

Innovative Mechanisms in Latin American and Caribbean Commodity Exchanges

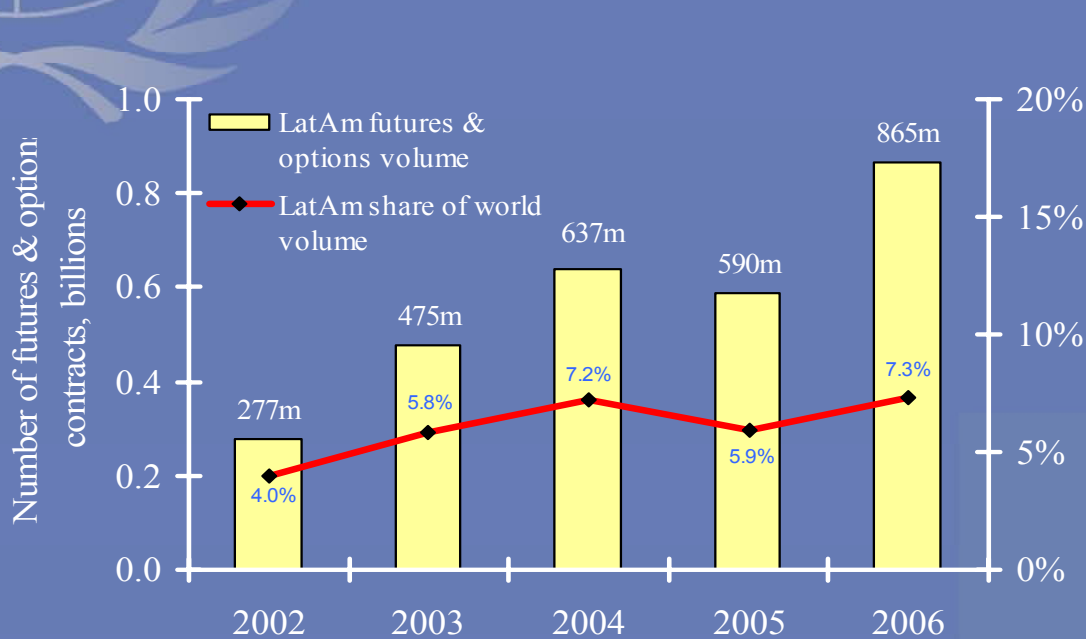
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*FAO International Conference on
Commodity Exchanges and their Role in
Market Development and Transparency
15 May 2007*

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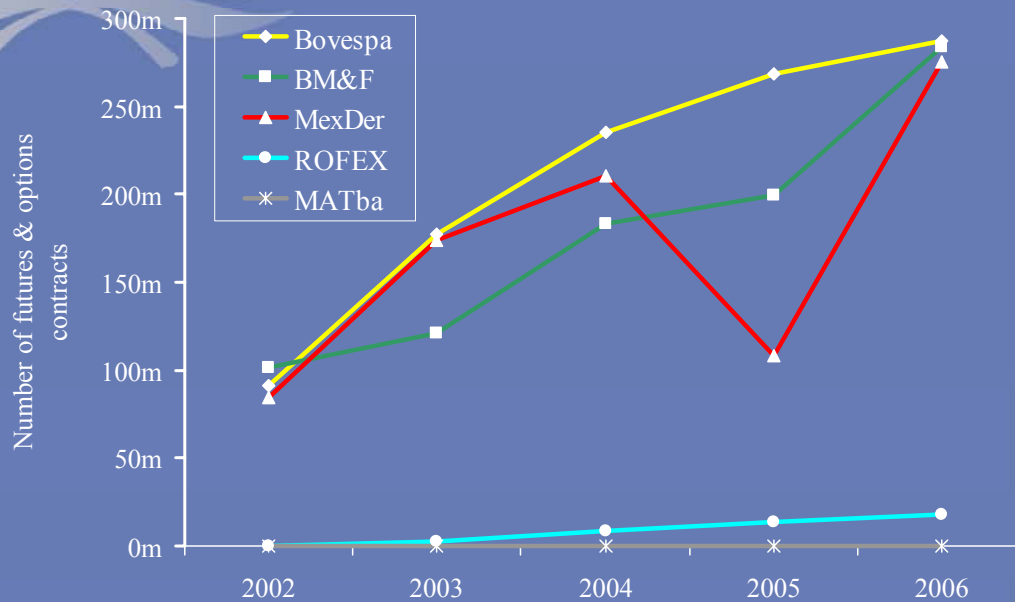
Regional Performance: Derivatives



