
Maize Price Volatility in Zambia

Presented at a meeting on Zambia's Agricultural Finance Market,
organized by the Zambia National Farmers Union and the PROFIT
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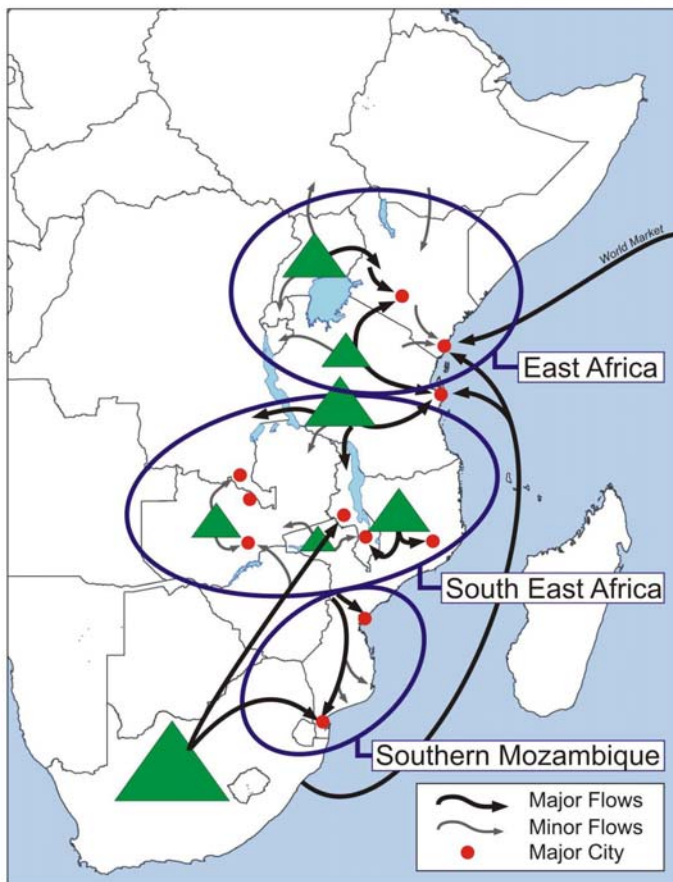
Jan Nijhoff

Antony Chapoto

ACF/FSRP

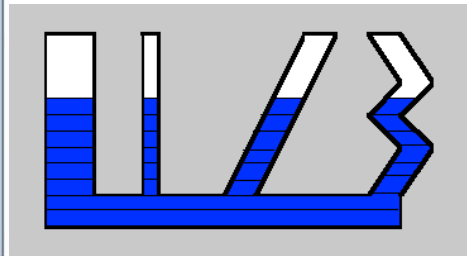
Production and Price Instability

- Production fluctuations are substantial
 - Results in price fluctuations
 - Prices should fluctuate between import and export parity
 - Lower marketing costs (investments, competition) shrinks gap between import and export parity
 - Import parity lower: Increases food access
 - Export parity higher: Encourages production
 - Market access and functioning markets can also shrink the gap
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■ Regional Trade

- Major production zones linked to deficit zones - 'natural markets'
- Ideally, principle of communicating vessels:

