Price controls in food markets

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Outline

- Definition and types of price controls
- Motivation for price controls
- Effect of ceiling prices on food
- Effect of floor prices on food crops
- Cost of production as basis for floor price
- Other issues related to price controls
- Summary
Definition and types of price controls

- Definition: “Law passed by the government which dictates a price for a good or service”

- Types of price controls
  - Ceiling prices (upper limit)
  - Floor prices (lower limit)
  - Price band (upper and lower limit)
  - Fixed price

- Methods of enforcement
  - Legal enforcement (e.g. fines)
  - Government purchases and sales (buffer stock)

Motivation for food price controls

- Ceiling prices (upper limit)
  - Protect consumers from rising food prices
  - Break “psychology” of inflation

- Floor prices (lower limit)
  - Protect farmers from low prices after bumper harvest
  - Ensure farmers a “fair” price that covers costs

- Price band (upper and lower limit)
  - Reduce volatility of food prices
Market price

- Market price is where supply equals demand
- Market price depends on:
  - Crop yield
  - Cost of production
  - Cost of marketing
  - Price of competing goods
  - Trade policy and exchange rate (if commodity is tradable)
  - Expected changes in prices in the near future

Ceiling price

- Suppose government decides this price is “too high”
- Fixes ceiling price below the market price
- Now food demand is greater than food supply
- If ceiling price can be enforced, there will be rationing of food
Ceiling price

- More likely that the price cannot be enforced, in which case a black market will develop
- Black market price may be higher than market price
- Symptoms of ceiling price
  - Commodity disappears from shops
  - Vendors sell only to selected customers
  - Black market appears with price above ceiling and possibly above market price
  - Resales by consumers able to buy at official price

Floor price

- Suppose government decides this price is “too low”
- Fixes floor price above the market price
- Now food supply is greater than food demand
- If price can be enforced, there will be a surplus i.e. unsold quantities of food
Floor price

- If government buys the surplus, floor price can be maintained
- If government does not buy the surplus, farmers will try to sell at price that may be below the market price
- Symptoms of a floor price
  - Traders reluctant to purchase, particularly in remote areas
  - Excess supply
  - Government may be "forced" to purchase surplus
  - Farmers may sell at a loss on parallel market

Cost of production as basis for price controls

- Many countries use farm surveys to estimate cost of producing main crops, which are used to set support prices for crops

- Problems with cost of production estimates
  - Cost of production estimates often based on recommended input levels rather than actual input levels
  - Two largest elements of cost of crop production (land and labor) are difficult to value.
  - Land values often affected by agricultural prices
  - Cost of production different for each farm.
Cost of production as basis for price controls

- There is no single “cost of production”
- Cost of production varies across farms depending on location, yield, labor costs, land costs, etc.
- Supply curve reflects fact that, as price rises, it becomes profitable for more farms to grow the crop
- “Average” cost of production too low for some, too high for others

Other issues related to price controls

Changes over seasons.
- If price remains fixed over seasons, effect will vary over year
- Ceiling price on food become more binding in off-season.
- May eliminate incentives for farmers and traders to store during harvest and release in off-season
- Example of maize prices in Lunzu, Malawi: If price ceiling set at US$ 170/ton, no incentive to store from May harvest to December
Other issues related to price controls

Changes over year
- If price remains fixed over several years, inflation will erode real price
- Ceiling price will decline in real terms, becoming even more binding over time
- Floor price will be eroded until no longer binding.
- Example of wheat in Addis Ababa: floor price of US$ 250/ton no longer binding after 2005

Variation by location
- If price fixed throughout country, effect will vary by location
- Ceiling price will be more binding in cities and rural deficit zones. May eliminate incentives to take food to cities and remote deficit zones.
- Example of maize in Tanzania: If ceiling price of US$ 120/ton, no incentive to ship maize to Singida or Arusha
Summary

- Advantages
  - Quick response to extreme prices
  - Satisfies political pressure to “do something”
  - Alleviates burden of extreme price for some households
  - No cost to government unless it “defends” price with purchase/sales

- Disadvantages if no government purchase/sale
  - Creates shortage or surplus of commodity
  - Often leads to black market activity
  - Benefits well-connected or lucky rather than poor
  - Disrupts signals to motivate storage, shipments, and production

- Disadvantage if government purchase/sale
  - No shortage or black market but...
  - Often involves large costs to government
  - Disrupts signals to motivate storage, shipments, and production