

Exchange Traded vs OTC  
Order-Driven vs Quote-Driven



Efficient Securities Transactions



Efficient Securities Transactions

## Exchange Traded

- Some Instruments such as Stocks, Futures and Options are traded on exchanges like New York Stock Exchange, CME and CBOE through intermediaries such as Banks and Broker/Dealers

## OTC

- Instruments such as Bond, FX, Forwards, Swaps and Exotic Derivatives are traded on OTC run by Financial Institutions like Commercial Banks, Investment Banks and Broker/Dealers



Efficient Securities Transactions

## Exchange

- Level Playing Fields are given to all participants(individuals, institutions and broker/dealers)
- Central Counter Parties(CCPs) are given to participants and Clearings are provided either by Clearing Houses or Exchanges themselves(In-house Clearing)
- Mostly Order-Driven except Stock Options and Some Instruments of which liquidities are generated by Market Makers.

## OTC

- No Level Playing Fields. Inter-dealer markets lie in center and clients sit around them.
- No CCPs are given. Buyer and Seller must settle transactions among themselves. Therefore it incurs more settlement risks and transactional costs.
- Mostly Quote-Driven(Direct Market). Electronic Brokerages are Order-Driven.



Efficient Securities Transactions

- Best bids and offers are disseminated to the public on a real time basis, thus very transparent.
- Highly regulated, both by law and exchanges' rules and regulations.
- Products traded in exchange markets are less diverse due to the requirement of standardization and the tight regulation
- Price disseminations are not so transparent. Clients sitting outside inter-dealer markets don't get price information of same quality.
- No regulation.
- More diverse products can be traded in OTC markets which, thus, have a powerful function of distributing resources due to their market making feature



Efficient Securities Transactions

- It is more difficult to generate liquidities due to the lack of market making
- As far as professional dealers are willing to make markets, liquidities can be generated more easily

# Critical Problems in Korean Financial Market



Efficient Securities Transactions

## OTC

- There are no direct markets (quote-driven market) for money market, bond and FX
- In real sense, there are no money market, bond and FX dealers
- This means banks are not playing their roles as market makers, which is one of the most important roles that bank usually do in other countries
- Since banks are not actively making markets, liquidities are far too small compared to the size of Korean Economy (my estimation is that both FX and Bond markets should be 5-10 times bigger than now)
- Therefore all these factors explain well why Korean financial market is so vulnerable to any impacts that have both domestic and foreign origins



Efficient Securities Transactions

## Exchange

- Market monopoly is guaranteed by law- no competition
- OTC share trading and other market venues like ECN in US and MTF(Multi-lateral Trading Facilities) are not allowed
- Regulatory framework is very domestic-oriented. Algorithmic trading, DMA(direct market access), Co-location Service and etc that are normal practices in other markets are not allowed in Korea. This is main reason why share trading volumes in KRX never reached its peak in 2002 whereas there have been big increases in other markets in last five years.
- Individual Stock Options Markets have grown rapidly. Stock and Index Options, Index Futures became flagship products in major derivatives exchanges whereas Stock Options are not traded at all in KRX. This is because there are no market making or continuous two quotes by market making members in KRX.( refer to page 8, 9 and 10)



s Transactions

## Equity Options Contract Volume By Exchange

- CBOE pioneered the concepts of listed options in 1973

- 2000

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>Total Volume Share</b>	
278,920,392	192,032,222	72,135,321	108,533,862	7,565,684	659,187,481	42.3%

- 2001

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>Total Market Share</b>	
232,851,089	167,713,954	92,955,040	95,646,008	59,201,203	648,367,294	36%

- 2002

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>Total Market Share</b>	
173,189,719	145,258,377	78,435,997	71,433,006	140,343,022	608,660,121	28%

- 2003

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>Total Market Share</b>	
173,033,965	142,184,749	89,060,733	71,112,677	225,829,026	701,221,150	25%

- 2004

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>BOX</b>	<b>Total Market Share</b>	
224,316,863	160,354,728	107,404,566	88,909,404	322,767,111	16,457,048	920,209,720	24%

- 2005

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>BOX</b>	<b>Total Market Share</b>	
275,646,980	155,020,082	138,878,659	127,621,679	384,016,841	61,318,465	1,142,502,706	24%

- 2006

<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>BOX</b>	<b>Total Market Share</b>	
390,657,577	141,858,034	231,789,665	168,521,298	484,184,624	77,480,159	1,494,491,357	26%

