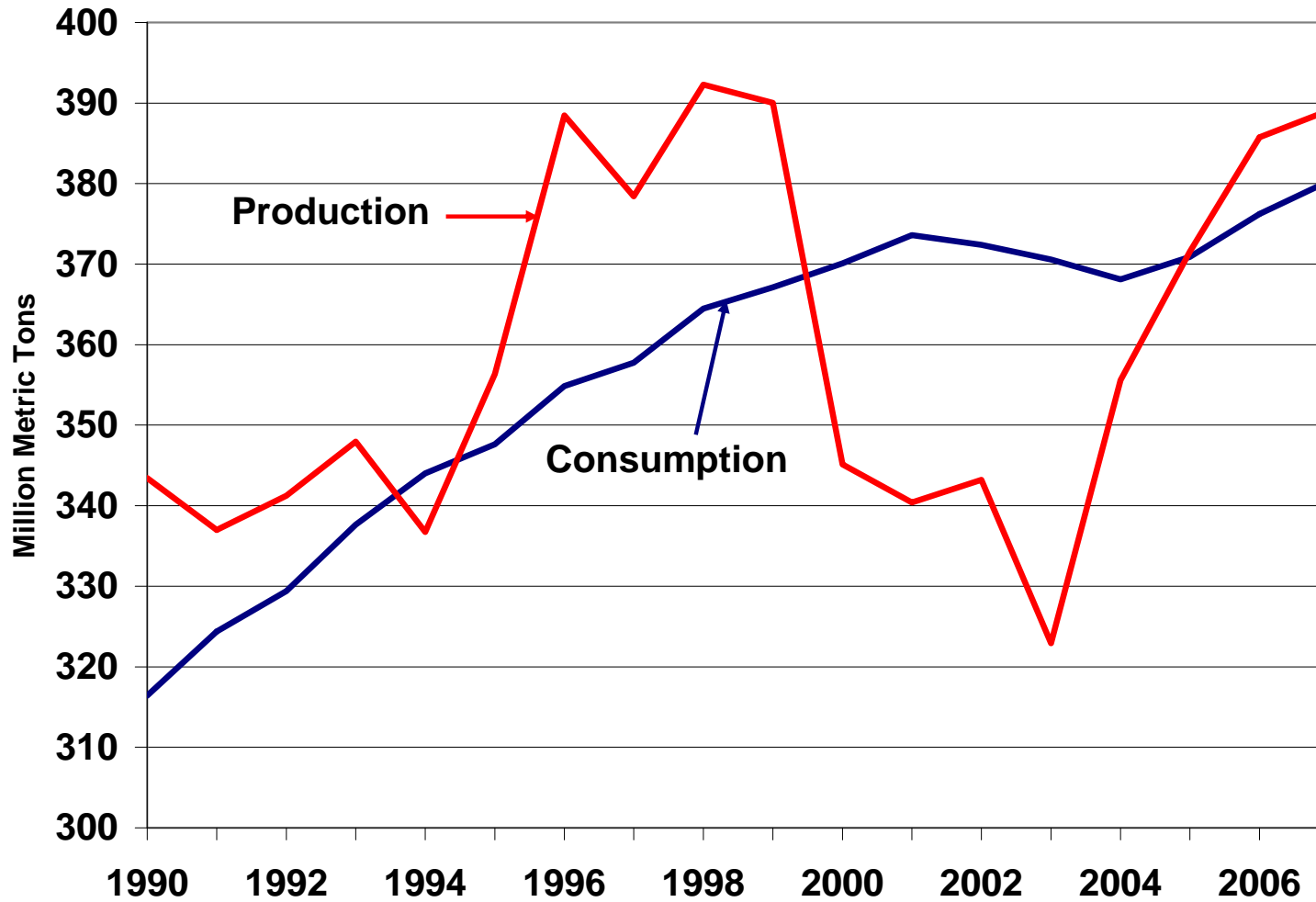
China Meat and Corn



Indexed Meat Production (Pork, Broilers, Beef) and Corn Feed

Source: USDA PS&D

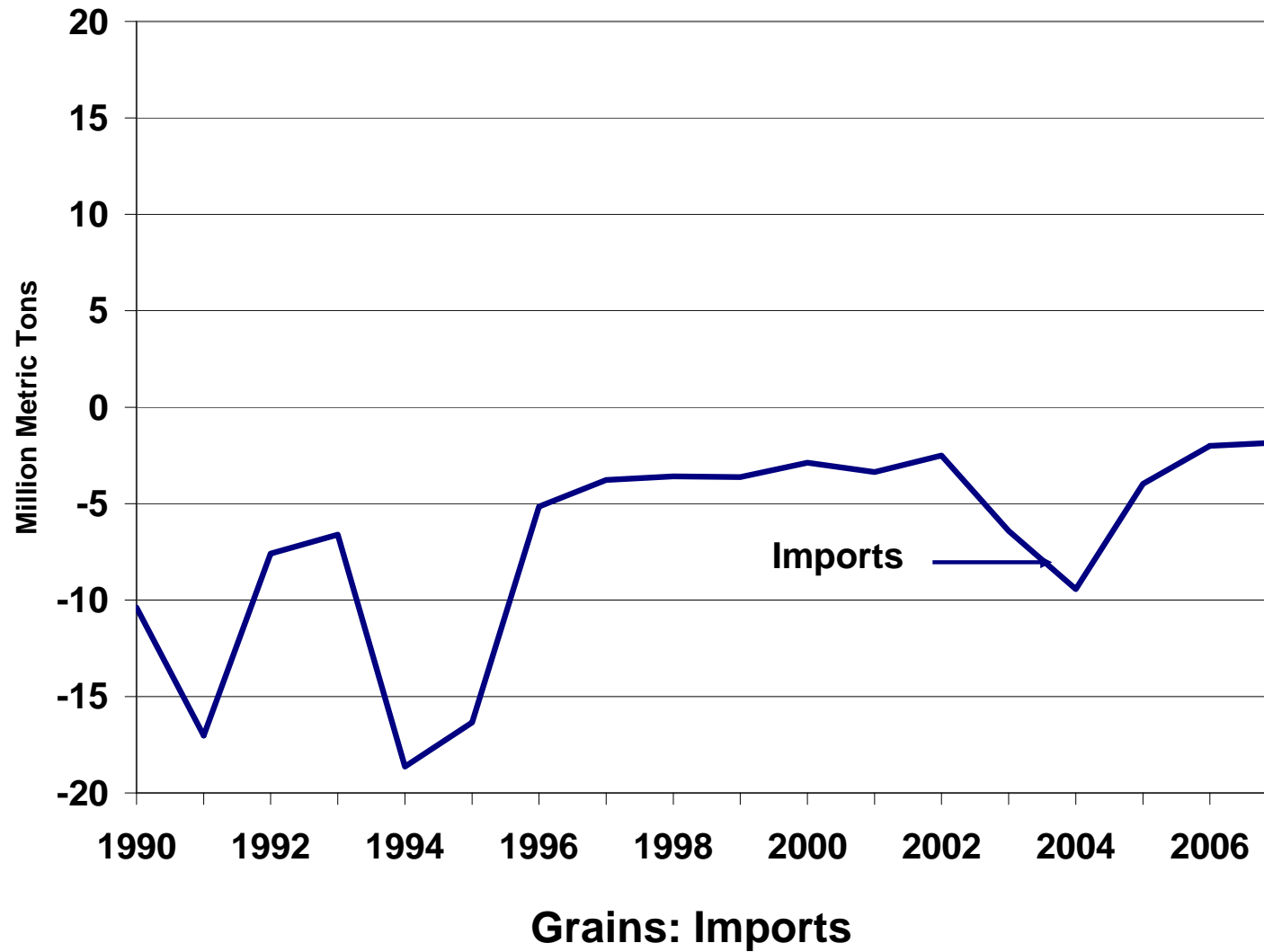
China Grains



Grains: Production and Consumption

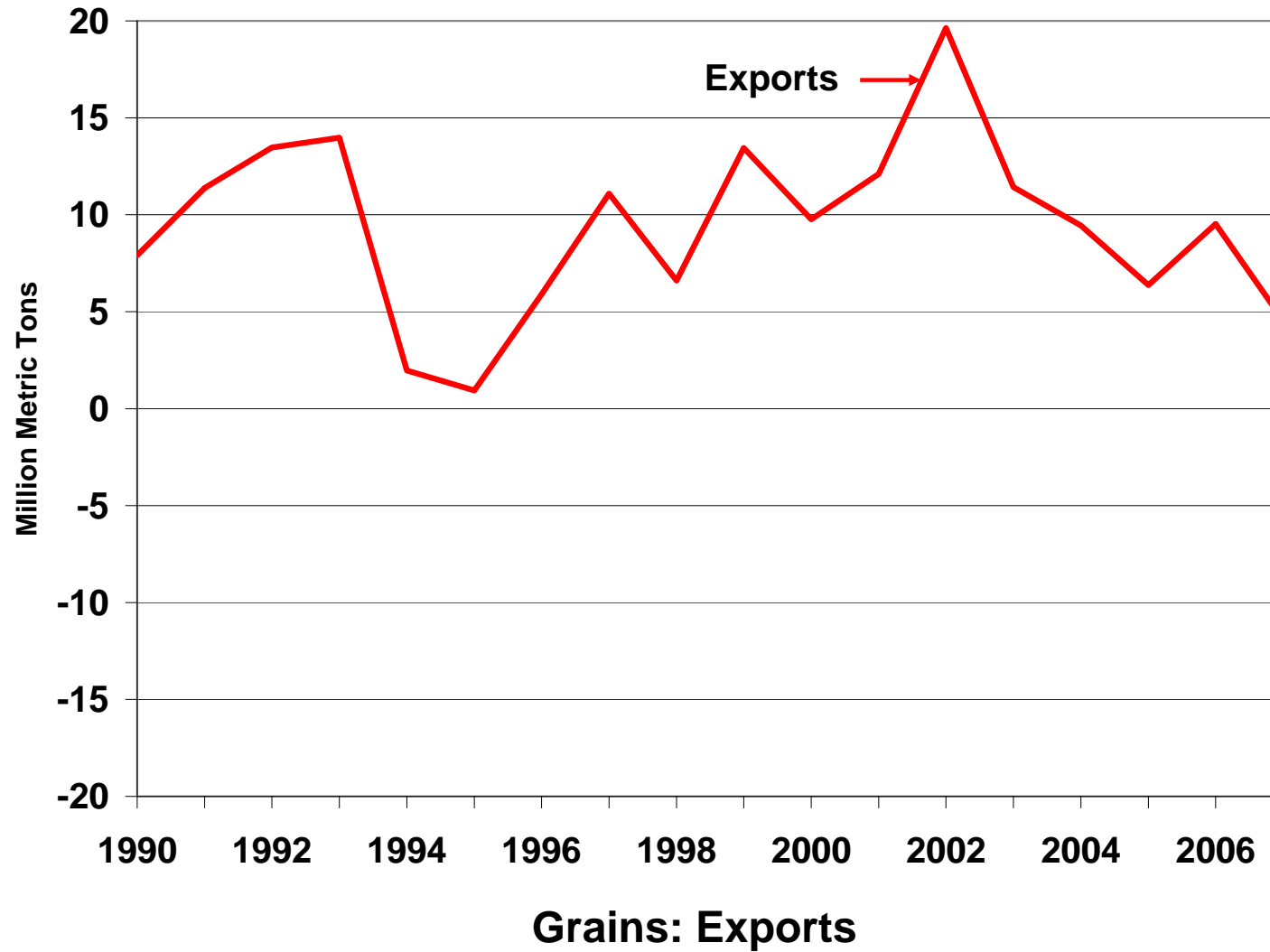
Source: USDA PS&D

China Grains



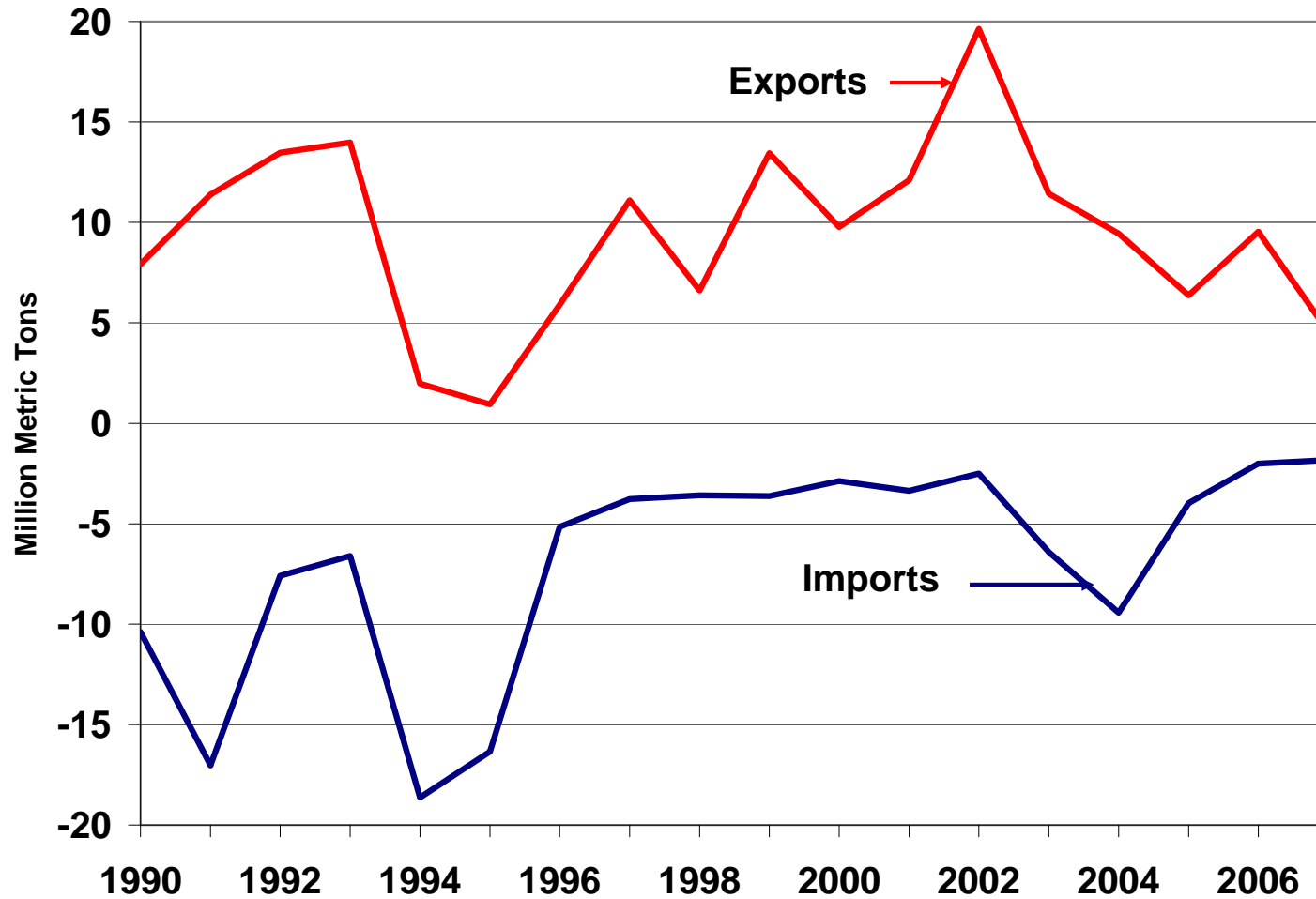
Source: USDA PS&D

China Grains



Source: USDA PS&D

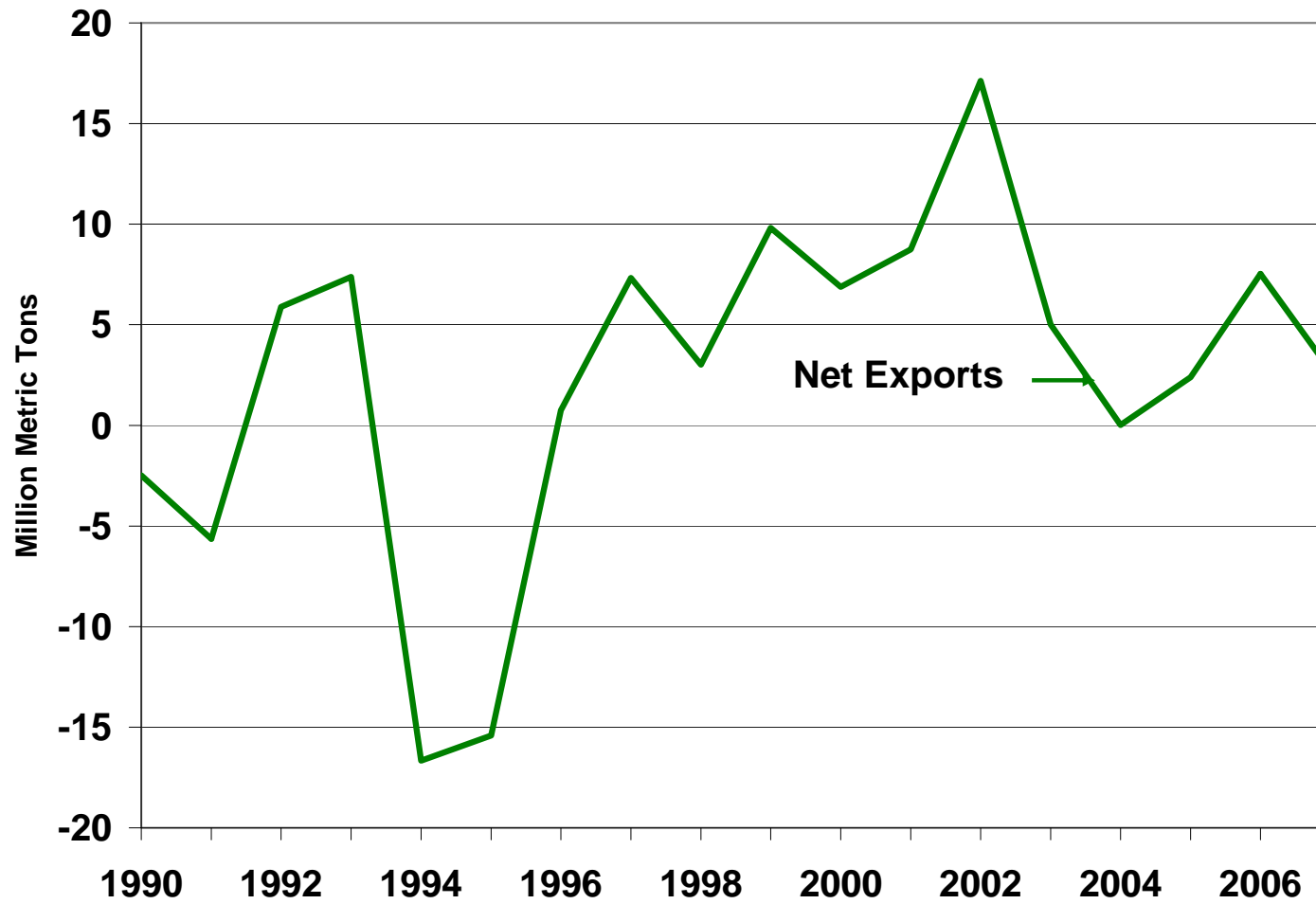
China Grains



Grains: Exports, Imports

Source: USDA PS&D

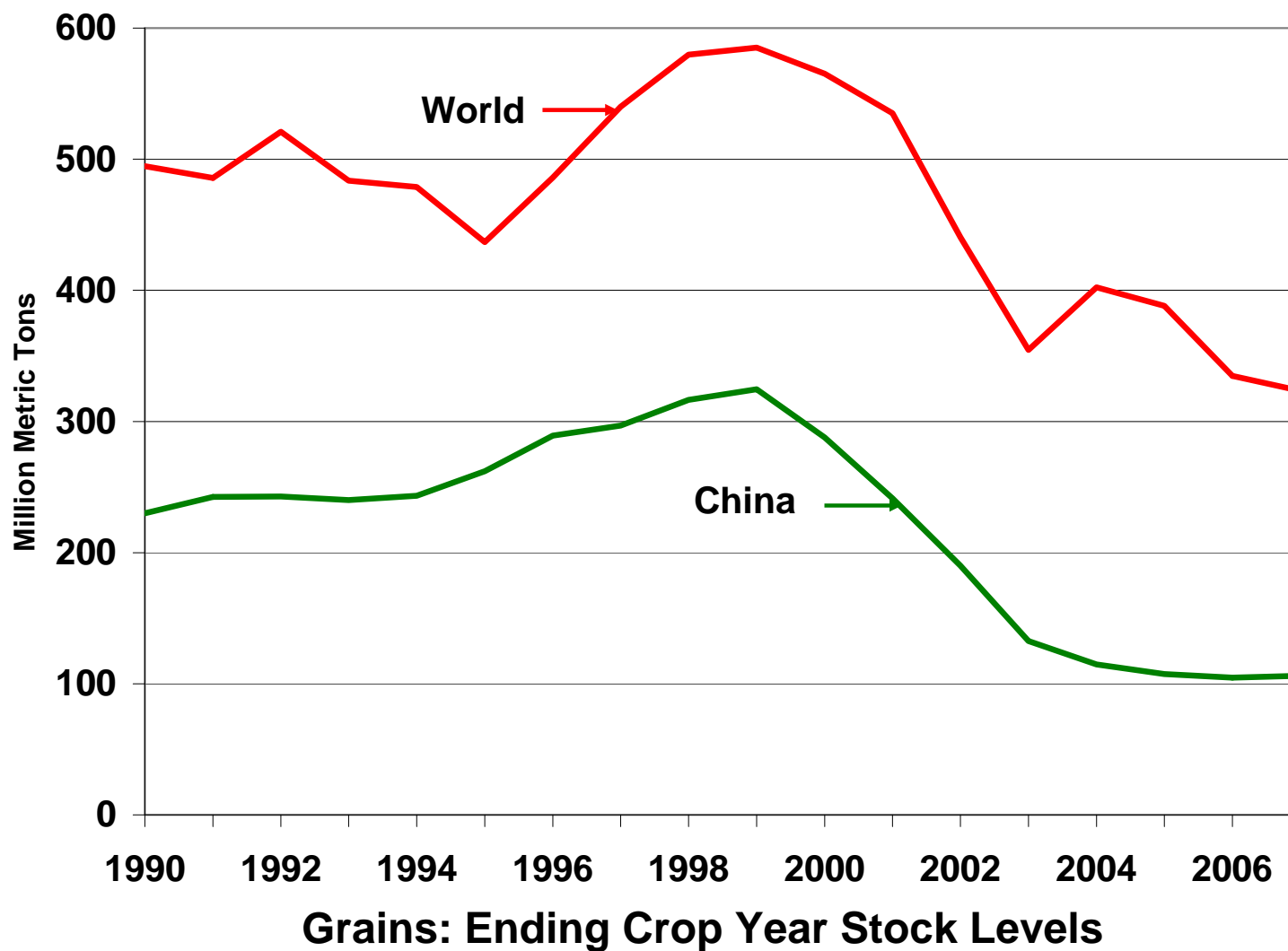
China Grains



