



# U.S. Cotton Subsidies Under Fire: Would Subsidy Elimination Really Help Farmers Worldwide?

Beltwide Cotton Conference  
San Antonio, Texas  
January 9, 2004

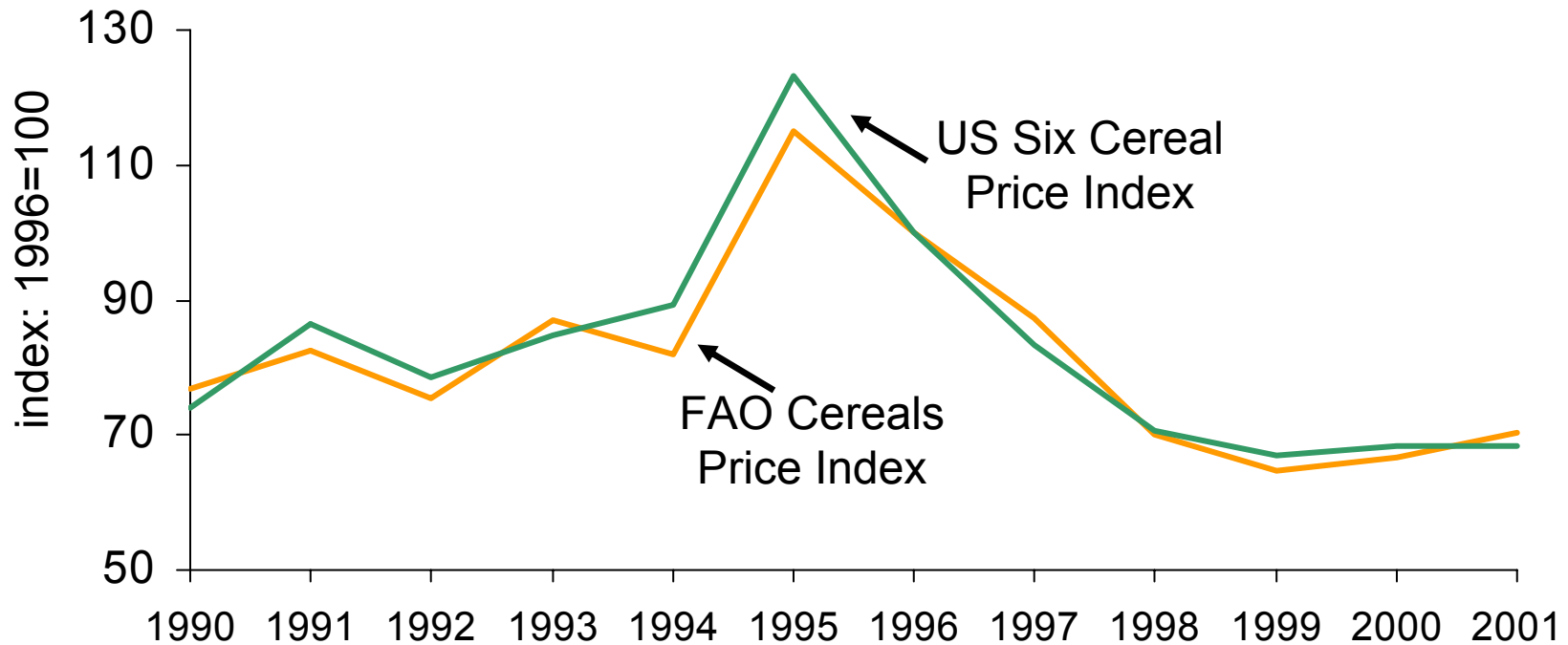
*Kelly J. Tiller*

*Harwood D. Schaffer*

# What's the Situation?

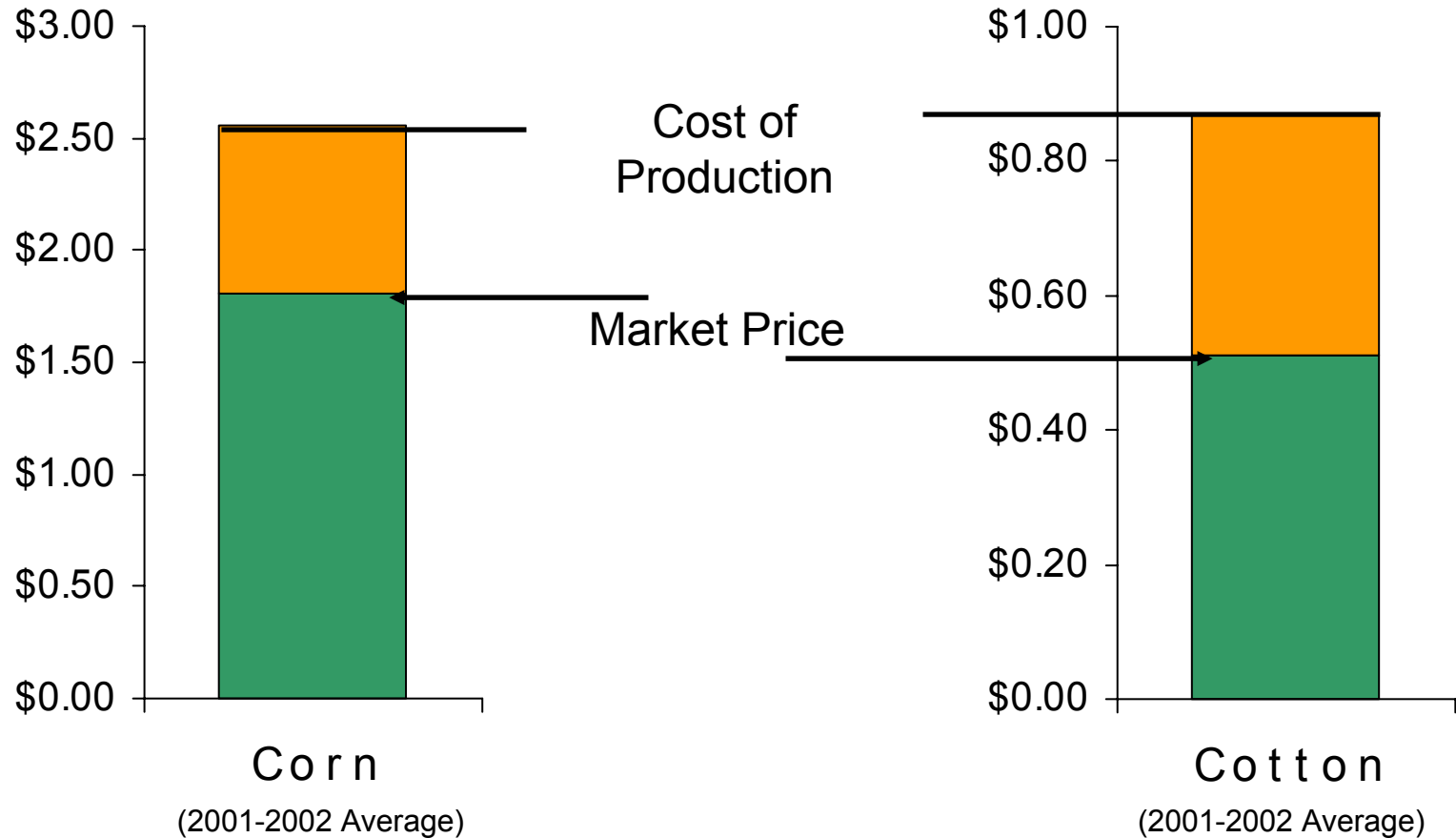
- Crop prices have plummeted in recent years affecting farmers worldwide
- U.S. is annually paying \$20 billion in cash subsidies to farmers; ag supports in developed countries are estimated to be \$300 billion
- Integrated livestock, processors, importers primarily benefit from low crop prices
- Farmers in other countries accuse U.S. of dumping crops onto global market at below the cost of production
- Developing countries can't provide cash subsidies to offset low crop prices

