

Discuss for
“Global Trends and the Rise of China in
Derivatives Market”

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(2015 APAD conference)



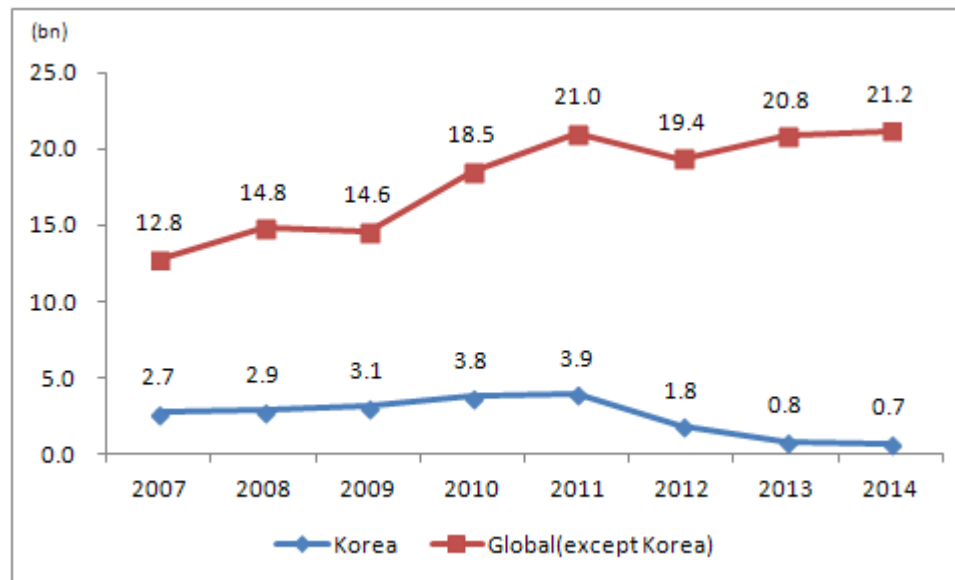
Summary of Global Trends in Derivatives Market

- ❖ **Global ETD volume bounced back after 2012**
 - Annual increase: -15.2%('12) → 1.7%('13) → 1.5%('14)
- ❖ **ETD volume in Asia excluding KOSPI200 options increased by double digits**
- ❖ **ETD volume in KRX sharply declined since 2011**
 - KRX's market share of global ETD: 15.7%('11) → 3.1%('14)
- ❖ **China's ETD market share is fast growing**
 - All ETD: 4.8%('11) → 12.1%('14)
 - Commodity: 42.3%('11) → 64.1%('14)
- ❖ **Notional amount of both global and KRX is stagnant**
 - Global: \$645 trillion('11) → \$630('14)
 - Korea: 6,903 trillion won('11) → 7,373 trillion won('14)

ETD volume between global and Korea

- ❖ **The volume of global ETD except Korea increased by 43% since 2009**
 - Whereas, ETD volume of Korea declined by 73.5% since 2009
 - Korea's market share of global ETD market has sharply declined from 17.5%('09) to 3.1%('14)

Contract Trends of ETD market between Korea and Global(except Korea)



Source: KRX

Top 15 Derivatives Exchanges



- ❖ **Chinese derivatives exchanges are rapidly growing owing to commodity**
 - The trading volume of Shanghai Futures Exchange, Dalian Commodity Exchanges, and Zhengzhou Commodity Exchanges increased by double digits
- ❖ **BSE (India), Moscow Exchange grows fast**
 - In contrast, the rank of KRX dropped from 1st (2011) to 12th (2014)

Top 15 derivatives exchanges

Exchange	2013 volume	2014 volume	Annual Change
CME group	3,161,476,638	3,442,766,942	8.90%
Intercontinental Exchange	2,807,970,132	2,276,171,019	-11.00%
Eurex Group	2,190,548,148	2,097,974,756	-4.20%
National Stock Exchange of India	2,135,637,457	1,880,362,513	-11.60%
BM&F Bovespa	1,603,600,651	1,417,925,815	-11.60%
Moscow Exchange	1,134,477,258	1,413,222,196	24.60%
CBOE holdings	1,187,642,669	1,325,391,523	11.60%
Nasdaq OMX	1,142,955,206	1,127,130,071	-1.41%
Shanghai Futures Exchange	642,473,980	842,294,223	31.10%
Dalian Commodity Exchange	700,500,777	769,637,041	9.9%
Bombay Exchange	254,845,929	725,841,680	184.80%
Korea Exchange	820,664,621	677,789,082	-17.40%
Zhengzhou Commodity Exchange	525,299,023	676,789,082	28.80%
Hong Kong Exchanges	301,128,507	366,145,920	6.10%
Japan Exchange	366,145,920	301,128,507	-15.40%