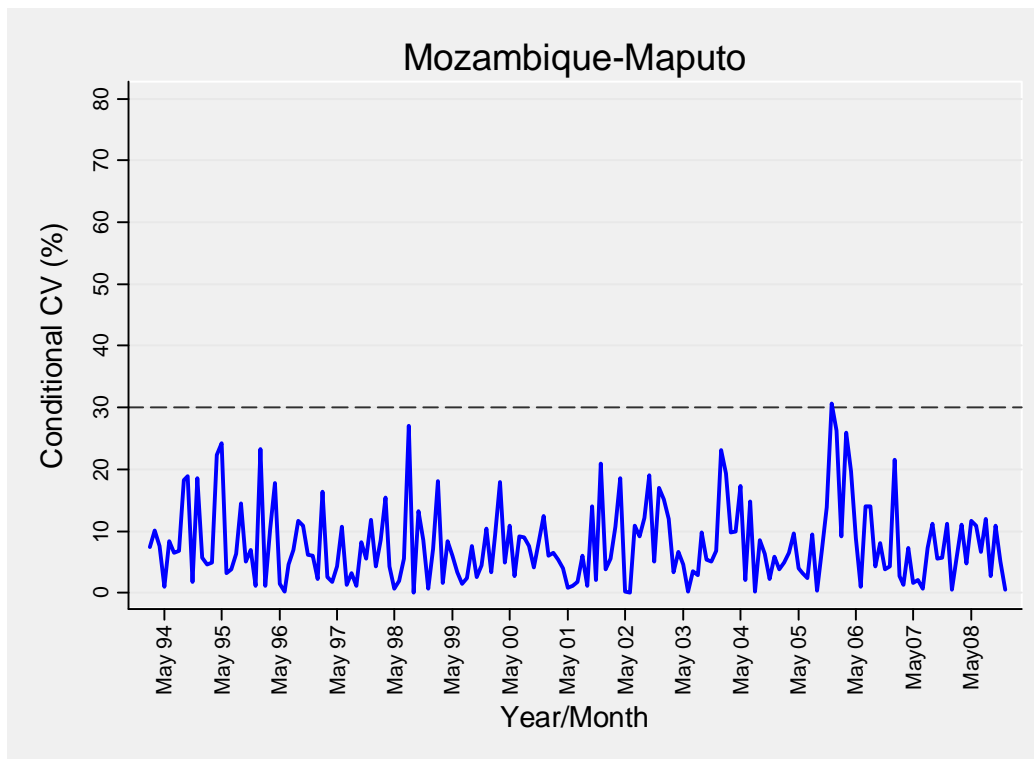


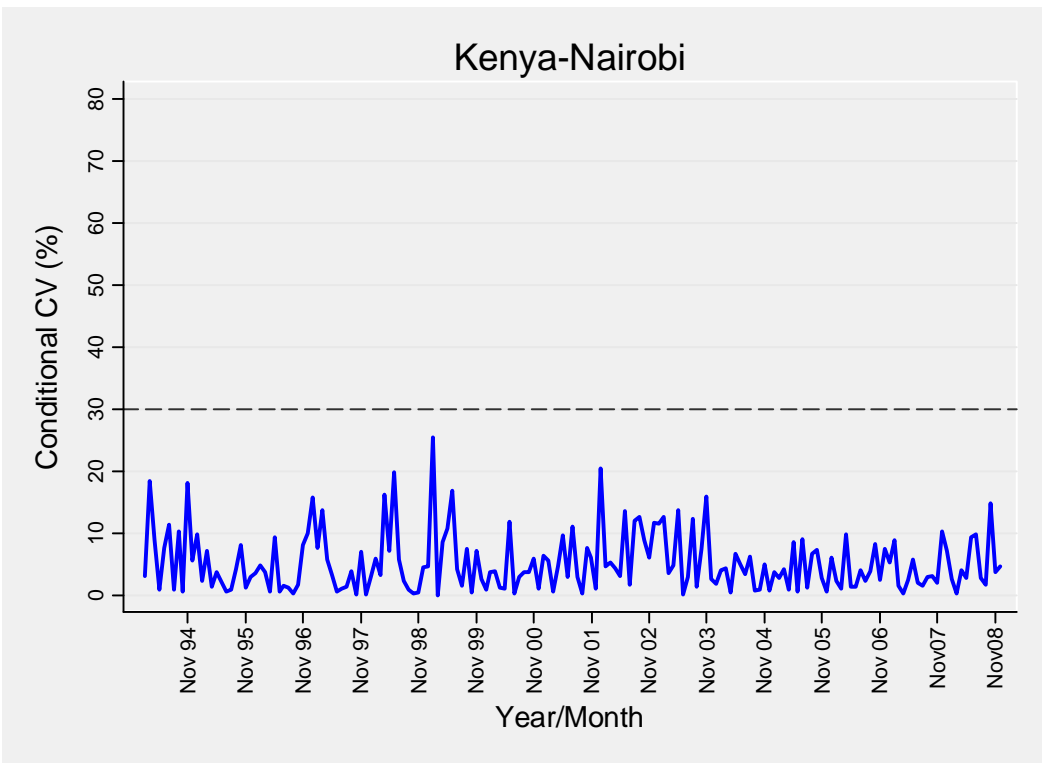
