



*Economic Consequences of
Alternative Policies*

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Future of Iowa Agriculture: A Policy Discussion

Gateway Center Hotel, Ames, IA

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Agricultural Policy Analysis Center - Institute of Agriculture

The University of Tennessee

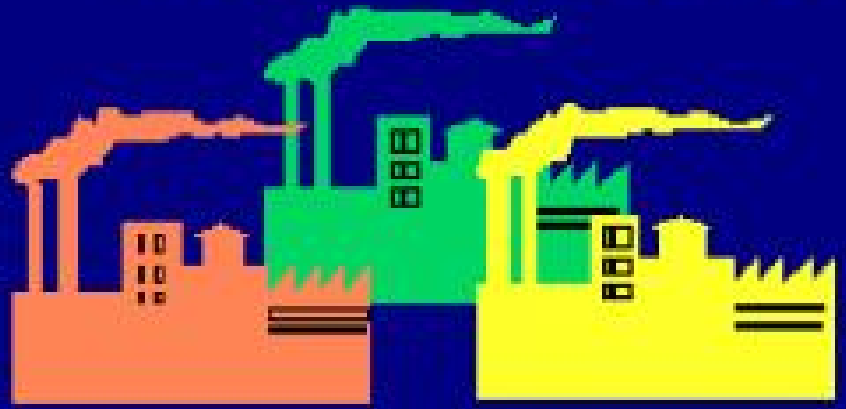
Introduction

- **Why Do We Have Farm Programs?**
 - **Market Characteristics of Crop Agriculture Prevent Self-Correction**
- **The 1996 Farm Bill: A Classic Case of Reality Smashing Into Grandiose Expectations**

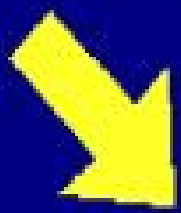
Other Industries Self-Correct

- **If Price Drops, What Should Happen?**
 - **Consumers Buy More**
 - **Yes, Except for Food**
 - **Producers Produce Less**
 - **Yes, Except in Agriculture**

Farm Size & Supply Determinants



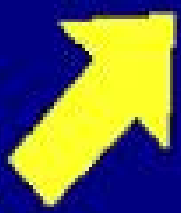
Relatively Few Firms



Leading Firms Govern Supply



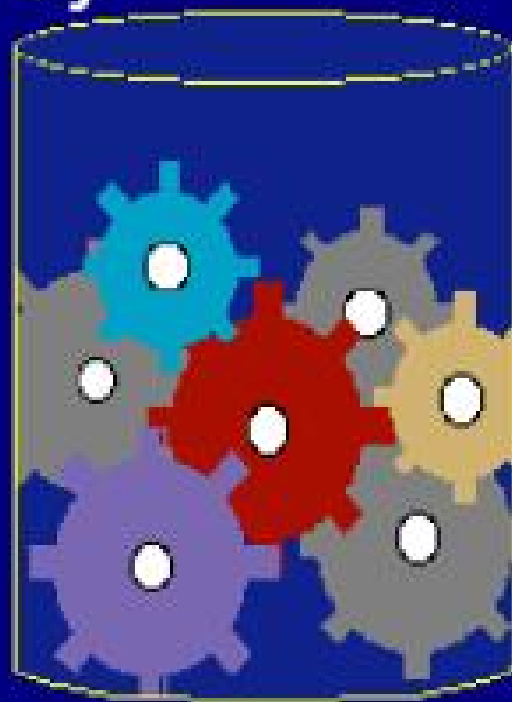
Many Firms



No One Firm is Large Enough to Affect Supply

Production Capacity

Long-Term Capacity
Determined By
Planning



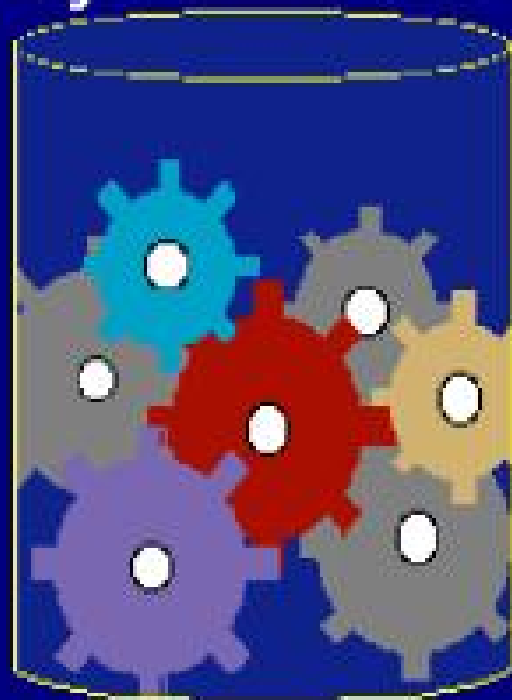
Non farm
Industries

Expect to Keep Excess
Capacity in Reserve



Production Capacity

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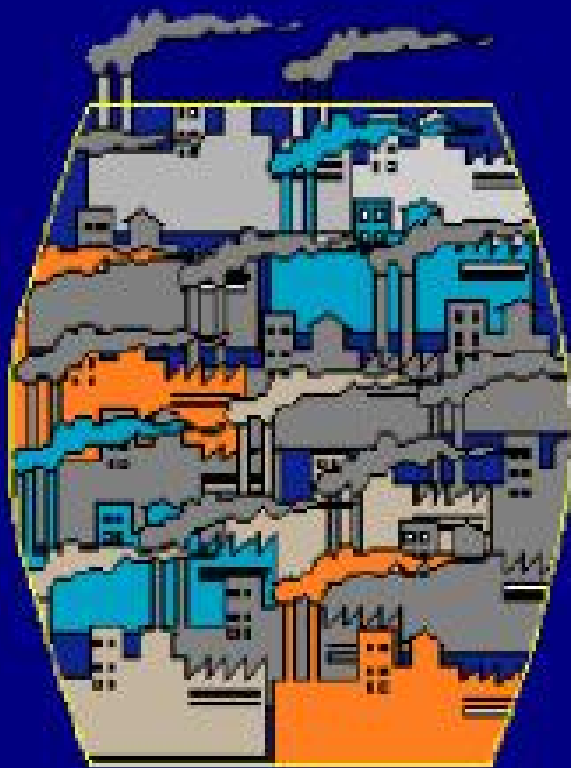
Long-Term Capacity
Determined by
Technology



Production
Capacity Tends
to be Fully Used

When Industries Overbuild

When
Nonfarm
Industries
Grow Too
Large,
Plants go
Out of
The
Industry

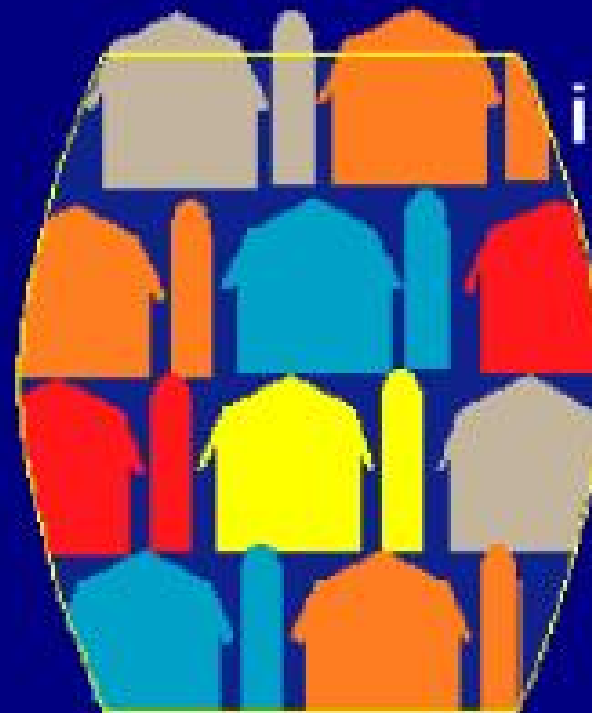


When Industries Overbuild

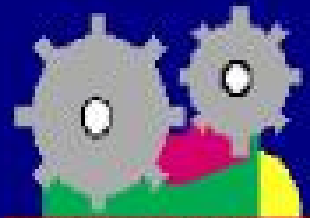
When
Nonfarm
Industries
Grow Too
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Out of
The
Industry



