

Commodity Exchanges and Derivatives Markets

The New World

Basic Definitions

Commodity exchanges are transaction hubs and depots for physical goods

Derivatives markets are risk shifting venues for instruments derived from commodities, securities, assets, indices, and events

Basic definitions cont'd

Commodity exchanges deal in various quantities and qualities of goods mostly thru bi-lateral spot transactions

Derivatives markets deal in purchase and sales contracts, standardized in quantity, quality, expiration dates and settlement procedures.

Basic definitions cont'd

Derivatives contracts are “cleared” by a Clearinghouse - the foundation of all derivatives markets

A CH is a central counterparty to all transactions

CH assumes the role of buyer to the seller and seller to the buyer

Basic definitions cont'd

Clearinghouse guarantees financial integrity of derivatives markets

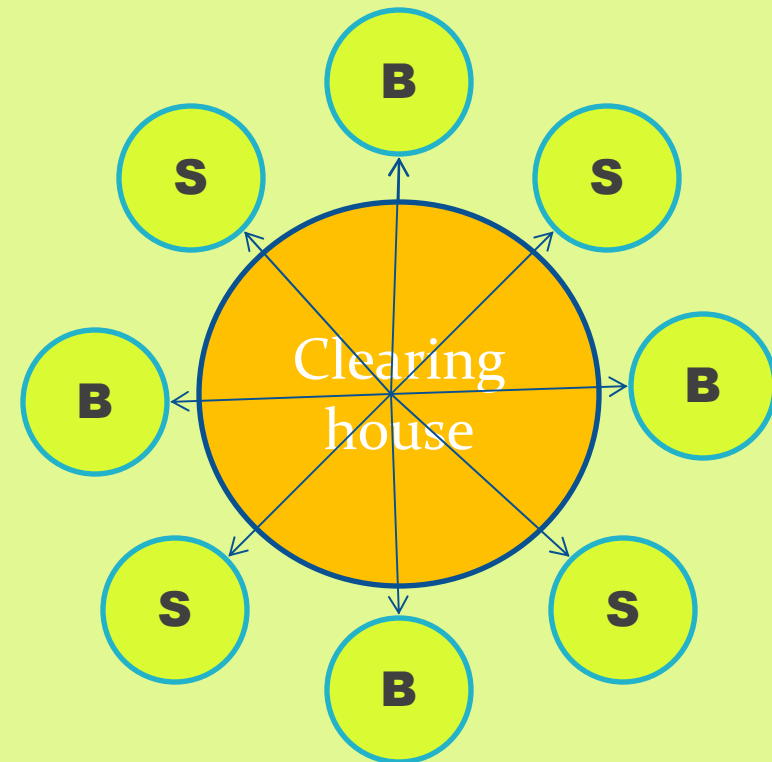
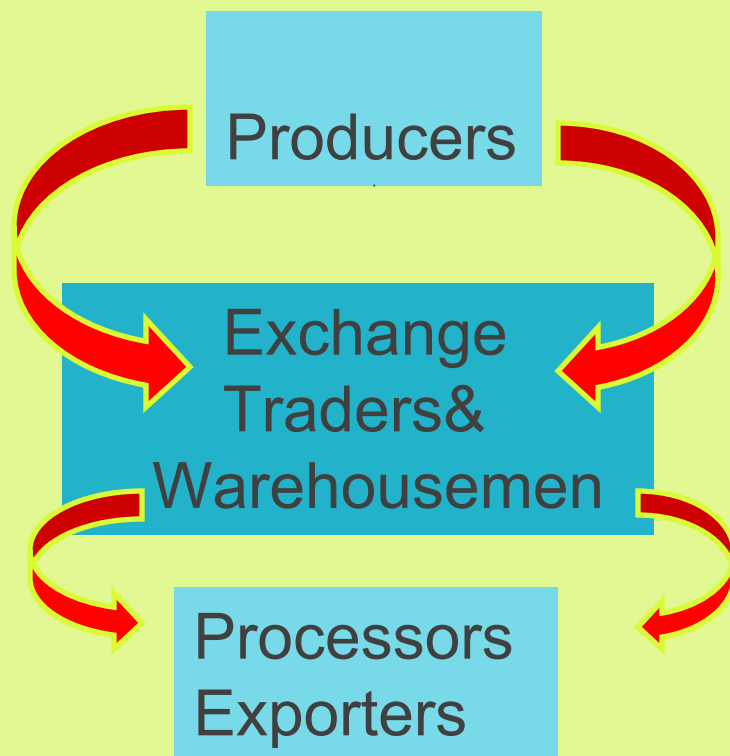
CH collects and remits margins to balance positions on “mark to market” basis

CH usually establishes a guaranty fund to guard against default

CH assigns deliveries of commodities from seller to buyer

Market structures

Commodity exchange vs Derivatives market



EXAMPLE OF DERIVATIVES CONTRACT

(Tokyo Grain Exchange Corn contract)

QUALITY



3YC
15% mst

QUANTITY



100MT

DELIVERY



CIF
JAPAN

CURRENCY



JAPANESE
YEN/MT

Delivery months: January, March, May, July, September, November

Traditional models

Commodity Exchanges

- Transaction hub
- Payment mechanism
- Buyer's market
- Government procurement
- Tax registry