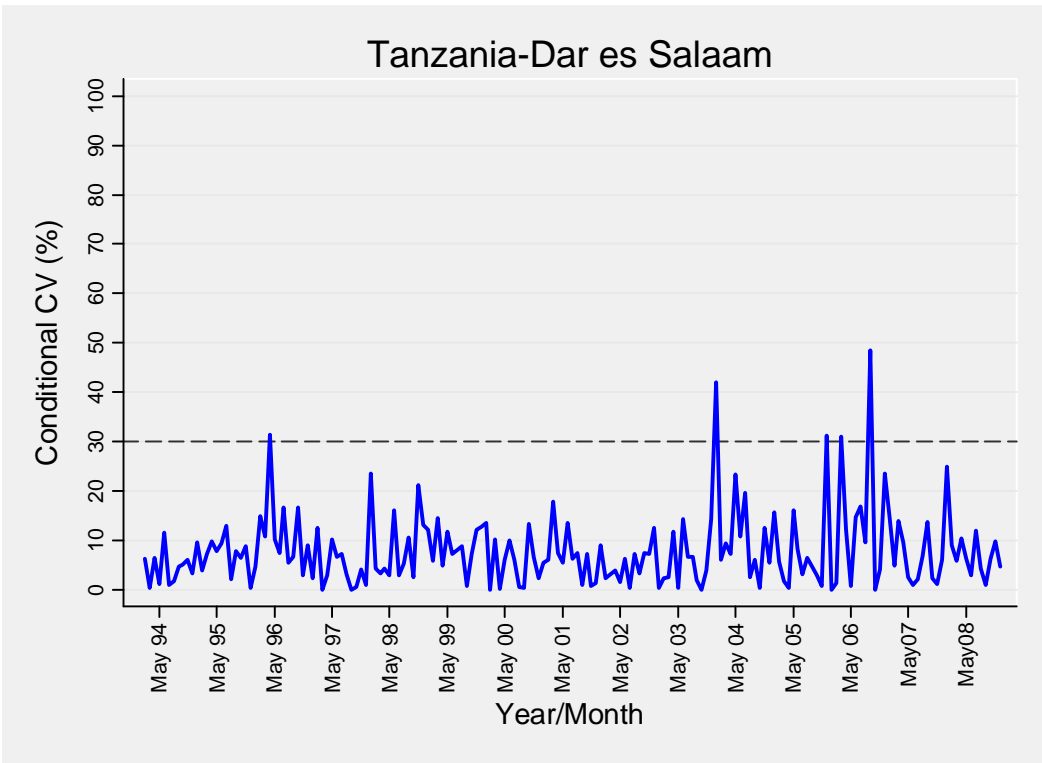
Regional Trade – Challenges

