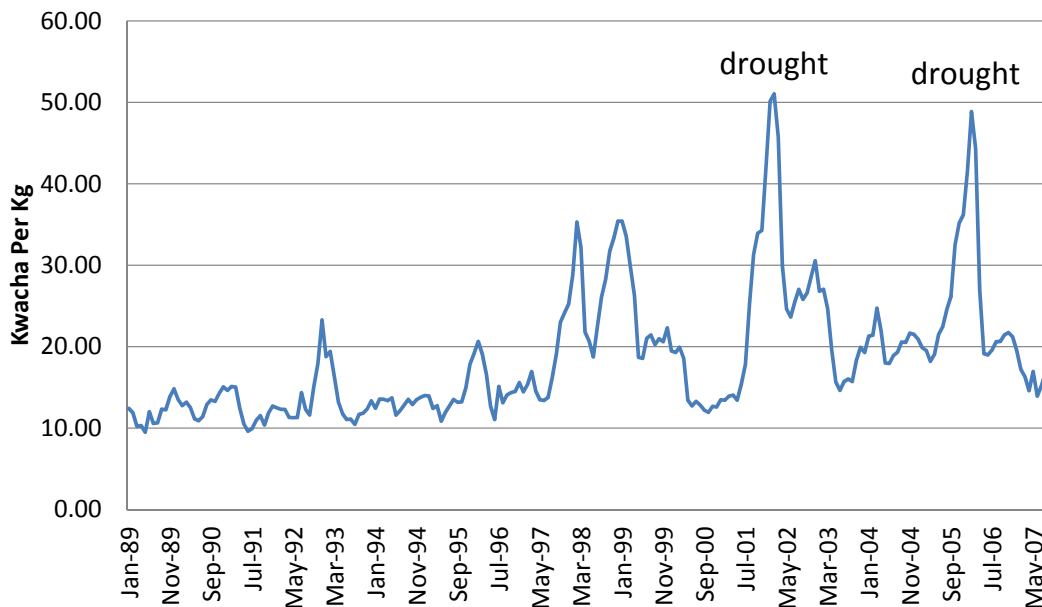


Commodity Price Hedging and Supply/Price Stabilization in Malawi

SAFEX Call Option

David Rohrbach, World Bank

Malawi: Real Maize Grain Price per Kg



Why did grain prices triple?

- Drought (+/- 500,000 t deficit)
- Limited Stocks
- Thin markets (ave trade of 250,000 t)

- Slow import response – why?
 - Uncertainty about magnitude of the problem
 - Delays in making an emergency appeal
 - Uncertainty about government intentions

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Improving the timeliness and transparency of government's response

Two Types of options contracts

- Financial – SAFEX based only
- Physical – SAFEX + transport

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Types of Call Options

	Exchange-traded option	Over-the counter (OTC) option	
Type	Financial	Financial	Physical
Price Basis	SAFEX futures price	SAFEX futures price	SAFEX futures price + delivery cost to Lilongwe
Delivery Point	SAFEX silo (in South Africa)	SAFEX silo (in South Africa)	Lilongwe
Counterparty / Guarantee	SAFEX broker or bank	SAFEX broker or bank	SAFEX broker, bank or grain trader
Performance guarantee	guaranteed by clearing house	not guaranteed by clearing house	not guaranteed by clearing house
Requirements	Registration as a client of the exchange	Contractual agreement with broker	Contractual agreement with broker/trader
Advantages/ Disadvantages	-price ceiling on SAFEX only - still need to arrange physical imports	-price ceiling on SAFEX only -still need to arrange physical imports	-price ceiling for landed maize - contract arranges physical imports

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Call Option as Contingent Import Agreement

Contractually specified agreement to purchase maize (if needed) at a pre-agreed maximum price at a pre-agreed time in the future.

Buyer has the right, but not the obligation, to buy maize for delivery later in the season.

