



Bond Market in Korea and KOFIA's Role

April 2011

Korea Financial Investment Association



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- 1. Primary Market: Bond Issuance in Korea
- 2. Secondary Market: Trends in Bond Trading
- 3. Foreign Investment in the Bond Market

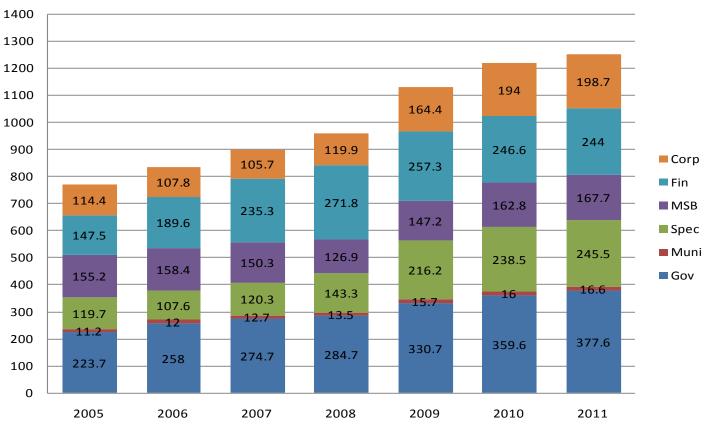




1. Primary Market: Bond Issuance in Korea

◆ As of Mar., 2011, bond outstanding amounts to KRW 1,250 Trillion(≒ 1.16 USD Tril.) with government, financial, special and corporate bonds representing 30%, 20%, 20%, and 16% respectively

< Bond Outstanding >



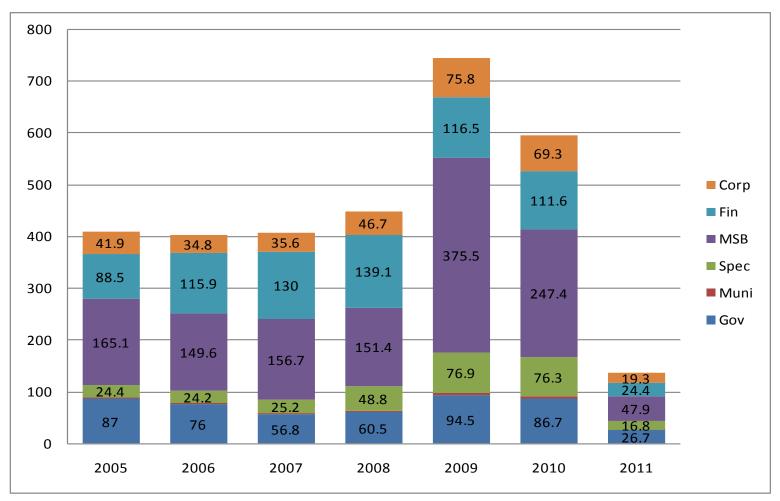
<Unit : KRW Trillion, Source : KOFIA, KOSCOM>





1. Primary Market: Bond Issuance in Korea

< Bond Issuance >



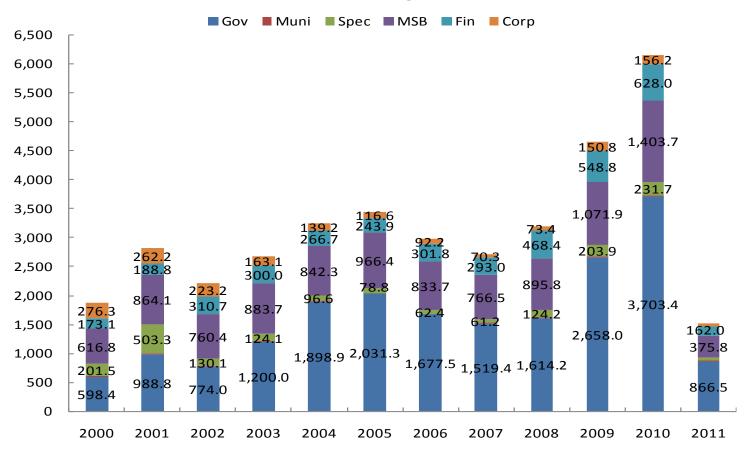
<Unit : KRW Trillion, Source : KOFIA, KOSCOM>



2. Secondary Market: Trends in Bond Trading

In 2010, KRW 6,151 trillion(≒ 5.7 USD Trill.) worth of bonds were traded in Korean Bond Market.