When
Agriculture
is Overbuilt,
Land
Changes
Hands
But Output
is Not
Reduced



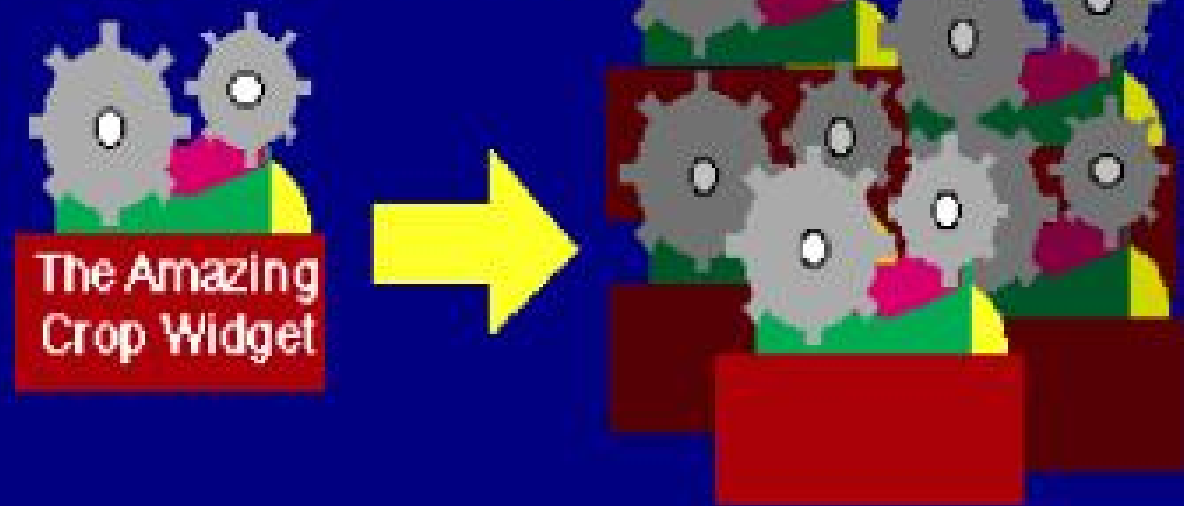
Technology Treadmill



• The Amazing Crop Widget

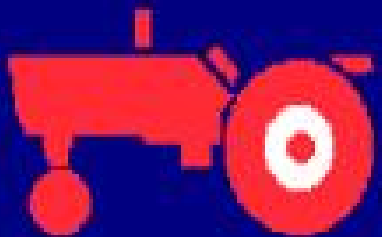
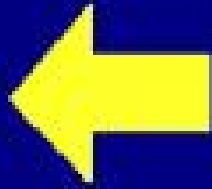
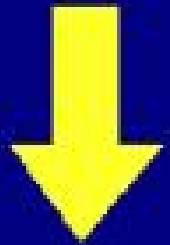
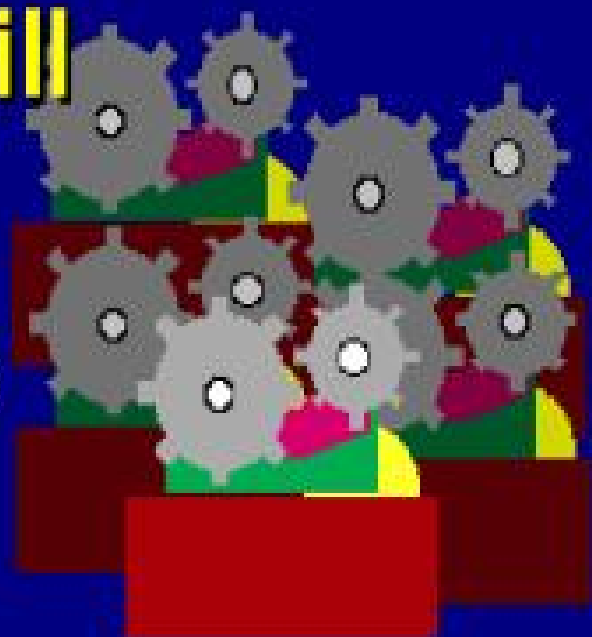
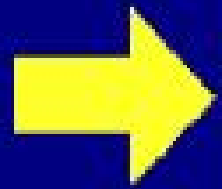
- Because Farmers Produce Only a Tiny Part of Total Production, They Cannot Influence **Price**
- Therefore, Farmers Try to Reduce Their Per-Unit Production **Costs**
- Adopting **New Technologies** Early on Allows Farmers to Reduce Costs Without Affecting Price

Technology Treadmill



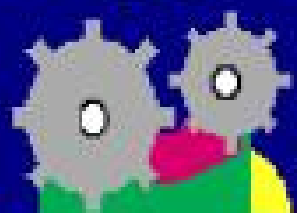
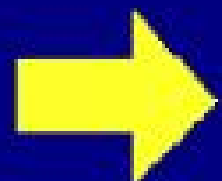
- As Adoption of a New Technology **Spreads**, Output Increases
- As Output Increases, **Prices** Drop
- Thus, The Benefits of Technology Continually Slip Through Farmers' Hands

Technology Treadmill

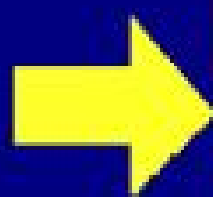


- Once Prices Fall, Agricultural Production Declines Slowly
 - Farm Assets Can be Used For Little Else
 - Farmers Tend to Prefer Farm Living

