

The new order of global derivatives trading

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Commodity Exchanges and their Role in
Market Development and Transparency
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Contents

- Concept: A new kind of commodity exchange for a new kind of challenge
- Trends: where are we heading?

Critical development challenge: Smallholder commodity producers

"75 per cent of the 1.2 billion people living on less than \$1 a day live and work in rural areas. Moreover, about half of the world's hungry people are from smallholder farming communities, another 20 per cent are rural landless and about 10 per cent live in communities whose livelihoods depend on herding, fishing or forest resources."

— UNCTAD 2006, *Enabling Small Commodity Producers and Processors in Developing Countries to Reach Global Markets*

Barriers to rural development:

- **Fragmented markets**
- **Poor infrastructure**
- **Information assymetries**
- **Limited access to affordable credit**
- **Weak or absent sectoral support institutions**
- **Globalising commodity supply chains with rising barriers to small producer participation**

Reaching commodity producers at 'the bottom of the pyramid'

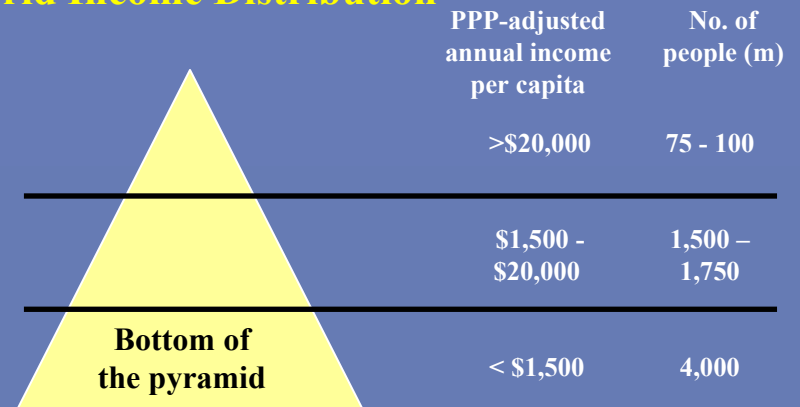
"If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up..."

[However,] doing business with the world's 4 billion poorest people, two-thirds of the world's population, will require radical innovations in technology and business models.

It will require [companies] to reevaluate price-performance relationships for products and services. It will demand a new level of capital efficiency and new ways of measuring financial success... In short, the poorest populations raise a prodigious new managerial challenge: selling to the poor and helping them improve their lives by producing and distributing products and services in culturally sensitive, environmentally sustainable, and economically profitable ways."

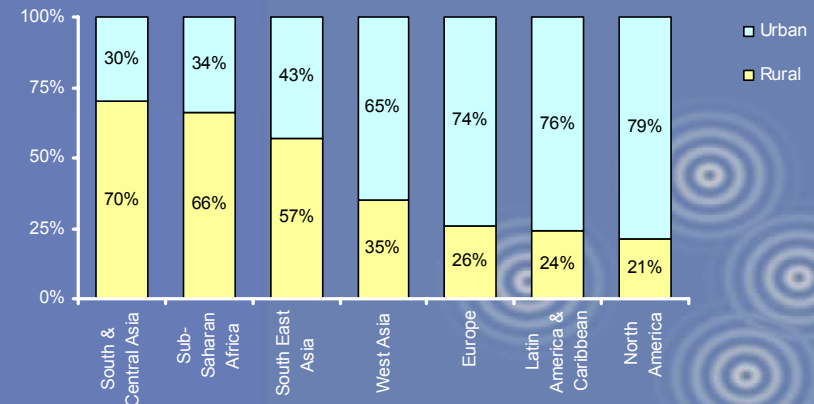
— C.K. Prahalad, *"The Fortune at the Bottom of the Pyramid"* (Wharton, 2004)

World Income Distribution



Source: Prahalad and Hart (2002) "The Fortune at the Bottom of the Pyramid", *Strategy and Business*, Issue 26

Regional urban-rural populations, 2005



Source: Population Reference Bureau

Commodity exchange: What?

“A market in which multiple buyers and sellers trade commodity-linked contracts on the basis of rules and procedures laid down by the exchange.”

Within this definition, the nature of the instruments and contracts traded - and indeed the central purpose of the institution - can vary considerably by region and sector:

- Exchanges offering spot trade for immediate delivery of the commodity
- Exchanges offering/registering forward contracts which result in future delivery
- Exchanges offering trade in commodity-based futures and options contracts - financial instruments most commonly used by commodity sector participants to manage price risk and which only rarely result in the delivery of the physical good.
- Exchanges which focus on the facilitation of trade, rather than the trade itself – e.g. some Turkish exchanges have served as a centre for registering transactions for tax purposes.

Commodity exchange: Why?

Transaction costs in the commodity economy

"The neo-classical result of efficient markets only obtains when it is costless to transact. But when it is costly to transact, institutions matter... and it is costly to transact."