< Bond Trading Volume >



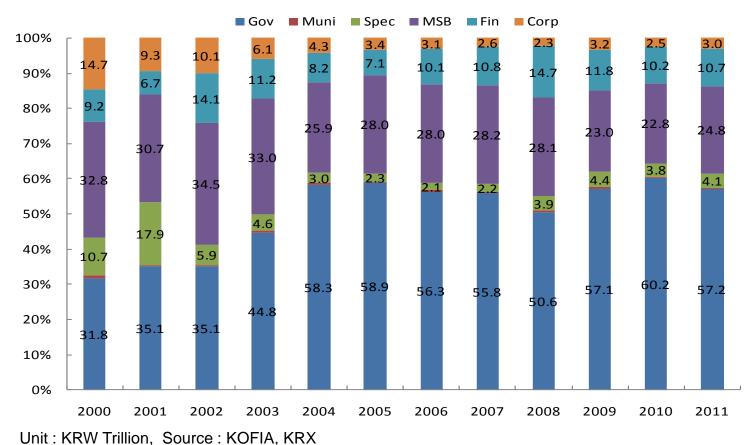
Unit: KRW Trillion, Source: KOFIA, KRX



2. Secondary Market: Trends in Bond Trading

 As of Mar. 2011, government bonds are taking the biggest share at 57.2% of the total followed by MSB, financial bonds, and as for corporate bonds, it took a meager 3.0%.

< Trading Volume Ratio >



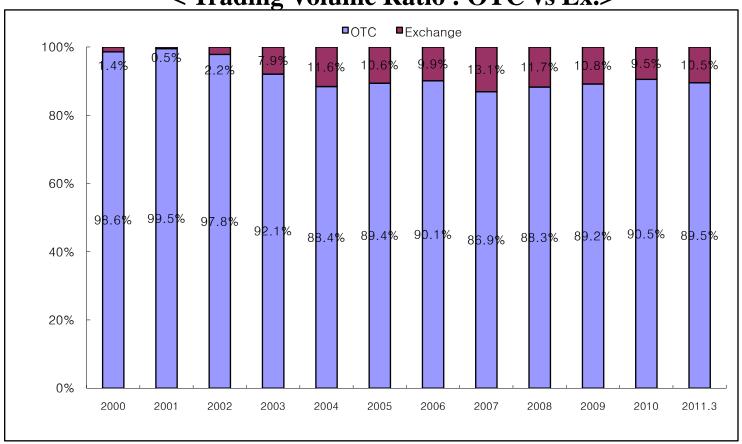




2. Secondary Market: Trends in Bond Trading

■ Most of the bonds (almost 90 %) are being traded in the OTC markets

< Trading Volume Ratio : OTC vs Ex.>



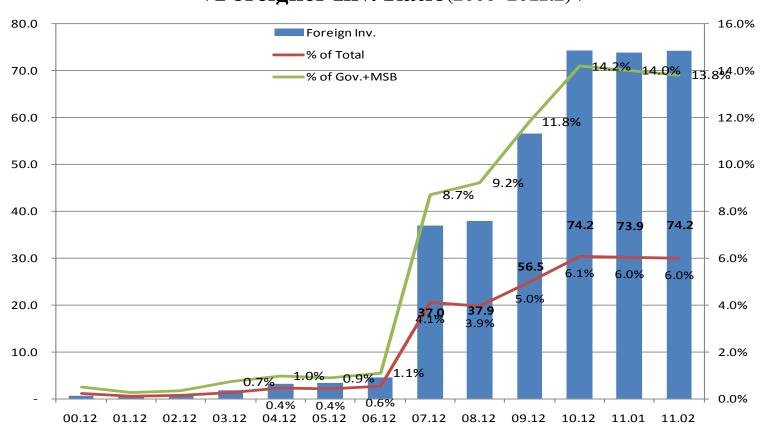
Unit: KRW Trillion, Source: KOFIA, KRX





3. Foreign Investment in the Bond Market

□ Foreigners' participation in bond markets has been getting very active since 2007
< Foreigner Inv. Ratio(2000~2011.2) >



