UNDERAPPRECIATED CONSTRAINTS TO THE DEVELOPMENT OF COMMODITY EXCHANGES IN AFRICA: A CASE STUDY OF ZAMACE

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Objectives of Presentation

1) To review how functional commodity exchanges can address some of the challenges faced in African food markets
2) To identify and explore 5 underappreciated constraints to the development of commodity exchanges in the region.
3) To identify institutional changes, policies, and legal frameworks that could help overcome these constraints.
4) Ultimately, to provide analytical tools for assessing the feasibility of developing sustainable commodity exchanges in the region

The Potential Role of Commodity Exchanges in African Food Markets

- In developed agricultural markets, commodity exchanges serve to:
  - Manage risk
  - Reduce costs
  - Provide transparent price discovery
  - Increase market activity and decrease price volatility

The Potential Role of Commodity Exchanges in African Food Markets

- In Africa commodity exchanges have been viewed as a means of addressing many of the ills plaguing food markets, including:
  - High price volatility and poorly developed formal risk management strategies
  - Limited price discovery
  - Oligopolistic market behaviors
  - Limited formalization of contracts and quality standards
  - Low participation of smallholders in formal food market channels
  - High transaction costs throughout the system

The Potential Role of Commodity Exchanges in African Food Markets

- Despite these potential benefits commodity exchange in the region, a part from South Africa, remain underdeveloped, underutilized, and reliant on government and donor support.
- For example, the value of one day of trade on SAFEX ($US 100 million) exceeds the total value of trade conducted on ZAMACE over 2 years ($US 72 million).
- This is not simply a result of Zambia's smaller market size. ZAMACE members only direct 2-5% of their trade through ZAMACE

Why have exchanges failed to develop?

Thin trade on an exchange is a reflection of 5 key underlying constraints:

1) Limited capacity to enforce contracts, which elevates the potential transactions costs of using the exchange above costs of traditional trading;
2) Insufficient incentives to develop competitive brokerage services;
3) Costs of operating the exchange exceed the benefits of using it for many potential participants;
4) Exchanges perceived as vehicles for manipulating markets, rather than as forums to achieve price discovery; and
5) Uncertain food policy environments and poorly developed legal frameworks

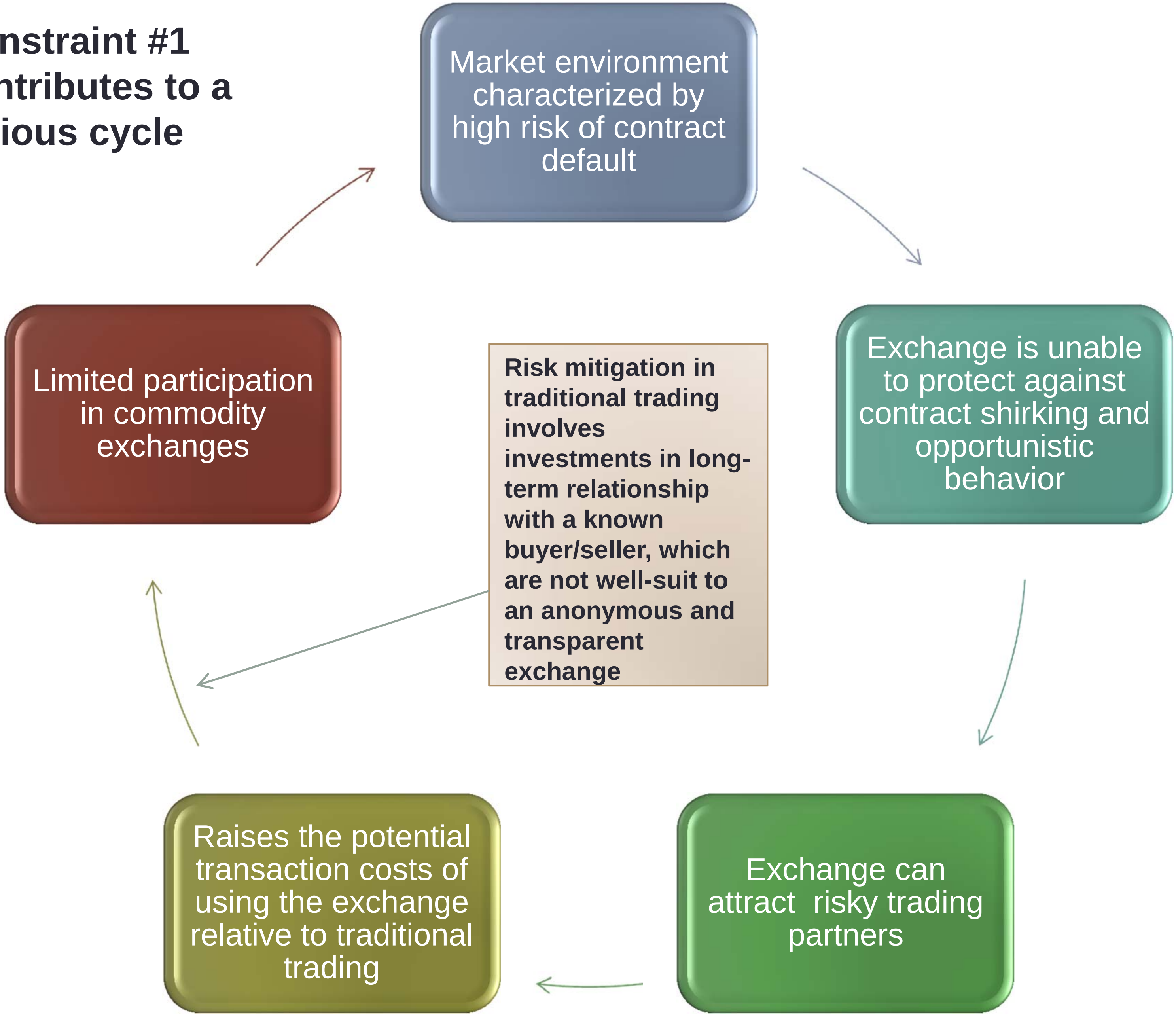
Constraint #1: Poorly developed contract enforcement