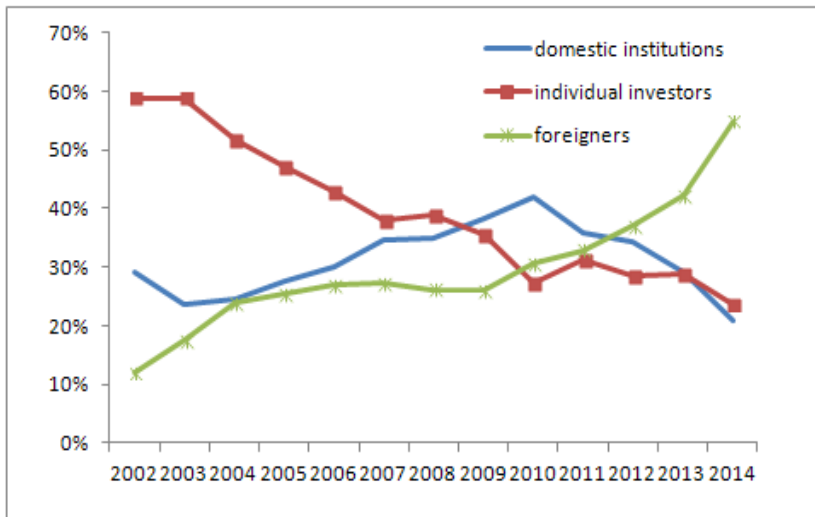
Source: FIA

Investor types of KOSPI 200 futures & options

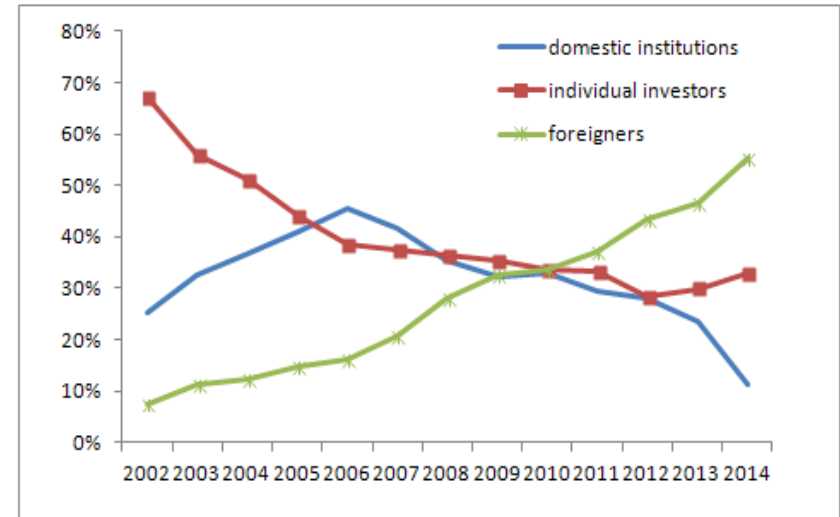
❖ Since 2008, the ratio of foreigners has doubled

- The ratio of foreigners in KOSPI200 futures & options is about 60%
- Whereas, the ratio of domestic institutions has decreased due to the downsizing of prop trading of securities firms
- The ratio of individual investors has decreased and is stagnant around 30%