	Growth 05-06	CAGR 02-06
LatAm:	47 %	33 %
World:	19 %	18 %

Source: FIA data
Note: CAGR = compound annual growth rate

Regional Performance: Major Exchanges

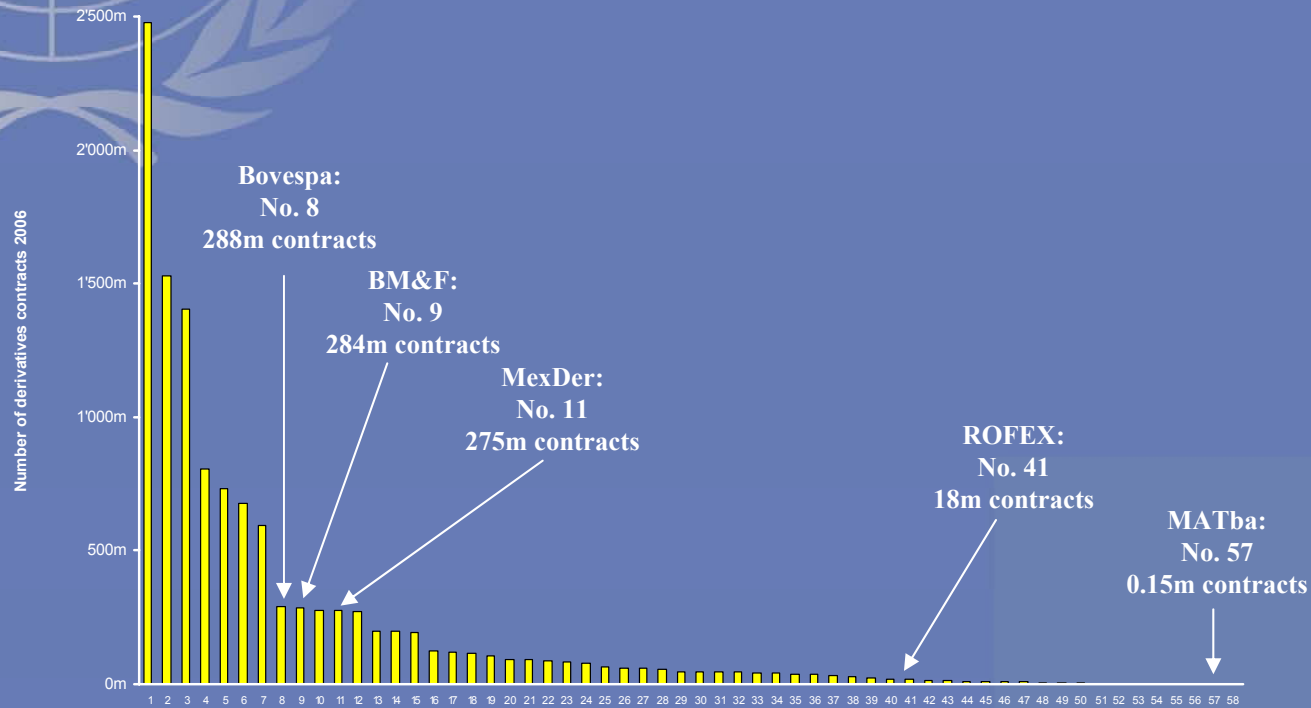


Source: FIA data

Note: CAGR = compound annual growth rate

	Growth 05-06	CAGR 02-06
Bovespa:	7 %	33 %
BM&F:	42 %	29 %
MexDer:	154 %	34 %
ROFEX:	36 %	158 %
MATba:	8 %	55 %

Regional Performance: All derivatives



Source: Futures Industry Association

Brief overview

Financial derivatives exchanges

Two exchanges trading exclusively financial derivatives, though MexDer has been looking at commodity futures

Mexican Derivatives Exchange (MexDer)

- Launched in 1998 and has enjoyed rapid but volatile growth
- Its TIEE-28 interest rate contract has become the world's fourth most traded contract in 2006
- Catastrophic 2005 - a near 50% decline in volume:
 - more stability in interest & exchange rates
 - imposition of higher margin and capital adequacy requirements by the Central Bank
 - increase in withholding tax on foreign investors
- Recovery in 2006 with 154% increase in volume to become world's 11th largest derivatives exchange:
 - relaxation of the withholding tax
 - introduction of the FIX protocol
 - implementation of regulatory reforms