# US Six Cereals and FAO Cereals Price Indices



- Since reducing government intervention in 1996, US prices plummeted
- World prices followed

# US Prices & Cost of Production



- Prices cover only 60% to 75% for cotton and corn, respectively
- Even less for other crops
- Corresponding graphs for other countries would look even worse

# U.S. Cotton Subsidies Under Fire

- Cotton is grown commercially in a large number of countries, particularly LDCs
- Declining cotton revenues have a proportionately larger impact on GDP in LDCs
- Farmers in developing countries have no protection mechanisms
  - Pressure to deregulate economy
  - Eliminated tariffs in compliance with trade agreements
  - Unable to provide direct payments to farmers
- U.S. cotton policy challenged by Brazil under the WTO

# Critics' Rationale

- U.S. commodity payments have caused overproduction
- Overproduction in the U.S. has caused prices to plummet
- Farmers worldwide have been hurt by low world prices
- Eliminating U.S. subsidies would cause planted acreage to decline
- U.S. and world prices would rise

# Questions

1. Are these problems (overproduction, low prices, large government payments, dumping) policy-caused?
2. If so, why didn't the policies work?
3. What impacts would eliminating U.S. subsidies have?
4. What needs to be considered when evaluating alternative policies?

# Q1: Are Problems Policy-Caused

- To a large extent, yes
  - Low prices were the result of policy changes
- Low price-high subsidy cause and effect
  - Low prices triggered larger subsidies, not the reverse
- For policy analysis, must consider aggregate impacts
  - Single crop analysis doesn't tell the whole story

# Historically—Two Major Components of U.S. Farm/Commodity Policy

- Policy of plenty
  - Ongoing public support to expand agricultural productive capacity through research, extension and other means
- Policy to manage plenty
  - Mechanisms to manage productive capacity and to compensate farmers for consumers' accrued benefits of productivity gains