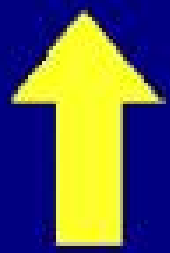
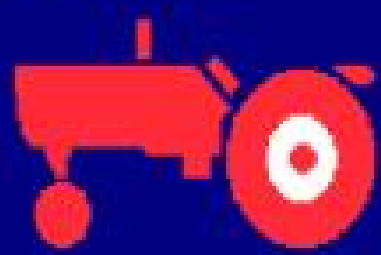
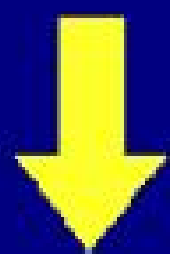
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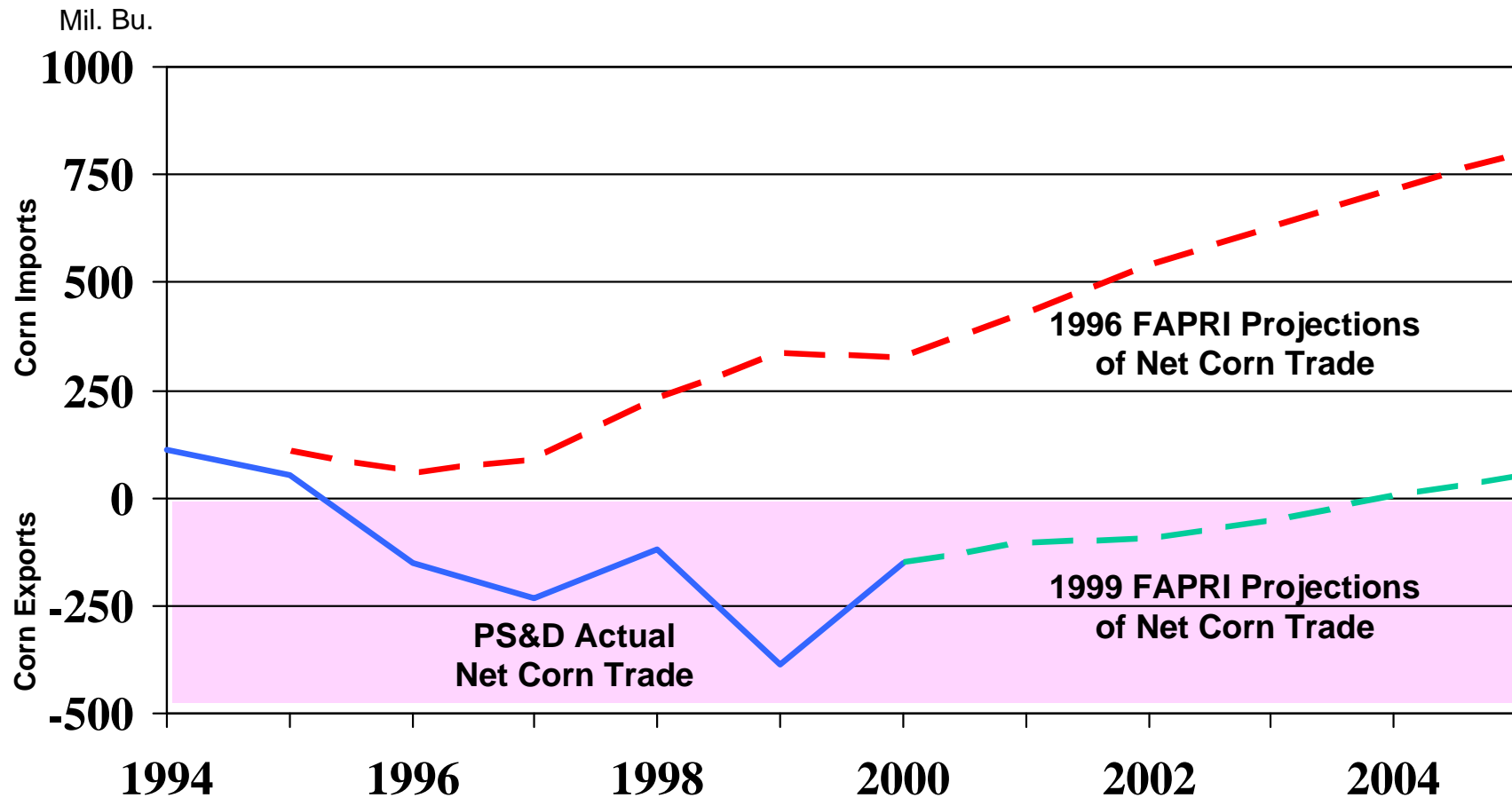
- Consumers Benefit From Low Prices
- Farm Programs Try to Shift Part of This Benefit Back to Farmers



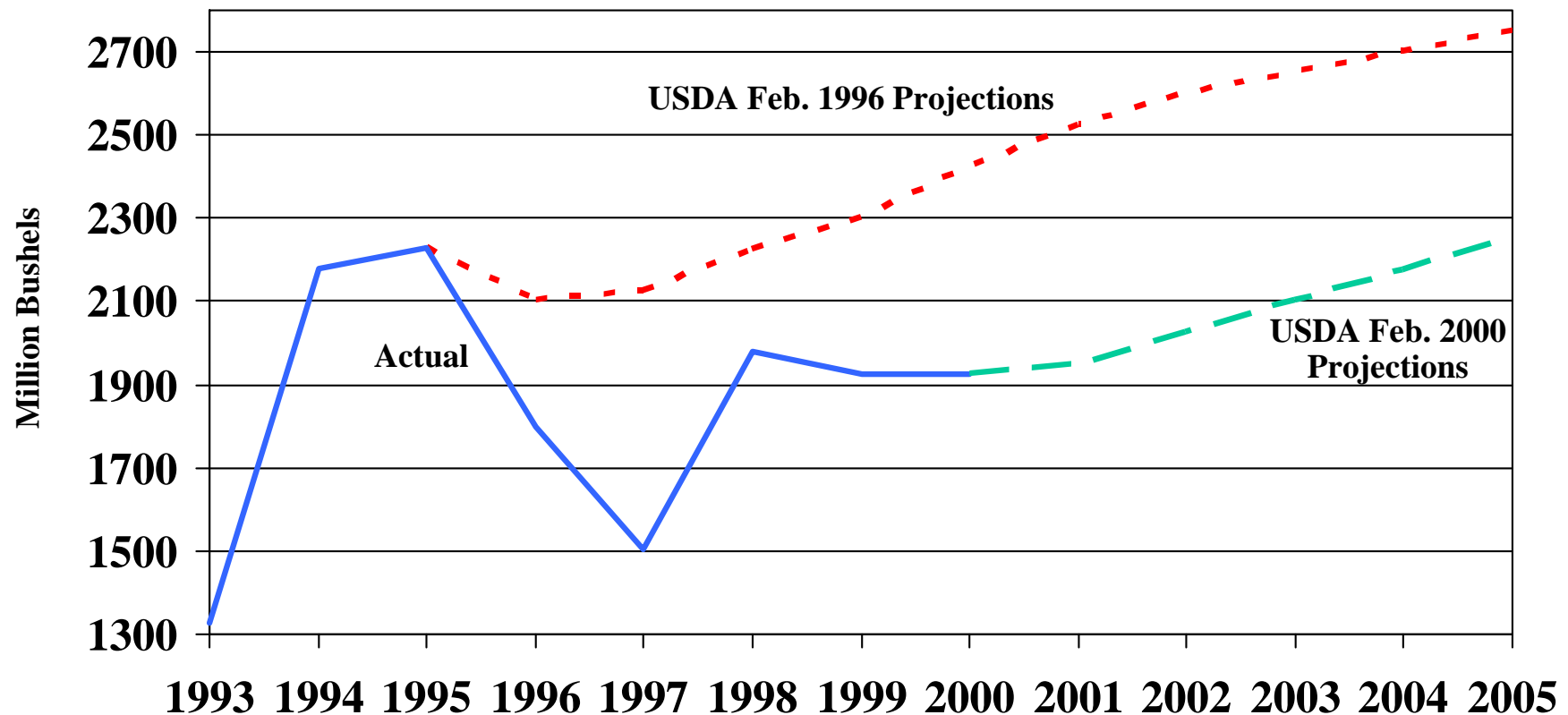
Expectations

- **“High” Prices and Incomes Like 1995/1996**
- **Because:**
 - **Rapid Per Capita Income Growth in China/Asia Will Increase Demand and U.S. exports**
 - **With Planting Flexibility & Decoupled Payments Farmers Would Plant for the Market – Reduce Production When Needed**
 - **With No Brake on Prices, Importers Will Import More From the U.S. When Prices Decline –Increase Consumption & Reduce Production When Needed**
 - **With Marketing Loans, Competitors Would Not Be Under U.S. Price Support Umbrella –Reduce Production When Needed**

