

# Coffee Price Risk Management in Ethiopia, Kenya, Uganda, Tanzania and Zimbabwe

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International Task Force on Commodity Risk Management  
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## Progress to Date

- Prof. Dr Gilbert & Dr Zant visited Kenya, Tanzania & Uganda in February. Dr Burger visited Ethiopia in April. Prof. Dr Gilbert will visit Zimbabwe in July.
- We have reached preliminary conclusions on the feasibility of alternative schemes. We have not at this stage attempted to rank the different feasible schemes.
- The current draft report does not include discussion of Zimbabwe and does not make recommendations.
- Recommendations will be discussed with the CFC and ICO before preparation of the final report.



## Types of Scheme

- The ITF has recommended the sale of price floor guarantees, backed by put options. We regard this as the appropriate form of price risk management for farmers, cooperatives and farmer associations.
- The alternative is to use futures to fix the price of coffee inventory, for example inventory held under warehouse receipts schemes. This fixes margins for intermediaries and advances payment for cooperatives or farmers.
- Price floor guarantees can be expensive but allow benefiting from upward price movements. Futures hedges cost less but require a significant credit line to cover margin payments.



# Feasibility Criteria

- Is there an appropriate intermediation agency (Local Transmission Mechanism) with sufficient out-reach to coffee farmers or cooperatives?
- Is performance risk manageable? Are there constriction points in the commodity chain? Is enforcement guaranteed? What is the past performance record of potential intermediation agencies?
- Is the extent of risk reduction satisfactory? How serious is basis risk or what is the hedge quality?



## Feasibility Criteria (continued)

- Are warehouse receipt schemes in place and operative?
- Are credit schemes, in place and operative?
- Are there statutory obligations to lend to agriculture?
- Is financial environment satisfactory? Are commercial banks actively involved in the coffee sector, in particular in providing credit to coffee farmers or cooperatives?
- Is there free access to foreign exchange?
- Is the planned transaction replicable to other organisations and to a country-wide operating scheme?



# Ethiopia

- Cooperatives do constitute potential LTMs. However, their share of the coffee supply and hence outreach to farmers is limited.
- Auctions (Addis Ababa, Dire Dawa) are potential points of constriction which would allow performance risk to be managed.
- We have yet to make a judgement on hedge quality.
- No warehouse receipts scheme is in place and none is currently envisaged.
- The financial environment is poorly developed with little lending in the coffee sector.
- Exchange controls make any market risk management scheme problematic.