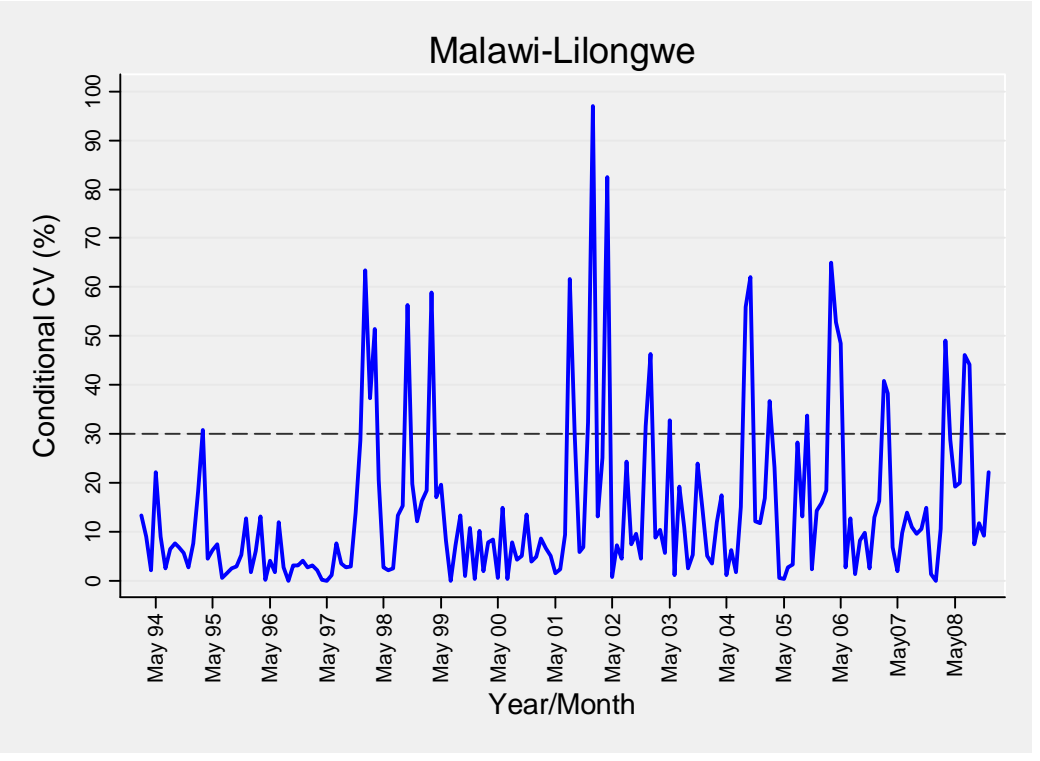
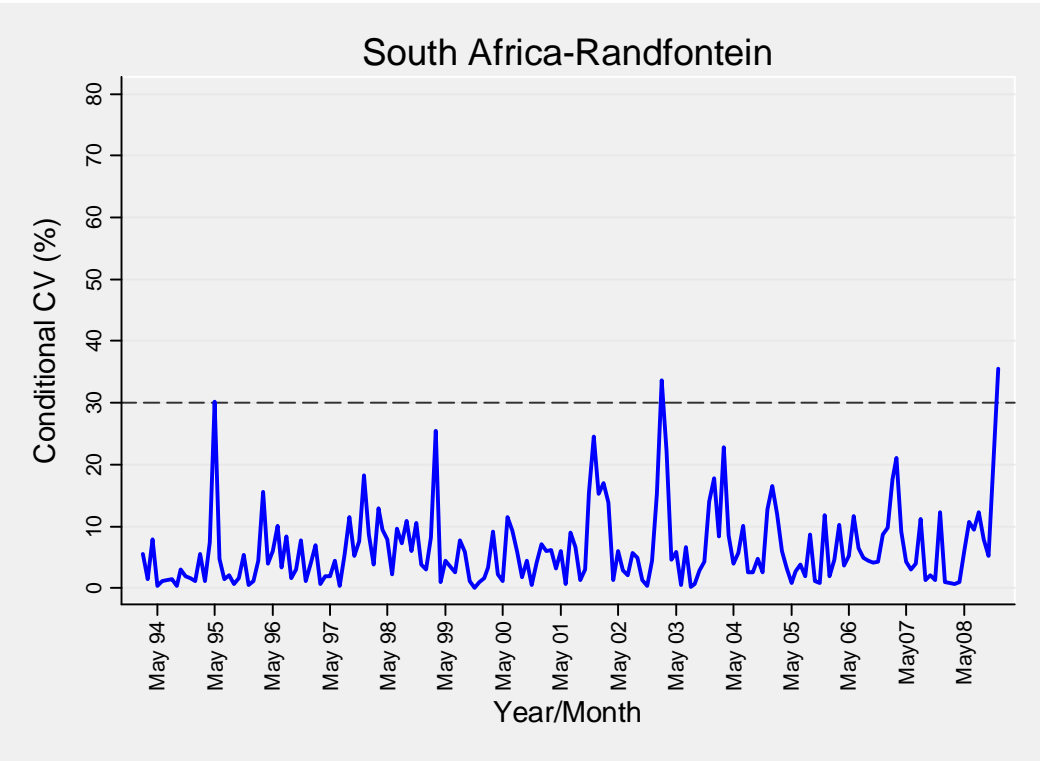
- Regional trade has potential to
 - Reduce price spikes, reduce consumer prices
 - Encourage maize production
- Despite Free Trade Area maize trade not free
- Various Tariff and Non-Tariff Barriers
- Main problem is their unpredictability, ad hoc nature
- Volatility=expected fluctuations+unpredictability