- Food markets in Africa are characterized by high levels of contract shirking and non-compliance:
  - When prices move buyers and sellers frequently walk away from prearranged agreements.
- By providing effective arbitration and settlement guarantee commodity exchanges assist in managing the risk of contract shirking, thereby driving down transaction costs in food markets
- However, although ZAMACE has arbitration protocols in place, and an arrangement for a settlement guarantee facility, these remain under-utilized, slow, and costly.

Constraint #1: Poorly developed contract enforcement

- Arbitration:
  - Contract disputes on ZAMACE can take years to resolve and can cost each party close to $20,000 to resolve.
    - Thus, arbitration is only feasible for large transactions and well capitalized firms.
    - When arbitration fails, disputes are passed to the courts, which tended to be even slower and more costly than ZAMACE arbitration
- Settlement Guarantee
  - The institution exists, but not a single broker has opened a guarantee account
    - Clearly incentives are not in place for the benefits of a settlement account to outweigh the costs of maintaining it

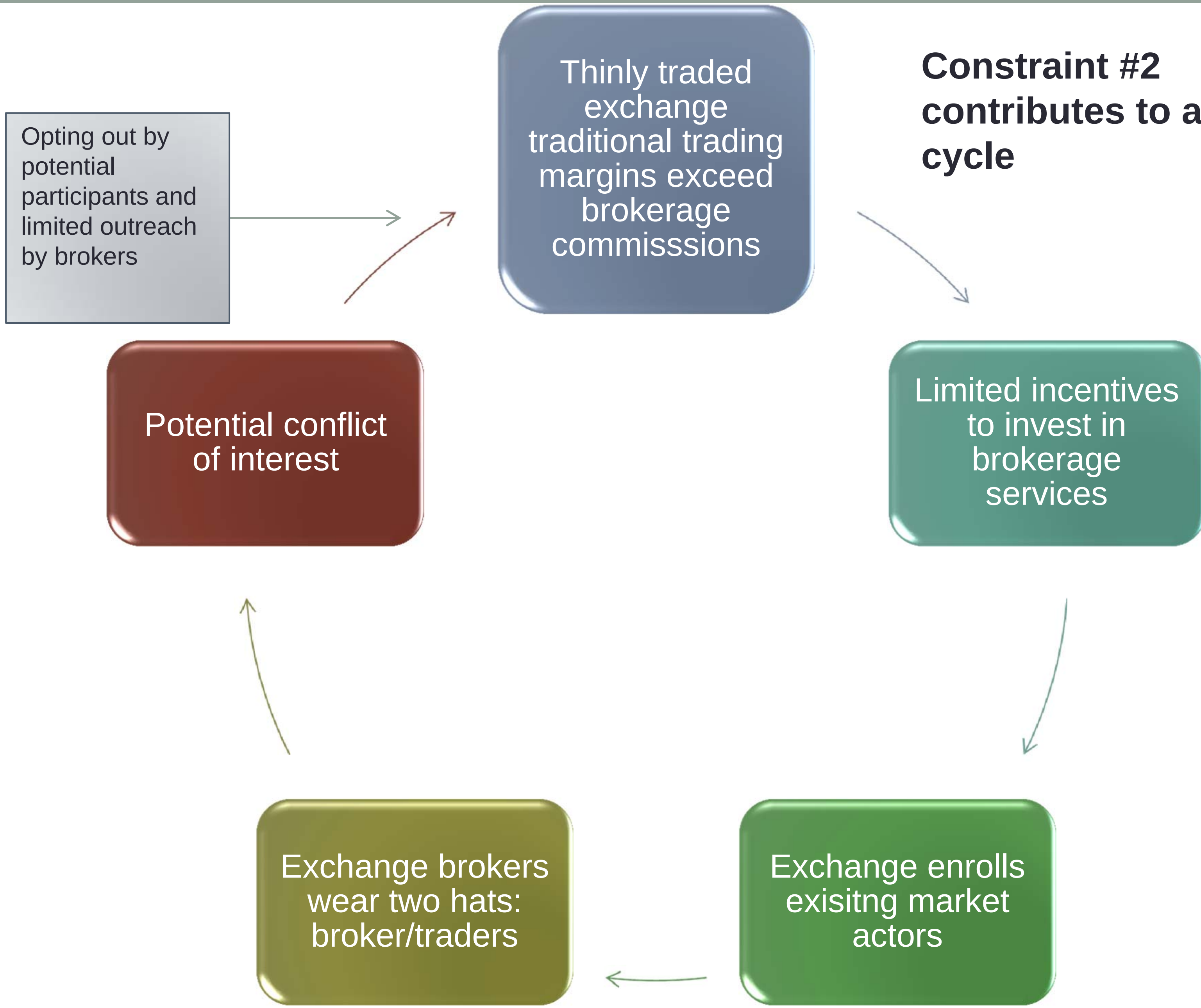
Constraint #1 contributes to a vicious cycle



Constraint #2: Insufficient incentives to develop competitive brokerage services

- In relatively small and non-transparent food markets, margins from grain trading far exceed the profit potential of brokerage firms;
  - As a result there are few if any true brokers in Zambia;
  - Most brokers on ZAMACE wear two hats: as brokers and as grain traders
  - This represents a potentially serious conflict of interest: Are brokers working in the best interest of their client or the trading firm they represent?
  - Limited outreach by broker/traders to their clients on the benefit of using an exchange

