

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 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.

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:
 - Although there have been just two arbitration cases on ZAMACE, the perception is that arbitration is slow, costly, and ineffective.
 - Reforming the arbitration process is critical for ZAMACE's future development
- 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

Market environment
characterized by high
risk of contract default

Perception that the
exchange is unable to
protect against
contract shirking and
opportunistic behavior

Limited participation in
commodity exchanges

Risk mitigation in
traditional trading
involves
investments in long-
term relationship
with a known
buyer/seller, which
are not well-suit to
an anonymous and
transparent
exchange

Perception that
exchange can attract
risky trading partners

Raises the potential
transaction costs of
using the exchange
relative to traditional
trading

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

Opting out by potential participants and limited outreach by brokers

Thinly traded exchange traditional trading margins exceed brokerage commissions

Constraint #2 contributes to a vicious cycle

Potential conflict of interest

Limited incentives to invest in brokerage services

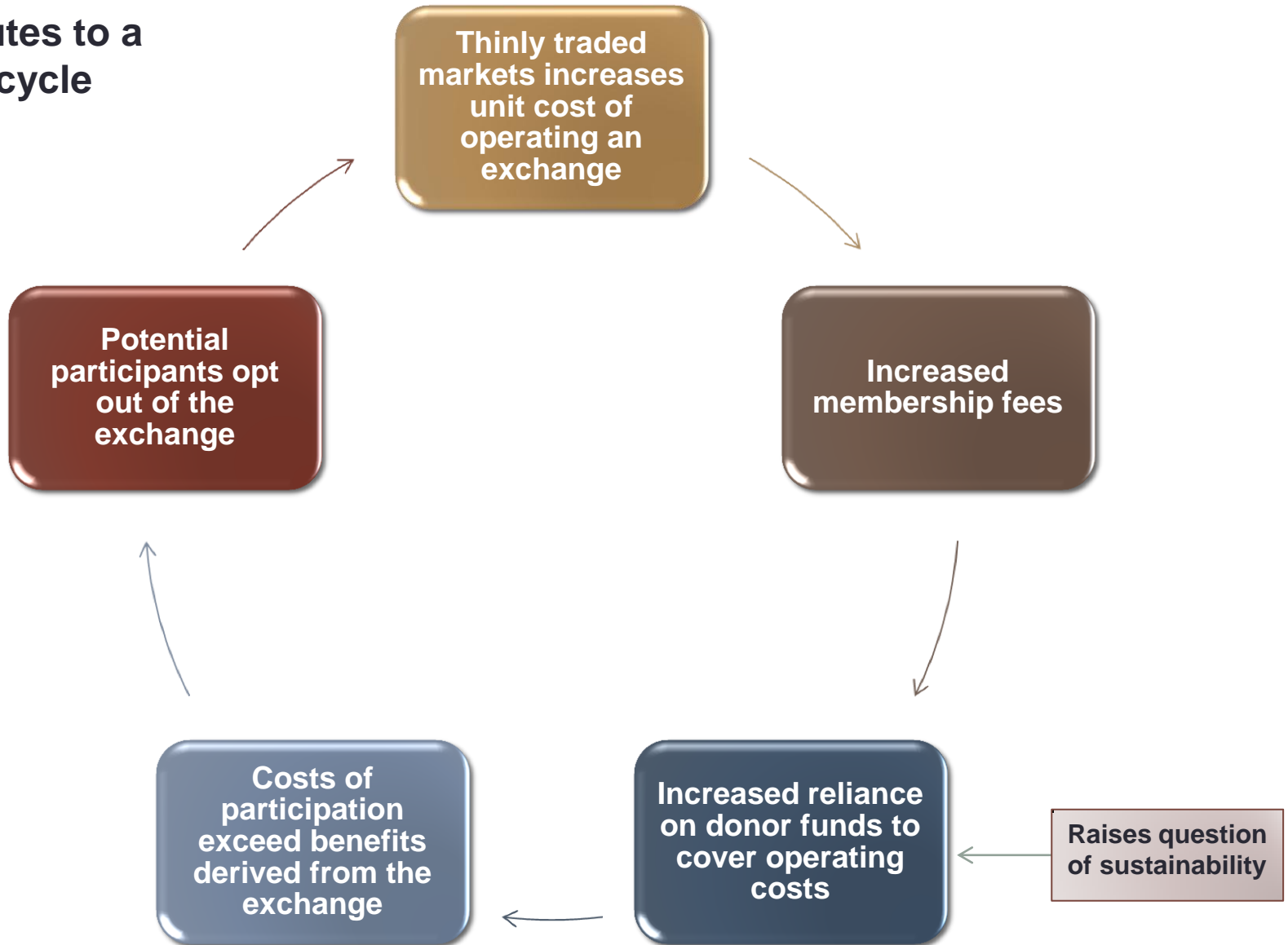
Exchange brokers wear two hats: broker/traders