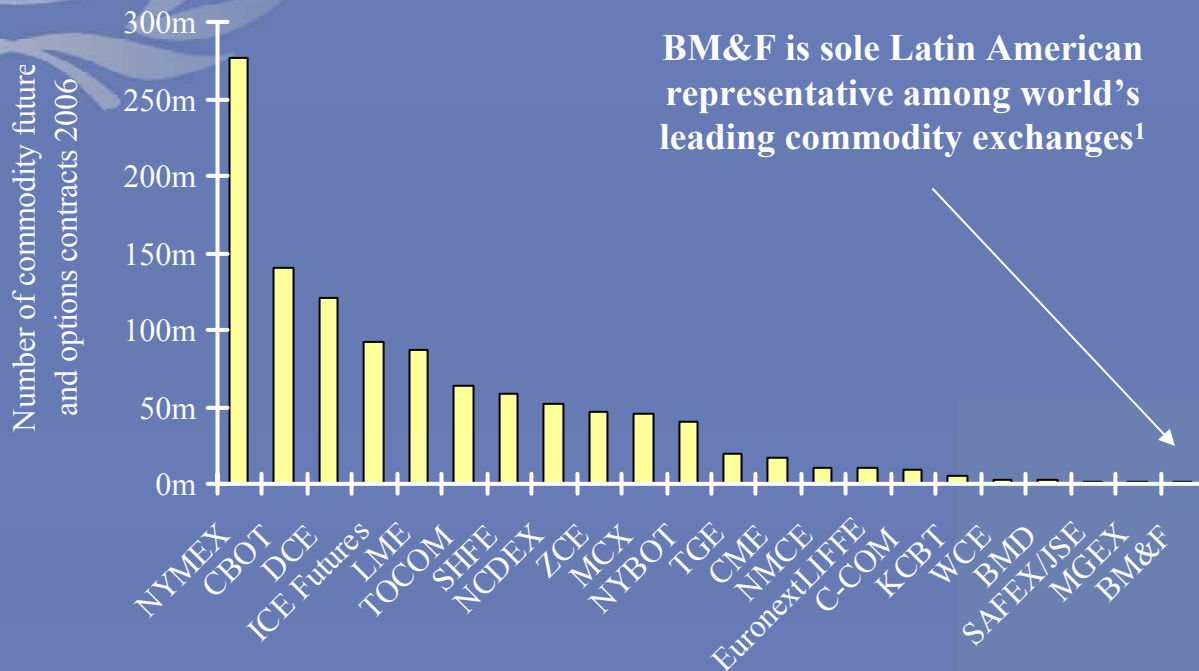
São Paulo Stock Exchange (Bovespa)

- Founded in 1890, but trading under its current name since 1967
- Latin America's largest stock exchange and the only centre in Brazil for trading equity and private fixed-income cash and derivatives contracts
- Also trades indices, corporate bonds, subscription warrants and Brazilian Depository Receipts (BDRs) which are certificates representative of stocks issued by foreign companies.
- Bovespa has been the world's 8th largest derivatives exchange since 2004.
- Growth in 2006 has been 7%, making it a relative laggard compared with other large derivatives exchanges

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Regional Performance: Commodity derivatives



Source: UNCTAD

1. Here defined as commodity exchanges which trade over 1 million futures and options contracts per annum



However, as will be discussed, Latin American exchanges have become noted for their innovative application of exchange mechanisms to address challenges in underlying commodity markets.