# Critical Changes in U.S. Policy

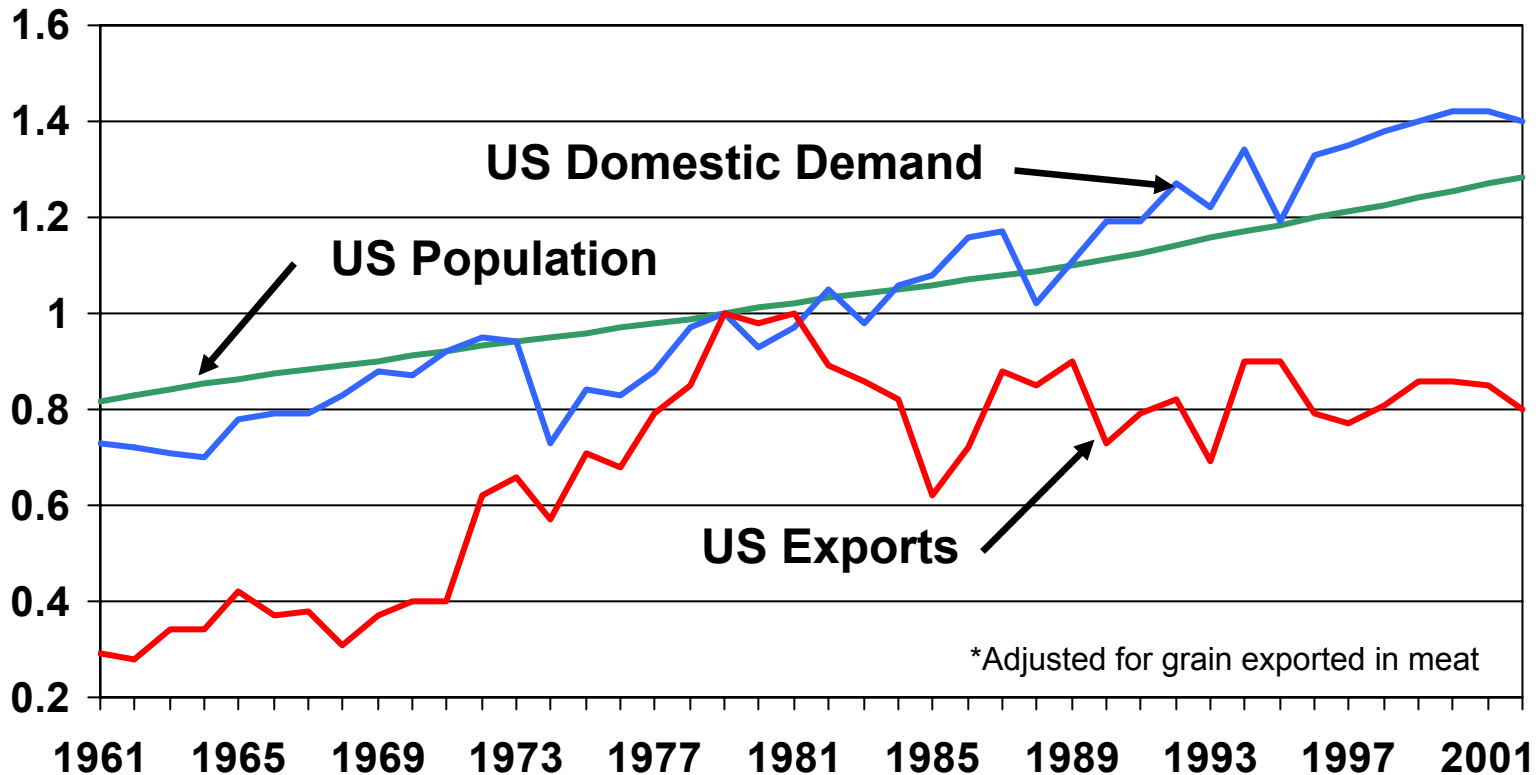
- Since 1985 “policy makers” believed that to allow exports to drive agricultural growth, markets should be allowed to work
- This view culminated in the 1996 Farm Bill
  - Elimination of supply control instrument: set-aside program
  - Replaced “price floors” with government income support payments

# Q2: Why Didn't Policies Work?

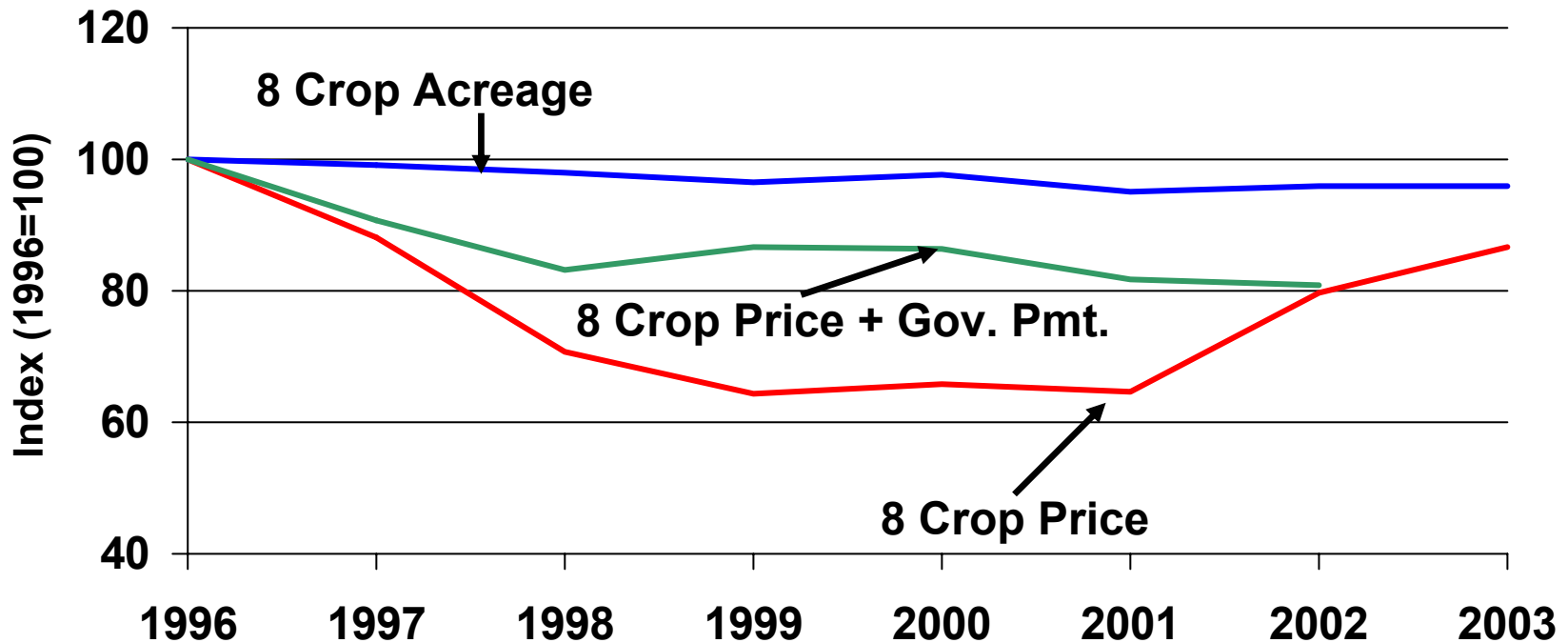
- Technology expands output faster than population and exports expand demand
- Market failure: lower prices do not solve the problem
- Little self-correction on the demand side
  - People will pay almost anything when food is short
  - Low prices do not induce people to eat more
- Little self-correction on the supply side
  - Farmers tend to produce on all their acreage
  - Few alternate uses for most cropland