Exchange enrolls existing market actors

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

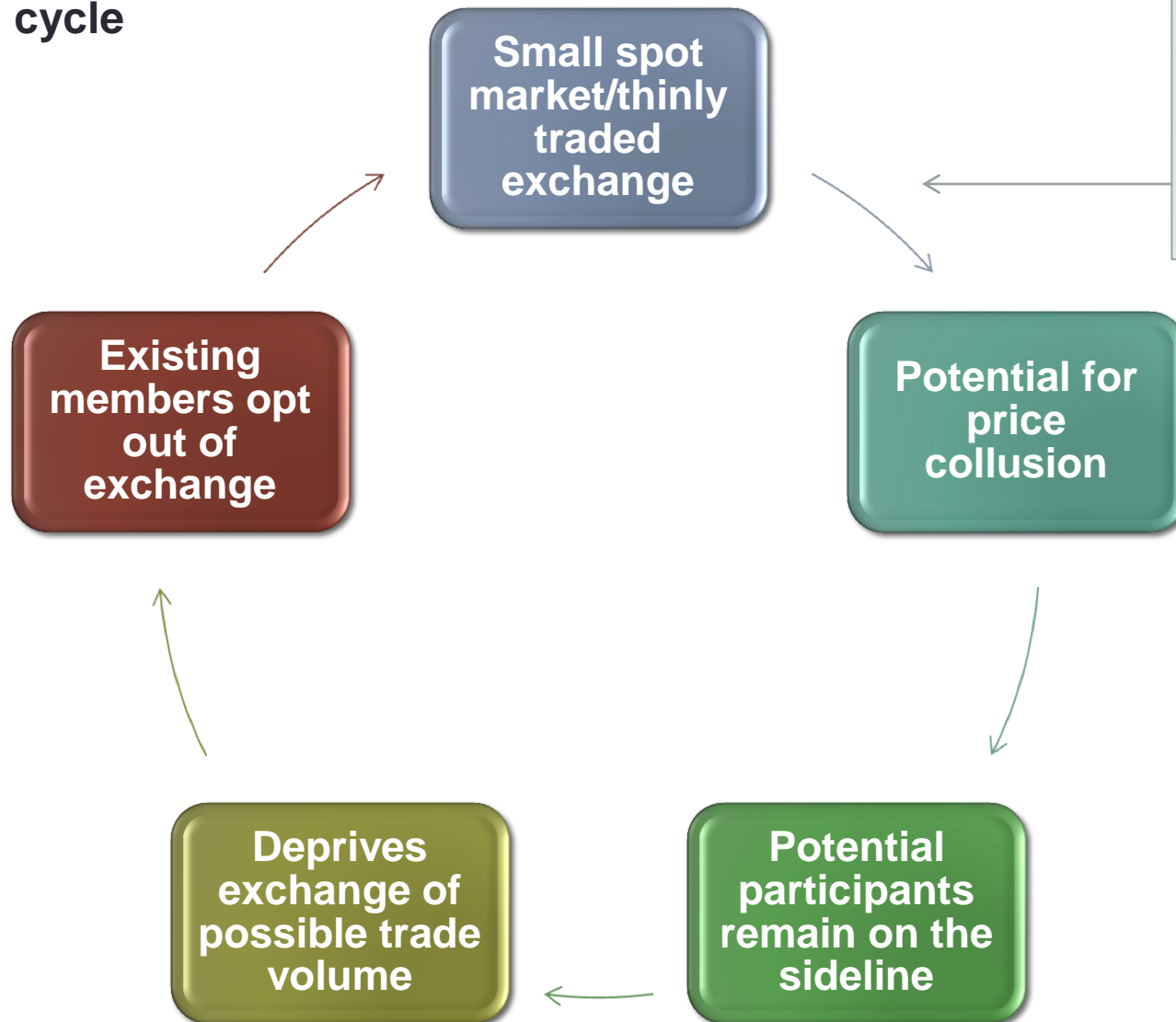
Constraint #3 contributes to a vicious cycle