Brief overview: Brazilian Mercantile & Futures Exchange (BM&F)

- The world's 9th largest derivatives exchange in 2006
 - has been as high as 4th but severely impacted by the Brazilian devaluation
- Range of commodity derivatives contracts traded
 - Arabica coffee and live cattle are the most liquid
 - Others include gold, corn, soybean and crystal sugar
- Outside of derivatives trading, BM&F is heavily engaged in other dimensions of commodity market activity through the Brazilian Commodities Exchange (discussed further below)
- The exchange also launched in 2005 the BM&F Carbon Facility, an electronic trading system for the generation and trading of carbon credits under the Kyoto Protocol's Clean Development Mechanism
- However, the vast majority of BM&F's trading is in financial derivatives
 - Mainly interest rate and US Dollar futures, as well as providing registration for over-the-counter transactions
- Drivers of growth at BM&F
 - progressive engagement of Brazilian industry and foreign investors
 - upgrade in ratings of Brazil's sovereign debt
- Demutualization expected in 2007

Brief overview: Argentinean Exchanges

- *Argentina has a long tradition in futures markets, but their activities have from time to time been circumscribed by government regulation which has limited the use of exchange services*
- *The national exchange network consists of 11 markets which trade mostly in agricultural commodities, of which the major two are outlined below*

Rosario Futures Exchange (ROFEX)

- Founded in 1909, and trading large volumes of linen, corn and wheat in the 1920s before a government-induced decline
- Today, ROFEX is the largest of the Argentinean futures exchanges, trading 18.2 million contracts in 2006, and is the world's 41st largest derivatives exchange
- Of this volume, a few hundred thousand agricultural derivatives contracts were traded in maize, soybeans and wheat
- However, the vast majority of ROFEX volume is in financial futures, specifically on US Dollar futures and options

Mercado a Término de Buenos Aires (MATba)

- MATba is the futures exchange of the Bolsa de Cereales, one of the world's oldest commodity exchanges dating back to 1854
- Operations were temporarily suspended during the 2002 Argentinean economic crisis
- Volumes have yet to reach pre-2002 levels despite an annual growth rate of 55% between 2002-6
- 2006 volume of 158,000 makes it the world's 57th largest derivatives exchange
- MATba is a pureplay commodity exchange with trade in soybean, wheat and corn futures (and smaller volumes of sunflower seed)

Brief overview: Other Latin American and Caribbean Commodity Exchanges



- Other established commodity exchanges in:
 - **South America:** Bolivia, Chile, Colombia (x2 – Bogota & Cali), Ecuador, Peru, Venezuela
 - **Central America:** Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama
 - **The Caribbean:** Dominican Republic
- These exchanges were created mostly in response to the liberalisation of domestic trade as a mechanism for the organisation of domestic agricultural trade flows
- The oldest of these, in Bogota, Colombia, dates from 1973, and the Ecuador exchange dates from 1986, while all the others have been established since 1992
- Most of the products traded are agricultural (with some processed products traded in a few countries)
- Most provide a forum for trade in physical commodities but some, such as the Agricultural Exchange of Venezuela, also enable forward trading

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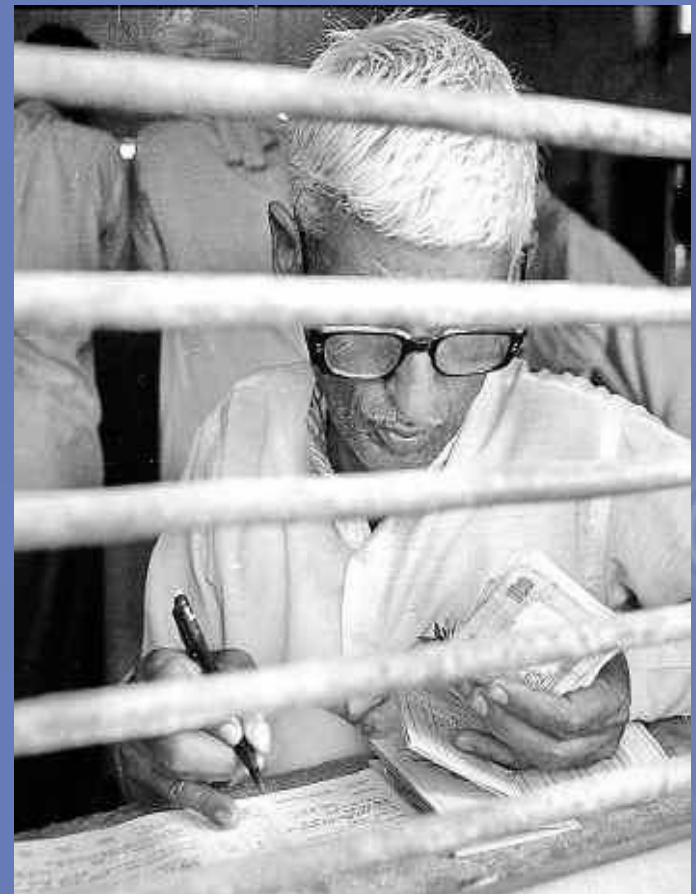
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 - Mechanisms for upgrading the underlying physical markets