# Exports Did Not Deliver

Index of US Population, US Demand\* for 8 Crops and US Exports\* of 8 Crops 1979=100



# Acreage Response to Prices



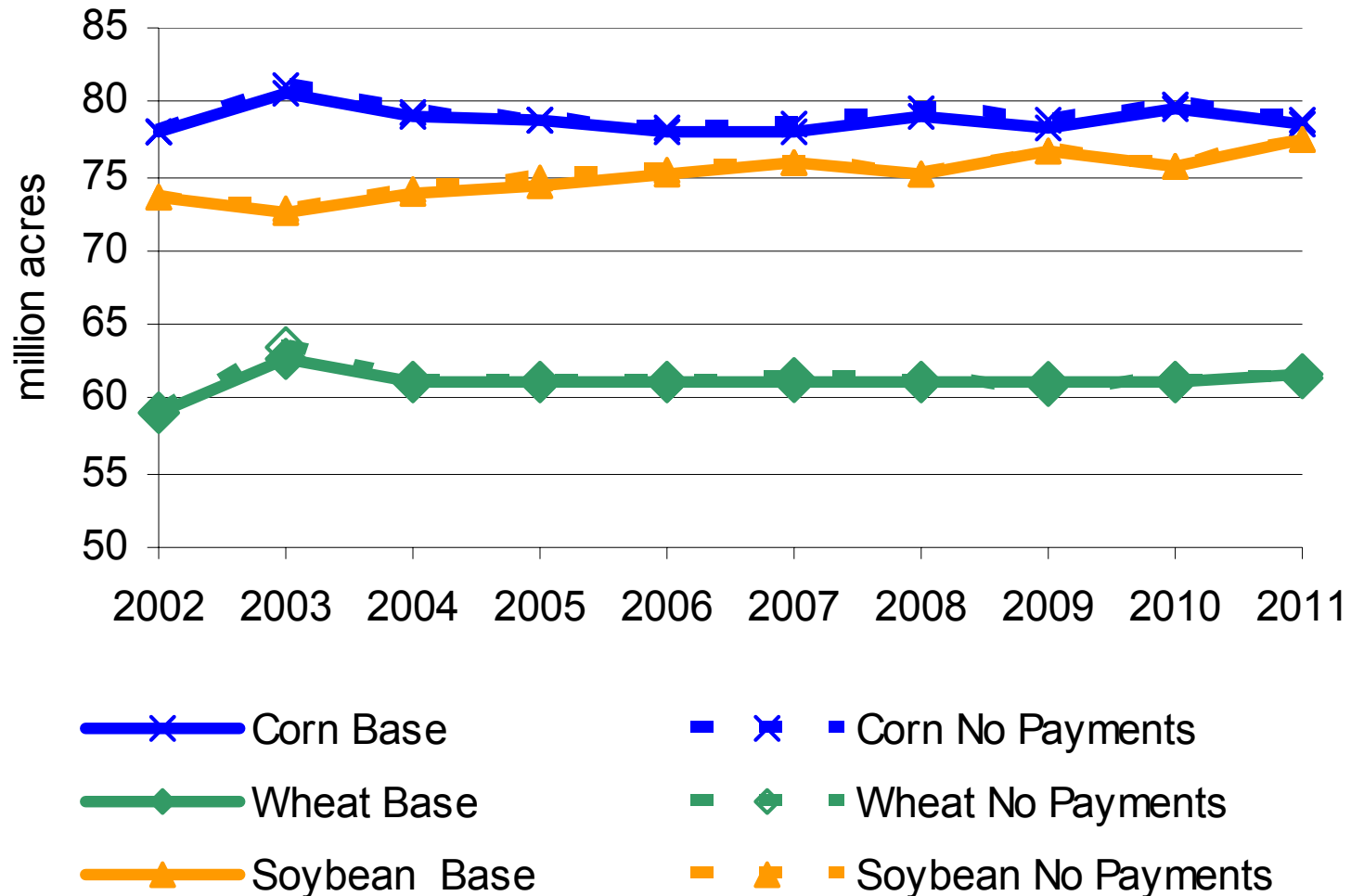
Since 1996 US

- Eight major crops maintain acreage
- Eight-crop price drops and rises

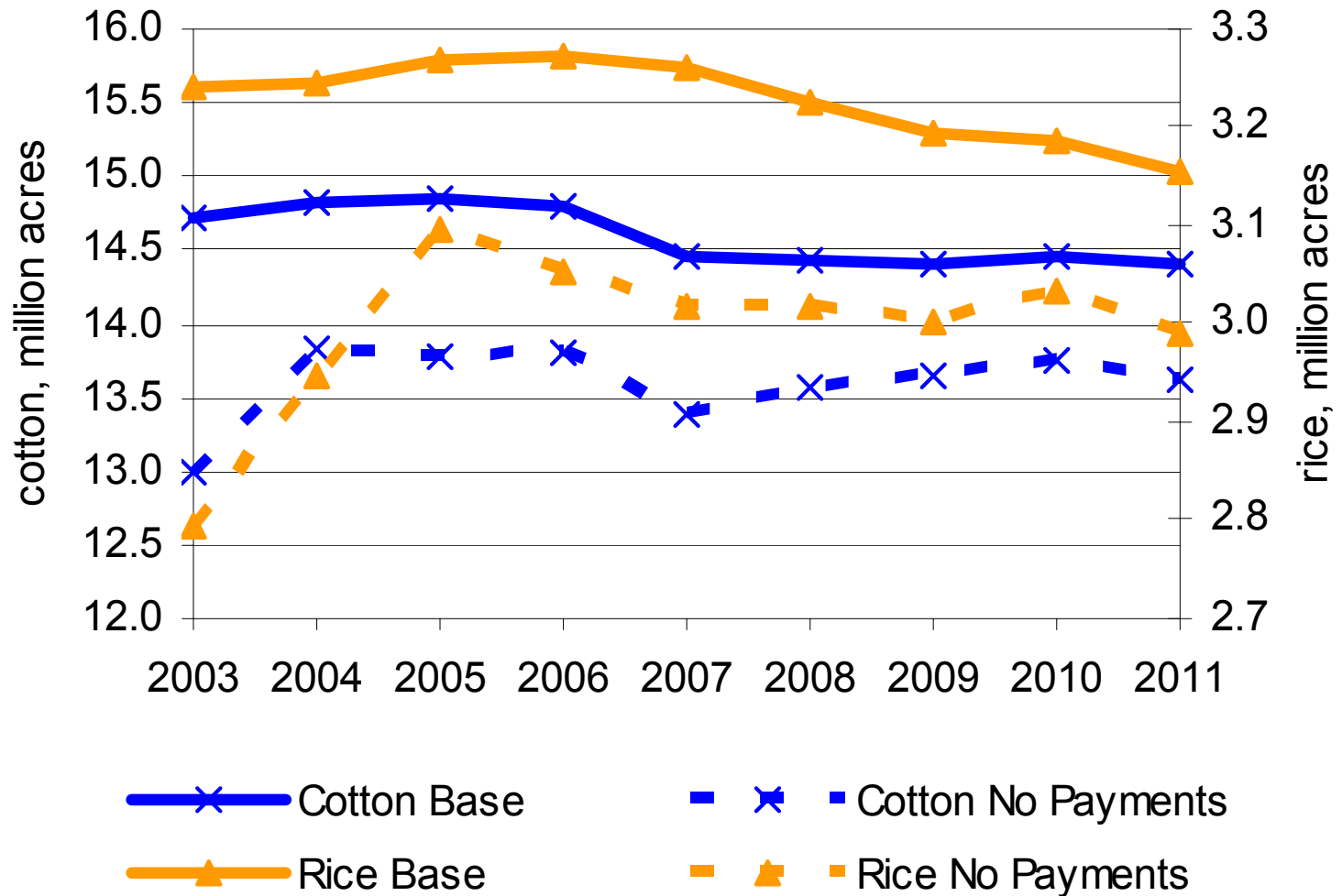
# Q3: Subsidy Elimination Impacts?

- If subsidies *cause* low prices, then eliminating subsidies should increase prices