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

- When trade volumes are low 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 reported to ZAMACE occurred off the exchange with prices later announced
 - Perception that broker/traders use the trading floor to negotiate prices amongst themselves rather than bid competitively on available lots

Constraint #4 contributes to a vicious cycle



Most robustly traded markets tend to be in staple food markets, which are subject to unpredictable government interventions. This makes them unsuitable for an exchange

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

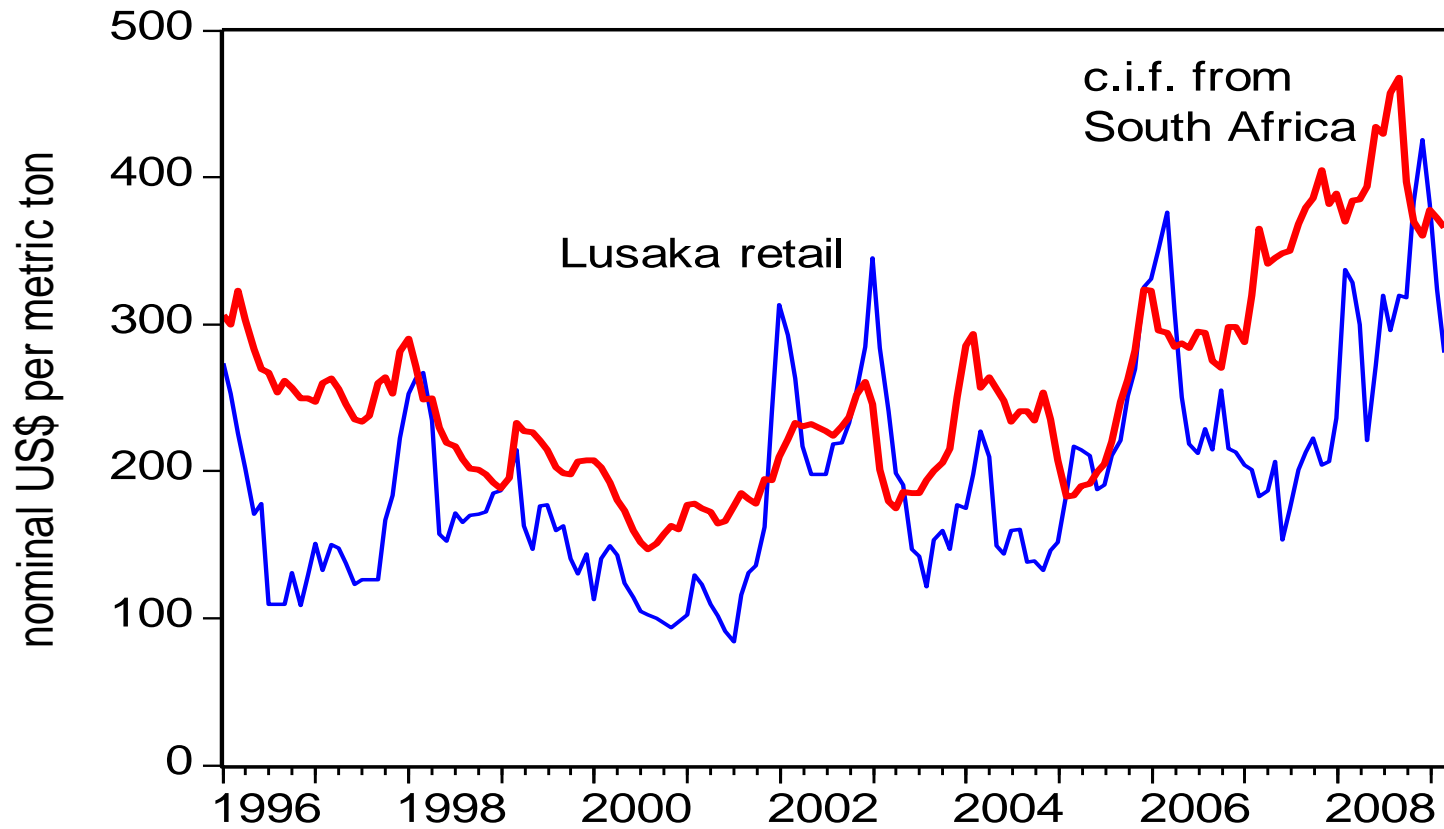
Unpredictability:

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

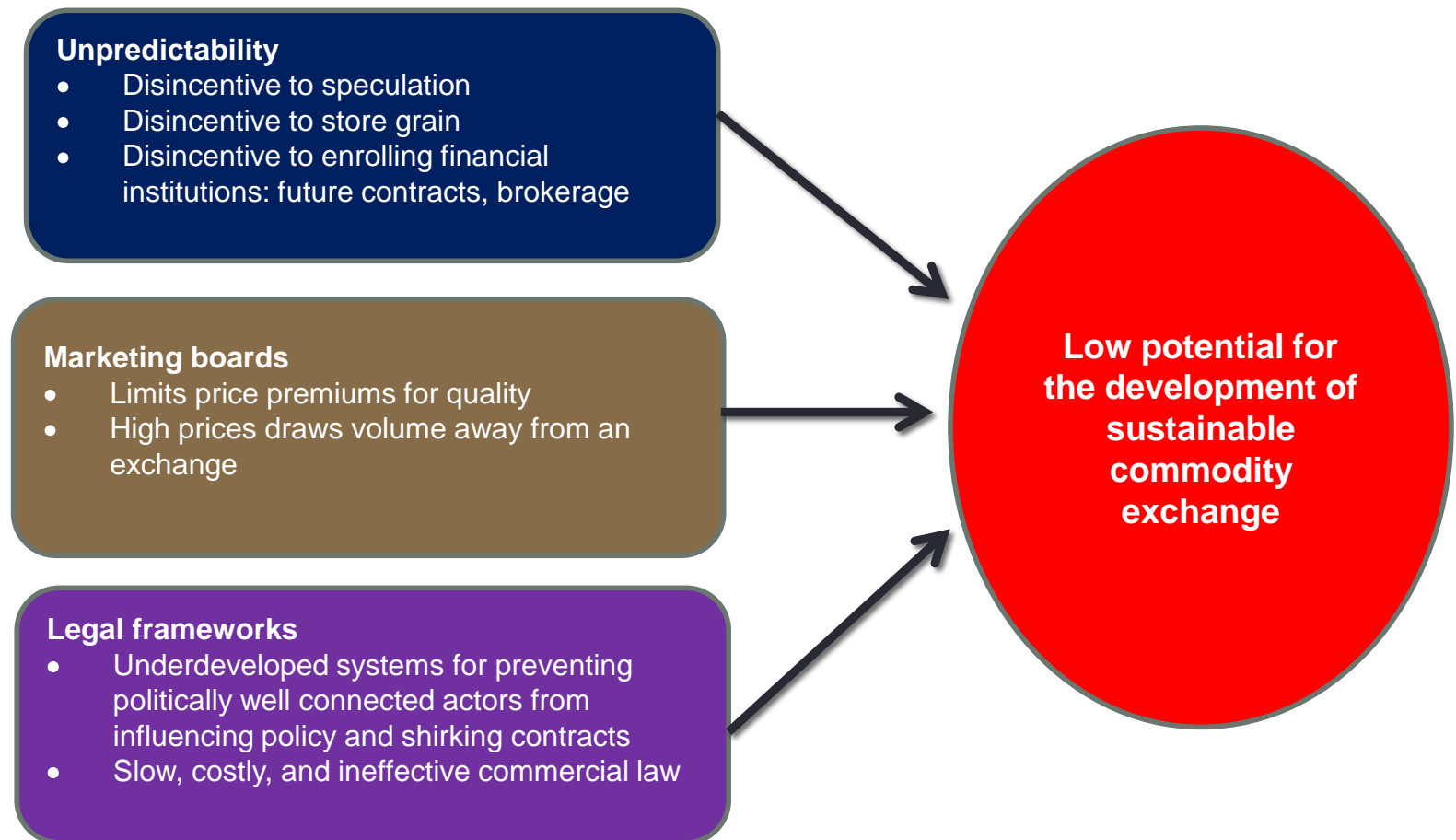
- Disincentive to speculation
- Disincentive to store grain
- Disincentive to enrolling financial institutions



Lusaka Maize Retail Prices



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



Recommendations

- Arbitration reform: ZAMACE certified arbitrators, fee scale, and mandated timeframe
- Find ways of encouraging the adoption of settlement guarantee: Brokerage services provided by farmers' associations
- Engaging the financial sector
- New ownership and oversight arrangements: JSE or LuSE
- Warehouse receipts
- Regional markets
- 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