Investor types of KOSPI 200 futures



Investor types of KOSPI 200 options



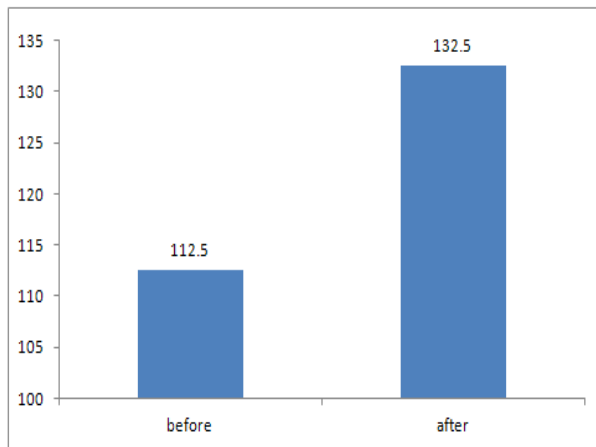
Source: KRX

Source: KRX

Market Efficiency after the increase of KOSPI200 options' contract size

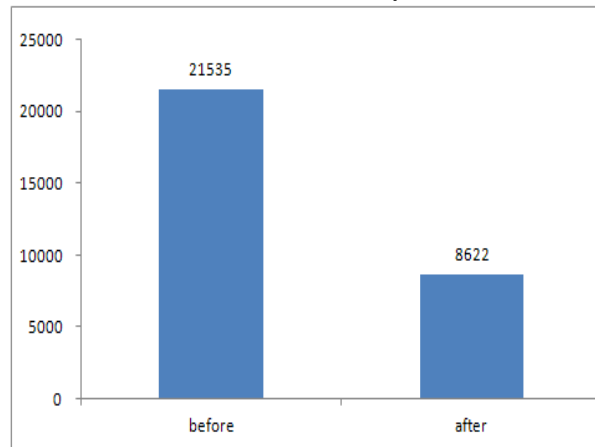
- ❖ **Quoted spread increased by 17.8% (after 1 year)**
 - 112.5 bp (before) → 132.5 bp (after)
- ❖ **Quoted depth decreased by 60.0%**
 - 21,535 (before) → 8,621 (after)
- ❖ **Market quality decreased by 62.5%**
 - 24,452 (before) → 9,170 (after)
 - Market quality = $\text{quoted depth} / (\text{quoted spread} * 100)$

Quoted spread (bp)



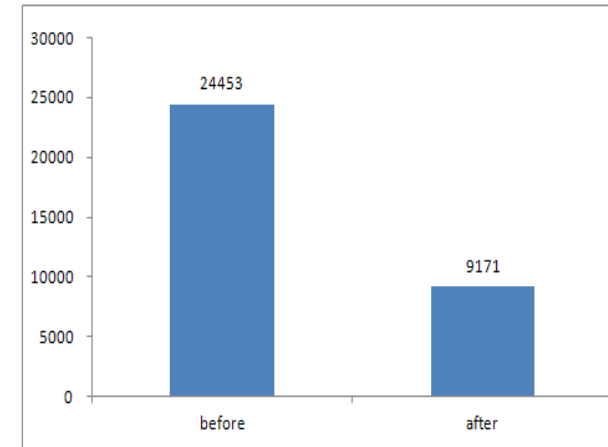
6 Source: KCMi

Quoted depth



Source: KCMi

Market quality

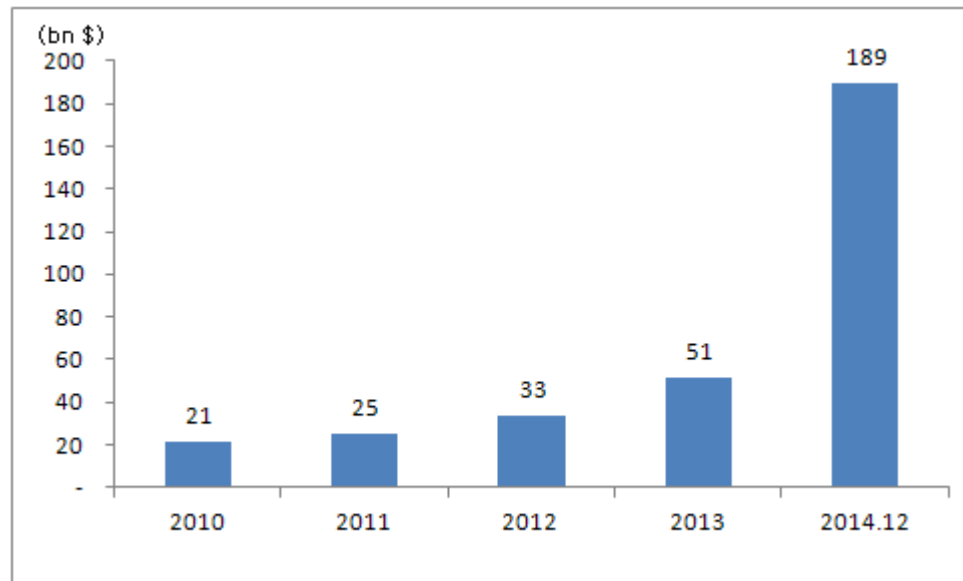


Source: KCMi

Outbound ETD volume in Korea

- ❖ **After strong regulations since 2010, retail investors in Korea go overseas ETD market**
 - Outbound ETD volume increased by about 10 times since 2010

Outbound derivatives' volume (monthly average) in Korea



Source: KOFIA
Note: exclude FX margin

Improvements of derivatives market in Korea

❖ **De-regulation policy should be required for ETD market**

- Minimize or abolish open-account margin (30 million won for futures, 50 million won for options) for the entry of ETD market
- Mandatory education & on-line trading experience (80 hours) for the entry of ETD market should be minimized

❖ **List new ETD products**

- Mini Yuan futures & options
- ETF options
- Crude or Petroleum products such as gasoline, naphtha

❖ **Induce OTC trading to ETD market**

- Expand mandatory clearing products such as NDF, CDS
- Using on-line trading platform for OTC market should be mandatory

Thank you very much.