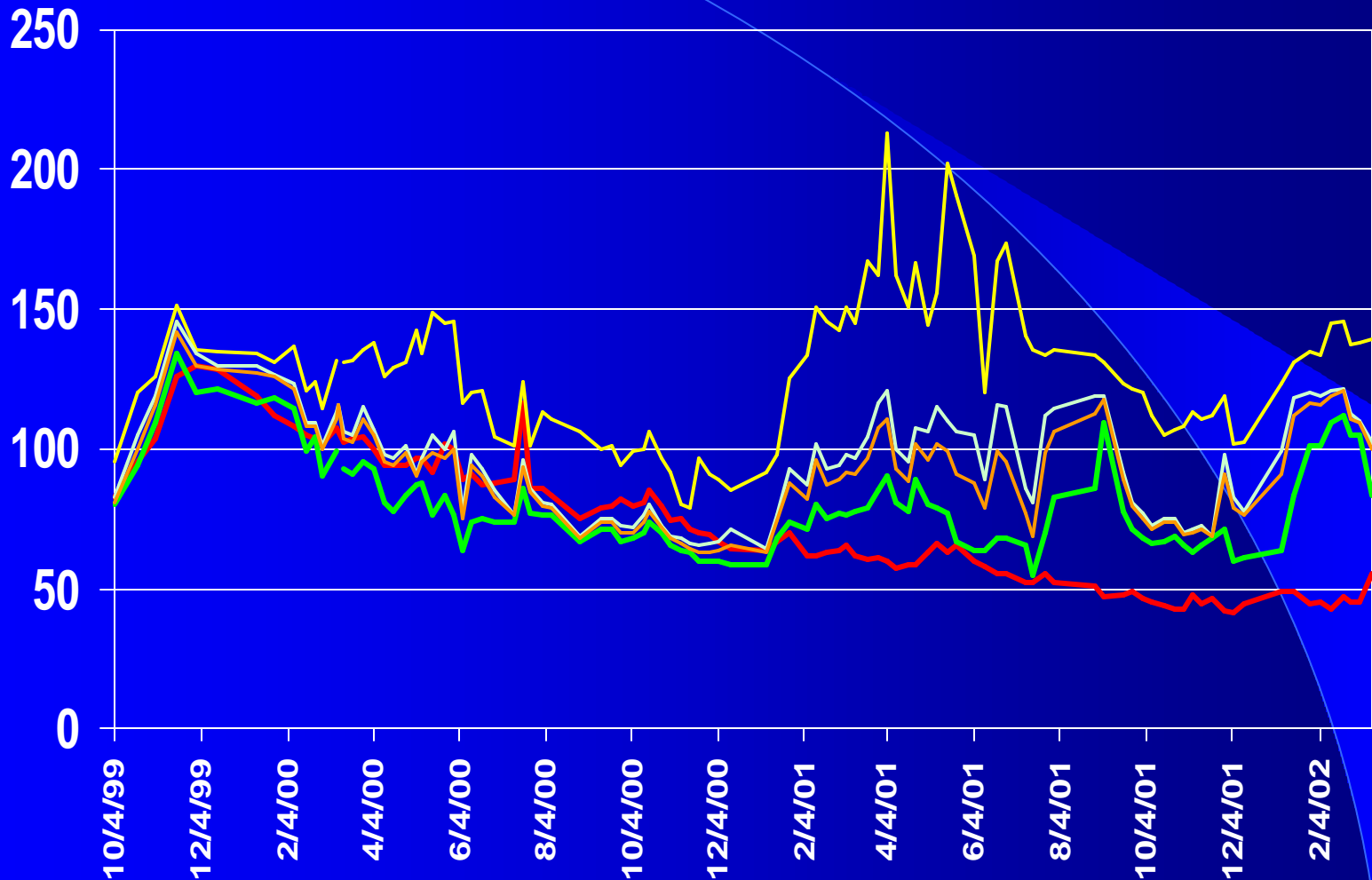


# Kenya

- Both cooperatives and banks do constitute potential LTMs. In particular, KPCU appears to be a very strong candidate LTM.
- The Nairobi auction is a potential point of constriction which would allow performance risk to be managed.
- Hedge quality seems to be modest (see below).
- Although no CFC warehouse receipts scheme is envisaged, the government is planning a warehouse warrant scheme under existing legislation. A CFC input finance scheme is projected
- The financial environment is well developed with a number of banks active in the coffee sector.
- The foreign exchange environment is permissive.



# NYBOT versus NCE (Nairobi, Kenya)



— NYBOT C contract (nearby) — NCE (grade AA) — NCE (grade AB)  
— NCE (grade C) — NCE (grade ABC)





# Basis risk Nairobi Coffee Exchange (NCE)

**Nairobi Coffee Exchange (grade AB) versus NYBOT 'C' contract (nearby)  
correlations between 6 months returns (182 calendar days)**

April 2000 – March 2002	0.303
April 2000 – December 2000	0.851
April 2001 – December 2001	0.618