Unit: KRW Trillion, Source: Financial Supervisory Service (FSS)



II. Korea Bond Market Initiatives



< Market development history>

Dec. 1989	 Operation of the Council for Bond Issuance Coordinates issuance volume of corporate bonds (abolished in Oct. 1997) & special bonds (in Apr. 1998) in advance to stabilize market rates.
May. 1993	· Disclosure of Bond trading details in the OTC Market by KOFIA
Jul. 1993	· Collection and release of final quotation yields (8 types, 14 issues)
Nov. 1998	· Introduction of mark-to-market system, exclusively by KOFIA
Mar. 1999	· KTS(Electronic GB Trading System by KRX) launched
Sep. 199	· Disclosure of benchmark yields for settlement prices of government bond rate futures
Jul. 2000	 Use of mark-to-market system across the board (assigned to 3 private companies) Continues disclosure yields by bond type and time to maturity. Improvement of Bond Information Disclosure System(B-TRIS) Real-time disclosure [within 30 min>5 min. (July 2001) ->15 min. (Dec. '02)] of trading details



II. Korea Bond Market Initiatives



<Market development history>

Jul. 2002	· Calculation and release of CP Index
Dec. 2002	· Disclosure of benchmark yields for settlement prices of 364-d MSB rate futures
Jan. 2006	· Calculation and release of Bond Market Survey Index (BMSI)
Dec. 2007	· Centralization & Disclosure of OTC Quotations (BQS)
Feb. 2009	· Disclosure of Default & Recovery Rate
Jun. 2009	· Disclosure of Real-Time Bond Index(Treasury Bond)
Jan. 2010	· Disclosure of Real-Time MSB Index
2010	· BondMall launched (Feb.), FreeBond launched (Apr.)
Jul. 2010	· Disclosure of Real-Time Money Market Index
Dec. 2010	· Disclosure of Real-Time Credit Index
2011	· QIB(Qualified Institutional Buyer) System being investigated by Government.





1. Disclosure of OTC Trade Execution Details(15 Min. Rule)

2. Centralization & Disclosure of OTC Quotation

3. Miscellaneous Information Dissemination





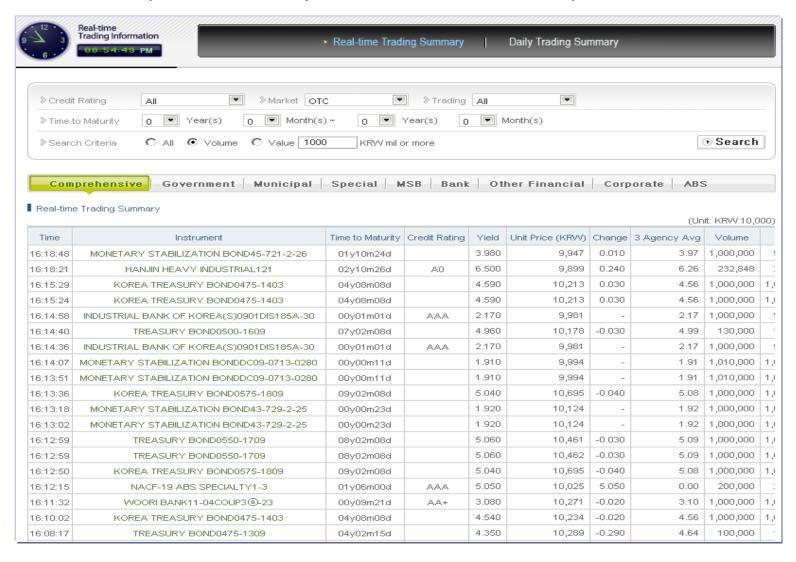
1. Disclosure of OTC Trade Execution Details(15 Min. Rule)