— Douglass C. North,
"Institutions, Institutional Change
and Economic Performance"
(Cambridge University Press 1990)

"...the assumption that there are no costs involved in carrying out market transactions is of course very unrealistic. These operations are often extremely costly, sufficiently costly at any rate to prevent many transactions that would be carried out in a world in which the pricing system worked without cost."

— Ronald Coase, "The Problem of Social Cost", *Journal of Law and Economics*, Issue 3, Oct 1960

Measurement / information costs (pre-transaction):

- Locating counterparties
- Appraising reliability of counterparties
- Determining and/or locking in an acceptable price
- Ascertaining product quality
- Securing finance to fund the transaction
- Defining appropriate delivery and payment modalities and other contractual terms and conditions

Enforcement / compliance costs (post-transaction):

- Managing credit and cash flows
- Overseeing delivery
- Assuring quality
- Arbitrating disputes
- Insuring against (or compensating for) default
- Sanctioning and/or excluding persistent defaulters

Commodity exchanges: Potential benefits to developing country commodity sectors

- ✓ **Market creation**
- ✓ **Stimulating regional integration & South-South trade**
- ✓ **Price discovery**
- ✓ **Infrastructure enhancement**
- ✓ **Quality assurance/upgrade**
- ✓ **Price risk management**
- ✓ **Market access**
- ✓ **Reduced counterparty risk**
- ✓ **Price transparency**
- ✓ **Facilitate provision of finance**
- ✓ **Facilitate input supply and extension service**

Caveat: Benefits do not automatically flow from the establishment of a commodity exchange

- A domestic commodity exchange is not necessarily an appropriate policy instrument for all markets and all commodities.
- An exchange which is badly-structured or poorly-managed is unlikely to deliver such enhancements to underlying commodity sectors.
- A well-functioning commodity exchange is predicated upon a robust legal-regulatory framework
- Exchanges in various parts of the world take different forms, not all of which will offer the same range of services or have the same strategic priorities
 - Therefore, the extent to which prospective enhancements are delivered in large part depend on the services offered and the strategic priorities pursued by the exchange.

The triple mission: Key differentiator for a developing country exchange

- Organisational mission:

The standard or 'core' mission of a commodity exchange to build liquid and efficient markets.

- Development mission:

The need to catalyse entire sectors whose participants tend to include some of the world's most impoverished people.

- Participatory mission:

Making market instruments relevant for and usable by the ordinary citizen.

The triple mission: why?

In developing countries, the political, social and commercial incentives for an exchange to pursue the triple mission are high



Political:

An exchange may be explicitly tasked with the triple mission by government or regulators.

Social:

An exchange may implicitly bear some responsibility for catalysing critical but under-performing commodity sectors

Commercial:

An exchange may perceive the significant commercial opportunity at the 'bottom of the pyramid'



Aim: to blend economically efficient markets and a financially rewarding business model with development-friendly outcomes that are equitable, empowering and sustainable

The emerging commodity exchange: The need for a new breed

*" Almost all absurdity of
conduct arises from the
imitation of those we
cannot resemble."*

— Samuel
Johnson, *The
Rambler*, #135

- An emerging exchange cannot simply copy exchange models that have proved successful in foreign markets under different market conditions and in pursuit of different imperatives.
- Instead, the attainment of these missions requires the development of new models and the application of new technologies for building the exchange as an institution.

The triple mission: What does it mean for the exchange?

Organisational mission

“Liquid and efficient futures markets”

- Liquidity in contracts traded
- Efficient transaction execution and clearing systems
- Transparency in all dimensions of market operations
 - especially dissemination of market information and exchange rules and procedures
- Well-defined contracts in line with market user requirements
- Smoothly-functioning delivery system
- Competent and trusted exchange management
- Sound risk management in all dimensions of market operations
- Robust legal-regulatory framework

Development mission

“Catalyse the underlying commodity sectors”

The organisational mission, plus:

- Develop instruments and contracts designed to benefit sectors with a significant development need
- Proactively extend exchange services to commodity sector participants, especially those most exposed to high transaction costs
- Promote as a priority the upgrade of infrastructure and practices in commodity sector supply chains
- Synergise exchange services with other services that commodity sector participants require e.g. finance, input supply
- Work closely with development-oriented organisations - public, private, civil society - to maximise impact from exchange operations

Participatory mission

“Instruments relevant for and usable by the ordinary citizen”

The organisational mission, plus:

- Innovate instruments and contracts that address the risk management and investment needs of the population
- Provide an open and accessible trading platform
- Offer extensive awareness-raising, education and training to demystify concepts, build understanding and drive usage
- Remove unnecessary complexities that obstruct engagement with the markets
- Devise exchange rules and procedures amenable to broad direct or indirect participation in the markets
- Promote robust investor protection rules and best practice trading techniques to inexperienced users
- Work closely with brokerages and other intermediaries to broaden participation

