

*The Widening Gap Between  
Farm Policy Needs and  
Farm Policy as Delivered*

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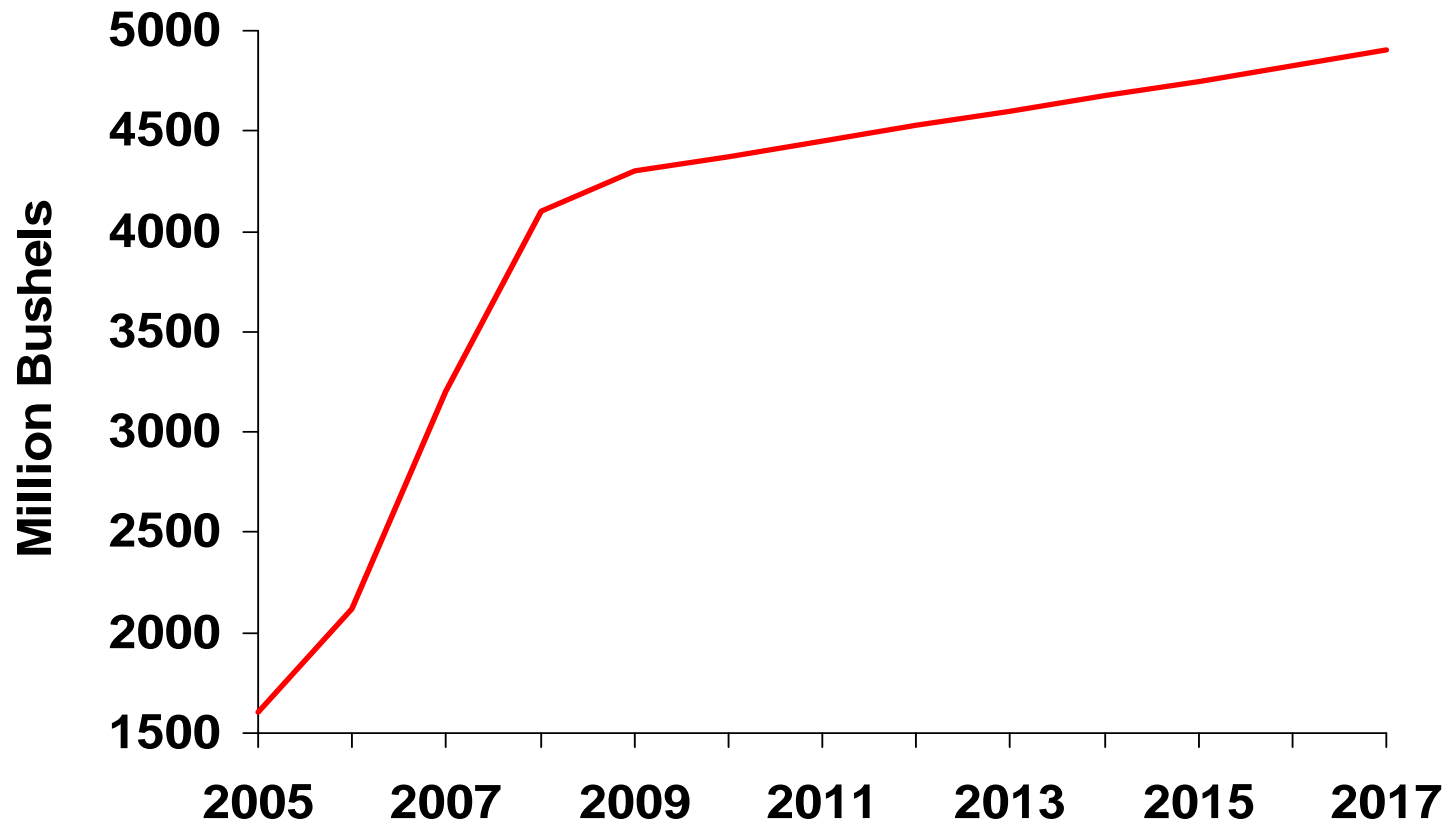
March 18, 2008



# *What Brought This About?*

- **In one word—ETHANOL**
  - **US corn-based ethanol production is booming**
    - **Farmer investment**
    - **Rising oil prices**
    - **Elimination of MTBE as gasoline oxygenate**
  - **USDA projects**
    - **13.5 billion gallons by 2018**
    - **4.9 million bushels of corn, up from 1.6 million bushels in 2005**