- Securities firms have been required to report trading details to the KOFIA within 15 minutes after trading execution and the KOFIA discloses this information on its website (Since Dec. 2002)
- ✓ More than 3,500 daily disclosures on average, worth 20T ~ 25T won in trading value.
- Function: Enhancement of transparency in OTC bond trading
- ✓ Similar to the US central trading system for **GovPX** and the system for corporate bond price transparency, the Trade Reporting And Compliance Engine(**TRACE**)





■ B-TRiS (Bond-Trade Report & Information Service)

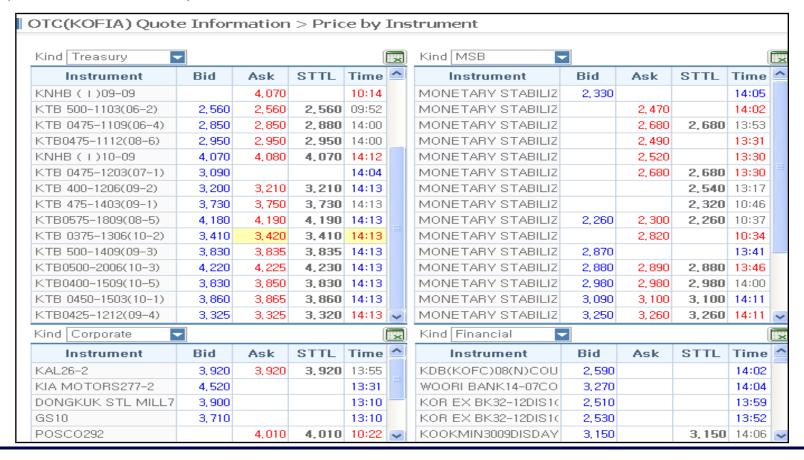






2. Centralization & Disclosure of OTC Quotations

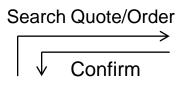
◆ KOFIA launched the BQS, an OTC Bond Quotation System that collects and disseminates all of the data pertaining to quote information on OTC trading. (Since Dec. 2002)





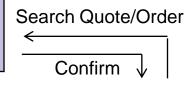


Centralization & Disclosure of OTC Quotations



Yahoo Messenger → FreeBond

(Before) (Present)





○ Real time collection of quotes from brokers →
 Systematic DB optimization



Broker/Dealer

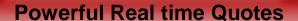
Institution

BIS

Integration and Disclosure

Information Vendor

Broker/Dealer, Institution, etc.



Institutional,
Foreign & Retail Investor



(Quote/Transaction Info on All Bonds)



- ▶ Regulations to be finalized by the 1st half-2007; required systems in place by Oct. 2007
- ▶ Pilot operation of quote centralization system in Oct. & across the board implementation in Dec. 2007





3. Miscellaneous Information Dissemination

- a. Calculation and Disclosure of Bond Yields
- b. Disclosure of Specialized Bond Dealer Quotations
- c. Bond Market Indices
- d. Benchmark Yields for Final Settlement Price of Interest Rate Futures
- e. Bond Information Service(BIS)





- 3. Miscellaneous Information Dissemination
 - a. Calculation and Disclosure of Bond Yields
- □ Discloses yields for 425 issues, including final quotation yields for 1, 3, 5,10 and 20 year treasury bonds, twice a day (11:30 &15:30)
- ✓ Final quotation yields for a specific time to maturity: 8 types 14 issues
- ✓ Final quotation yields by time to maturity: 4 types 46 issues
- ✓ Mark-to-market base yields: 13 types 370 issues