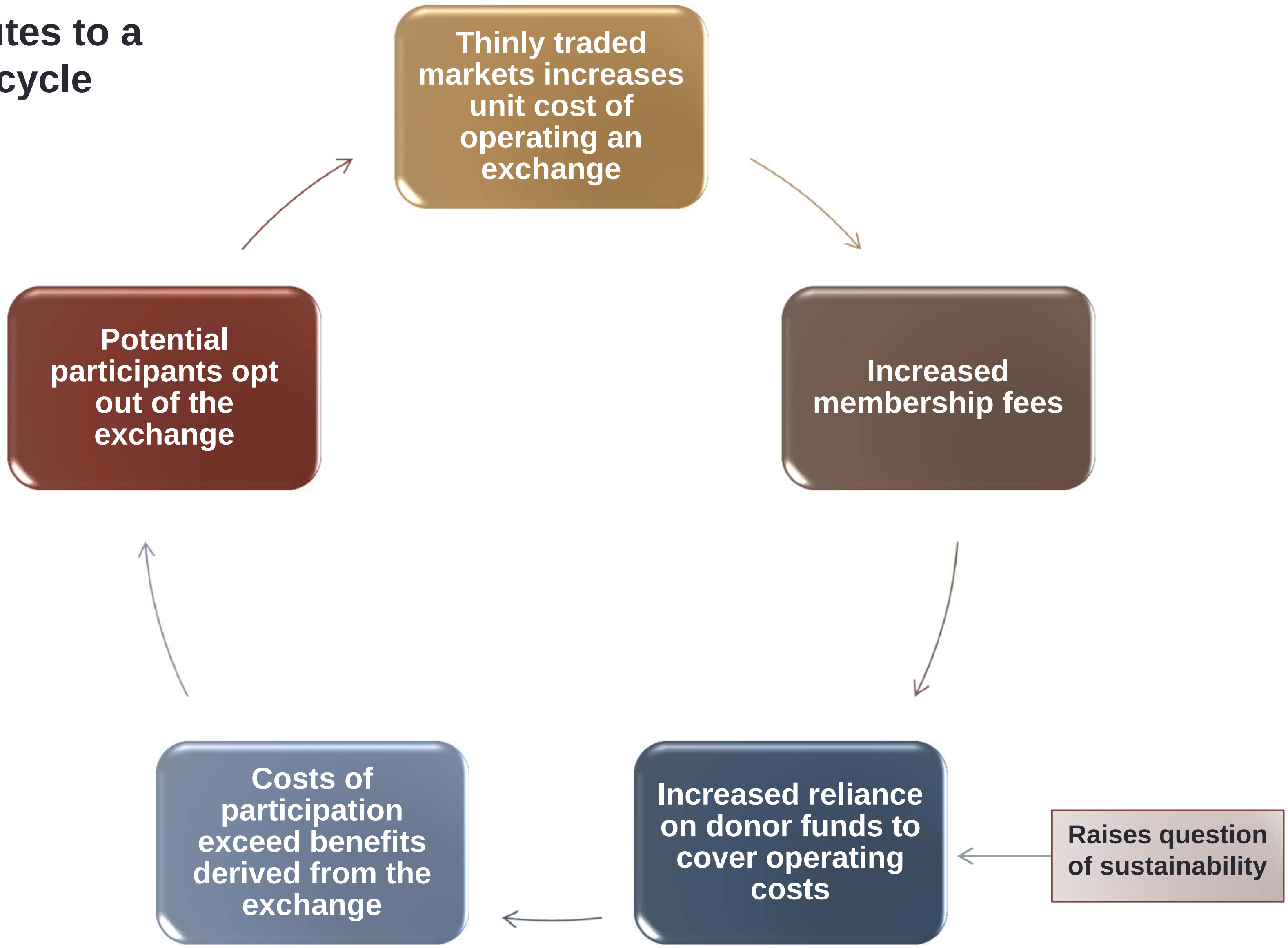
Constraint #2 contributes to a vicious cycle



Constraint #3: Costs of operating the exchange exceed the benefits of using it for many potential participants

- The costs of operating ZAMACE are covered through donor funds, monthly membership fees by broker/members, charges for testing and certifying commodities, and transaction fees on trades.
  - In the absence of sufficient market scale the cost of operating an exchange per trade can become prohibitive to some actors, causing them to opt out of the exchange
  - Monthly membership fees for ZAMACE brokers recently increased from $1200 to $1500, causing some to consider withdrawing