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Malawi structure

- Type – physical call option
 - Provides price ceiling on maize delivered to Malawi
- Counterparts- Gov't of Malawi & Standard Bank
- Process – competitive presentations to Gov't
 - SAFEX price capped + plus Delivery costs fixed
 - Transport cost
 - Cost of bagging, etc.
 - Premium for GMO free Maize

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Physical Call Option Pricing

	Lot 1	Lot 2
Option Date	15 October 2005	15 November 2005
Quantity of Grain	30,000 t	30,000 t
Strike Price	US\$126/t	US\$126/t
Fixed Transport Price	US\$140/t	US\$143/t
Premium Cost	US\$27/t	US\$27.50/t
Total Cost if Option Exercised	US\$293/t	US\$US\$296.5/t
Kwacha value	K36.2/kg	K36.6/kg

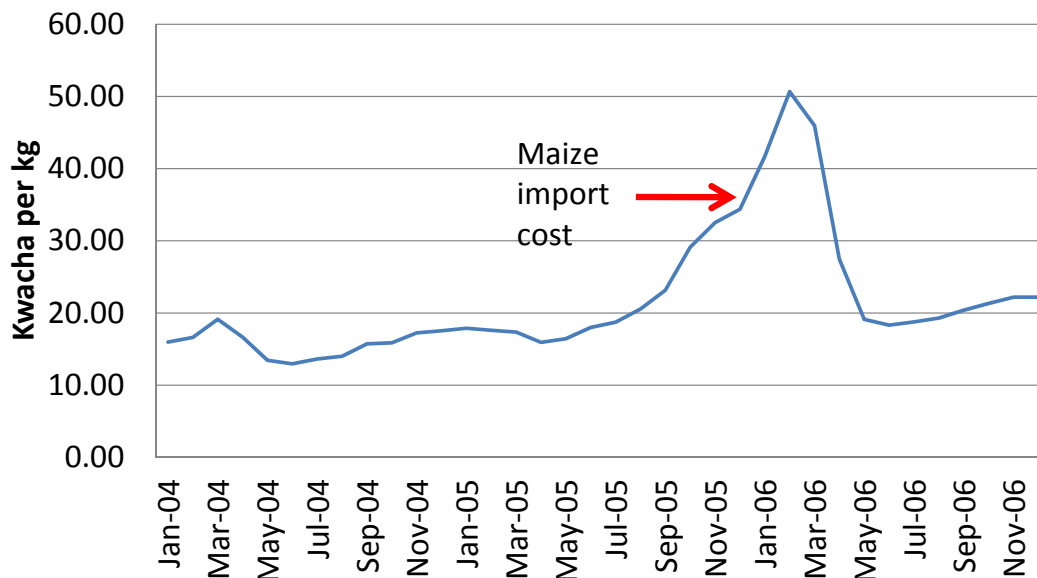
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Physical Call Option Pricing

	Lot 1	Lot 2
Option Date	15 October 2005	15 November 2005
Quantity of Grain	30,000 t	30,000 t
Strike Price	US\$126/t	US\$126/t
SAFEX Price	US\$122/t	US\$141/t
Gain/Loss on Grain	(US\$4/t)	US\$15/t
Fixed Transport Price	US\$140/t	US\$143/t
Actual Transport Cost	US\$195/t (est)	US\$200/t (est)
Gain/Loss on Transport	US\$55/t	US\$57/t
Premium Cost	US\$27/t	US\$27.50/t
Total Savings	US\$24/t	US\$44.5

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Import Cost versus Domestic Prices



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Benefits to Government

- Provides a capped price for imports
- Sends signal to the public and private sector about what government is going to do
- Is a contingent import strategy to respond to shortages in commercial markets
 - if commercial imports not moving and local prices are rising, gov't has a response on hand
- Can be used to manage risk of local price increases
 - if publicly announced, can act as a brake on local traders holding maize off the market in order to take advantage of price increases
- Can be used as a back-up for humanitarian supplies

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Benefits to Private Sector

- Provides a clear signal of government intent
- Opportunity to participate commercially - providing options structures
- Improved planning
- Creates defined space for commercial imports
 - gov't / donors / WFP take action if shortage persists and local prices unaffordable to large sectors of the population

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Should be considered as part of a national risk management strategy

- Strengthened early warning systems – for planning
- Macro-weather insurance (derivative) payout may be earmarked to a physical call option
- Signals to commercial sector regarding price level at which government will intervene with sale/distribution of public stocks
- Complements strategic grain reserve (3 month import allowance)