☐ Final Quotation Yields : Yields for Specific Time Maturity

		Final Quotation Yields									
Instrument	Time to Maturity	Search Date									
		11:30	15:30	Change	Previous	Spread	Year High	Year Lov			
KTB 1y	10m ~ 1y	2.89	-	-	2.89	-	3.50	2.63			
КТВ Зу	2y6m ~ 3y	3.42	-	-0.01	3.43	-	4.44	3.35			
КТВ 5у	4y6m ~ 5y	3.86	-	-0.01	3.87	-	4.98	3.82			
KTB10y	9y ~ 10y	4.22	-	-0.02	4.24	-	5.43	4.21			
KTB 20y	18y ~ 20y	4.45	-	-0.01	4.46	-	5.65	4.46			
NHB1 5y	4y6m ~ 5y1m	4.08	-	-0.01	4.09	0.22	5.45	4.06			
MSB 91d	85d ~ 91d	2.44	-	-	2.44	0.01	2.65	2.11			
MSB 364d	364d	2.91	-	-	2.91	0.02	3.54	2.66			
MSB 2y	1y9m ~ 2y	3.37	-	-	3.37	0.12	4.49	3.32			
КЕРСО Зу	2y9m ~ 3y	3.94	-	-0.01	3.95	0.52	5.11	3.90			
KDB 1y	10m ~ 1y1m	3.17	-	-	3.17	0.28	4.01	2.90			
Corp 3y-non AA-	2y9m ~ 3y	4.36	-	-0.01	4.37	0.94	5.56	4.32			
Corp 3y-non BBB-	2y9m ~ 3y	10.30	-	-0.01	10.31	6.88	11.61	10.27			
CD 91d	91d	2.66	-	-	2.66	0.23	2.88	2.45			
CP 91d	85d ~ 91d	2.79	-	-	2.79	0.36	3.10	2.61			





☐ Final Quotation Yields : Yields by Time to Maturity

>> Date													
													(Unit:,%
Instrument	Cat	tegory	3m	6m	9m	1y	1y6m	2y	2y6m	Зу	5y	10y	20y
	Pre	Previous		2.66	2.83	2.89	3.08	3.26	3.34	3.43	3.87	4.24	4.46
	Search	11:30	2.43	2.66	2.83	2.89	3.07	3.25	3.34	3.42	3.86	4.22	4.45
KTB	Date	15:30						No Data					
	* C	hange	-	-	-	-	-0.01	-0.01	-	-0.01	-0.01	-0.02	-0.01
	Pre	evious	2.53	2.79	3.05	3.15	3.42	3.59	3.78	3.95	4.33	-	-
	Search	11:30	2.53	2.79	3.05	3.15	3.42	3.59	3.78	3.94	4.33	-	-
KEPCO	Date	15:30						No Data					
	* Change		-	-	-	-	-	-	-	-0.01	-	-	-
	Pre	Previous		2.80	3.02	3.17	3.47	3.60	3.74	3.89	4.37	-	-
	Search Date	11:30	2.51	2.80	3.02	3.17	3.47	3.59	3.74	3.89	4.37	-	-
KDB		15:30	No Data										
	* Change		-	_	-	-	-	-0.01	-	-	-	-	-
	Pre	evious	2.91	3.11	3.39	3.46	3.75	3.98	4.20	4.37	5.04	-	-
	Search	11:30	2.91	3.11	3.39	3.46	3.75	3.98	4.20	4.36	5.04	-	-
Corp AA-	Date	15:30						No Data					
	* Change		-	_	-	-	-	-	-	-0.01	-	-	-
	Pre	evious	4.97	5.83	6.60	7.02	8.20	9.02	9.80	10.31	11.16	-	-
	Search	11:30	4.97	5.83	6.60	7.01	8.19	9.02	9.80	10.30	11.15	-	-
Corp BBB-	Date	15:30						No Data					
	* C	hange	-	-	-	-0.01	-0.01	-	-	-0.01	-0.01	-	-
> Day's Change is the difference between the recently disclosed price and the previous day's price disclosed at 15:30.													