# *Projected Ethanol Demand*

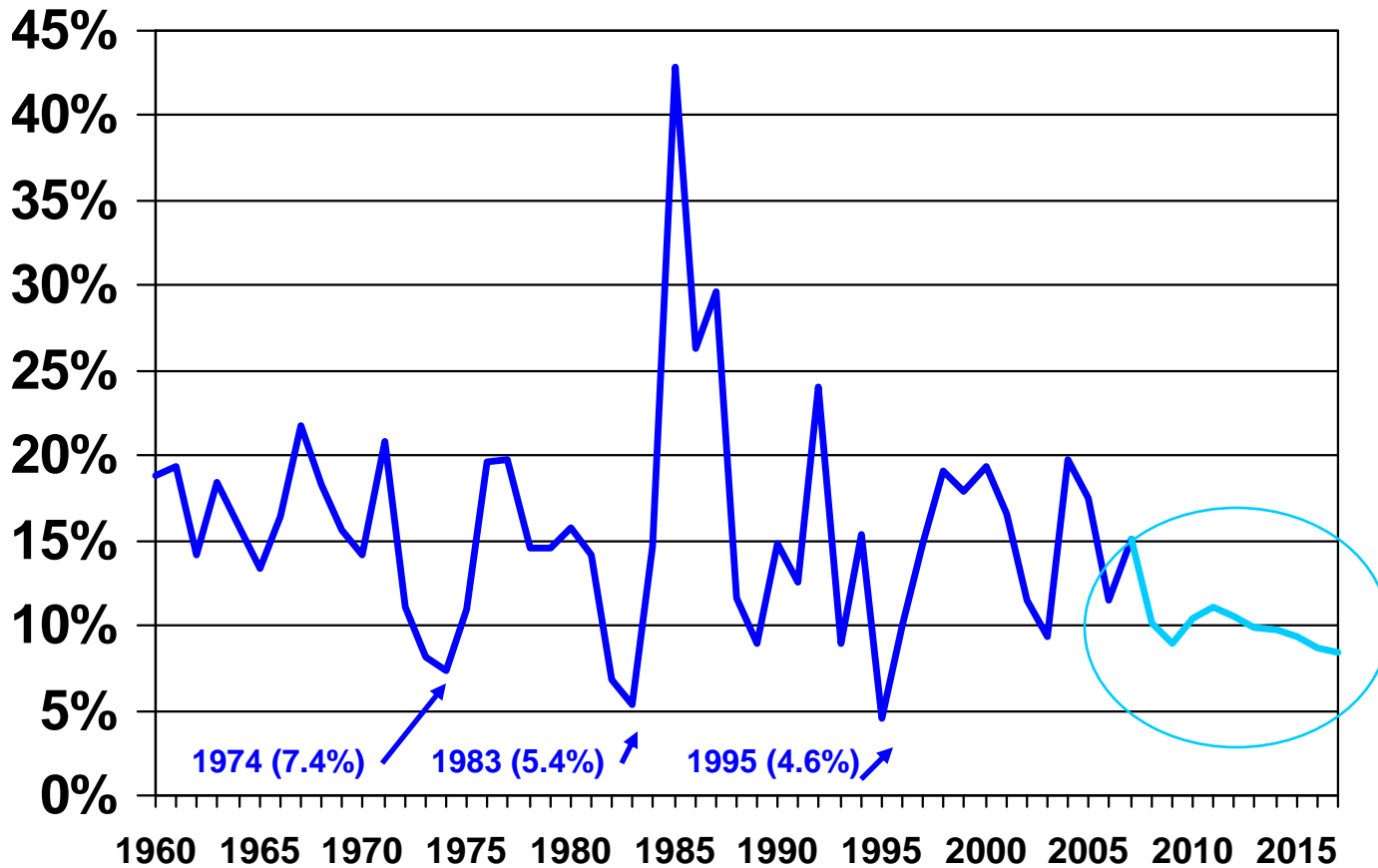


Source: UDSA Baseline Projections to 2017

# *Greatest Short-Term Risk*

- **Weather event**
  - **The 2008 USDA baseline shows a string of years in which corn carry-out stocks are projected to be 8-11 percent of utilization**
    - Recent historic range has been 10% to 20%

# *Uncharted Territory*



**Year ending commercial stocks-to-use ratio for US corn**

1960-2006 (actual), 2007-2017 (USDA Baseline Projections to 2017)

# *Greatest Short-Term Risk*

- **Weather event**

- The 2008 USDA baseline shows a string of years in which corn carry-out stocks are projected to be 8-11 percent of utilization
  - Recent historic range has been 10% to 20%
- **In five of the last 10 years, we have seen corn production fall by 300 mil. bu. from the previous year but also 20% drop in earlier years ('83 '88 '93)**
- **A shortfall of that magnitude in an era of tight supplies would trigger skyrocketing prices**
  - **\$6 to \$8 or more per bushel (talkin' season average)**

# *Greatest Long-Term Risk*

- **Acreage and yields greatly increase worldwide—just a question of how fast**
  - **With \$6 to \$8 per bushel corn**
    - **Acreage shifts in the short-run**
    - **Longer-run investments that increase acreage and yields**
  - **With \$3 to \$4 corn or somewhat lower**
    - **Increases in acreage & yields but at slower rate**
- **Lower prices return**
  - **Recreate problems for farmers worldwide and for the US treasury**

# *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

# *Fundamentals*

- **Reasons for farm/commodity programs**
  - Econ 101 says the market self corrects
  - Response to price, response to price, response to price

# *Ag Policy Did Not Start in 1932*

- **Historic policy of plenty**
  - Land distribution mechanisms – 1620 onward
  - Canals, railroads, farm to market roads
  - Land Grant Colleges – 1862, 1890, 1994
  - Experiment Stations – 1887
  - Cooperative Extension Service – 1914
  - Federal Farm Credit Act – 1916
- **This policy of plenty often results in production outstripping demand**