Opportunities

- New offerings

- New contracts and instruments
- New product / service bundles

- New liquidity

- Commercial participants
- Institutional investors

- New technologies

- Connectivity
- Functionality
- Service enhancement

- New partnerships

- Public sector actors
- Private sector actors
- Civil society actors

Obstacles

- Absent or degraded infrastructure
 - Information and Communications
 - Transportation and logistics

- Weaknesses in legal-regulatory framework
 - Legal environment
 - Regulatory architecture

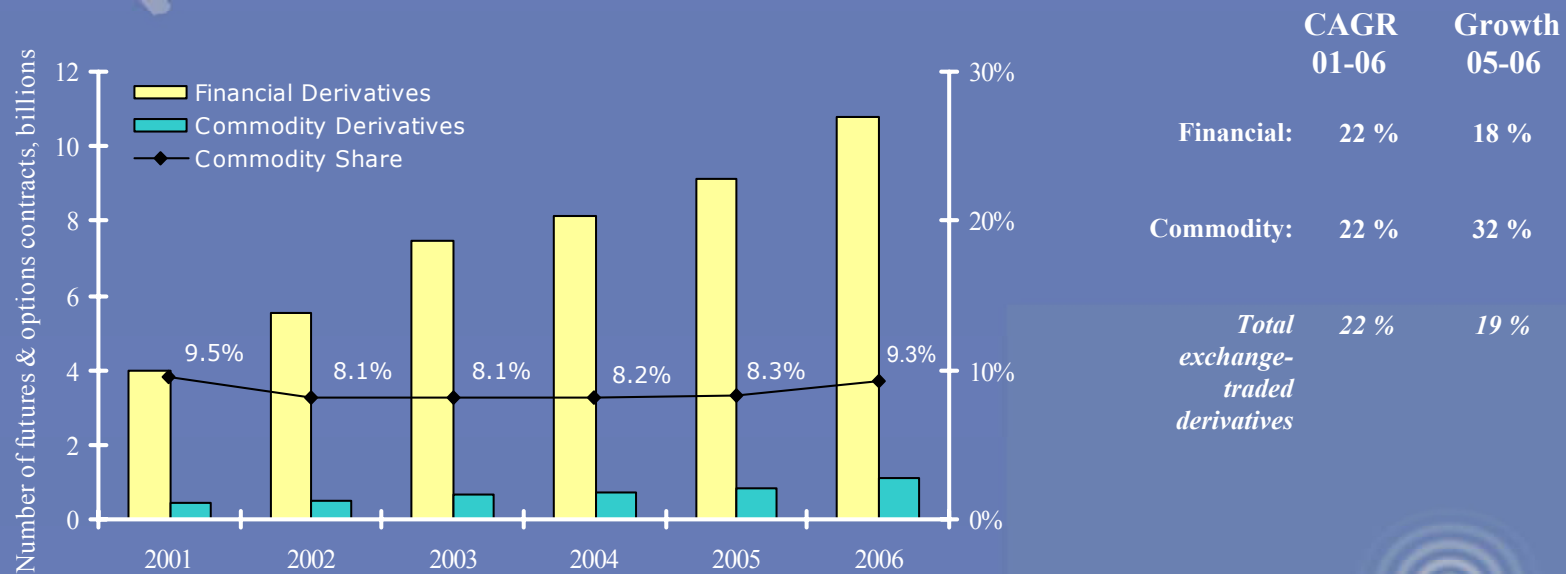
- Lack of awareness
 - New concepts
 - New practices
 - New mindset

- Absence of intermediaries
 - Aggregation
 - Information
 - Education and training

Contents

- Concept: A new kind of commodity exchange for a new kind of challenge
- Trends: where are we heading?