3. Miscellaneous Information Dissemination

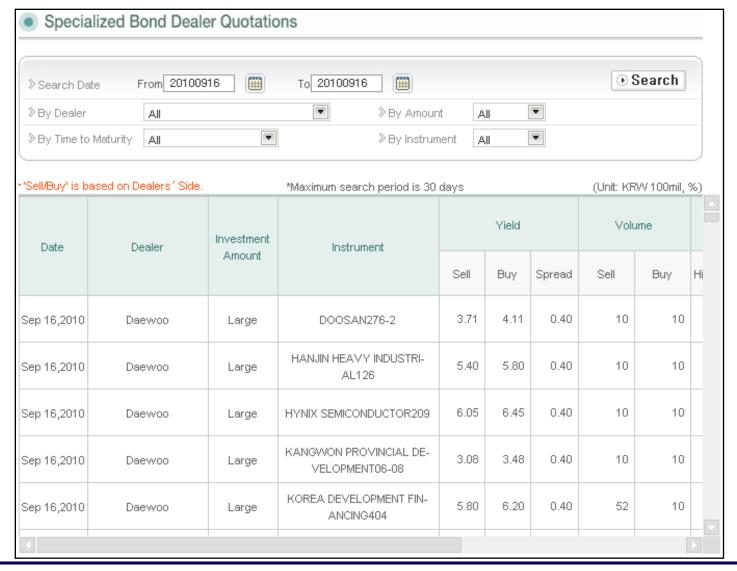
b. Disclosure of Specialized Bond Dealer Quotations

- Specialized Bond Dealers were introduced in July 2000 to increase liquidity in the OTC market through market-making by each bond type.
- ✓ A total of 19 Primary Dealers (13 securities firms & 6 banks) disclose their buy/sell quotations on the KOFIA website.
- ✓ The KOFIA receives daily quotations from SBDs and discloses them on the website and on other online terminals





□ Specialized Bond Dealer Quotations







3. Miscellaneous Information Dissemination

c. Bond Market Survey Indices

- ☐ This Indices serve as warnings to detect potential risks in the bond market, thereby enabling market participants to systematically forecast market movements, credit risks, etc.
- ✓ quantified from the market forecasts of an opinion leader group comprising mainly of bond market insiders who are surveyed once a month.

Index	Relevant Risks	Expecte	d Effects
BMSI	Interest rate risks	Predicts market direction	Strengthens bond market's self-
HHI MCRI	Credit risks	Distributes fund according to credit premium changes	correcting and risk- managing capabilities





Bond Market Indices : BMSI

Comprehensive BMSI (Foreign)

KTB 3y

95.8

4.39

93.1

4.44

105.8

4.10

103.7

4.41

97.3

4.27

103.6 | 110.2 |

3.89

4.10

103.7

3.61

100.8

3.58

105.6

3.86

91.9

3.80

95.2

3.55

102.1







3. Miscellaneous Information Dissemination

- d. Benchmark Yields for Final Settlement Price of Interest Rate Futures
- Calculates and discloses benchmark yields that are to be used for final settlement prices of 3 interest rate futures listed on KRX.
- √ 3- & 5-year treasury bonds (18 co.), 364-day MSBs (15 co.)
- ✓ Disclosure Frequency : Twice a day (11:30 & 15:30).
- √ five times on futures' final trading day (10:00, 10:30, 11:00, 11:30 and 15:00)





■ Benchmark Yields for Final Settlement Price of Interest Rate Futures

home > Bond Interest Rates > Benchmark Yields for Interest Rate Futures > Benchmark Yields for Final Settlement Price of KTB Futures

Benchmark Yields for Final Settlement Price of KTB Futures

By Date

By Period

Last Trading

> Date

20070323

(Unit:, %)

Dana Band	Search	h Date	Channa	Previous	
Base Bond	11:30	15:30	Change		
KTB0500-1103	4.841	4.830	0.003	4.827	
KTB0475-0906	4.803	4.782	-0.015	4.797	
KTB0475-1109	4.829	4.820	0.009	4.811	
KTB0475-0912	4.770	4.750	-0.012	4.762	





3. Miscellaneous Information Dissemination

e. Bond Information Service (BIS)