Net Corn Trade for China: Actual and Projections, 1994-2005



U.S. Corn Exports: Actual and Projections, 1993-2005

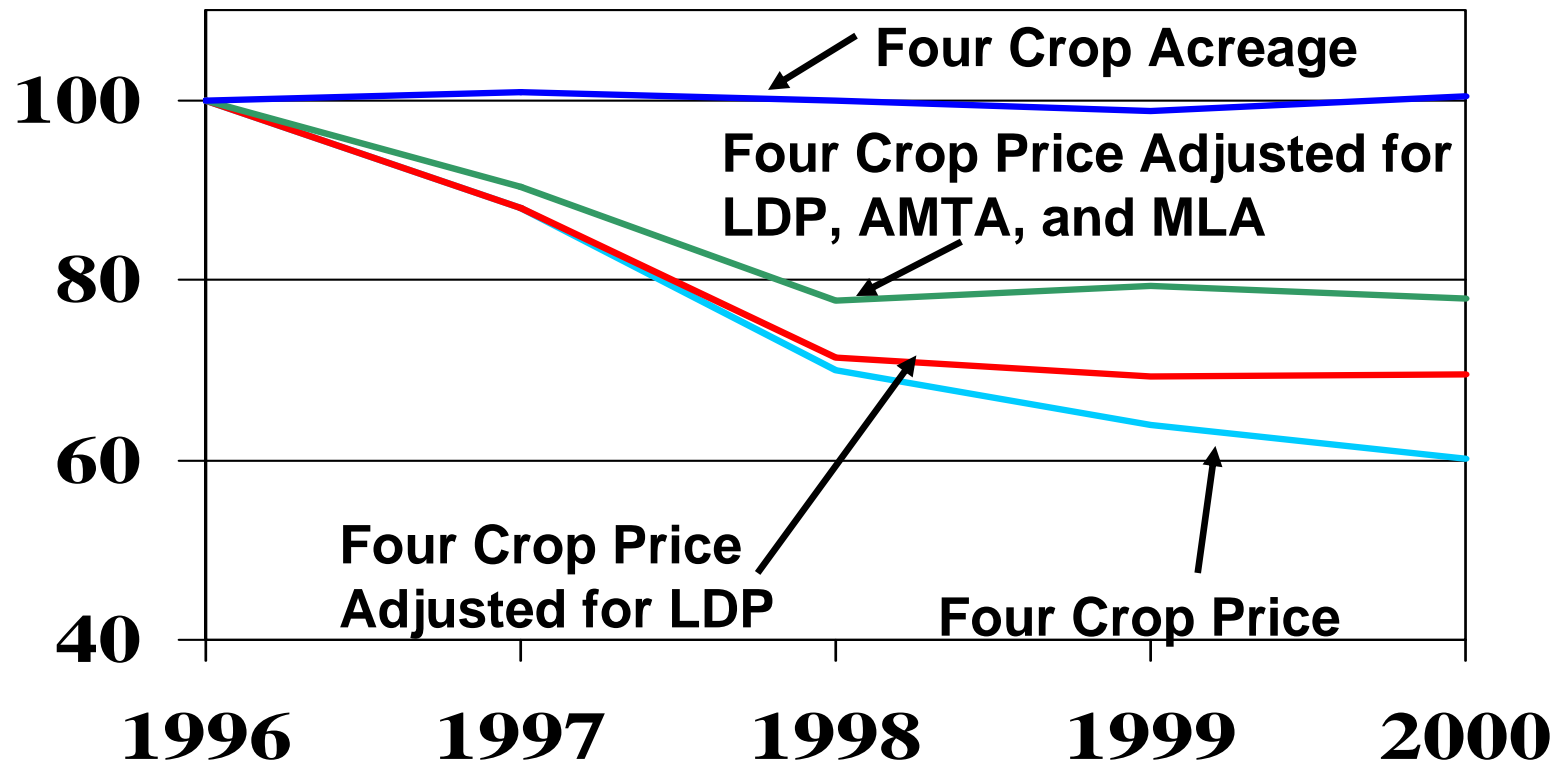


- **Expected Rapid Growth in Exports Did Not Occur**

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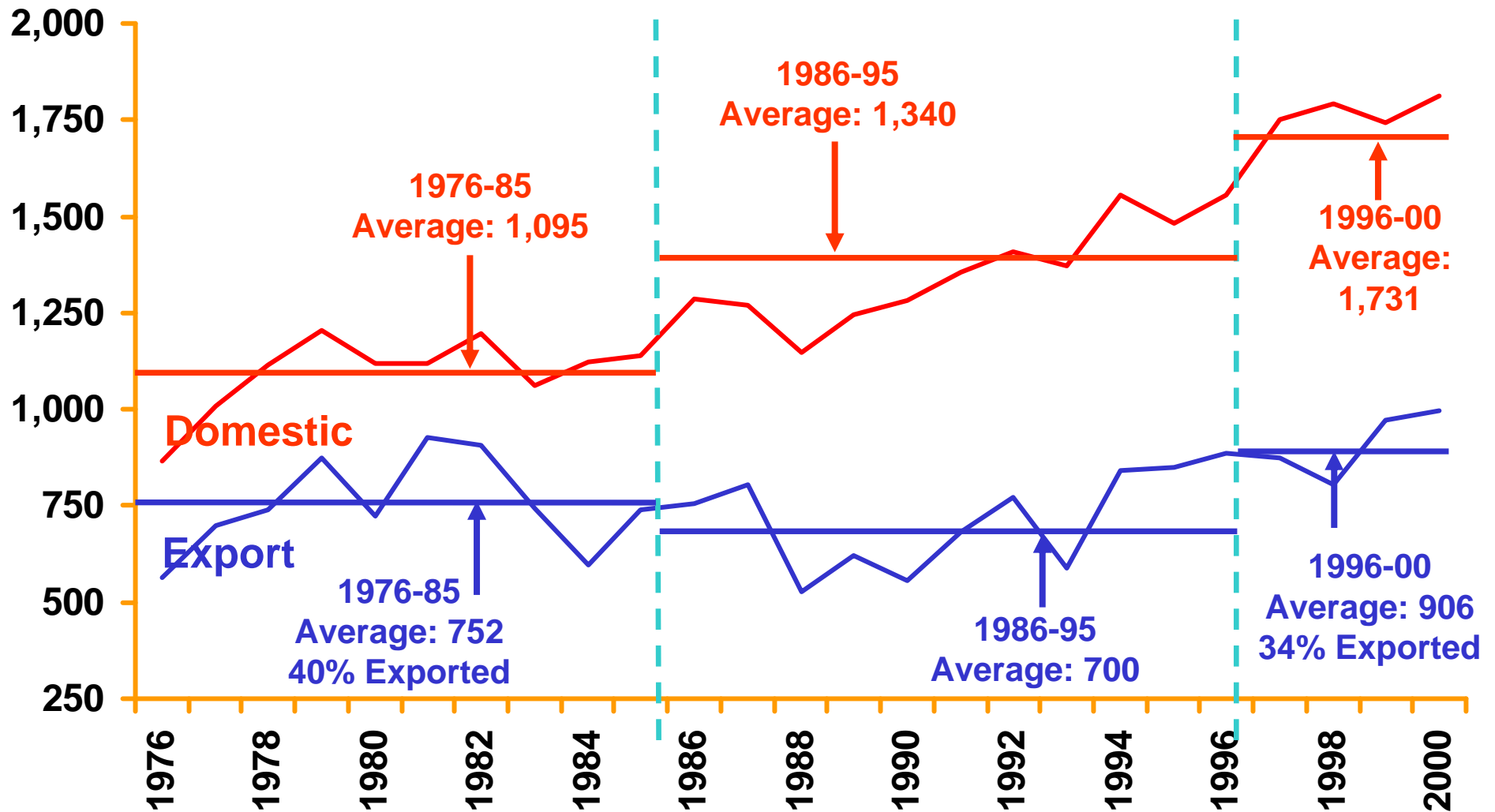
Indexed Four Crop Acreage, Price and Price Adjusted for LDP and Contract Payments