- POLYSYS model of U.S. subsidy elimination
  - Minor changes in aggregate acreages, prices
  - 25% to 30% decline in net farm income
  - Acreage adjustments among crops would occur
- IFPRI model removing all DC subsidies and protectionist measures
  - Price increase fails to appear appreciably or quickly

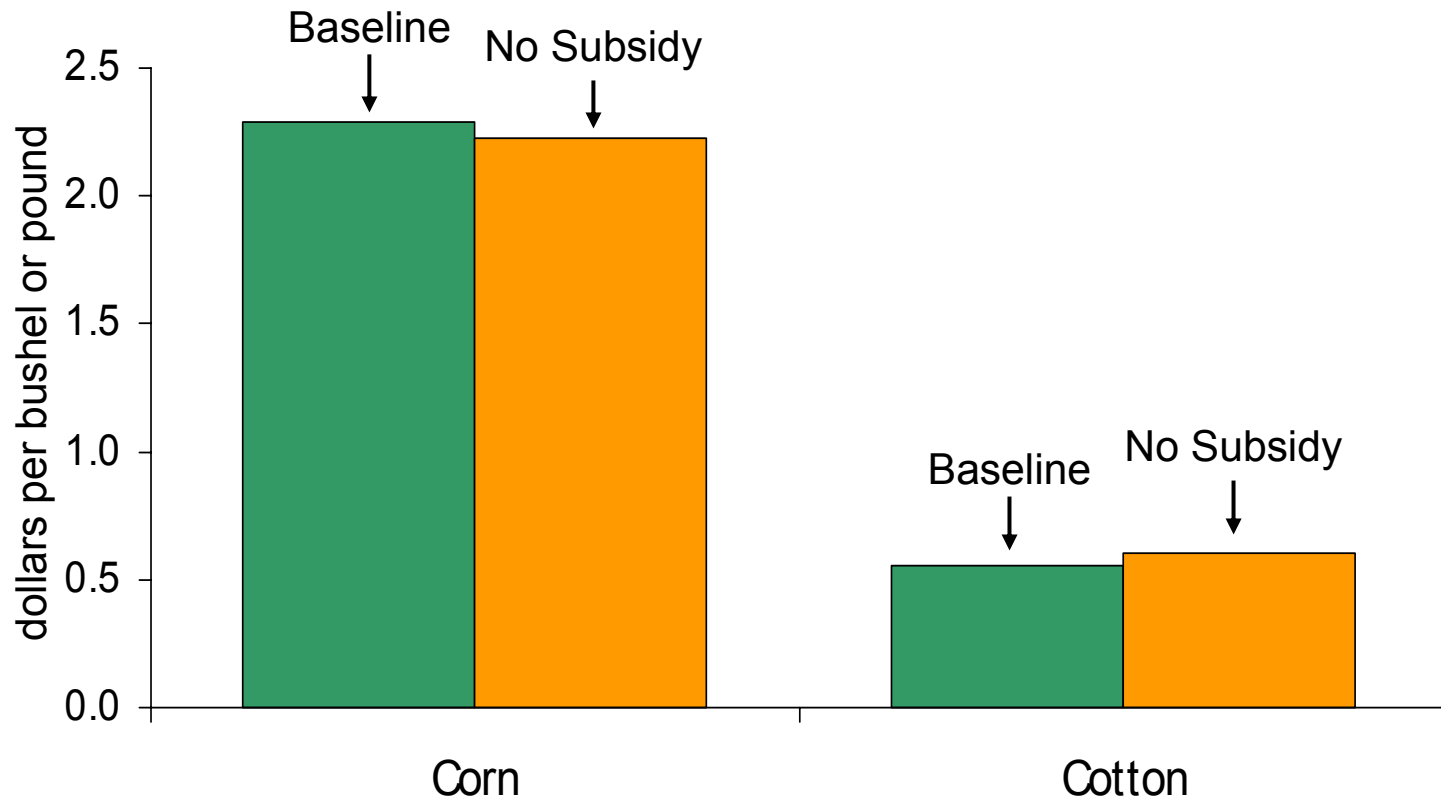
# Subsidy Elimination: Corn, Soybeans & Wheat Acreages