Innovative Mechanisms

- Latin American commodity exchanges have become noted for their innovative application of exchange mechanisms to address challenges in the underlying commodity markets.
- Three sets of innovative mechanisms will be discussed below:
 - Financing mechanisms
 - Mechanisms for quota and import allocation
 - Mechanisms for upgrading the underlying physical markets

Innovative Mechanisms: Financing - Rationale

- In many developing countries, banks may not be interested in exposing their own capital to agricultural credit risks.
- An exchange can provide a mechanism that meets an important market gap allowing the commodity sector to bypass banks and tap directly into local capital markets.
- The mechanism is the trade of farmer repurchase agreements, or 'repos'.
- In this structure, the exchange:
 - provides an innovative product to capital market investors that offers a valuable addition to the existing range of money market instruments;
 - attracts a large and relatively organized part of the commodity sector which is looking for relatively cheap sources of capital;
 - by arranging the transactions, can benefit from high arrangement and other fees.

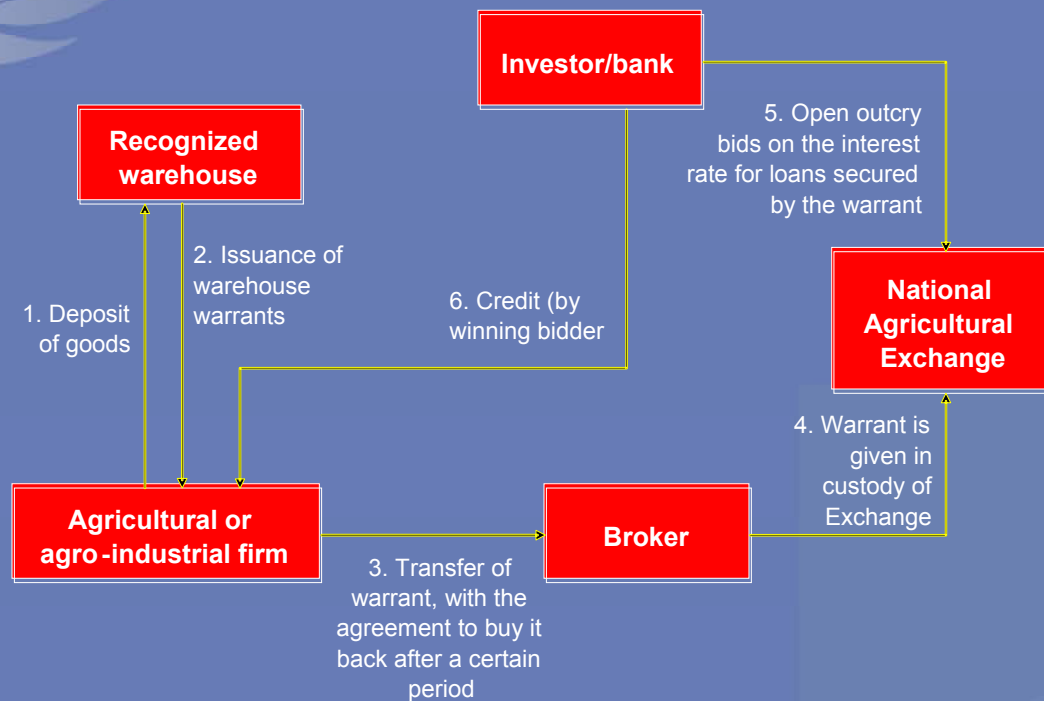


Innovative Mechanisms: Financing – (1) On inventories

- Commodities already produced can be stored with an exchange-accredited warehouse or collateral manager
- The warehouse receipt is then transferred to an exchange broker, and the owner of the commodities signs an agreement to buy it back at a given price (say, US\$ 1,000) after a certain period (say, 3 months)
- The broker posts this “package” on the exchange network and investors can bid on it
- Investors know that after 3 months, they will receive US\$ 1,000 → Therefore, the higher they bid, the lower the effective interest rate received
- Payment is guaranteed by the broker, and further underwritten by the physical goods in the warehouse → risks for the investor are very low
- As a result:
 - The commodity firm will have cheaper working capital
 - Investors can expect to receive a somewhat higher return than they could get on other, equally risky investments