Grains: Exports, Net Exports, Imports

Source: USDA PS&D

China Grains



Source: USDA PS&D

China Connection

- Yes, meat consumption per person is increasing relatively rapidly in China
- Yes, this has caused increased use of corn and other grain (also protein meals) in China
- So are China's diet changes causing high corn/grain prices in the US and internationally?
- No! (No? Why not?)
- Because China has used its own grain (production and stocks) to produce meat
- Meat and grain markets are walled within China and have virtually no affect on outside prices

Greatest Risks

- **Short-term**

- **Weather, weather, weather: US, Brazil, China, India, elsewhere**

- **For example, US annual corn yields have dropped by 20 percent in years past ('83 '88 '93)**

- **High input prices**

- **Long-term**

- **Acreage and yields greatly increase worldwide (not if with current prices)**

- **Low prices will return**

- **Reduced farm asset values, especially land**

On Knife's Edge

- **Short-term object lesson?**
 - **Need strategic reserves**
 - A properly managed stocks reserve
 - Reduce economic dislocation
- **Long-term reality?**
 - “**New Era?**” (fourth “**New Era**” in my lifetime)
 - **Supply growth has always caught and then surpassed demand growth** (and it does not take long)
 - This time, surge in productive capacity will be global suggesting need for global supply management

Long-Term Considerations

- **International supply response—yield**
 - **Development and adoption of drought and saline resistant crops**
 - **Globalization of agribusiness: Near universal access to the new technologies world-wide**
 - **Narrowing of technology and yield differentials between US and the rest of the world**

Long-Term Considerations

- **International supply response—acreage**
 - *Long-run* land potentially availability for major crops
 - Savannah land in Brazil (250 mil. ac. -- USDA says 350)
 - Savannah land in Venezuela, Guyana, and Peru (200 mil. ac.)
 - Land in former Soviet Union (100 mil. ac.)
 - Arid land in China's west (100 mil. ac. GMO wheat)
 - Savannah land in Sub-Saharan Africa (300 mil. ac. -- 10 percent of 3.1 bil. ac. of Savannah land)
 - Easy to underestimate supply growth

Policy for All Seasons

- **Assume the unexpected will happen**
 - Random policy and weather events do occur—**Plan for them**
- **Establishment of International Grain and Oilseed Reserve**
 - Moderate impacts of random policy and weather events by providing stable supply until production responds

Policy for All Seasons

- **Keep productive capacity well ahead of demand**
 - Public investment in yield enhancing technologies and practices
- **Provide means to hold arable land in rotating fallow during periods of overproduction**
 - This land can then quickly be returned to production in the case of a crisis

Thank You

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