# Subsidy Elimination: Cotton & Rice Acreage

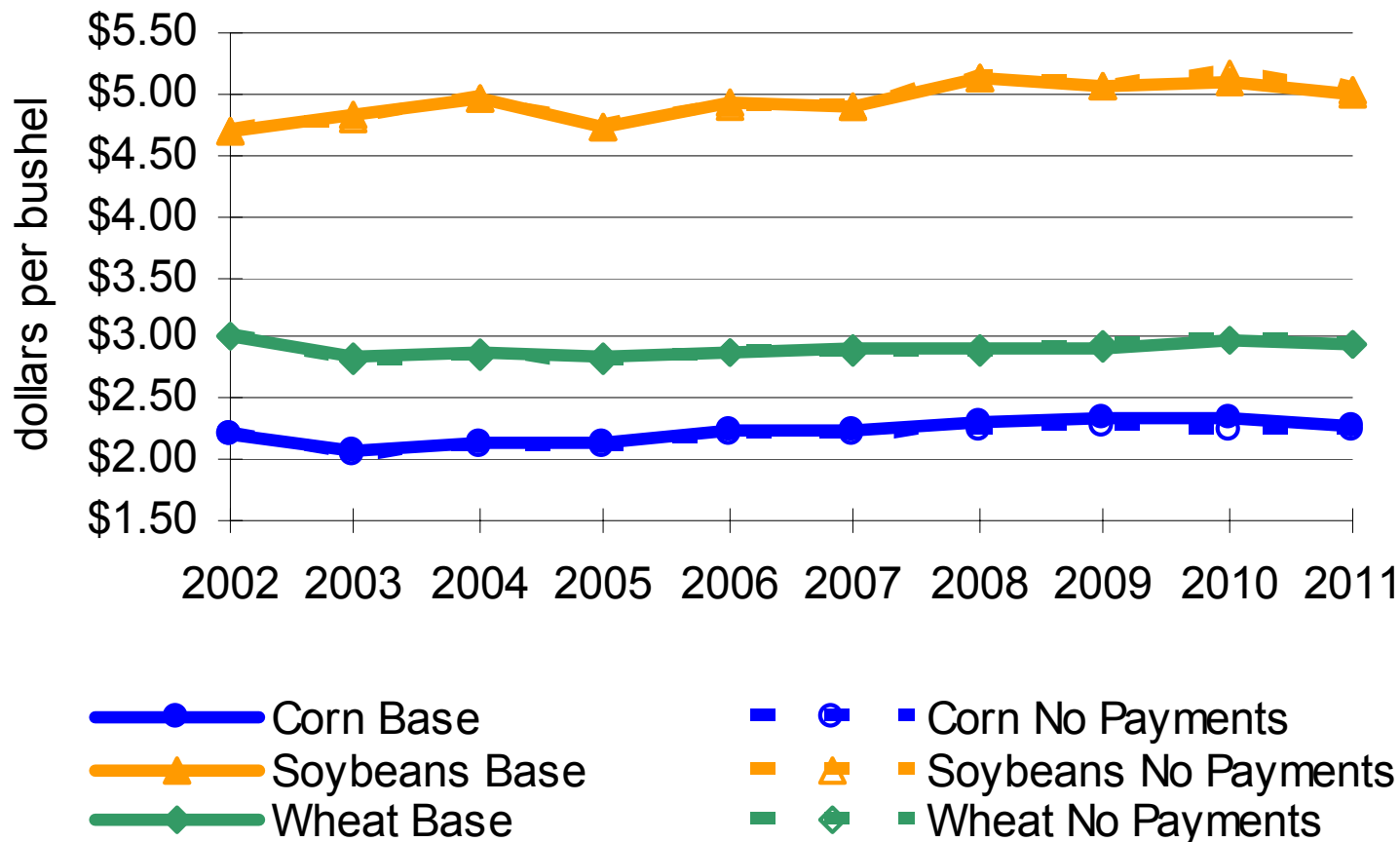


# No US Subsidies: US Price Impacts, 2011

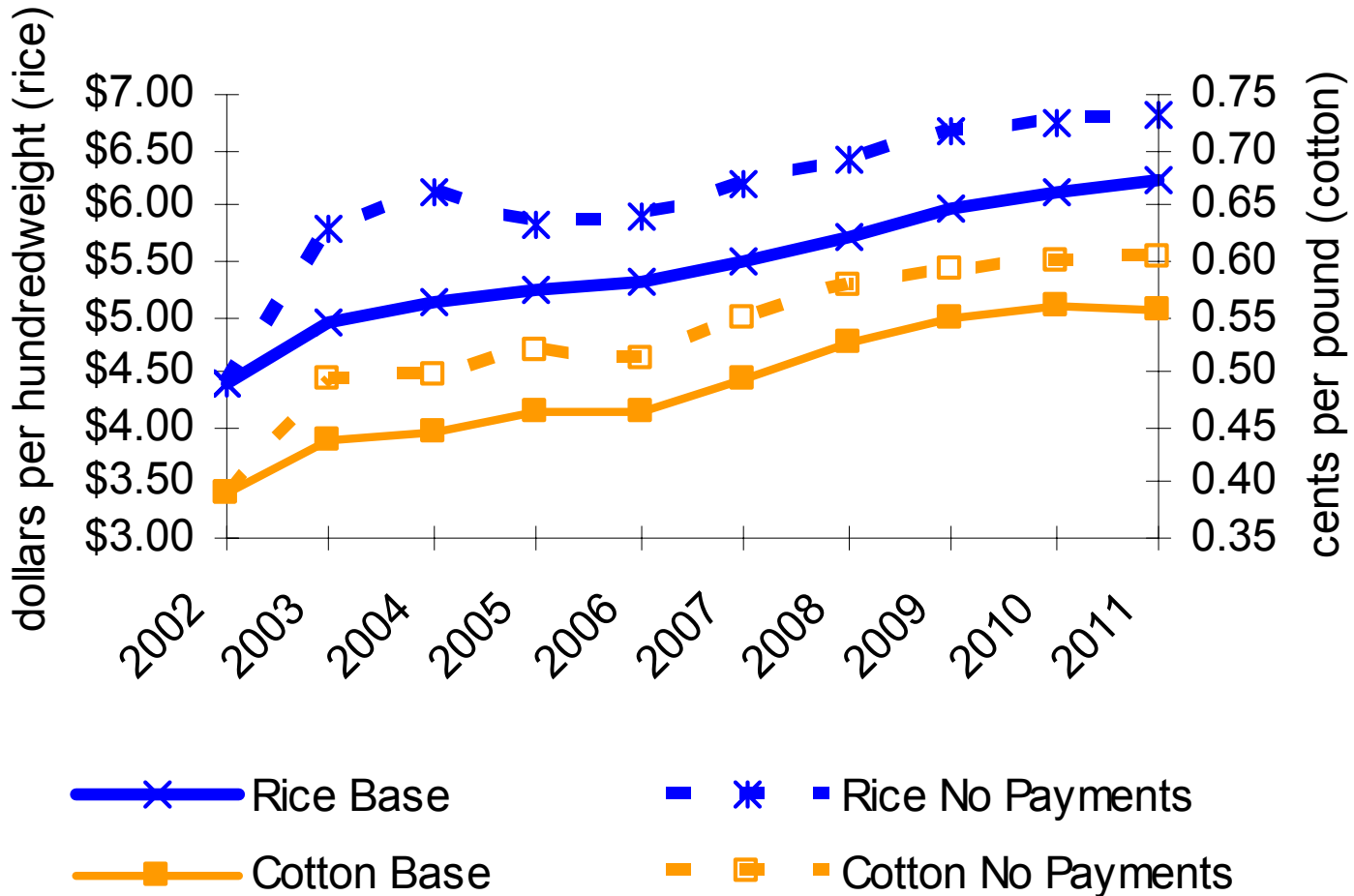