# *Characteristics of Ag Sector*

- **Agriculture is different from other economic sectors.**

*On the demand side:*

**– With low food prices—**

- **People don't eat more meals a day**
- **They may change mix of foods**
- **Aggregate intake remains relatively stable**

# *Characteristics of Ag Sector*

- **Agriculture is different from other economic sectors.**

*On the supply side:*

– **With low crop prices—**

- **Farmers continue to plant all their acres**
- **Farmers don't and “can't afford to” reduce their application of fertilizer and other major yield-determining inputs**
- **Who farms land may change**
- **Essential resource—land—remains in production in short- to medium-run**

# *Why Chronic Problems In Ag?*

- **Technology typically expands output faster than population and exports expand demand**
  - Much of this technology has been paid for by taxpayers
- **The growth in supply now is being additionally fueled by**
  - increased acreages in Brazil, etc.
  - technological advance worldwide

# *Fundamentals*

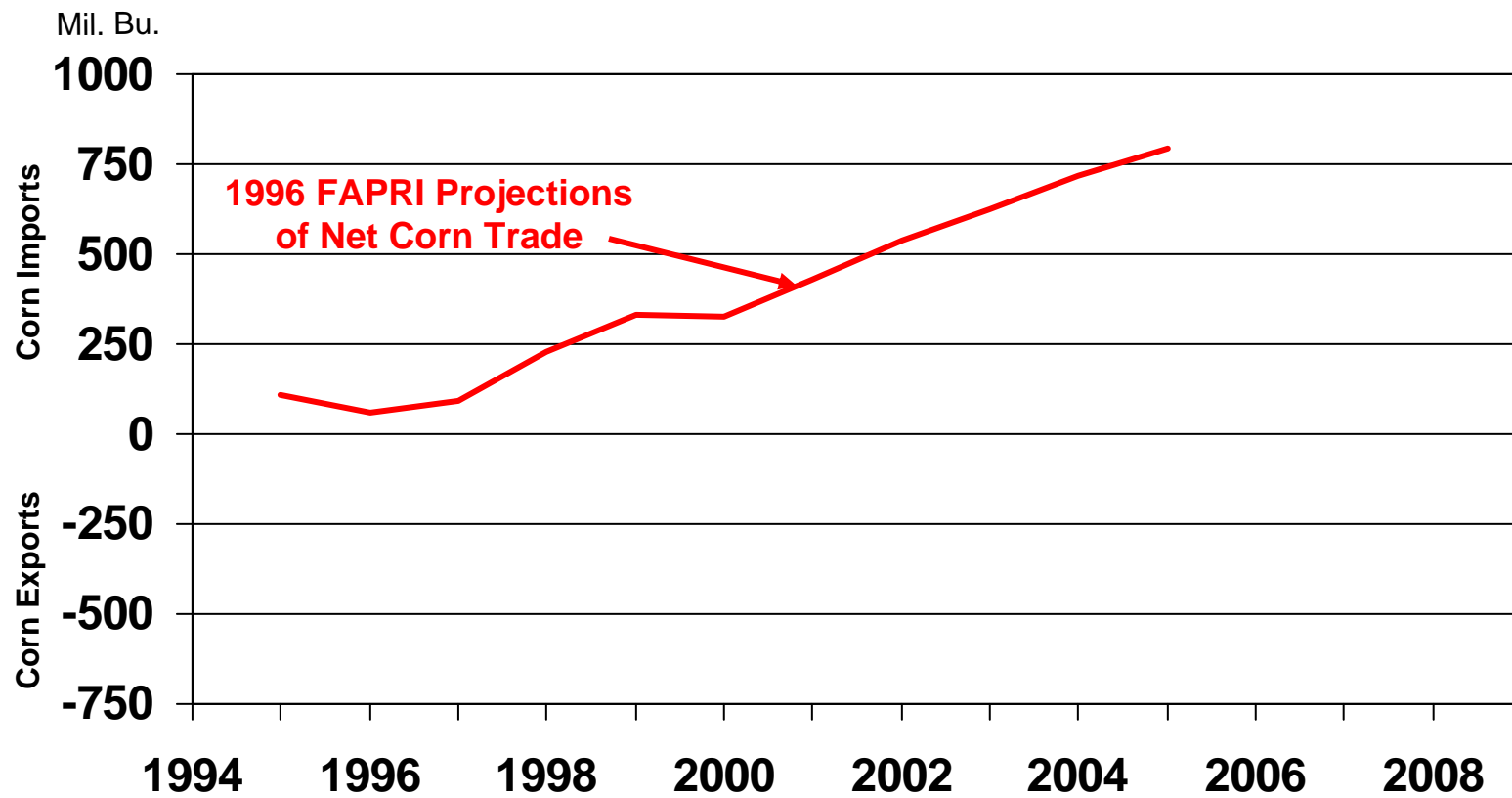
- Reason for farm/commodity programs
- **Exports—present and future**

# *Exports, Exports, Exports*

- **For the last quarter century, exports have been heralded—and continue to be by some—as crop agriculture’s salvation**
  - **Exports is the production safety valve that can rebalance agricultural markets**
  - **Exports will grow at accelerating rates**
- **So, how has that been working for farmers?**