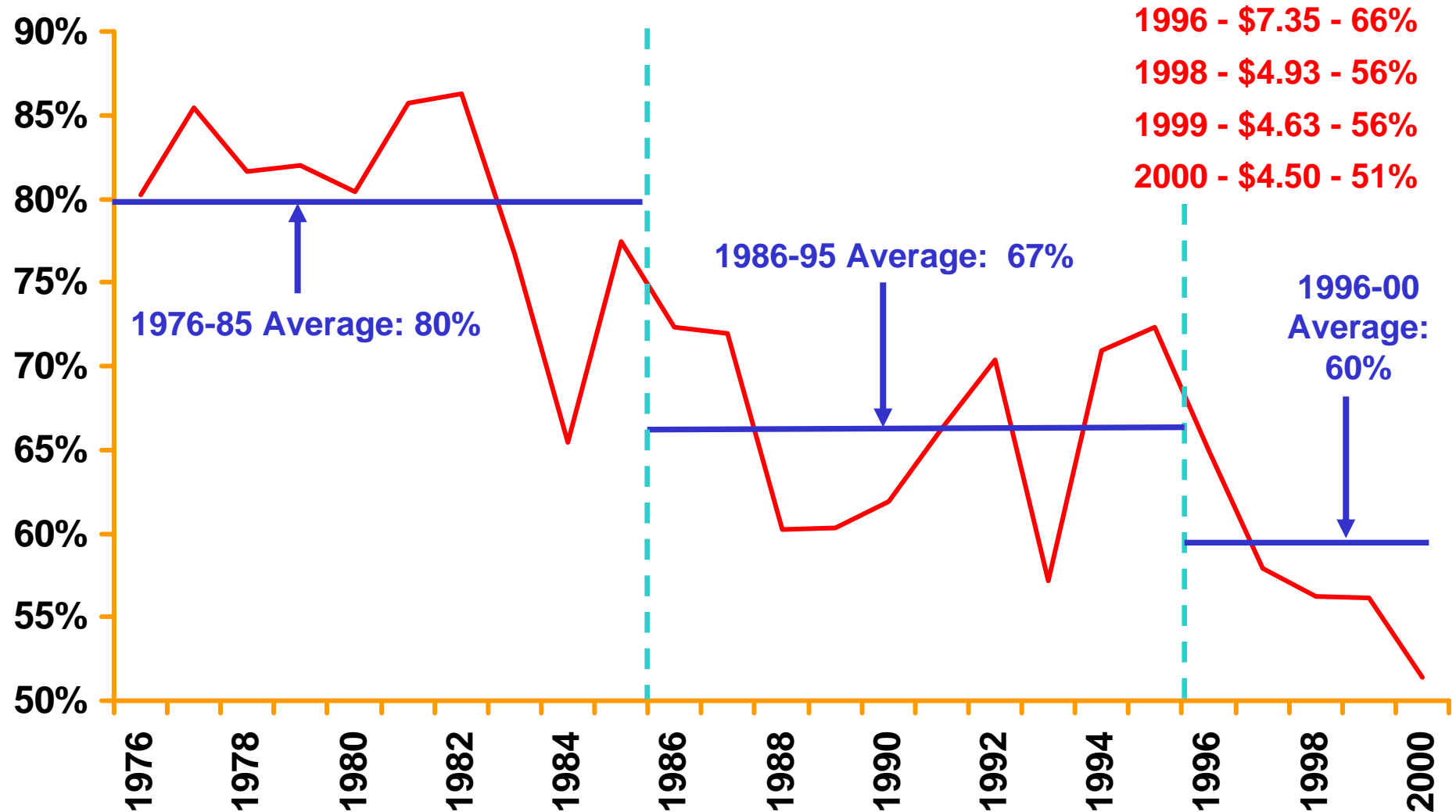
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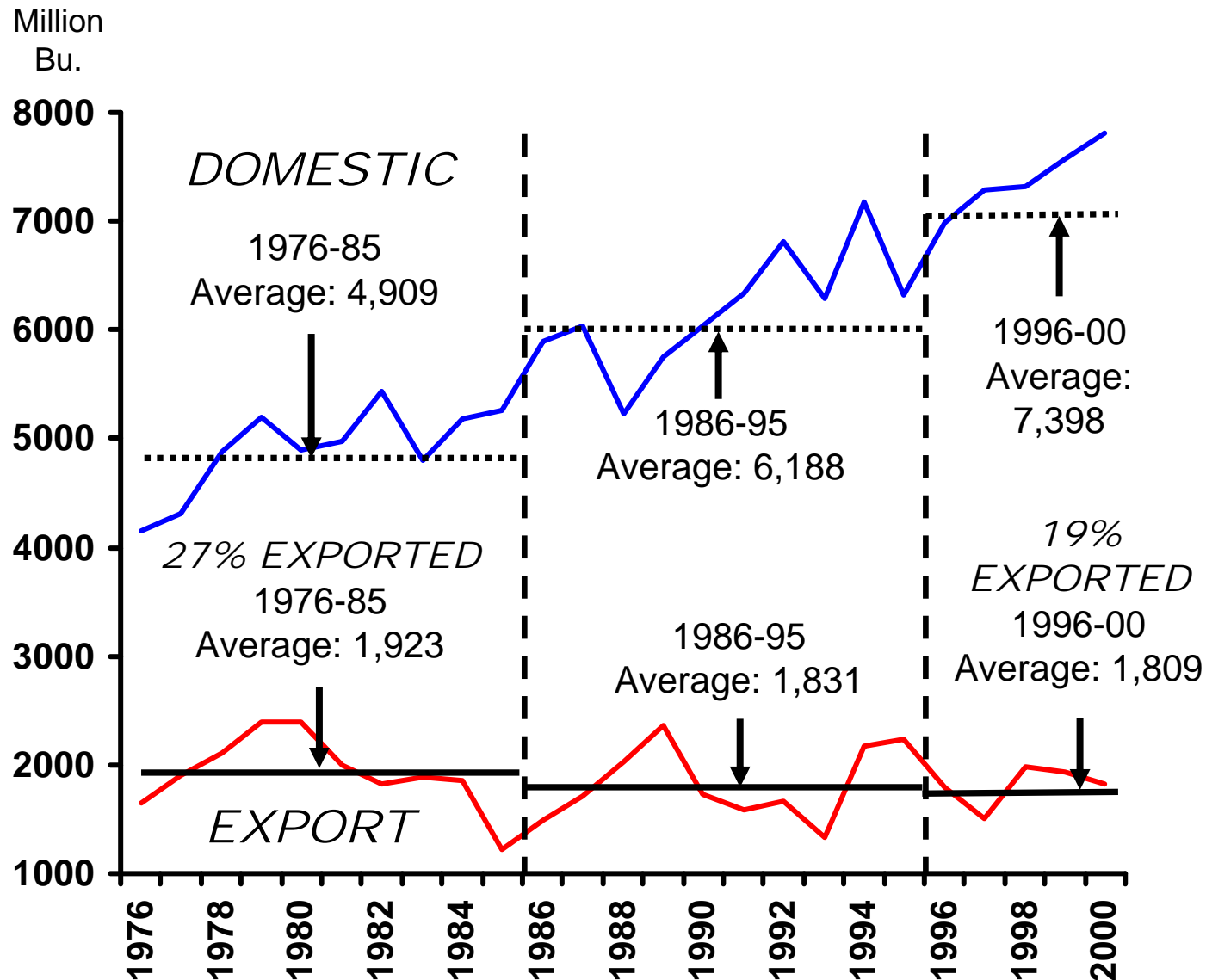
U.S. Domestic & Export Demand