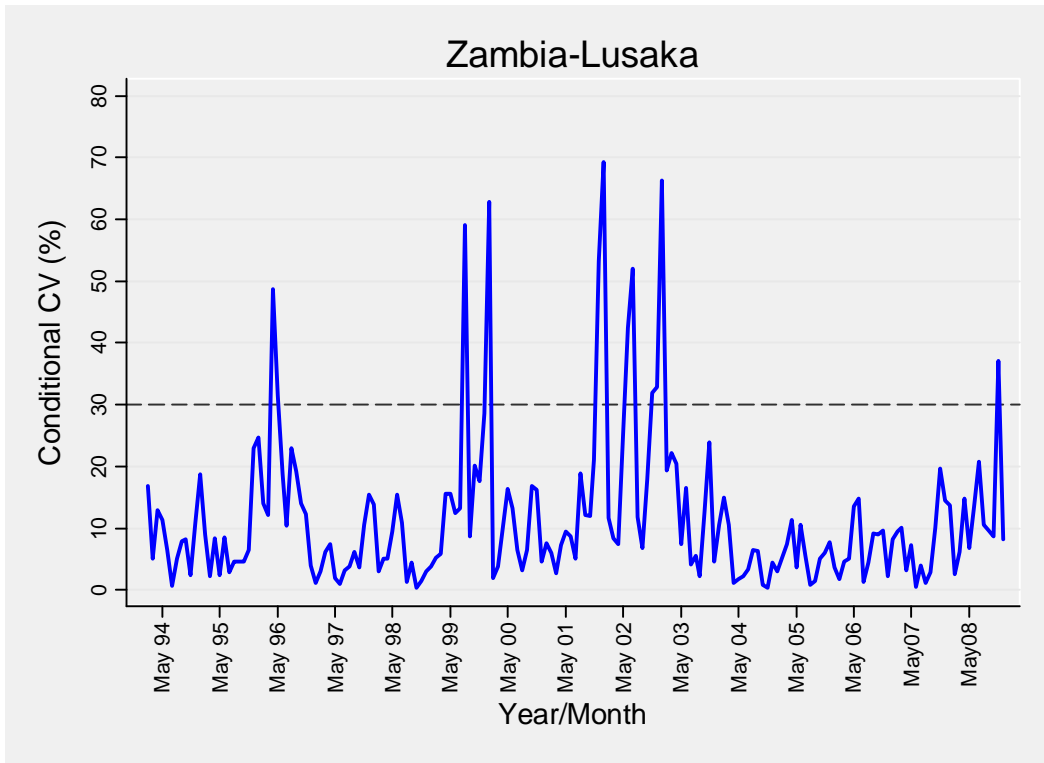
Maize Price Unpredictability

- **Conditional Coefficient of Variance:**
 - Measures level of price unpredictability, represents the unpredictable component of price variation
 - Considers difference between actual and predicted prices
 - Predicted prices take into account:
 - Seasonality
 - Production
 - World market prices