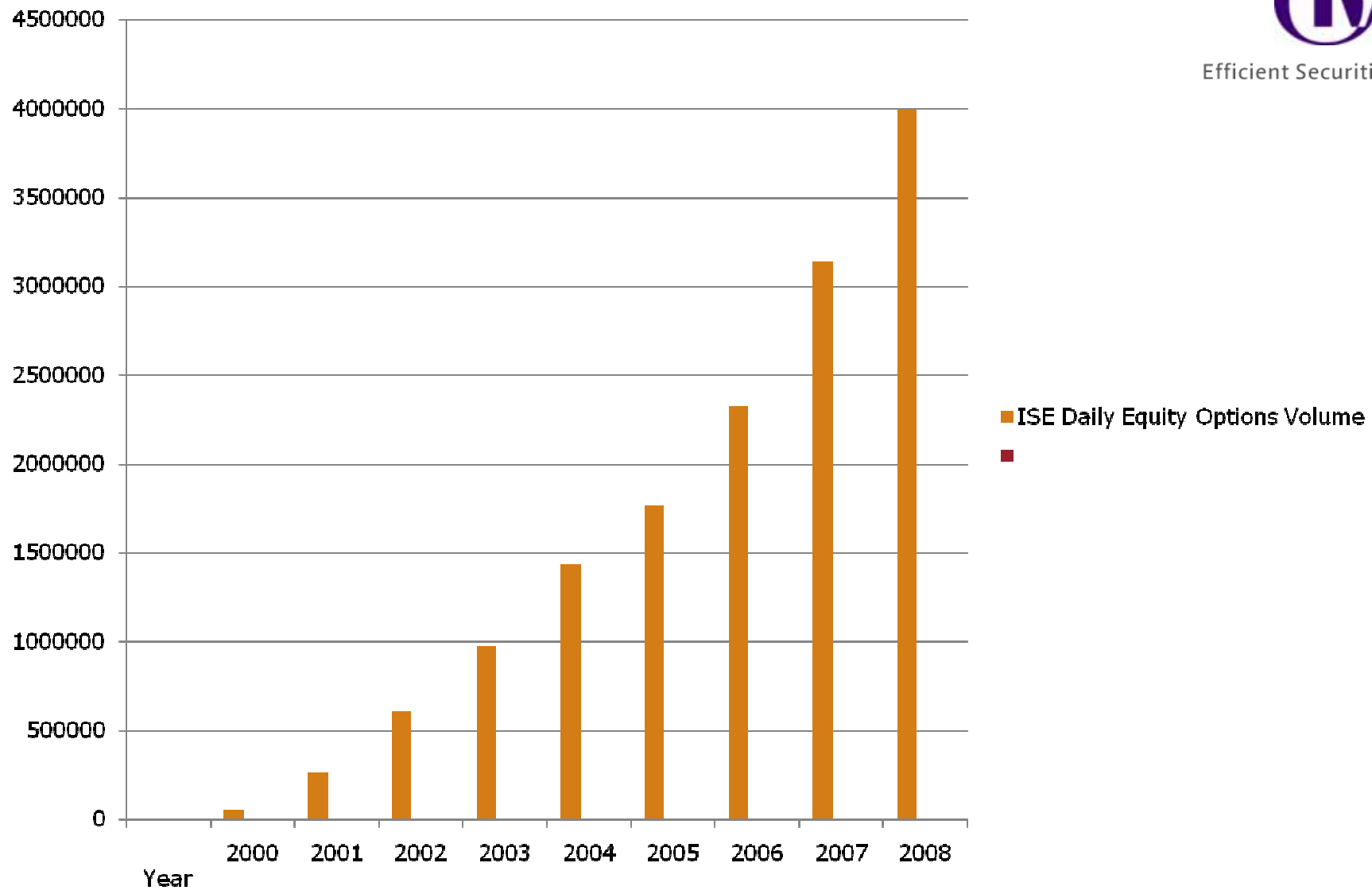
- 2007

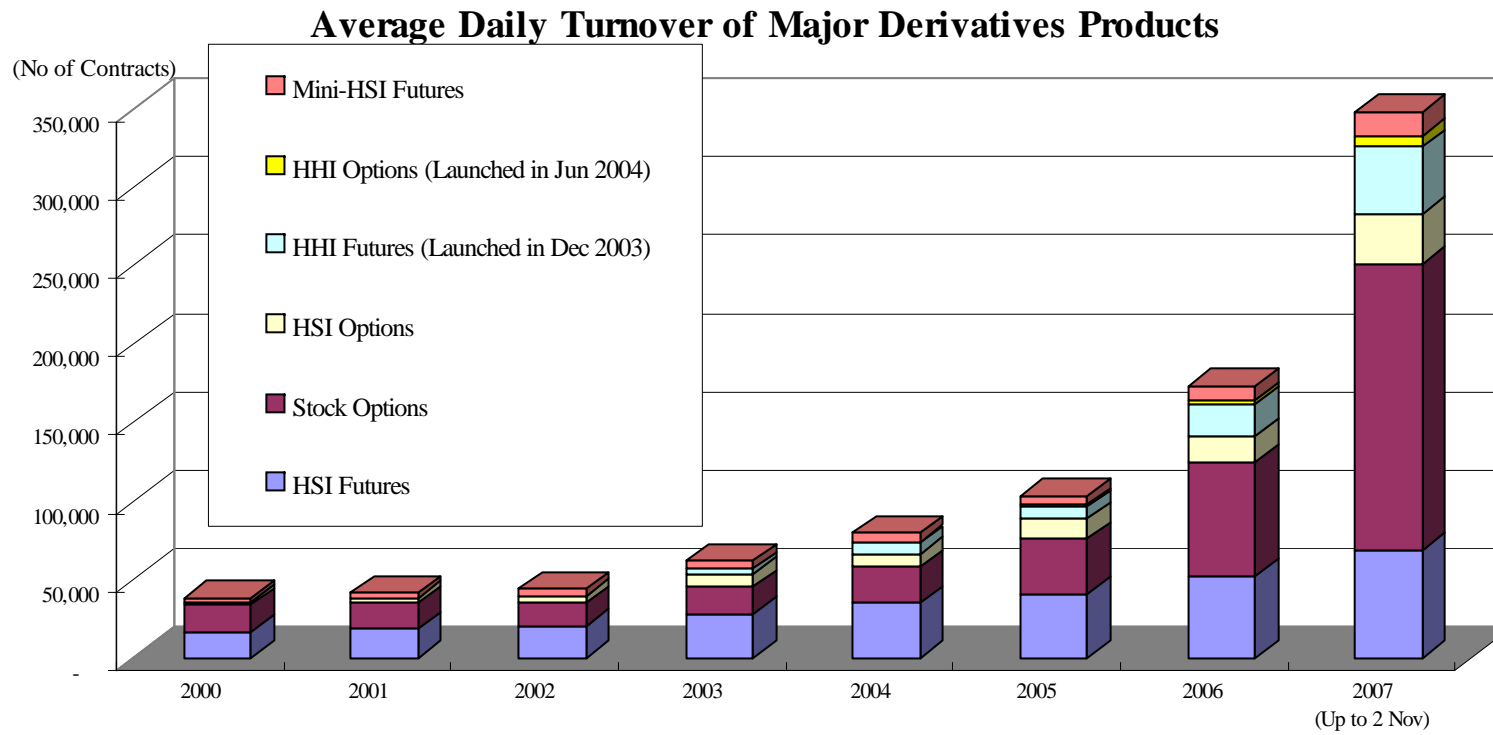
<b>CBOE</b>	<b>AMEX</b>	<b>PHLX</b>	<b>PCX</b>	<b>ISE</b>	<b>BOX</b>	<b>Total Market Share</b>	
500,964,713	158,940,325	331,458,236	259,399,433	603,361,649	95,509,373	1,949,633,729	26%





Efficient Securities Transactions







Efficient Securities Transactions

## Eurex

03/11/08

The international derivatives exchange Eurex traded a total of 226.6 million contracts in October (excluding ISE volume), a year-on-year increase of 55 percent

(October 2007: 145.9 million contracts). The strong growth is partly attributable to the increased use of exchange-traded derivatives during the current market crisis.

On a year-to-date basis, Eurex volumes rose by 18 percent achieving 1.9 billion contracts (Jan – Oct 2007: 1.6 billion contracts).



Efficient Securities Transactions

# How do these problems negatively impact Korean Financial Industry?

- Lack of market experts

Broker/Dealer, Market Maker, Proprietary trader, Arbitrager, Diverse spectrum of Fund Manager, Asset Manager and Hedge Fund Manager

- Underdeveloped Financial Software and Solution Market

Smart Order Routing, Algorithmic Trading, Automated Trading, DMA, Arbitrage, Market Making, Front to Back Office, Risk Management, Performance Evaluation, Enterprise Data Management