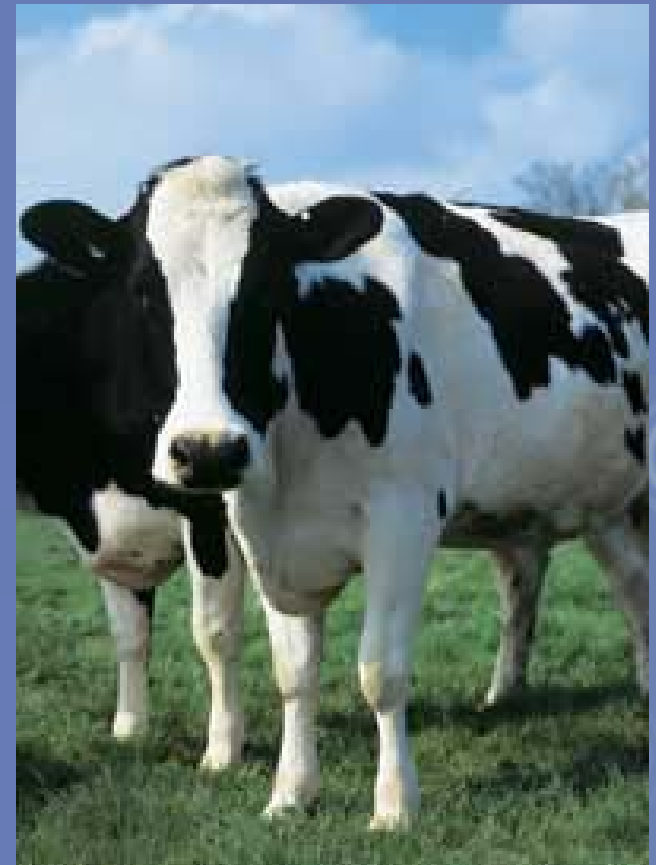


Innovative Mechanisms: Financing – (1) On inventories

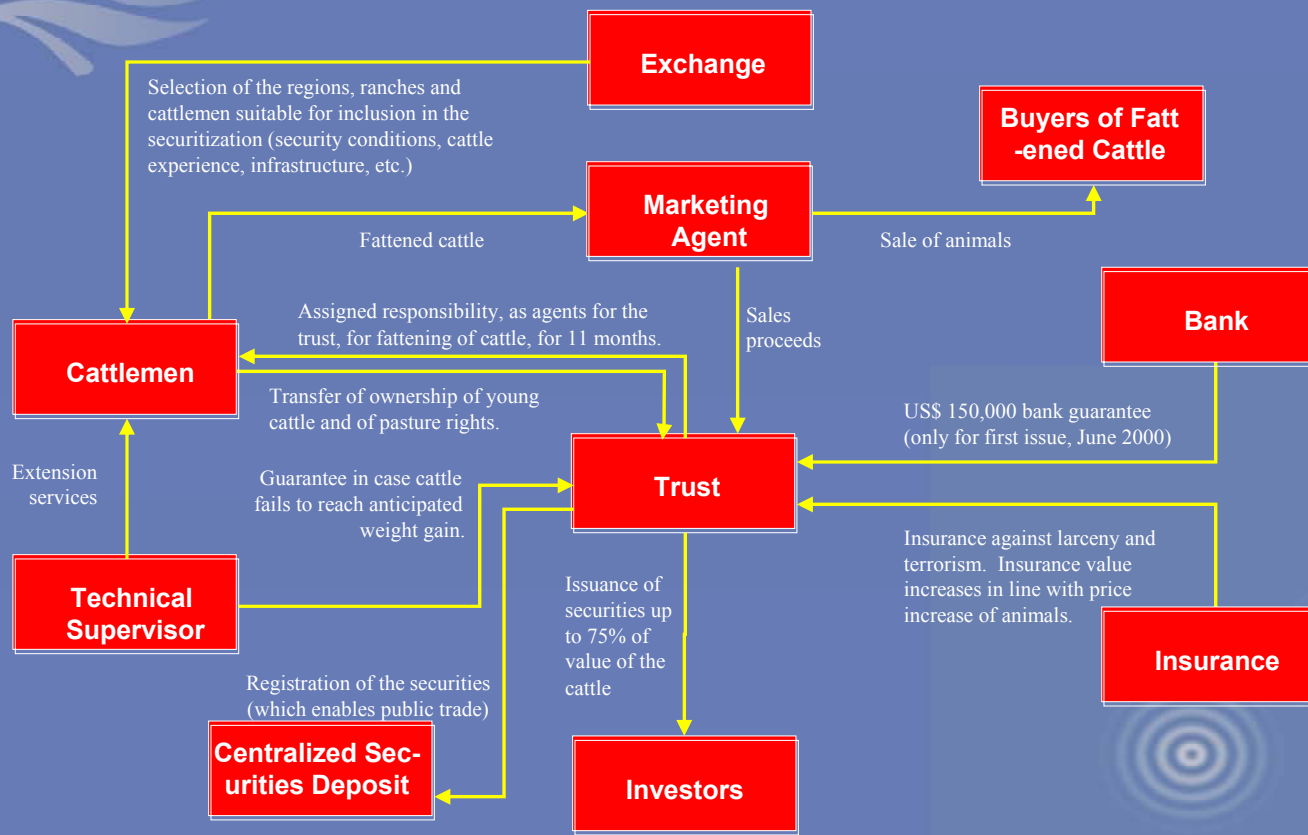


Innovative Mechanisms: Financing – (2) On future receivables

- Funds for future receivables – e.g. raising of livestock – can be raised from local institutional investors through livestock-backed securities
- These are traded on an exchange, which also provides supervision over the entire process and all parties involved
- Repos are at the basis of the financing – ranchers sell cattle to a Trust, and then act as agents for the trust in fattening the cattle, before buying their animals back after a period of, at most, 11 months
- The securitization is highly structured with various forms of risk mitigation necessary to reduce risks for investors to the minimum:
 - various forms of insurance
 - high levels of overcollateralization
 - independent quality control of the underlying commodity throughout the process
- Instruments fully compatible with Islamic principles and can thus be successfully marketed to Islamic funds.



Innovative Mechanisms: Financing – (2) On future receivables



Innovative Mechanisms: Financing - Practitioners

- Colombia:
 - Colombia's National Agricultural and Livestock Exchange (BNA) has developed a whole range of instruments of this nature, with not only agricultural commodities as the underlying, but also, poultry and live cattle
 - The BNA introduced an innovative livestock securitization programme in 2000, and a similar programme for poultry in 2002. Several series of securities were successfully issued under the programme, with strong interest from both cattlemen and investors – BNA expects to issue securities worth some 4-5 million US\$ each 45 days
- Venezuela:
 - A private company (Induservices) developed a system under which it provided capital enhancement to warehouse receipt paper on seasonal maize stocks. This paper was put into a Special Purpose Vehicle, which was backed by financial guarantees of Induservices, and issued securities