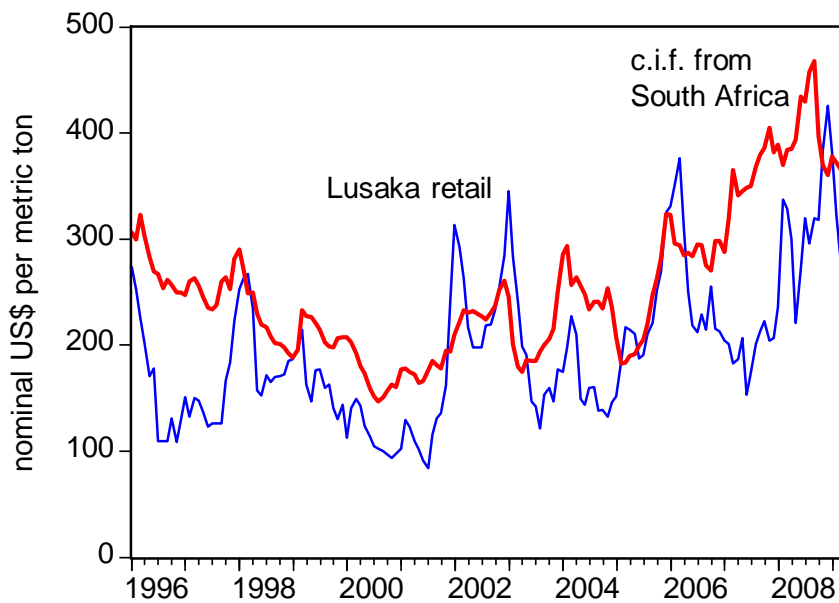








Lusaka Maize Retail Prices



What Causes Such Price Spikes?

- Absence of trading activity – ‘market paralysis’
 - Various reasons:
 - Import restrictions
 - Export restrictions in source countries
 - Subsidy programs on imports or domestic supplies discourage private imports
 - Import programs delayed
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Example:

The Zambian Maize Market in 2001/02

- July: Maize deficit of 200,000mt announced
 - Aug: Subsidized import program announced, 16 traders and millers selected as importers. Subsidy ~ \$70-100/mt
 - Sep-Nov: Imports delayed due to GRZ financial constraints. Market paralysis. Food shortages
 - Dec: Imports start arriving. Mealie meal prices remain high
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Example:

The Zambian Maize Market in 2005/06

- Jan: Import duty raised from 5% to 15%
- May: Maize deficit announced (85,000mt, private sector thinks 150,000mt)
- Aug: Import permits and duty waiver applied for
- Sep: Duty waived, private imports contracted
- Oct: FRA releases 50,000mt at \$60/mt below import cost – some import orders cancelled
- Nov: New phytosanitary rules cause delays
- Dec: Pressure to lower maize prices due to strong ZK
- Dec: Duty waiver to expire, extension applied for
- June import price: \$210 – Dec import price \$320/mt

Example:

Maize Export Restrictions

- Export permits act as NTB
 - Export bans have been unpredictable in the past - anecdotal evidence:
 - Large traders have lost their export market
 - Domestic market prices have collapsed by as much as \$60/mt
 - Private sector losses have been substantial
 - Some large firms withdrew from Zambia as they could not hedge their risk
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Conclusions

- Consequences:
 - Ineffective markets, leading to price volatility and food shortages, or surpluses
 - Lack of investment in agriculture, stifling growth
 - Need for predictability of government actions
 - Government actions to facilitate trade, not provide disincentives to trade
 - One last thought: Free trade requires a multi-country commitment...
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