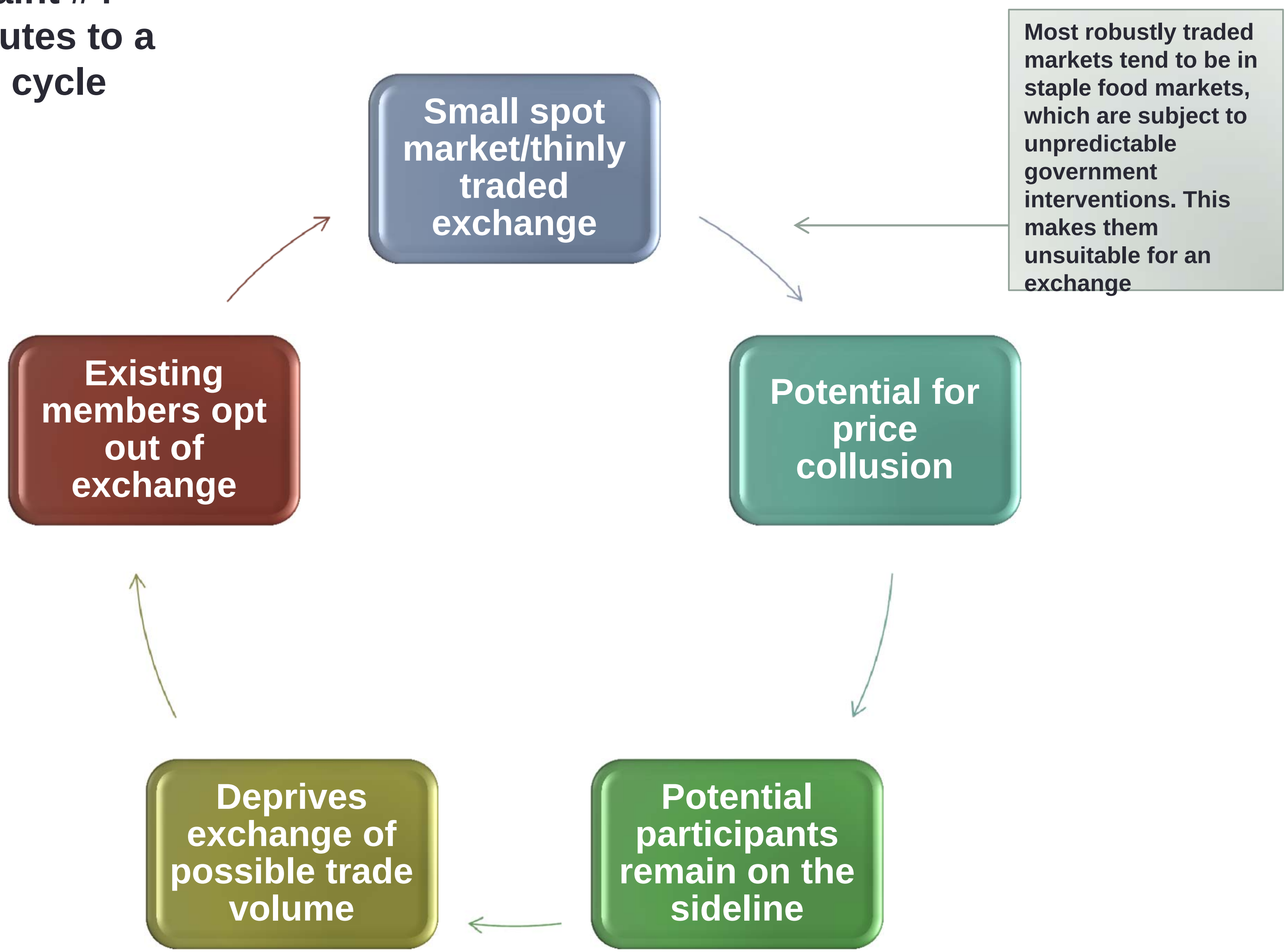
Constraint #3 contributes to a vicious cycle



Constraint #4: Exchanges perceived as vehicles for manipulating markets, rather than as forums to achieve price discovery

- The majority of commodity markets in Zambia are characterized by small spot markets
  - Maize is the only exception, but policy uncertainty makes it an unlikely candidate to be traded on an exchange
- When spot markets are small commodity exchanges can become vehicles for market collusion and manipulation rather than institutions for improving price discovery and price transparency
  - Selective use of the exchange and selective price reporting: 68% of all trades registered on ZAMACE occurred off the exchange with prices later announced
  - Broker/traders may use the trading floor to negotiate prices amongst themselves rather than bid competitively on available lots