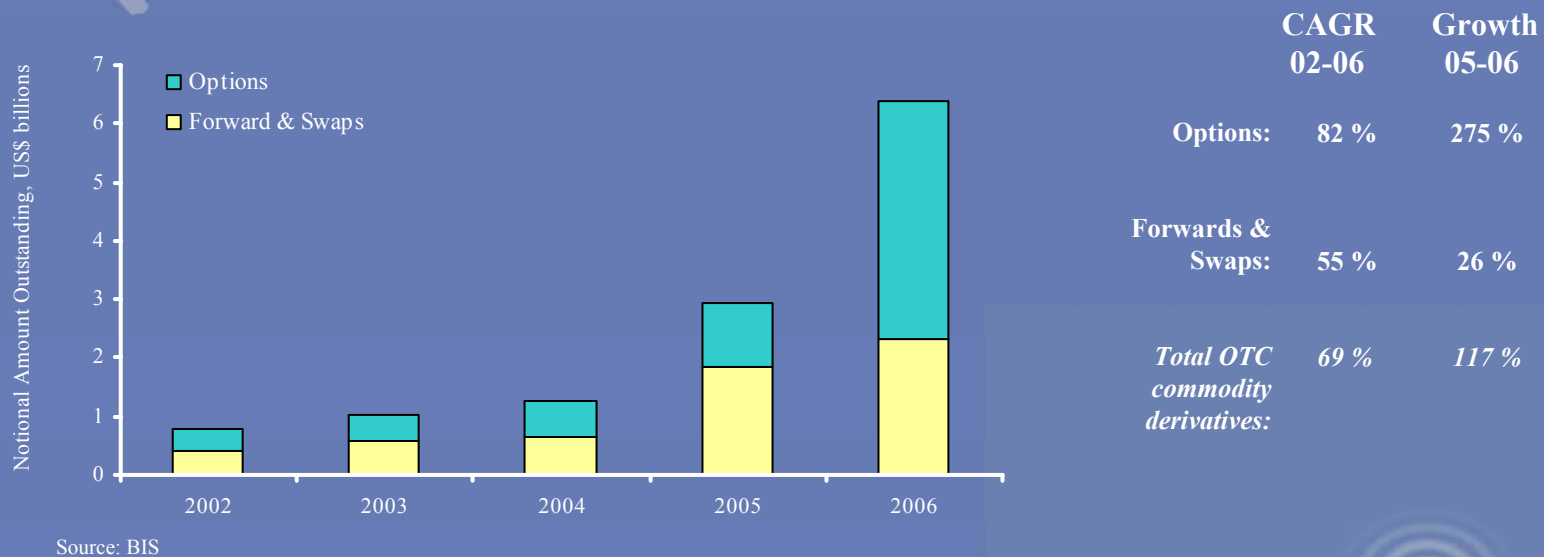
Trends: Exchange-traded commodity derivatives now growing faster than financial derivatives



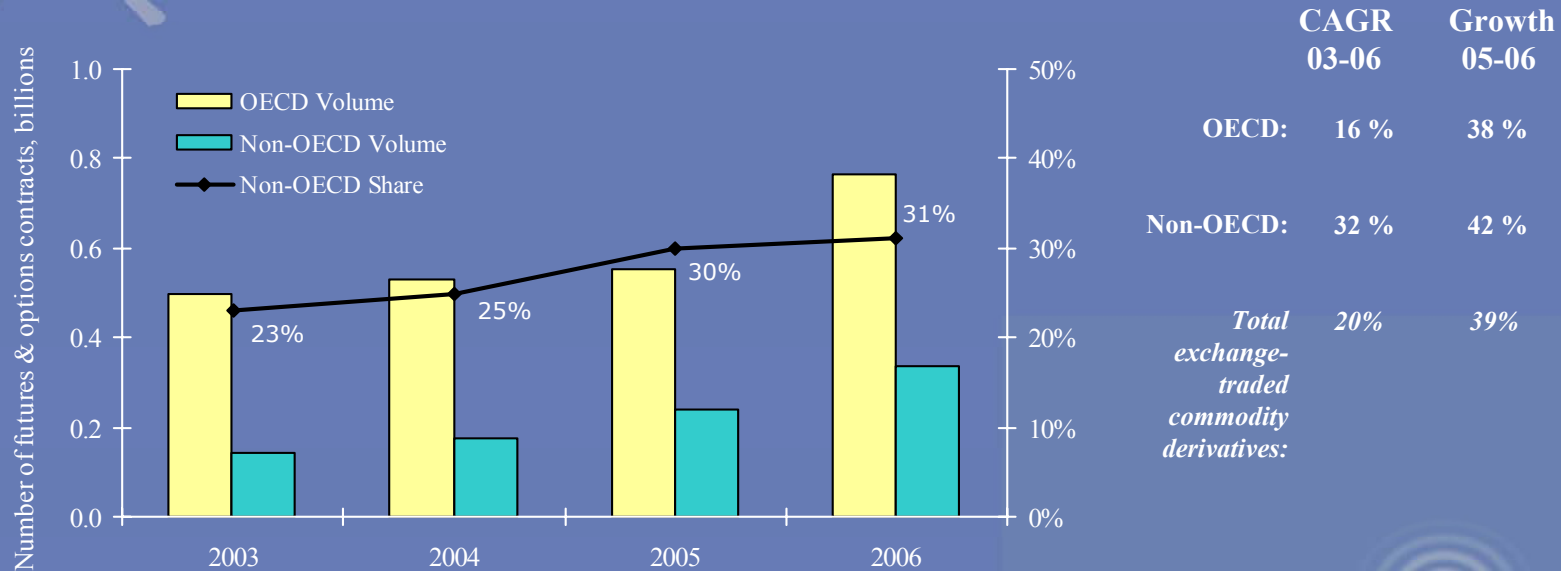
Source: FIA data with UNCTAD adjustment for missing commodity exchange data