# China Net Corn Trade

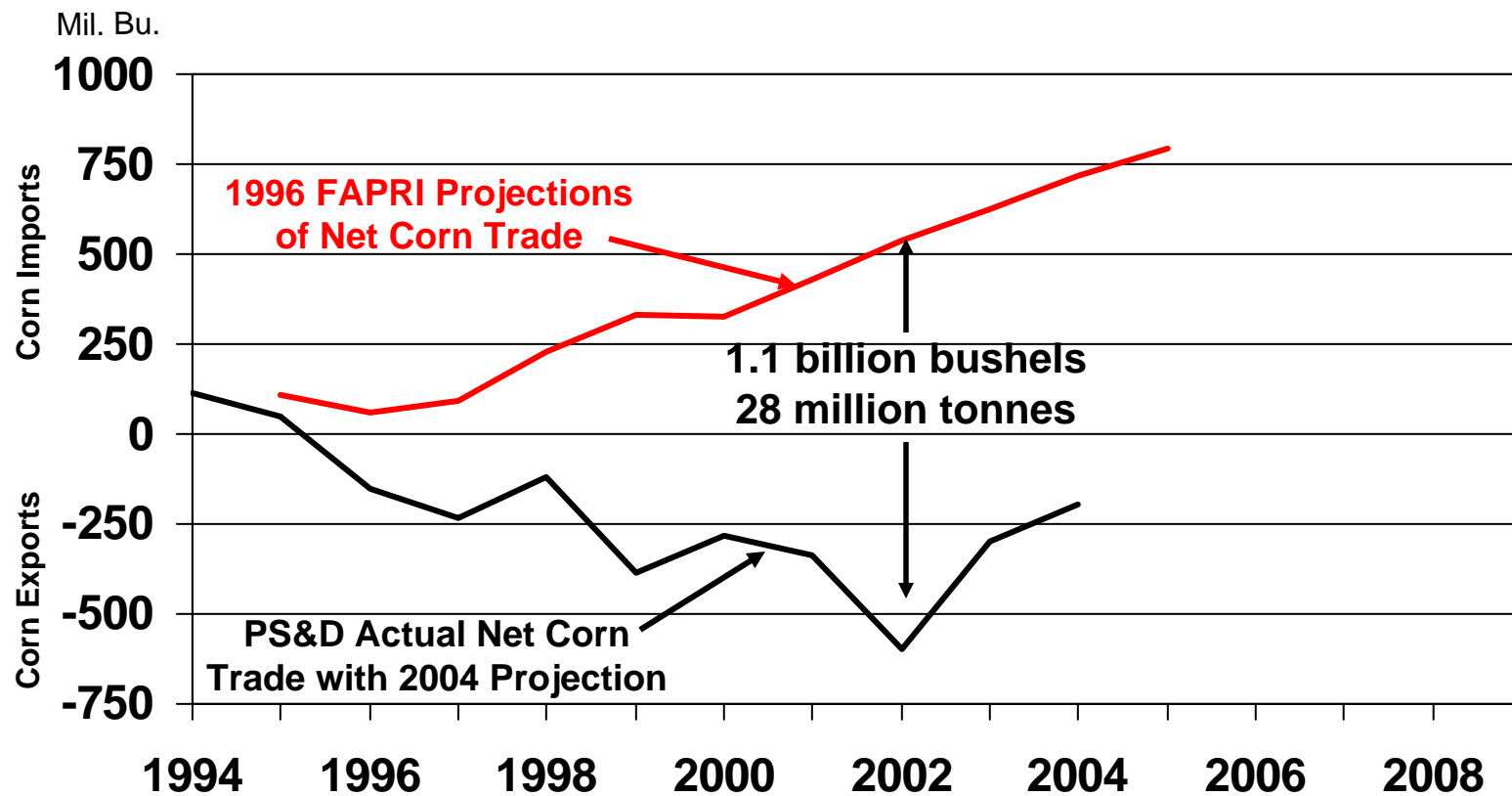
What We Expected During Debate of 1996 FB:



1996 FAPRI Projections

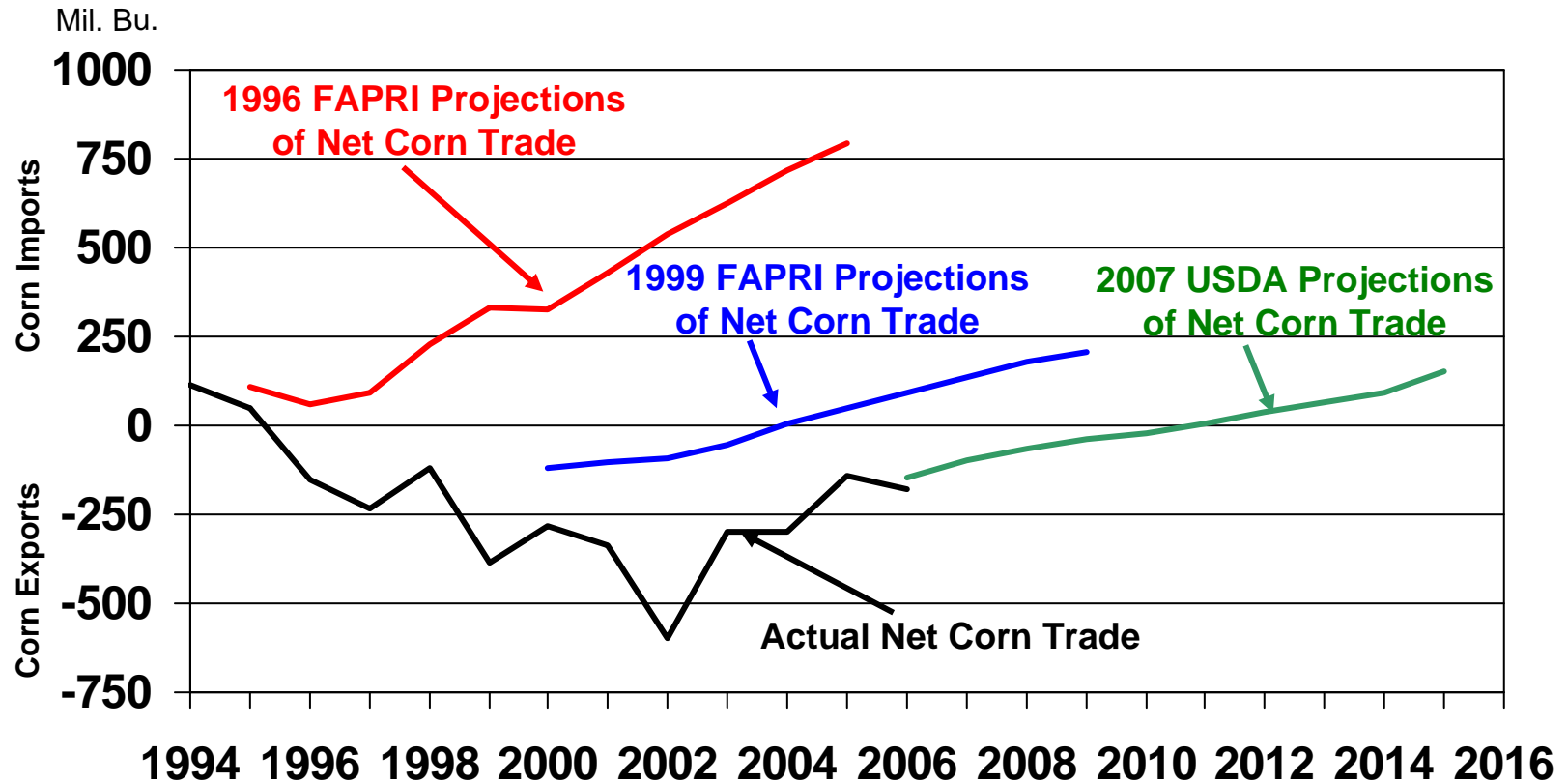
# China Net Corn Trade

## What We Got:



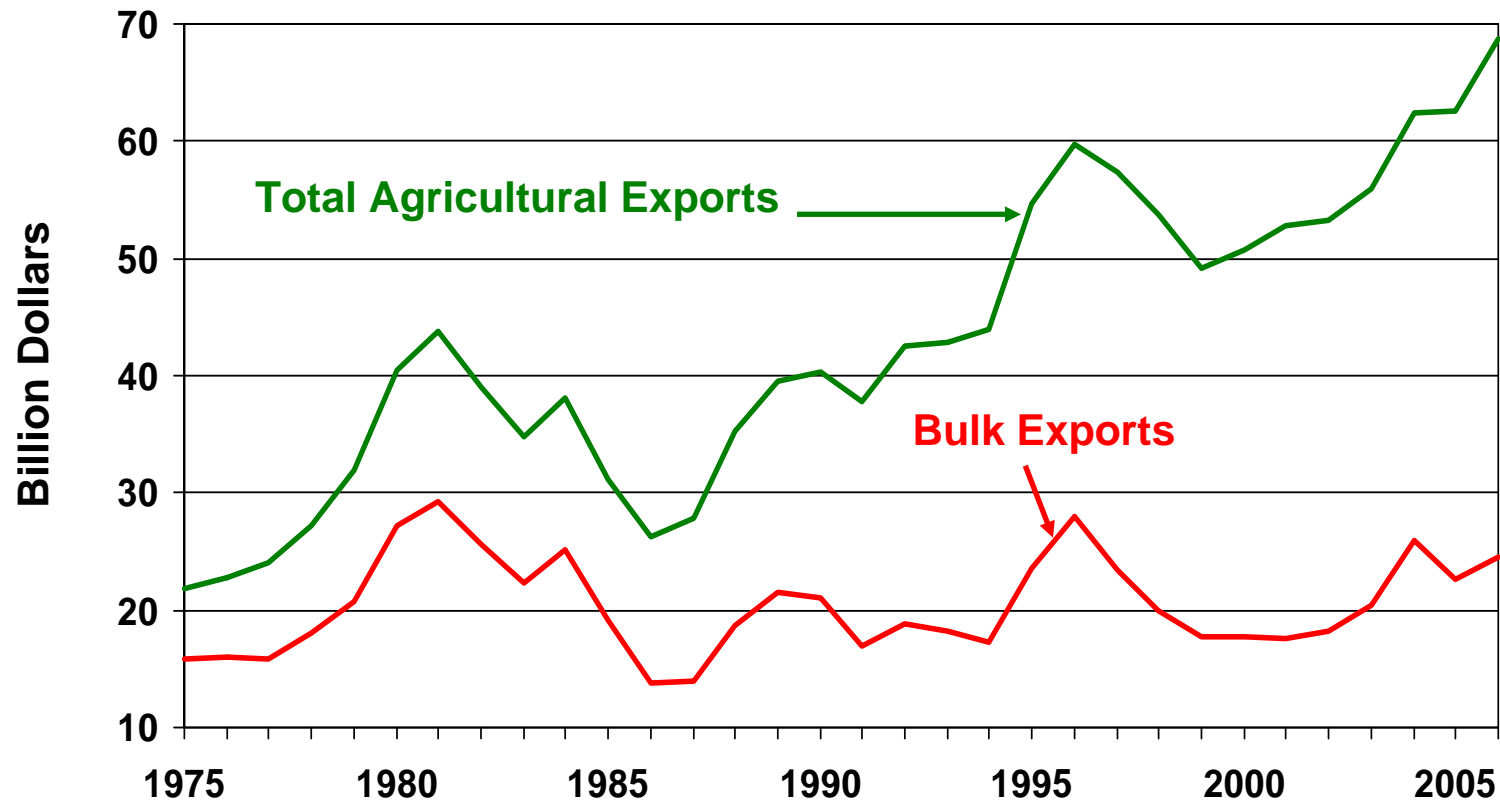
# China Net Corn Trade

Comparison between 