Innovative Mechanisms: Quota / Import Allocation - Rationale

- In some developing countries, efficient or transparent markets for international or domestic trade may not yet have fully formed
- An exchange can be an essential intermediary for bringing together interested transactional counterparties within a rule-based framework
- Trade in cash and derivatives contracts are the standard contracts offered by an exchange
- However, other types of less conventional transaction can also be handled where an exchange mechanism can:
 - promote broader participation
 - increased transparency



Innovative Mechanisms: Quota / Import Allocation – (1) Panama

- The National Commodities Exchange, Panama (BAISA) utilizes its commodity exchange for distributing tariff packages negotiated as part of Panama's WTO accession agreement
- One of Panama's accession conditions is a commitment to import eight sensitive agricultural and agro-industrial products
- These tariff packages are imported through a commodity exchange mechanism to bring about greater participation and transparency in the process
- Between June 1999 and June 2006, BAISA had negotiated over US\$ 400 million in these tariff packages

Innovative Mechanisms: Quota / Import Allocation – (1) Panama

Two separate processes exist for allocation - one for tariff packages constituting commodities classified to be in raw material form, and another for processed commodities or finished products

Raw commodities

- The most straightforward of the processes
- Amongst the interested foreign suppliers, there is an auction in which the supplier that offers the lowest price gains the right to supply the whole package
- Among the Panamanian importers, there is no auction. The government allocates the right to buy a part of the package to interested processors of the imported commodity in proportion to the installed capacity each processor has
- The price of the tariff package is set in the auction amongst the competing suppliers