	CAGR 01-06	Growth 05-06
Financial:	22 %	18 %
Commodity:	22 %	32 %
<i>Total exchange- traded derivatives</i>	22 %	19 %

Trends: OTC commodity derivatives also exhibiting explosive growth



Trends: Exchange-traded commodity derivatives - Developing country growth outpacing that of the developed world

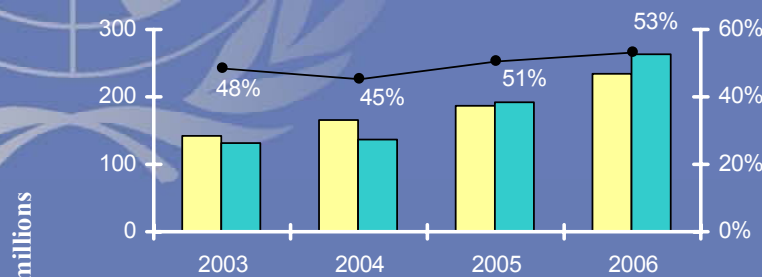


Source: UNCTAD

Note: The dataset comprises the world's leading commodity exchanges, defined as commodity exchanges which trade over 1 million futures and options contracts per annum; CAGR = Compound Annual Growth Rate

Trends: Exchange-traded commodity derivatives – Growing developing country strength in agriculture and metals

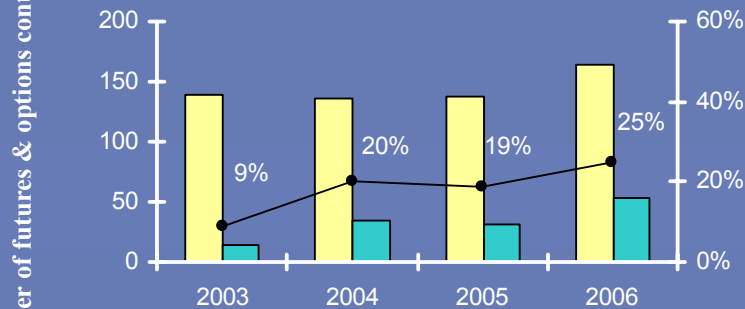
Agriculture



	CAGR 03-06	Growth 05-06
OECD:	18 %	26 %
Non-OECD:	26 %	38 %
Total Agriculture:	22 %	32 %

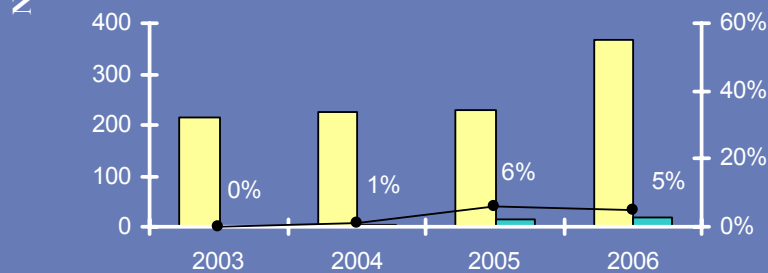
OECD Volume
 Non-OECD Volume
 Non-OECD Share

Metals



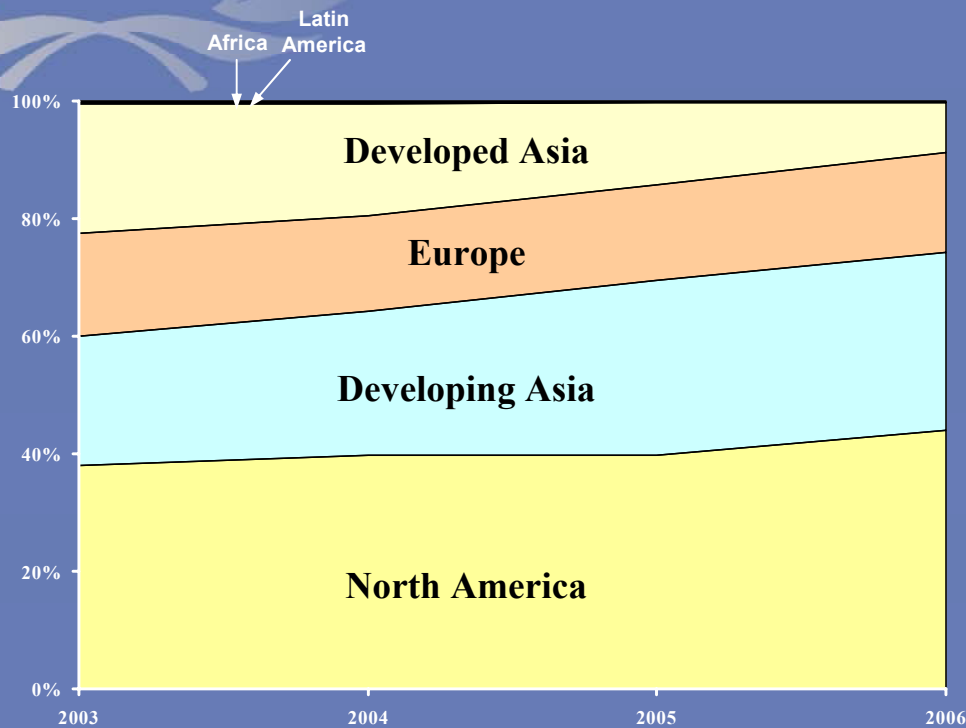
	CAGR 03-06	Growth 05-06
OECD:	6 %	19 %
Non-OECD:	25 %	71 %
Total Metals:	13 %	29 %

