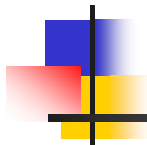


# Effects of NCPB Operations and Import Tariffs on Wholesale Maize Market Prices



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## Background

- COMESA / regional trade rules will require changes in Kenya's maize trade policy
- Up to 150,000 mt maize flow into Kenya from Uganda and Tanzania
- Continued pressure to alter the role of NCPB



- NCPB share of domestically marketed maize:
  - 40% (1990-2003)
  - 26% (1995-2003)
- NCPB purchase prices generally above market prices

How do we estimate effects of NCPB operations on maize market prices?



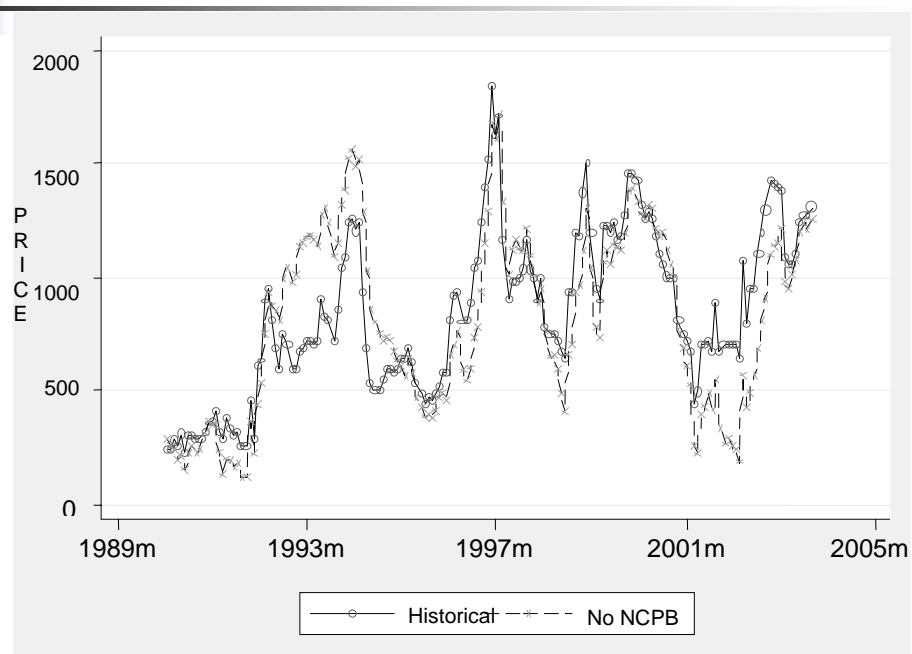
$$By_t = \sum_{i=1}^k B_i y_{t-i} + \sum_{i=0}^k C_i p_{t-i} + A^y u_t^y$$