U.S. Share of World Exports



U.S. Domestic and Export Demand

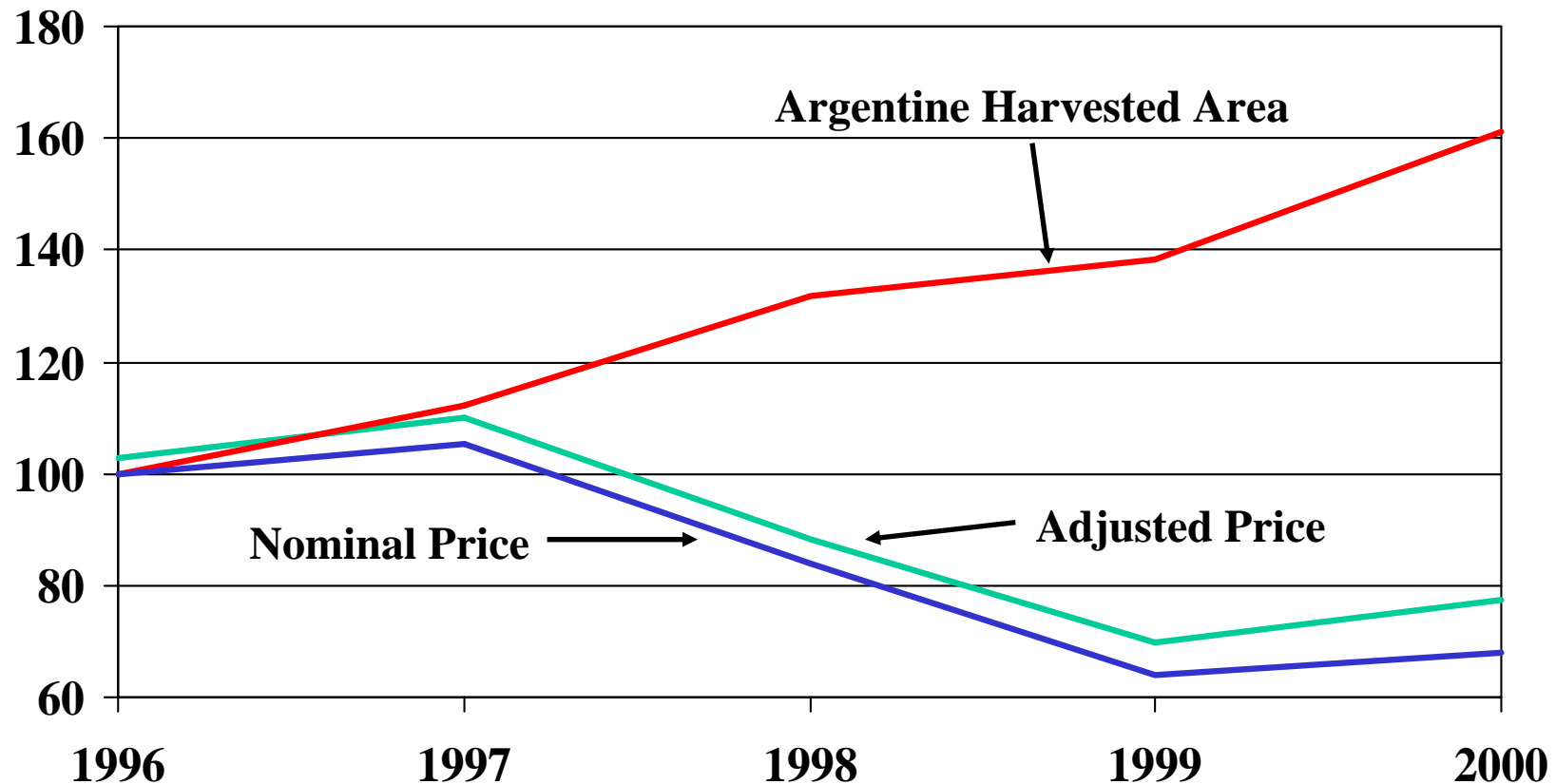


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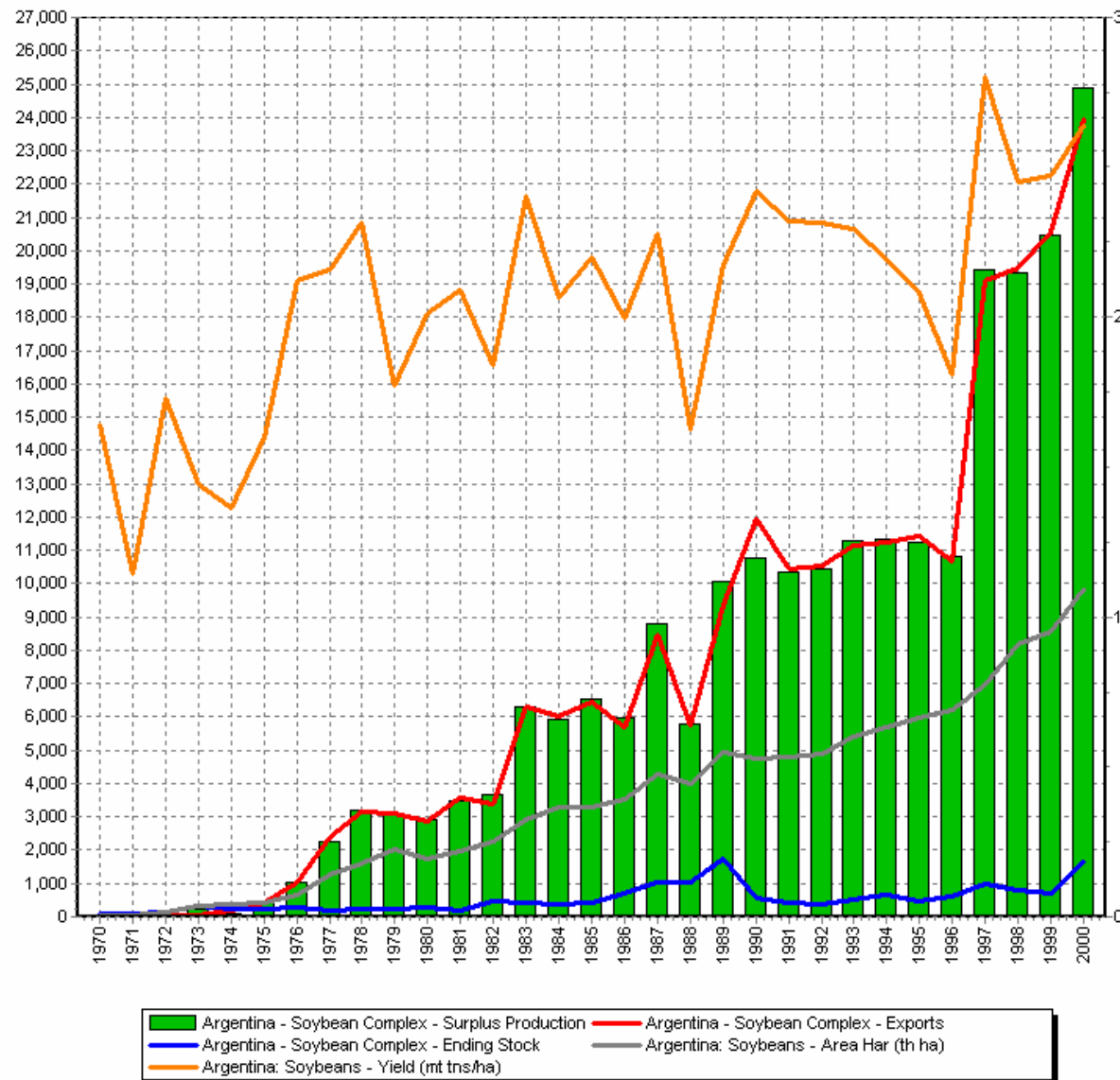
Argentine Soybean Price* and Harvested Area