1996 and 1999 FAPRI projections, 2007  
USDA projections and USDA PS&D actual

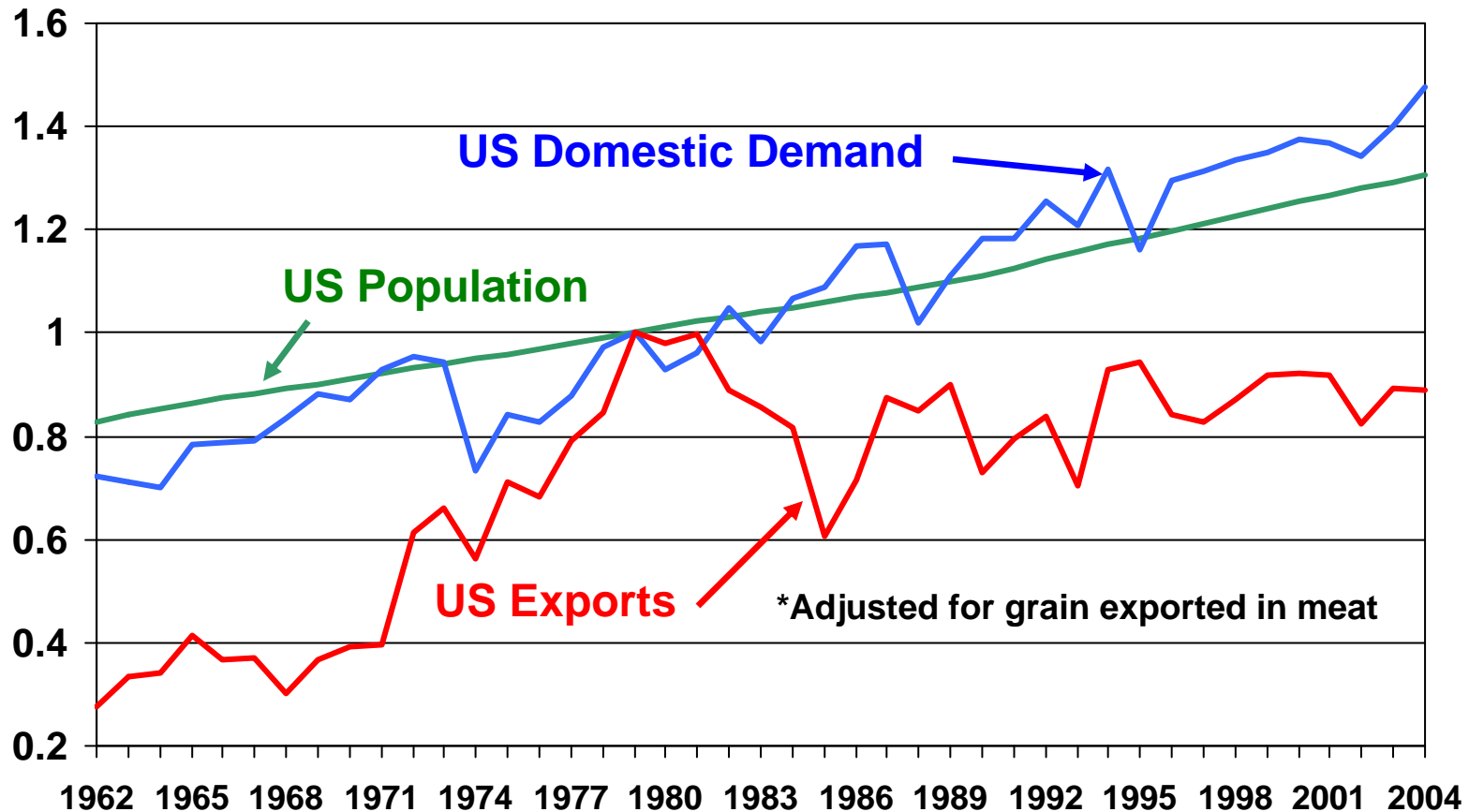


Overtime, the expectation remains—just further into the future.