Energy



	CAGR 03-06	Growth 05-06
OECD:	20 %	60 %
Non-OECD:	163 %	28 %
Total Energy:	22 %	58 %

Trends: Exchange-traded commodity derivatives - Developing Asia leading the charge



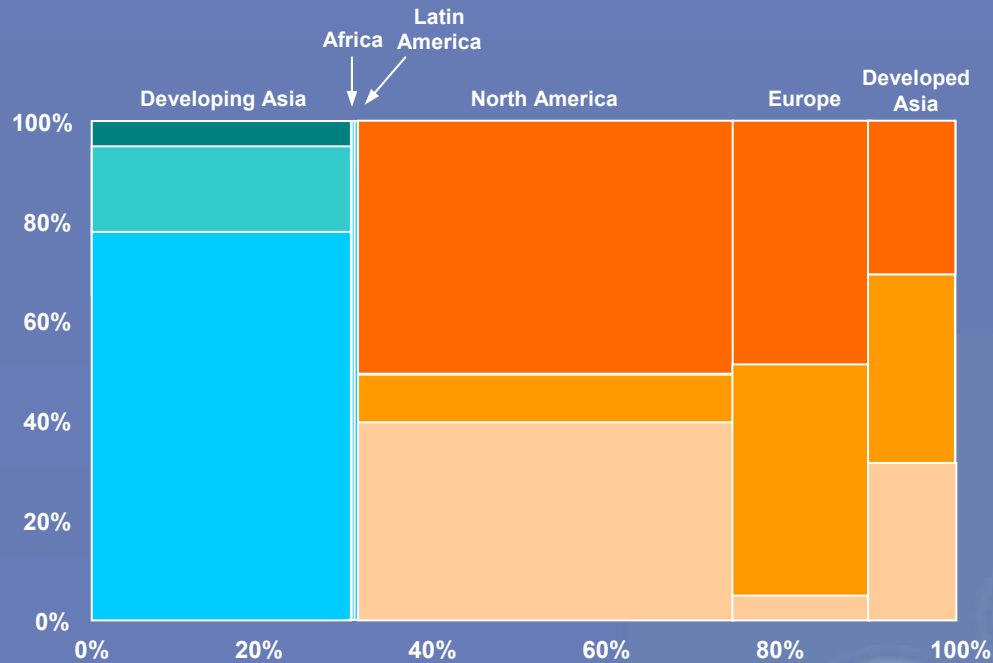
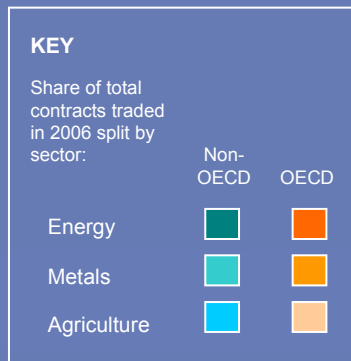
	CAGR 03-06	Growth 05-06
Africa:	- 6 %	10 %
Latin America:	13 %	28 %
Developed Asia:	-13 %	-16 %
Europe:	19 %	47 %
Developing Asia:	33 %	42 %
North America:	26 %	54 %

Source: UNCTAD

Note: The dataset comprises the world's leading commodity exchanges, defined as commodity exchanges which trade over 1 million futures and options contracts per annum; CAGR = Compound Annual Growth Rate

Trends: Exchange-traded commodity derivatives - Developing Asia's agricultural strength

