Do’s and Don’ts of Managing the New Food Price Environment in Countries with Food Insecure Populations

David Tschirley, Nango Dembélé
MSU Food Security Group

Outline

• Background on events since 2007
• Key observations on recent worldwide and domestic commodity price behavior
  • Short-term price transmission
  • Internal vs. external drivers of volatility
  • The issue is not just volatility, but the likelihood of higher price levels in the long-term
    • Concept of regime shifts
• Implications
• What to do and not do
Background – world prices

World Bank World Price Indices for Grains and Energy (Pink Sheet)
2000-2011
Background - causes

- Very broad phenomenon
  - Food, energy, metals/minerals
- Causes: still much debate
  - Increased demand from
    - Economic growth in Asia … and SSA!
    - Biofuels, especially in US
  - Poor harvests in Australia, Russia
- Speculation
  - The financialization of agricultural commodity markets
Background - responses

• Reflexive closing of borders in many countries
• Broad assertion of need for greater role for the state in cereals markets
• Upsurge in civil unrest in developing countries
• Renewed focus on agriculture among development agencies following 2007/08 crisis
• … but limited follow-through due to worldwide financial crisis
• Are we in a fundamentally new environment? What does that environment look like? What to do?
Key Observation # 1

Short-term price transmission to local markets (2-3 months) has been:

(a) low on average and
(b) highly variable across countries

Demonstrate with rice in Asia …
Rice price behavior

> 3x from late 2007 to early 2008, + regime shift

Source: FAO-GIEWS
Rice price behavior (2)

Source: FAO-GIEWS

Exporter that continued to export
Rice price behavior (2)

Source: FAO-GIEWS

Exporter that closed its borders
Rice price behavior (3)

Major importer that partially controlled imports and sales prices

Source: FAO-GIEWS
Importer (5% of consumption) that (presumably) subsidized sales prices
Domestic prices have remained (a) substantially higher but (b) not necessarily more volatile in all countries compared to pre-2007/08.

Source: FAO-GIEWS
Key observation # 2

Historically, drivers of domestic volatility have been more internal than external
Internal drivers

• High costs of storage and trade
  • A wider range within which prices can fluctuate, even if trade were fully liberalized

• Rainfed production
  • Greater year-to-year variability in production

• Unpredictable policy
  • Sidelines the private sector, leads to greater price spikes

• Poor management of public stocks

_Demonstrate with maize in southern Africa …_
Internal drivers (1)

• Nominal USD maize prices in **Zambia**
Internal drivers (2)

- Nominal USD maize prices in **Zambia**
Internal drivers (3)

- Nominal USD maize prices in **Zambia**
Internal drivers (4)

- Nominal USD maize prices in **Zambia**

![Graph showing nominal USD per metric ton for Lusaka retail and import parity from South Africa. The graph spans from 2000 to 2008 with notable peaks in 2002, 2004, and 2008.](image-url)
Internal drivers (5)

- Nominal USD maize prices in **Malawi**

![Graph showing nominal USD maize prices in Malawi](image-url)
Internal drivers (6)

- Nominal USD maize prices in Malawi

![Graph showing nominal USD maize prices in Malawi and import parity from South Africa.](image-url)
Internal drivers (7)

- Nominal USD maize prices in Malawi
Internal drivers (8)

- Nominal USD maize prices in **Malawi**

![Graph showing nominal USD maize prices in Malawi and import parity from South Africa. The graph indicates a significant increase in prices, particularly in 2008. The axis labels are: nominal USD per metric ton on the y-axis, years 2000 to 2008 on the x-axis, and Blantyre-Lunzu, southern Malawi. The graph highlights the import parity from South Africa with a red line representing the prices and a blue line indicating the nominal USD prices.](image-url)
Key observation #3

But the issue in developing countries is not just price volatility ... price levels have shifted (and are not necessarily more volatile)
Food price indices, world and regions

Source: Figure extracted from Ortiz and al., (2011) in Escalating Food Prices, UNICEF, Page 8. FAO (2010f) and authors’ calculations. Note: Sample includes 5 countries from South Asia, 5 from East Asia, 16 from LAC, 7 from CEE/CIS and 24 from SSA
Food price indices, world and regions

Domestic prices are clearly higher. Are they more volatile?

Source: Figure extracted from Ortiz and al., (2011) in Escalating Food Prices, UNICEF, Page 8. FAO (2010f) and authors’ calculations. Note: Sample includes 5 countries from South Asia, 5 from East Asia, 16 from LAC, 7 from CEE/CIS and 24 from SSA
Higher price levels – the long view

World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011
Higher price levels – the long view

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1960-2011

200% rise
220% rise
Higher price levels – the long view

World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011

Regime shifts

200% rise

220% rise
Higher price levels – the long view

World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011

Index (2000=100)

Grains
Fertilizers

200% rise
80% rise
110% rise
220% rise
Higher price levels – the long view

World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011

20% rise in CV, but lower than 1971-78
Higher price levels – the long view

World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011

50% rise in CV, but lower than 1971-78

World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011

Index (2000=100)

Grains
Fertilizers
Higher price levels – the long view

• Regime shifts driven by rising energy prices
• Fertilizer prices (and energy prices even more so) rising more rapidly than grain prices
  • Rising average worldwide productivity
• Not clear that coefficients of variation are higher now
• Yet prices continue to fall relative to average purchasing power (per capita GDP)
Higher price levels?