# *What About Exports?*

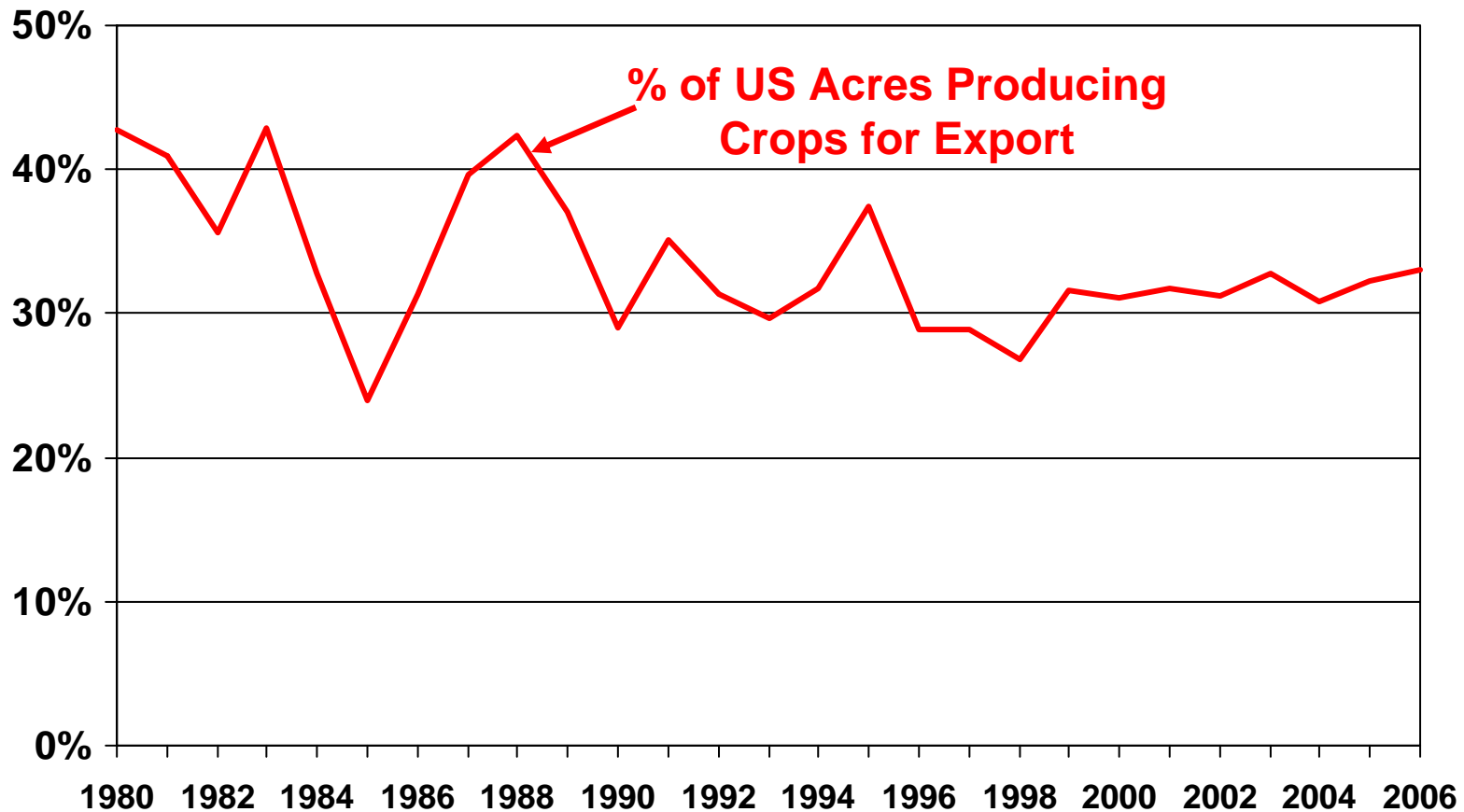


# What About Exports



Index of US Population, US Demand for 8 Crops and US Exports\* of 8 Crops  
1979=1.0