Global liquidity map: Total volumes by region and sector, 2006¹











Source: UNCTAD

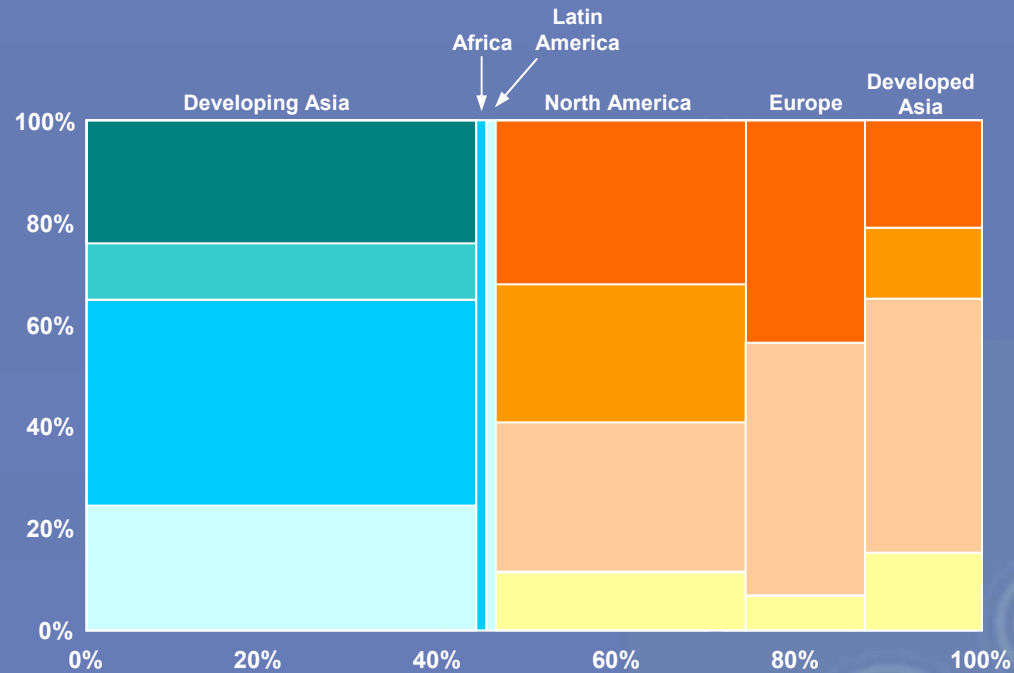
1. Total number of commodity futures and options contracts traded in 2006 at major exchanges: 1.1 billion

Note: The dataset comprises the world's leading commodity exchanges, defined as commodity exchanges which trade over 1 million futures and options contracts per annum

Trends: Exchange-traded commodity derivatives - Developing Asia – high number of liquid contracts relative to its volume

Global liquidity map: Liquid contracts by region, 2006¹

KEY		
Share of total liquid contracts traded in 2006 with volume ranges:		
	Non-OECD	OECD
> 10m		
5m – 10m		
1m – 5m		
0.5 – 1m		

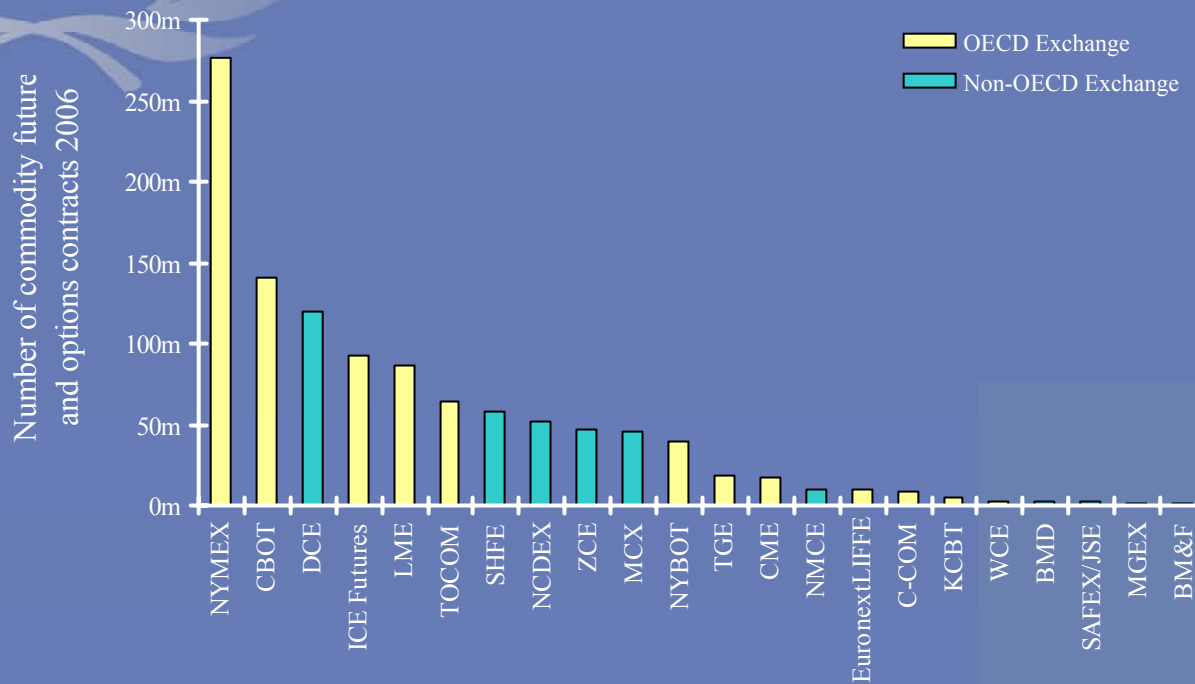


Source: UNCTAD

1. Total liquid commodity contracts traded in 2006: 109

Note: The dataset comprises the world's leading commodity exchanges, defined as commodity exchanges which trade over 1 million futures and options contracts per annum