Constraint #4 contributes to a vicious cycle



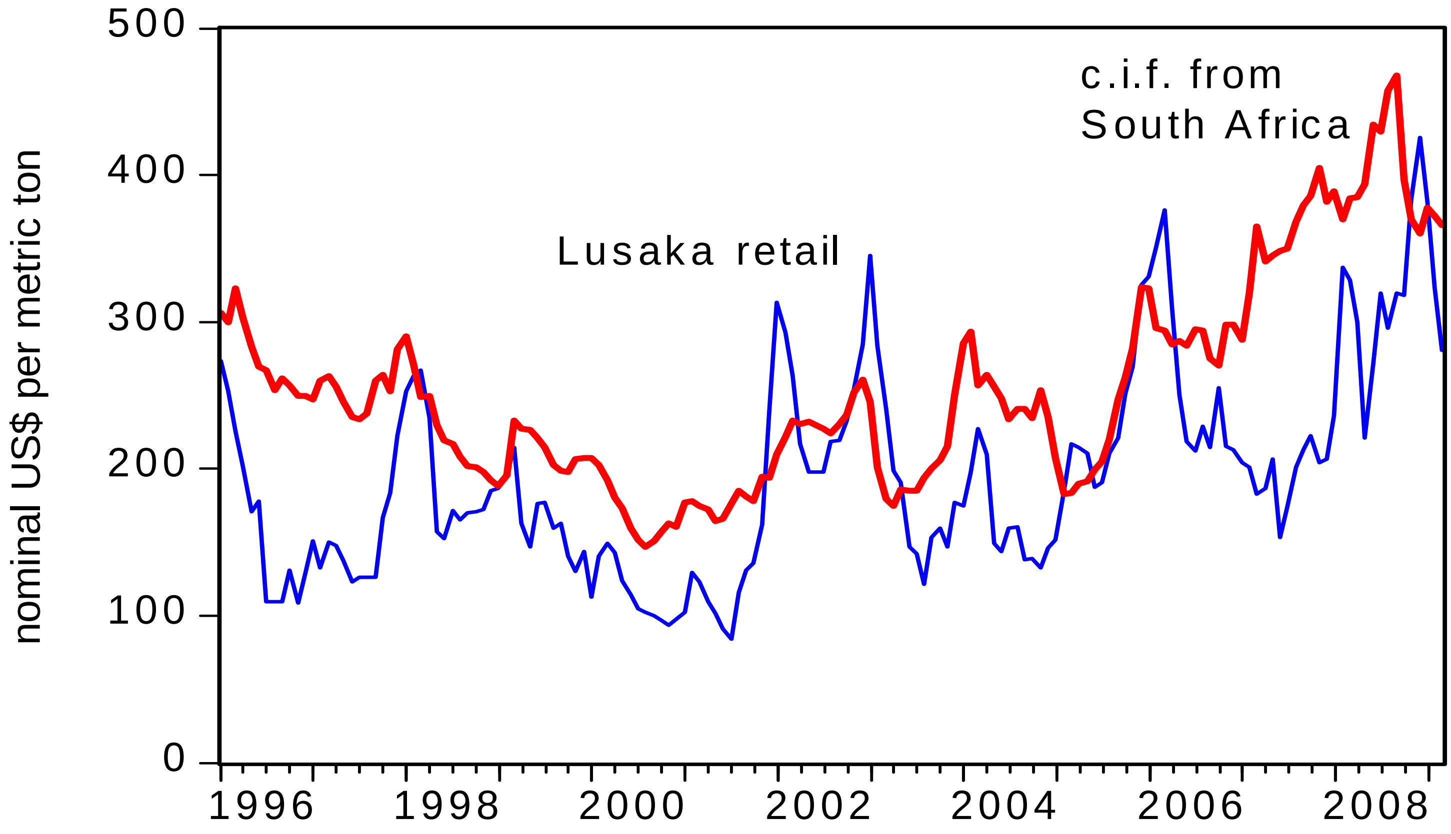
Constraint #5: Policy and Regulatory Obstacles to the Development of Commodity Exchanges

Unpredictability:

Imposition of import/export restrictions, changes in tariff rates, variations in marketing board procurement, and release of government stocks at discretionary prices

- Disincentive to speculation
- Disincentive to store grain
- Disincentive to enrolling financial institutions: future contracts

Lusaka Maize Retail Prices



Constraint #5: Policy and Regulatory Obstacles to the Development of Commodity Exchanges

Unpredictability
- Disincentive to speculation
- Disincentive to store grain
- Disincentive to enrolling financial institutions: future contracts, brokerage

Marketing boards
- Limits price premiums for quality
- High prices draws volume away from an exchange

Legal frameworks
- Underdeveloped systems for preventing politically well connected actors from influencing policy and shirking contracts
- Slow, costly, and ineffective commercial law

Low potential for the development of sustainable commodity exchange

Recommendations

- Arbitration reform: Internalize arbitration
- Find ways of encouraging the adoption of settlement guarantee: Brokerage services provided by farmers' associations
- Regional markets
- External regulation and legal standing of the exchange
- Warehouse receipts
- Political advocacy and policy reform: Predictability, utilizing the exchange to manage food reserves

Conclusion

- Making commodity exchanges work in the context of African food markets is not merely a matter of providing adequate funding and developing appropriate institutions.
- By their very nature commodity exchanges are situated in the broader context of agricultural markets that are often characterized by inefficient legal systems, small spot markets, limited numbers of potential participants, passive financial institutions, vested political interests, and high levels of policy unpredictability.
- Thus, when assessing the feasibility of developing a robust commodity exchange governments and donors must look closely at whether or not existing market conditions are supportive of an exchange. The existence of one or more of these binding constraints can lead to a vicious cycle of exchange under-utilization, opting out by potential participants, and eventual collapse of the exchange, regardless of the degree of financial support offered.
- If exchanges cannot attract market actors that are already in a position to effectively utilize an exchange, there is little hope that commodity exchange can facilitate a transformation in the ways in which smallholders interact with output markets

THANK YOU