# *US Exported Acres*

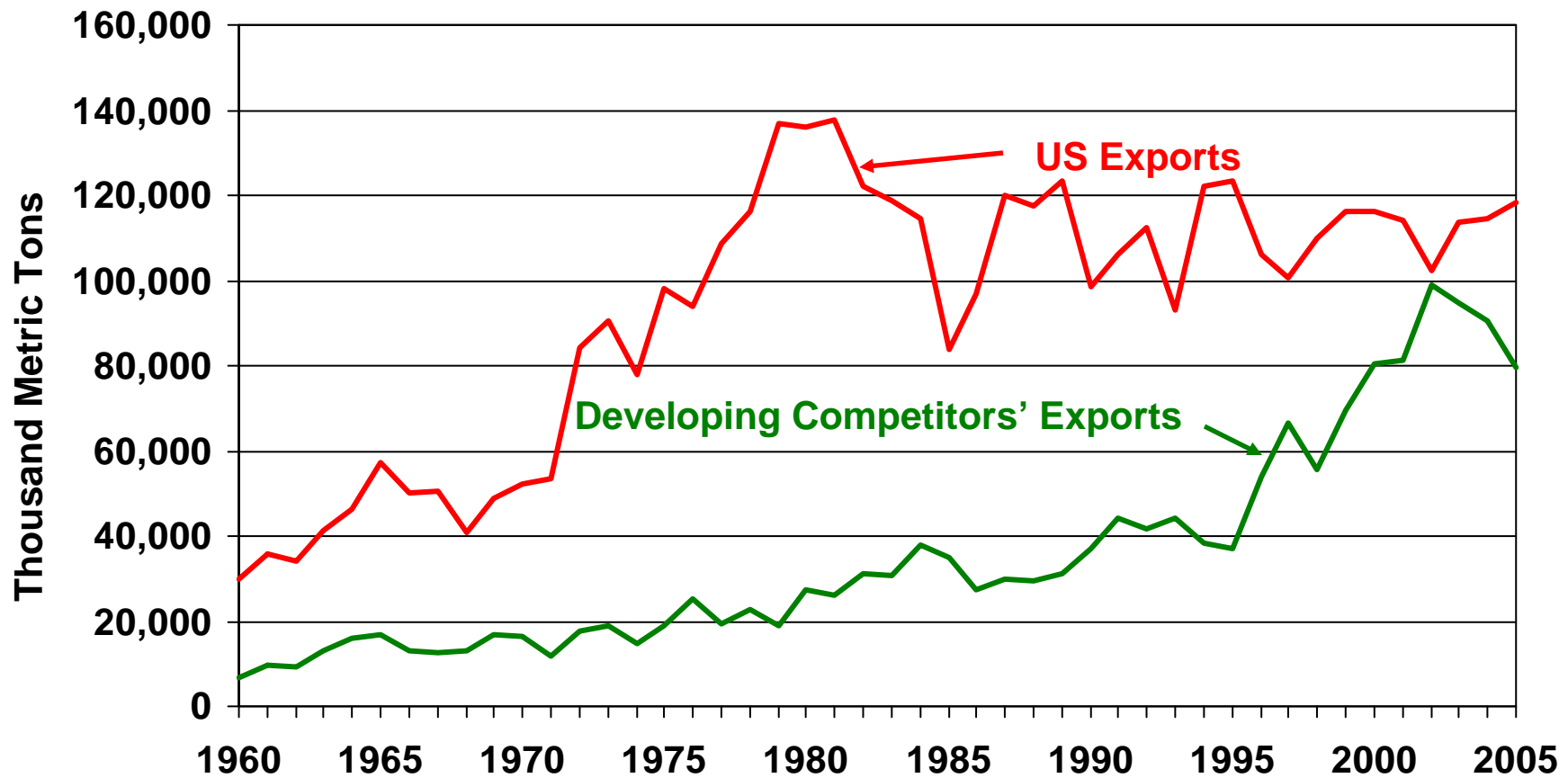


**Percentage of US acres used to produce crops for export have declined from a high of 43 percent in 1980 and 1980 to 33 percent for 2006**

# *What About Exports?*

- **Why have exports not fulfilled our hopes?**
  - **Export demand is braked by issues of food security/food sovereignty**
  - **International crop production is impacted by:**
    - **Increased acreage: Stage of development**
    - **Yield advances: World-wide distribution of technology**
    - **US role as the leading nation in the world**
      - **Politically, economically, technologically, and militarily**
      - **And in prices too: Others price off US prices**

# What About Exports?



**Developing competitors: Argentina, Brazil, China, India, Pakistan, Thailand, Vietnam**

15 Crops: Wheat, Corn, Rice, Sorghum, Oats, Rye, Barley, Millet, Soybeans, Peanuts, Cottonseed, Rapeseed, Sunflower, Copra, and Palm Kernel

*Worldwide Excess Capacity Will Again  
Be a Long-run Problem (Despite Ethanol)*

- **Dramatic yield increases in other countries (and in this country)**
  - Cargill, Monsanto, John Deere, etc., etc., etc.
- **Acreage once in production will be brought back in**
  - Russia, Ukraine and others
- **New Acreage**
  - Brazil
  - China

# *Policy Foundations*

- **Need to be realistic about the way aggregate agricultural markets work**
  - Take into account consumer behavior and food security concerns
  - Take into account producer behavior
  - Recognize limited ability of exports to rebalance aggregate agricultural markets
  - Recognize demand growth seldom outstrips supply growth for long

# *Global Policy For All Seasons*

- **In the near-term**

- We need commodity reserve stocks held in major producing and consuming countries to protect against extreme

- Supply and/or
- Demand shocks

- **Longer-term**

- We need international supply management system to maintain capacity while avoiding gluts

# *Global Policy For All Seasons*

- **What would it take?**
  - **An extreme whiplash**
- **What would it involve?**
  - **Developed countries**
    - **Near capacity on land base**
    - **Financial capacity to compensate farmers for production limits**
  - **Developing countries**
    - **Capacity to expand land base**
    - **Willingness to adjust rate of growth in times of global overcapacity**

# *Thank You*

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