$$Dp_t = \sum_{i=0}^k G_i y_{t-i} + \sum_{i=1}^k D_i p_{t-i} + A^p u_t^p$$

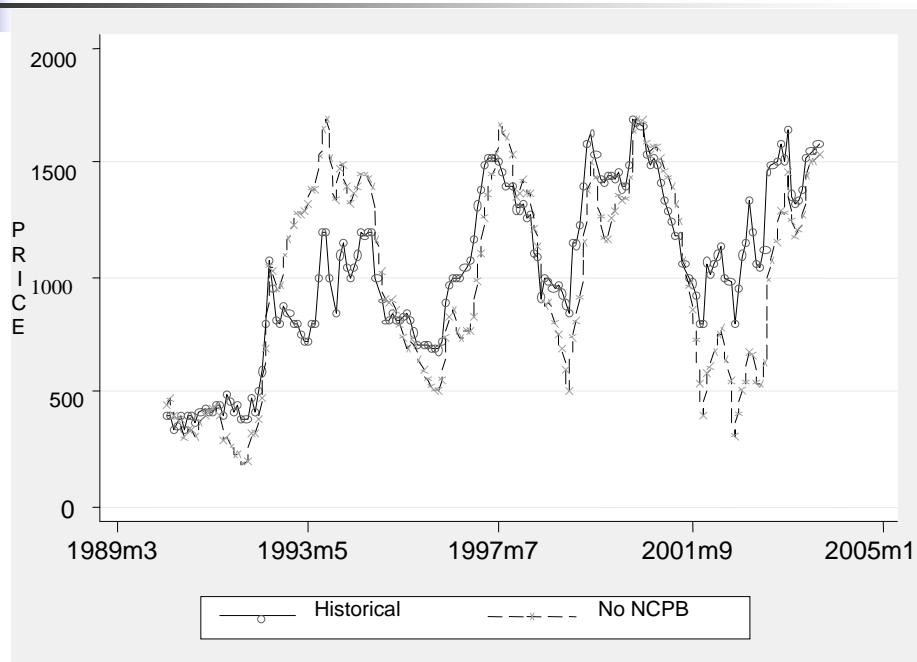


- Statistically examine how monthly maize market prices have been affected by:
  - NCPB purchases
  - NCPB sales
  - NCPB purchase price
  - NCPB sales price

### Kitale: Historical vs. simulated wholesale maize prices (no NCPB)



## Nairobi: Historical vs. simulated wholesale maize prices (no NCPB)



## Summary of NCPB effects: 1995-2004

- On price levels:
  - +15.7% (Nairobi)
  - +16.4% (Kitale)
- On price volatility:
  - NCPB operations stabilized prices



## Summary of Import Tariff Effects: 1995-2004

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- On price levels:
  - +2.0% (Nairobi)
  - +2.9% (Kitale)
  - In some years, raised local prices by up to 9%
- On price volatility:
  - Tariff had little impact on price stability



## Why Has Import Tariff Generally Had Only Minor Impact on Prices?

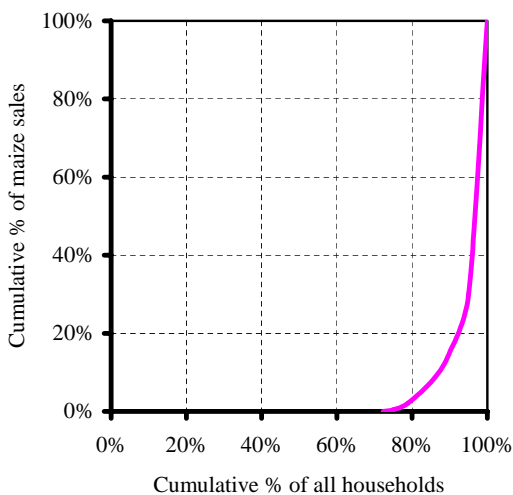
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- Porous borders → smuggling
- Informal arrangements between traders and border police

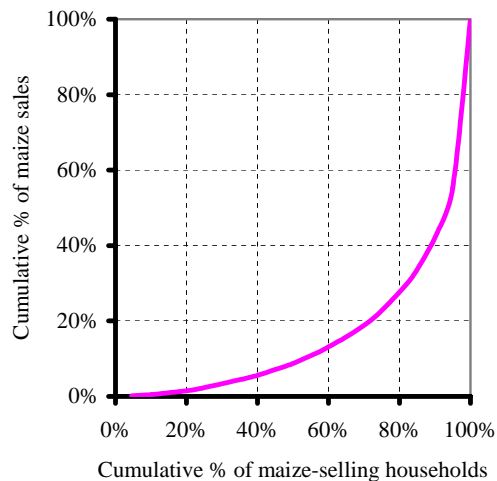
# Who benefits and who loses from NCPB operations?

- Depends firstly on:
  - Who sells maize (and how much)
  - Who buys maize
- Depends secondly on how changes in maize production affect employment and wages

## Concentration of maize sales; smallholder sector, Kenya, 2000



a) Among all smallholdings



b) Among maize sellers



## Most rural farm households are buyers of maize

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Kenya (2000, 2004)

- Eastern Province: 79%
- Coast: 93%
- Nyanza Province: 68%
- Central Province: 71%
- Western Highlands: 57%
- North Rift: 22%



## Effects on Income Distribution

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- Beneficiaries:
  - Large-scale farmers in N. Rift
  - Small farmers in areas such as Trans Zoia, Uasin Gishu, Lugari
- Losers:
  - Urban consumers
  - Maize purchasing rural households
- NCPB's promotion of maize price stability has had important indirect benefits to the economy



## Conclusions:

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- NCPB operations have
  - generally raised maize market prices by 15-18%
  - Stabilized prices
- Import tariff has not had major effect
- NCPB operations shift income from maize consumers (small farmers, urban consumers) to large maize sellers





# Farm Size Distribution – Smallholder Sector only