Indexed 1996=100

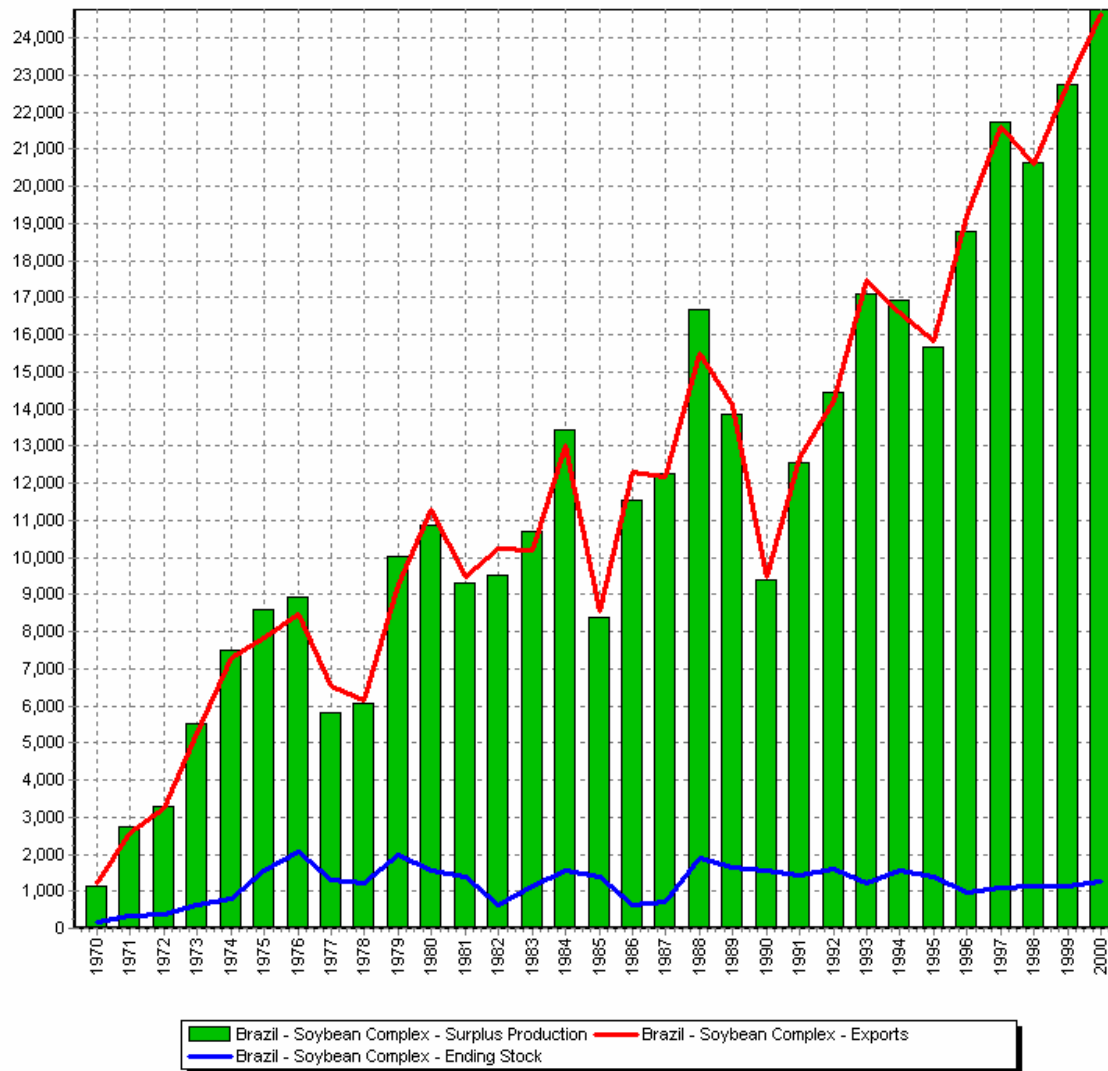


* Price is the export price posted by Abiove, the Brazilian Vegetable Oil Industry Association. Adjusted price is adjusted for changes in exchange rate and inflation.

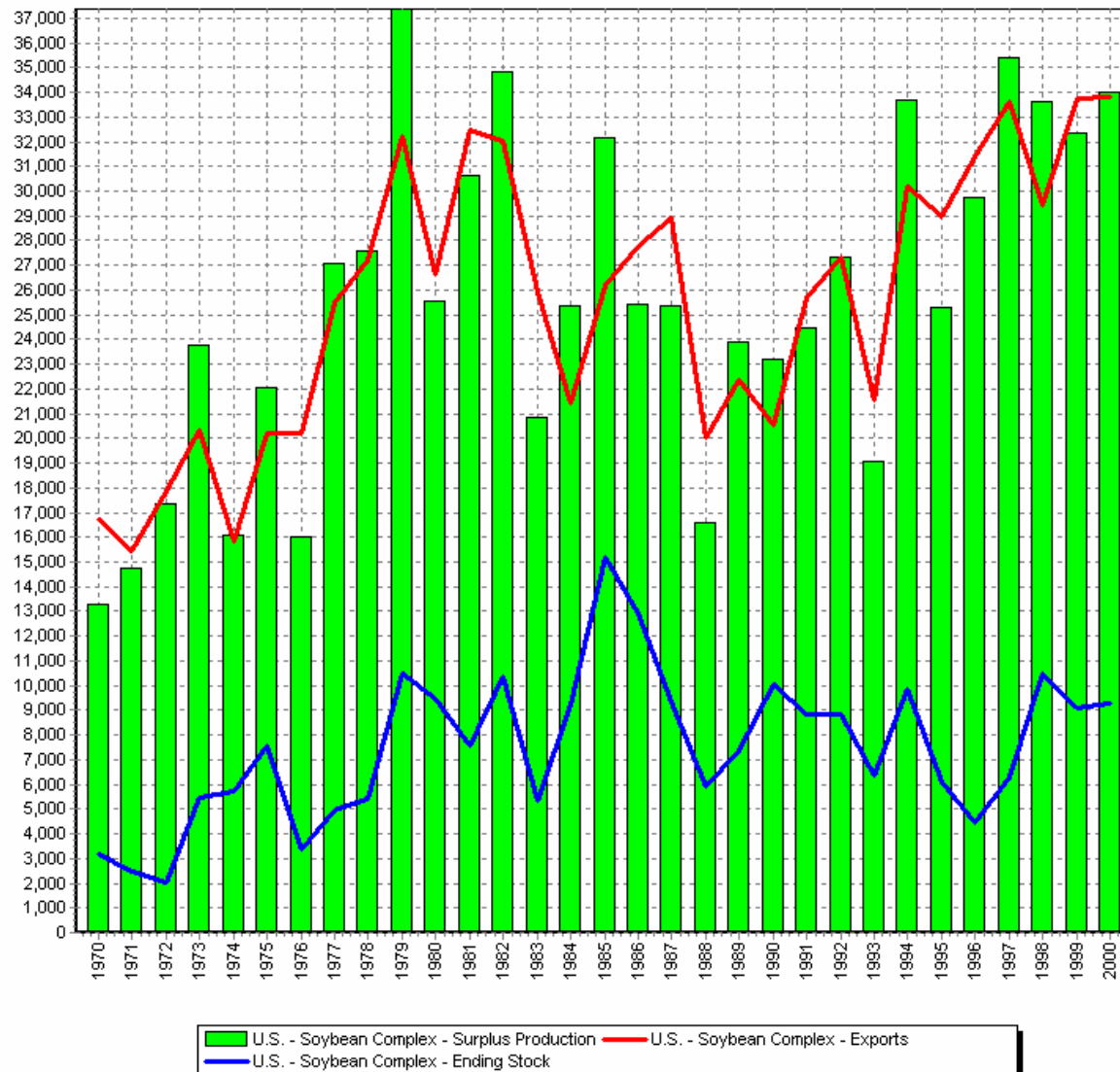
Argentine Soybean Complex Exports and Surplus Production