World Bank World Price Indices for Grains: Nominal and deflated with SSA and World per capita GDP (1960-2011)
Higher price levels? (2)

World Bank World Price Indices for Grains: Nominal and deflated with SSA and World per capita GDP (1960-2011)
Higher price levels? (3)

World Bank World Price Indices for Grains: Nominal and deflated with SSA and World per capita GDP (1960-2011)
Higher price levels? (4)

World Bank World Price Indices for Grains: Nominal and deflated with SSA and World per capita GDP (1960-2011)

- 2008 and 2011 peaks lower than previous peaks...
- SSA GDP deflated

Index (2000=100)
Higher price levels? (5)

World Bank World Price Indices for Grains: Nominal and deflated with SSA and World per capita GDP (1960-2011)

2008 and 2011 peaks lower than previous peaks...

So issue has to do with (a) distribution of gains from growth and (b) rising expectations

SSA GDP deflated

GDP-deflated grain price index (SSA)
Key observation # 4

*Price policy is a political issue*
“Citizens would willingly go to the market to buy food price stability, but such a market does not exist. Food price stability is a public good, not a market good. Understandably then, citizens turn to the political market instead.”

• Peter Timmer

• Competing culture, values, world views, pecuniary interests … all drive the debate

• A multi-dimensional approach is needed
Summary of key observations

• #1: Short-term price transmission from world to developing country markets has been low and variable

• #2: Drivers of volatility in developing country markets have been more internal than external

• #3: But price levels – and the distribution of gains from growth -- not volatility *per se*, may be the real issue

• #4: The food price problem is a political problem
Some implications

• Volatility *per se* primarily hurts commercially oriented (market oriented) smallholder farmers
  • Most direct harm concentrated among 5%-10% of (better-off) smallholder farmers
  • But it also makes it harder for other smallholders to become more commercially oriented
    • A broader, longer-term problem

• High price levels help commercially oriented farmers, but hurt consumers
  • Urban consumers: Especially the poor, whose incomes have not risen as rapidly as those at the top
  • Rural net buyers: Though the level of purchases by these hhss is generally very low, reducing the impact on them
Some implications (2)

• The distribution of gains from growth is a major issue
  • Prices continue to fall relative to average purchasing power
    • Even in Africa!
      • Per capita GDP growth in Africa has exceeded worldwide averages since 2000
  • But many of the poor have been left behind
  • … and rising expectations among urban poor fuel discontent
What to do?

Fundamental need to reconcile urgent short-term needs with long-term imperatives …

Reconciling politics with economics
What to do? Long-term

• Exploit the opportunity to drive farm level productivity growth
  • The marginal value product of all inputs has risen dramatically!
  • Learn lessons about how sustainably to increase access to inputs
    • While building private input markets
• Invest in varietal research
• Invest in water control
What to do? Long-term(2)

• Drive broad-based economic growth
  • Education
  • Health care
  • Water & sanitation
  • Communications infrastructure
  • Road infrastructure
What to do? Long-term (3)

- Drive costs down in the marketing system
  - Reduce uncertainty with more rules-based government policies
- Promote regional trade
- (Invest in road infrastructure)
- Improve marketing information
- Promote competitive private trading systems
  - Financial systems
  - Clear rules of the game
What to do? Long-term (4)

- **Pursue regional dialogue** to try to keep borders open
- **Engage civil society** in all these discussions
  - Evidence-based policy dialogue
  - Messy, but no other option
- **Build capacity** to generate solid empirical information and inject it into broad societal dialogue
What to do? Short-term

• Safety nets

  • “It may be that finding a way to … deliver effective and efficient safety nets will be the key to allowing markets to deliver their long-run promise. If so, designing and implementing them becomes the essence of effective policymaking” (Timmer, 2010)

  • Related to political nature of food price policy, which has real economic consequences
  • Also related to inequitable distribution of growth
What to do? Short-term (2)

- Distinguish between emergency reserves and buffer stocks
  - The former are smaller, meant to cover gap until imports can arrive
  - The latter are explicitly meant to stabilize prices and so need to be large
    - Very poor record in Africa: High cost, opaque management lead to market disruption
  - Regional buffer stocks would face even greater problems
What to do? Short-term (3)

- Combine relatively small emergency reserves with robust safety nets
  - Reserves = 2-3 mths consumption max
  - Layered safety nets
    - School feeding
    - Conditional cash transfers
    - Temporary food aid
- Remember that consumers can substitute in consumption
  - Cassava, sweet potato, sorghum, millet
  - Rice this time!
What *not* to do

• Trade bans
  • India helped its consumers
    • But farmers lost and world prices were more destabilized

• Large-scale government procurement
  • Zambia lost nearly $300m on its maize operations last year
    • Opportunity cost!
    • Who wins and loses?

• Generalized input subsidies
  • Poor targeting
  • Opportunity cost of the funds
  • Unsustainable
Thank you