- Corn prices decline slightly, while cotton prices edge upward

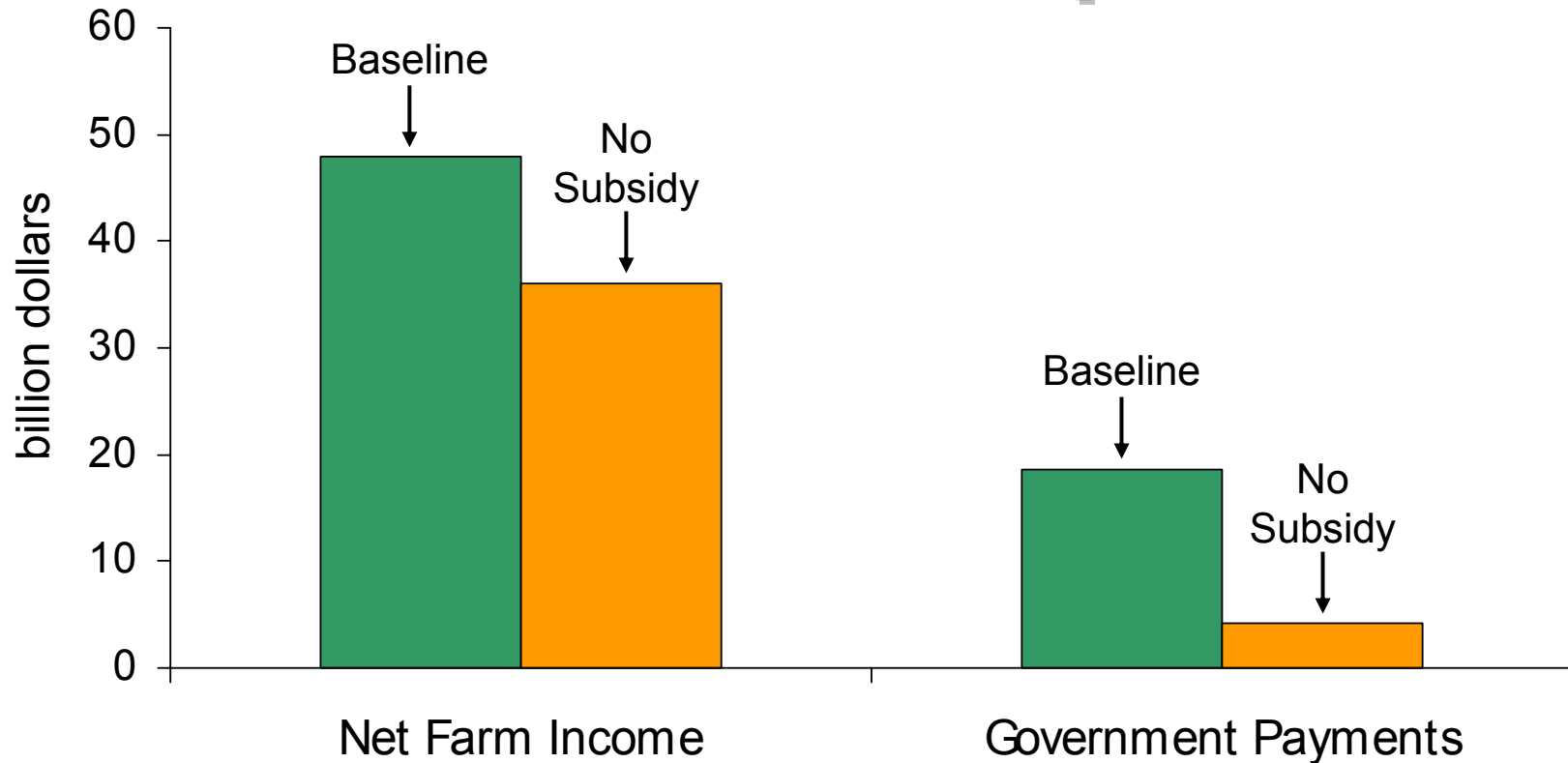
# Subsidy Elimination: Corn, Soybeans & Wheat Price