Brazilian Soybean Complex Exports and Surplus Production

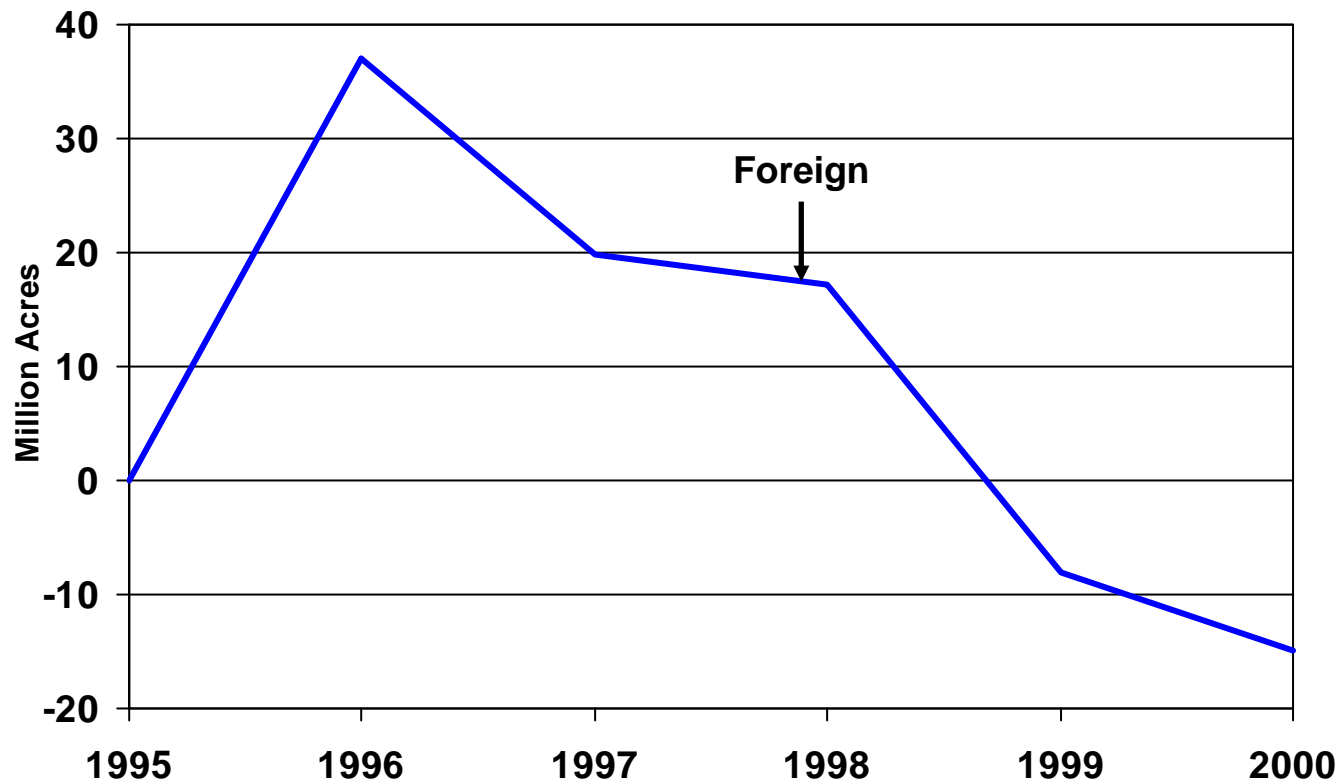


U.S. Soybean Complex Exports and Surplus Production



Foreign Crop Acreage

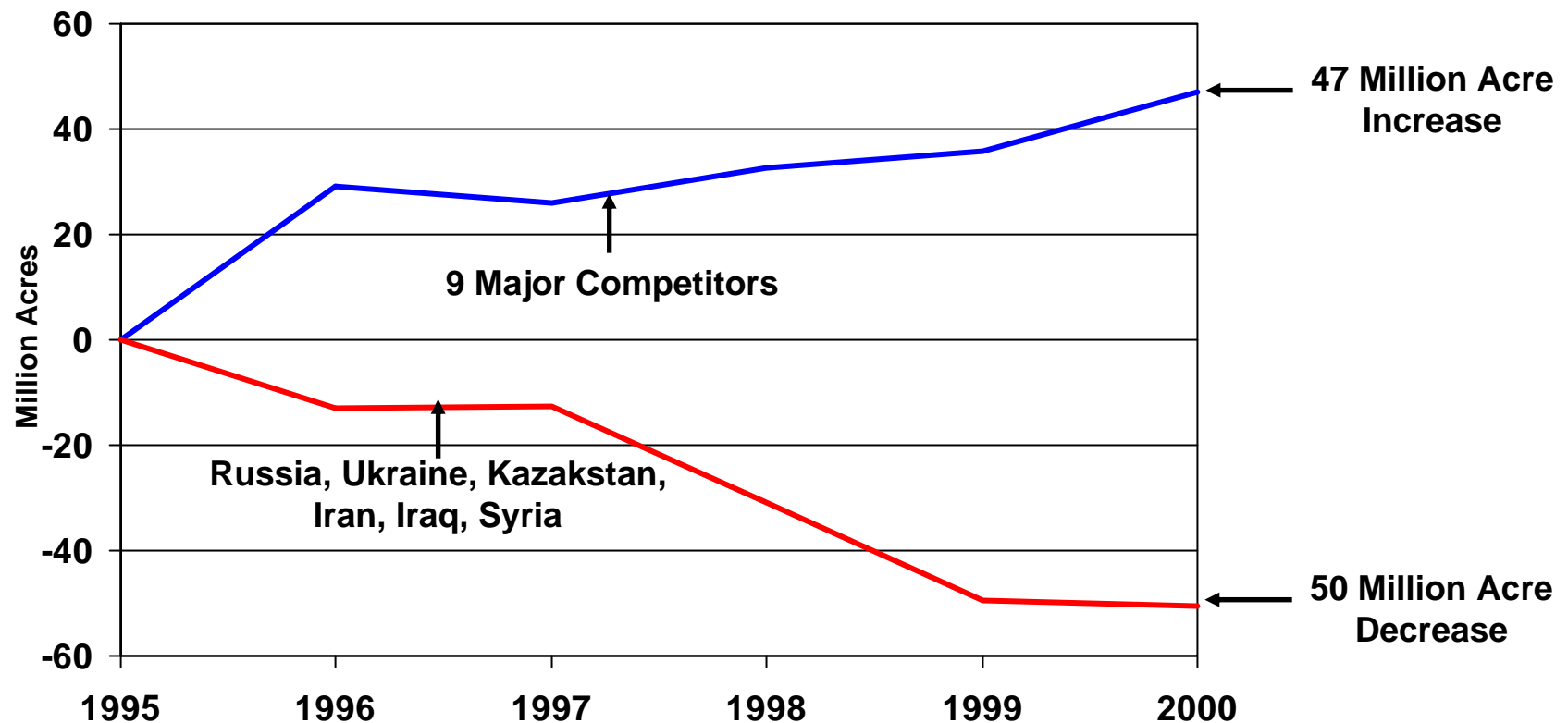
Some have cited the 1999 reduction in foreign harvested acreage as indicative of the benefits of eliminating set-asides



Gain or loss in foreign harvested acres when compared to 1995

Foreign Crop Acreage

What countries did we hope would reduce their acreage when we eliminated set-asides?



Gain or loss in 9 competitors' and a grouping of 3 former Soviet Union and 3 Middle Eastern countries' harvested acres when compared to 1995.

Low Prices Don't Trigger Large Increases In Demand

- **Since Food And Feed Are Biological Requirements, Demand Varies Little With Price**
 - **Difficult As Nation To Eat More Total Food**
- **Consumers Respond Quickly And Powerfully To Low Prices In Other Sectors**

Limited Ability To Adjust Production In The Short-Run

- **Farmers Do Not Make A Production Decision—
They Make A Planting Decision Once A Year**
- **Farmers Change The Mix Of Crops But Use All
Their Acreage**
- **Farmers Have Every Incentive To Produce Full
Out**

Limited Ability To Reduce Grain Production In The Long-Run

- **With Continued Overcapacity And Low Prices, Farmers Forced Out But Land Is Not**
 - Another Farmer (Often More Efficient) Takes Over
 - Productive Capacity Changes Little Or None
- **In Other Sectors, Plants Would Be Sold To Another Industry**
 - Productive Capacity Is Reduced

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