Processed commodities

- Two separate auctions take place: i) among the interested suppliers; ii) among the interested importers
- In the latter, the bidding is no longer for the entire package, but on a lot by lot basis with the highest offered price winning the lot
- Given that buyer and seller are not brought together in one auction, no price is actually set
- Instead, the suppliers receive the price at which they won the auction, and each importer pay the price at which they won the right to purchase each lot
- The importers pay in two instalments. One instalment is the amount due to the supplier. The second is any surplus, deposited with BAISA
- The exchange then distributes the surplus to charitable institutions
- Through this mechanism, BAISA donated in 2002 the sum of US\$ 1.6m merely from the negotiation of one part of a rice tariff package classified as a finished product

Innovative Mechanisms: Quota/Import Allocation – (2) Honduras

- The Honduras Commodities and Services Exchange (AGROBOLSA) registers and processes Honduran import transactions as part of its operations
 - The exchange was registered with the purpose of serving the commercialization of products, goods or services from or for agriculture and livestock by facilitating transactions
 - In particular, AGROBOLSA registers transactions within the Granza Rice Agreement, a scheme that enables rice mills to import, duty-free, the deficits of grain that are not produced domestically (provided they buy the whole bulk of the national crop at a guaranteed price)
 - Since 2002, the exchange has been registering transactions and generating the support required by the Government to issue import licenses. The exchange also generates process information such as follow-up to commercial agreements and reports on quality discrepancies
 - The participation of AGROBOLSA in the Agreement has contributed to its acceptance by the producer community, which has increased their crop production by 600% after the Agreement first came into force in 1999
 - The exchange envisages expanding its role in these transactions through enabling trade finance and working with other Central American exchanges to integrate a regional dimension into its services

Innovative Mechanisms: Upgrading Physical Markets - Rationale

- In fragmented and underdeveloped physical commodity markets, the absence of efficient price discovery and reliable trading mechanisms sustain inefficiencies and can promote anti-competitive practices
- Farmers are often the biggest losers from this set-up – intermediaries can exploit information asymmetries to offer sub-optimal prices and conditions of purchase
- Commodity exchanges can act to upgrade the physical sector by:
 - integrating fragmented markets
 - enhancing price discovery and dissemination
 - promoting access to remote or marginalised producers
 - facilitating investment in enabling infrastructure
 - stimulating quality standards that better meet market requirements



Innovative Mechanisms: Upgrading Physical Markets – Brazilian Commodities Exchange (BBM)

- Launched by BM&F in 2002 as a dedicated agri-business exchange to link agriculture, commerce, industry, finance and government
- Objectives:
 - to upgrade and commercialize the agricultural sector;
 - to provide a reliable and transparent mechanism for the exercise of government agricultural policy
- United six previously separate exchanges which became regional operation centers
 - members trade on an electronic platform accessible via the internet
 - BM&F provide clearing and settlement functions
- Services include trading in physical commodities, rural securities (CPRs) and agribusiness letters of credit (LCAs), auctions of government inventories, and a secondary market for securities, public tenders and private acquisitions



Innovative Mechanisms: Upgrading Physical Markets – Brazilian Commodities Exchange (BBM)

BBM has led to the upgrade of physical markets through:

- an integrated domestic market for agricultural commodities,
- a modern price discovery mechanisms that deliver transparent and neutral reference prices
- an organized marketing structure bringing together different stakeholders on an accessible and open platform.
- upgrading of sectoral infrastructure through enhanced warehousing and logistics.
- the registering of transactions and the BBM's rule-based framework, including arbitration mechanisms, have enabled greater confidence among counterparties to enter transactions, stimulating liquidity and new trading possibilities

Conclusions

- Latin American exchanges fall into two categories
 - Five futures exchanges, comprising three ‘mega-exchanges’ which trade exclusively or mainly financial derivatives and feature amongst the largest exchanges in the world, and two smaller Argentinian exchanges
 - Fourteen smaller commodity exchanges trading a variety of spot and other instruments but not futures contracts
 - These exchanges have been struggling to survive in the face of political uncertainty and small markets
 - Innovative mechanisms have been developed to maintain the relevance of these exchanges to Latin American economies
 - New measures are being developed – for example, Central American exchanges are looking to develop a regional, electronic exchange as a means of regional integration and enhanced operating efficiencies



THANK YOU!

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