# Subsidy Elimination: Cotton & Rice Price

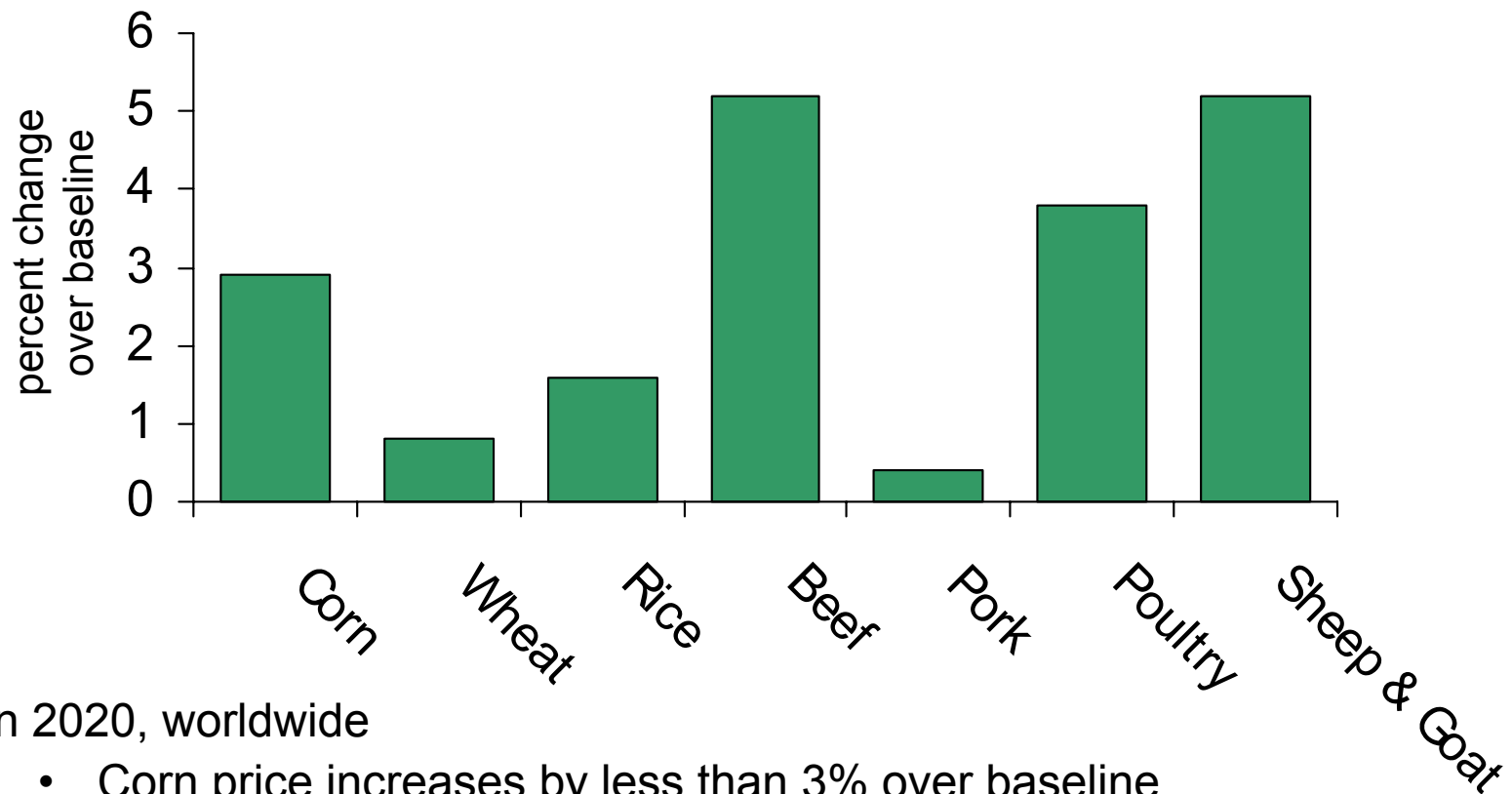


# No US Subsidies: US Farm Income Impacts, 2011



- Net farm income drops by \$12 billion or 25% in 2011
- Government payments drop by \$14 billion or 77% in 2011

# No Subsidies in Developed Countries: Worldwide Price Impacts, 2020



In 2020, worldwide

- Corn price increases by less than 3% over baseline
- Wheat price increases by less than 1% over baseline
- Rice price increases by less than 2% over baseline

# Q4: Considerations for Evaluating Policy Alternatives

- Must consider aggregate policy impacts
- Must consider the nature of food and agricultural markets, unique characteristics of agriculture
- May need to balance supply and demand globally in the future
  - Expanding productive capacity worldwide
  - Technological advances now increase yields worldwide
  - May be politically impossible for a nation to accomplish unilaterally

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