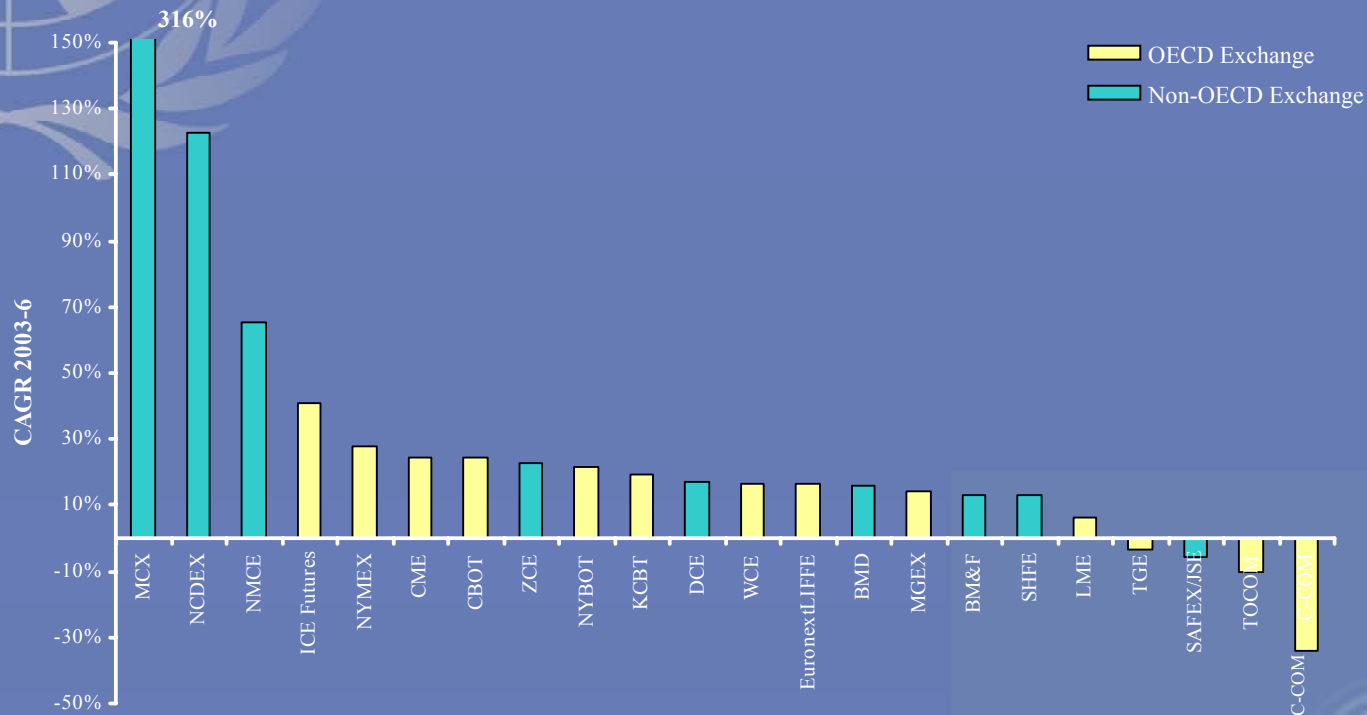
Trends: Nearly half of world's leading commodity exchanges are in the developing world



Source: UNCTAD

Note: The dataset comprises the world's leading commodity exchanges, defined as commodity exchanges which trade over 1 million futures and options contracts per annum

Trends: Developing Asian exchanges – the fastest growing in the world



Source: UNCTAD

Note: The dataset comprises the world's leading commodity exchanges, defined as commodity exchanges which trade over 1 million futures and options contracts per annum; NCDEX, MCX and NMCE were not yet trading in 2003 and therefore CAGR is taken between 2004-6; CAGR = Compound Annual Growth Rate

Conclusions

- Commodity exchanges are increasingly central to the policy debate – trade-facilitating institutions that can meet critical development challenges
 - Potentially offer a broad suite of benefits that can reduce transaction costs, thus upgrading commodity sectors and integrating supply chains
 - Although not a panacea whose benefits automatically follow from their establishment
 - Pursuing a triple mission – organisational, development and participatory – to create both high growth and equitable outcomes
 - Today, commodity exchanges in the developing world are the fastest growing, trading a large number of liquid contracts, with much of their focus on agricultural commodities to address underperforming sectors



THANK YOU!

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