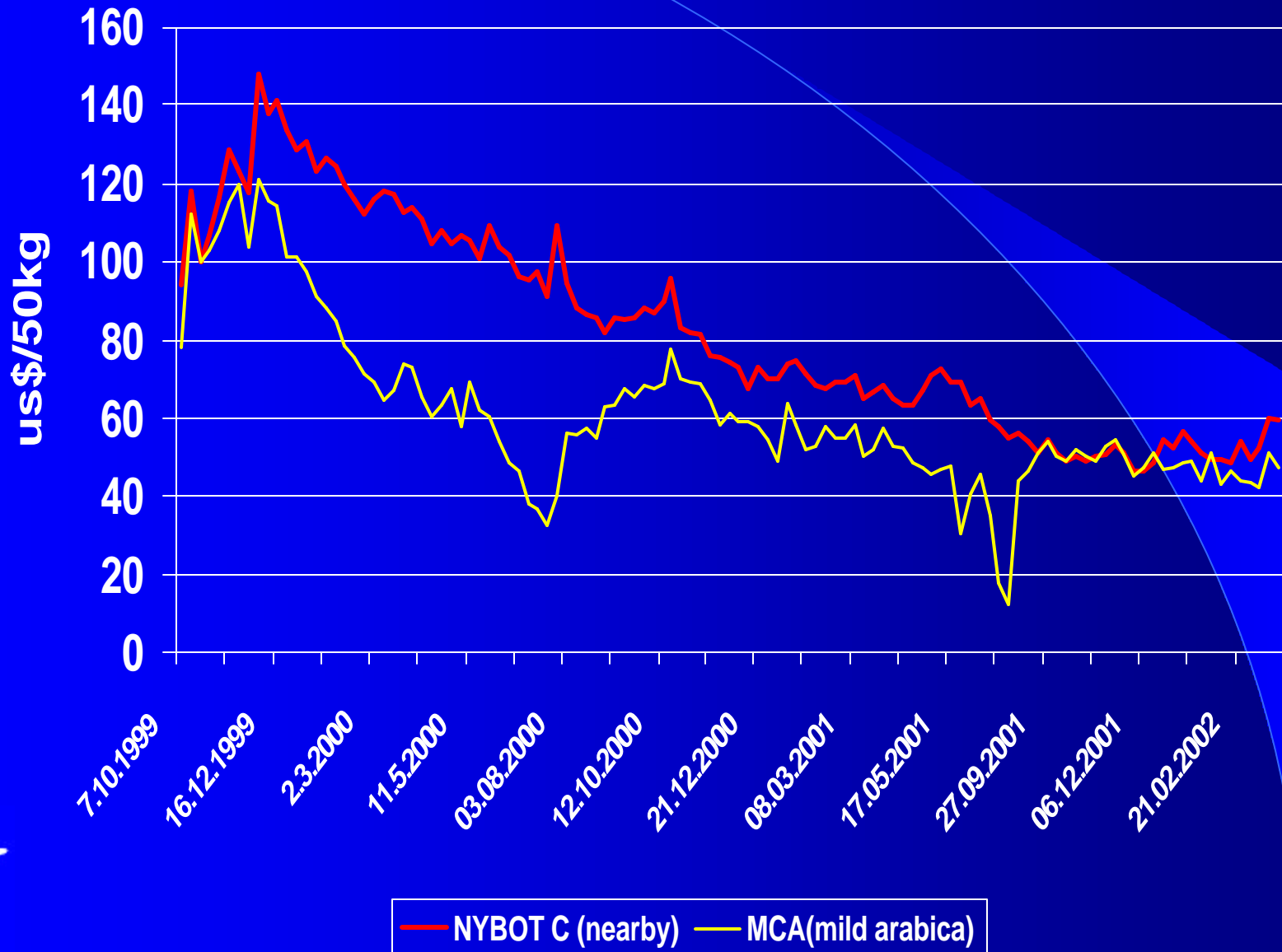


# Tanzania

- We doubt whether cooperative unions (except KNCU) are sufficiently strong to act as LTMs.
- The Moshi auction is a potential point of constriction which might allow performance risk to be managed, but it is currently not operating well and there are uncertainties over its future.
- Hedge quality is not good.
- The CFC is currently organizing a warehouse receipts scheme which could form the basis for a futures-based system for loans.
- The financial environment is generally well developed. However, relatively few commercial banks are currently active in the coffee sector.
- The foreign exchange environment is permissive.



# NYBOT versus MCA (Moshi, Tanzania)



# Basis risk Moshi Coffee Auction (MCA)

**Moshi Coffee Auction (mild arabicas) versus NYBOT 'C' contract (nearby)  
correlations between 6 months returns (182 calendar days)**

July 1999 – March 2002	0.094
July 1999 – December 1999	0.773
January 2000 – December 2000	0.064
January 2001 – December 2001	-0.412



# Uganda

- We do not see cooperatives as suitable risk management LTMs in the Ugandan context. Our judgement here differs from that reached by the ITF.
- We do not see potential points of constriction which might allow performance risk to be managed in a credit-based scheme.
- We have yet to make a judgement on hedge quality.
- The CFC is currently organizing a warehouse receipts scheme which could form the basis for a futures-based system for advancing payments to users of the scheme.
- Although the financial environment is generally well developed, relatively few commercial banks are currently active in the coffee sector.
- The foreign exchange environment is permissive.



## Provisional Recommendations

- **Ethiopia:** A successful scheme presupposes a change in current exchange control regulations.
- **Kenya:** We will consider both a price guarantee scheme for cooperatives through KPCU and a futures-based scheme based on warehouse warrants.
- **Tanzania:** Cooperatives are insufficiently strong to recommend a price guarantee scheme (the exception is KNPU involved with the ITF scheme). A futures-based scheme is possible in conjunction with the CFC Warehouse Receipts Scheme.
- **Uganda:** Cooperatives are insufficiently strong to recommend a price guarantee scheme. A futures-based scheme is possible in conjunction with the CFC Warehouse Receipts Scheme.
- **Zimbabwe:** We have yet to visit Zimbabwe.