Derivatives Markets

- Risk transfer
- Price discovery
- Liquidity
- Members' association
- Open outcry

Traditional models

Commodity Exchanges

- Discouraged quality production
- Discouraged investment in seed, assaying, infrastructure
- Perpetuated fragmented markets
- Made government MSP central focus

Derivatives Markets

- Developed from commodity exchanges
- Focused on member opportunity
- Self regulating and governed
- Stagnant → innovative after birth of financial futures in early 1970's

Key events to markets transformation

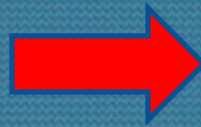
- Rapid markets liberalization after 1990
- Expansion of capital markets sector
- Greater liquidity in debt markets
- Fiscal policy discipline in emerging countries
- Leveling of risk spreads in debt market

Key events to markets transformation cont'd

- Technological revolution in information dissemination
- Explosion of global trade in goods, services and labor
- Increased volatility in basic commodities

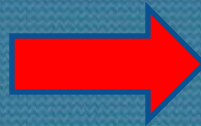
Commodity Exchanges expand their role

Transaction hubs



Dynamic forces for Development

Buyer's market power



Producer pricing

Islands of trade



Supply chain facilitator

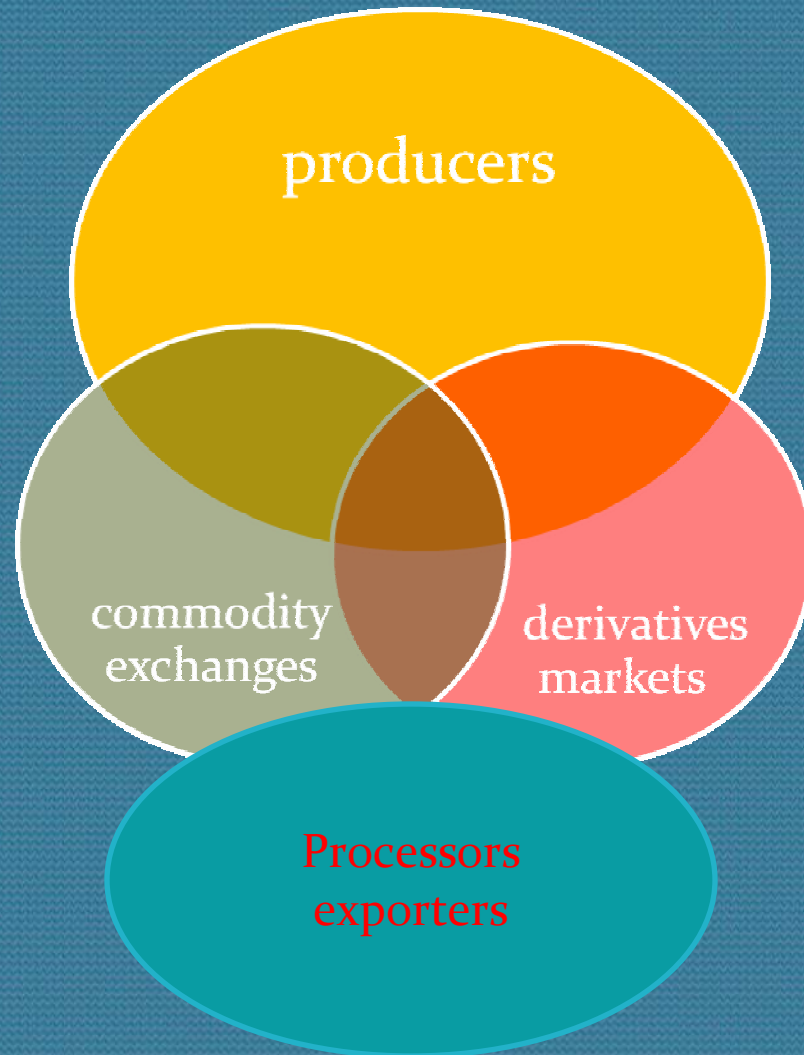
Derivatives markets link with commodity exchanges

- Broadcast a spectrum of prices across space and time to reduce market fragmentation
- Register warehouses to promote quality assurance
- Sponsor collateral management to facilitate producer financing
- Establish warehouse receipt system
- Practice quality control in delivery process

Positive benefits from linkage

- Farm productivity rises due to credit access
- Producer able to capture rewards for quality production
- Crop signals from futures prices, not government MSPs, determine producer planting mix
- Producer can store crops to avoid harvest lows

The new integrative structure



Conditions for success

Commodity Exchanges

Derivatives Markets

Minimum Conditions

Commodity Exchanges

- Infrastructure – warehouses, weighing scales, roads
- Centrality to producers
- Payment mechanism
- Registration process of buyers and sellers
- Trust

Derivatives markets

- Liquid cash market
- Price volatility
- Hedgers
- Speculative capital
- Sound financial system
- Regulatory framework
- Minimum government intervention
- Political stability

Cereal Derivatives

Minimum Conditions

- Robust cash market
- Reliable infrastructure
- Trusted grading procedures
- Vigilant supervision
- Functional clearing

Challenges: Cereal Derivatives

More complex than financial products

- Logistics
- Perishable
- Property rights standards
- Industry-wide cooperation
- Agreements with warehouses or fobbing elevators

Thank you

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