Using the Market During Food Crises: What has been Learned in Southern Africa over the Past Decade?

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Focus of the Paper

- What has been learned by government in the region about using markets to facilitate emergency response?

  - Focus primarily on three perceived crises since 2000
  - And primarily on Zambia, Malawi, and Mozambique
  - (presentation will focus on Zambia and Malawi)
Roadmap

- Background
- Production and price patterns in southern Africa since 1990
- Variety of perceived crises
- Zambia and Malawi in 2001/02 and 2002/03
- Implications and final thoughts

Background

- Efficient and integrated markets save lives during crises, in two ways:
  - Directly by increasing availability and reducing prices in deficit areas
  - Indirectly by reducing the scope and cost of the required emergency response
- Increasing concern
  - Triple threat, new variant famine
  - Three perceived crises already this decade
Background (2)

- Changed policy environment since early 1990s
  - Fewer government subsidies to maize sectors
    - More diversified production (cassava, groundnuts, s. pot.)
  - Less government control of domestic trade
    - Small-scale maize milling and informal marketing systems
  - Much more informal border trade
- More diversified consumption
- Should reduce reliance on external assistance
- But mounting market skepticism

Production and price patterns

- Common perceptions about production in southern Africa
  - Highly variable; more so recently?
  - Declining in per capita terms
  - Highly covariant across countries; more so recently?
Maize prod’n in RSA, Moz, Zambia, Malawi, Zimbabwe

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Coefficient of variation

- 1990-99: 0.29
- 1996-2005: 0.11

Driven by RSA, but fell in every country except Zimbabwe
## Correlation Coefficients on White Maize Production

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Data sources: FAOSTAT
**Production and price patterns (3)**

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**Production and price patterns (4)**

*Per capita maize prod’n & area harvested: RSA, Moz, Zambia, Malawi, Zim*
Steady per capita production, declining per capita area harvested

Per capita production unambiguously fell only in Zambia (other than Zimbabwe)

This more than made-up for by rise in cassava production

Note: Prices in RSA are SAFEX cash prices for white maize grain; all others are white maize grain prices at retail. Mozambique is a mean of Maputo, Xai-Xai, and Maxixe in the south; Zambia is a mean if Lusaka, Choma in the south, and Chipata in the east; Malawi is a mean of Lilongwe, Karong, and Nkata. The trend is from a linear regression of the pooled data. Source: Zambia: Central Statistical Office; Mozambique: SIMA; Malawi: FEWSNET
Production and price patterns (5)

- No significant trend (in nominal US$)
- Coefficient of variation
  - 1990-1999: 0.37
  - 1996-2005: 0.38

Variety of Perceived Crises

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<th>Marketing year</th>
<th>Prod’n Outcome</th>
<th>Beg. Stocks</th>
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<td>1992/93</td>
<td>-65%</td>
<td>Very low</td>
<td>Massive deficit, &gt;10 mmt</td>
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<td>1995/96</td>
<td>-37%</td>
<td>Very high, &gt;4 mmt</td>
<td>Deficit 2 mmt</td>
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<td>2001/02</td>
<td>-9%</td>
<td>About average, &gt;2 mmt</td>
<td>Small deficit, ~1 mmt</td>
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<td>2002/03</td>
<td>-1%</td>
<td>Historically low, &lt;500,00 mt</td>
<td>Deficit up to 3 mmt</td>
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<tr>
<td>2005/06</td>
<td>+15%</td>
<td>Above average, ~3 mmt</td>
<td>Surplus up to 2 mmt</td>
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Note: Production outcomes are relative to the 1990-2005 mean.
Source: FAOSTAT for production data; FEWSNET for stocks; INTERFAIS for food aid
Zambia, 2001-02: Chronology

- May: “Significant drop” in maize harvest
- July: commercial import need = 200,000 mt
- August: Government announces will import 200,000 mt and sell at $75 subsidy to millers
- October: government imports still delayed
  - Private sector has not imported
- Maize grain prices surge over $300/mt, meal > $350/mt

Zambia, 2001-02: Assessment

- Three effects
  - Stymied private imports
  - Temporary maize shortages and high prices
  - Government subsidy to millers not fully passed-on to consumers
Zambia, 2002-03

- Clear warnings on dimension of problem in June
  - “Government has sufficient information … firm import commitments need to be made very quickly”

- Government works with “private sector” to import 300,000 mt
  - Only millers, no import permits granted to traders
  - Most concentrated sector in the system!
  - Higher cost product

Zambia, 2002-03

- Government accuses “private sector” of not importing enough
  - Millers disagree, of course

- Prices surge well above IPP again
  - Clearly, more should have been imported

- Opening imports to traders would have protected consumer’s interests
  - Lower prices
  - More grain available milling in hammer mills
Malawi

- Heavy government involvement in maize market
  - Control of external trade
  - NFRA maintains food reserve
    - Rules of engagement very unclear
  - ADMARC buys from NFRA, sells at retail, often below market rates
- Very risky for formal private traders to import
- Informal trade can adapt, but geographical scope is limited
Malawi, 2001/02

- “Cognitive dissonance”
  - Maize production lower than last year but ~ average
  - High reported tuber production
  - Higher maize production reported in Mozambique
  - Prices in Malawi and N. Mozambique in normal ranges in June
  - Then …
  - Prices in July surge in Malawi and N. Mozambique
    - Continue to record highs after that
Malawi, 2001/02

- Government announces import plans of 150,000 in late August
- Raises to 220,000 by October
- January, 2002: only 40,000 had arrived

- Closed borders and controlled internal trade based on conviction that traders would exploit farmers and consumers

Malawi, 2002/03

- Abundant EW → avoid last year’s mistake!
- 250,000 mt government imports, 150,000 mt food aid → covers estimated deficit
- But 150,000-250,000 mt of maize enters informally from N. Mozambique and Tanzania before food aid and government imports arrive → big surplus
- March 2003: government begins selling surplus on domestic market
Malawi, 2002/03

- Prices in south fall throughout the marketing season
  - Longest continuous price fall in 10 years
- No storage incentives
- Big production disincentive for N. Mozambique

Conclusions, Implications

- Great inertia in policy response
- Influence of multi-party democracy
- Main elements of better policy seem clear
  - Government focuses on emergency response,
  - Shares all information
  - Opens borders to imports
- But how does policy change?
  - Theories of policy change
Conclusions, Implications (2)

- Need more detailed understanding of competitiveness of import/export market
  - Bangladesh/Madagascar example
- Limits of informal trade