- Maintains a wide range of bond market information, thereby enabling access for market participants, makes trading more efficient, and thus facilitates efficient pricing. (http://www.kofiabond.or.kr)
- Promotes efficient pricing in the bond markets
- Helps monitor abnormal OTC bond trading, Quotations
- ✓ Strengthens links with the interest rate futures market
- ✓ Increases convenience for members' reporting



III. Information dissemination & transparency

■ BIS on KOFIA's website(www.kofiabond.or.kr)







1. FreeBond (Bond Trading Support System)

- □ (Background) Replace the current trading method of private messenger in the bond OTC market with a formalized bond trading system, thereby advancing the Korean bond market
 - Reformation of Bond Trading Market(Oct. 6, 2009, FSC)

☐ (**Definition**) A system run by KOFIA which enables financial investment firms and major market practitioners to search bid/ask prices for trading and intermediation in the OTC bond market and supports trading negotiation with trading counterparts





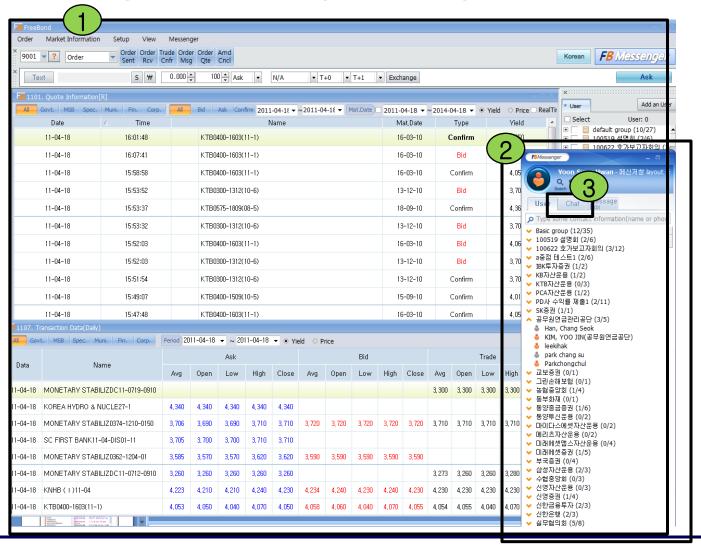
1. FreeBond (Bond Trading Support System)

- □ (Strengths) convenience, specialization only for bond trading professionals, security, stability
- (Components) Consists of two: Trading-Board(T-Board), messenger
- ☐ (Main Functions)
- ✓ T-Board : searching bid prices, ordering, negotiation, confirming trade, providing real-time information on bid prices and analyses
- ✓ Messenger : 1:N chatting, storing and using chatting frame lay-out, chatting room service





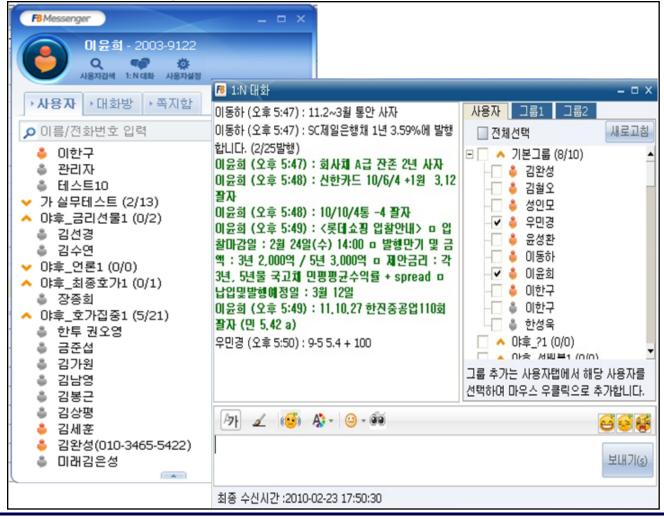
① Trading Board, ② Messenger ③ Chatting Room







- **☐** FreeBond Components
- 1:N Chatting Frame

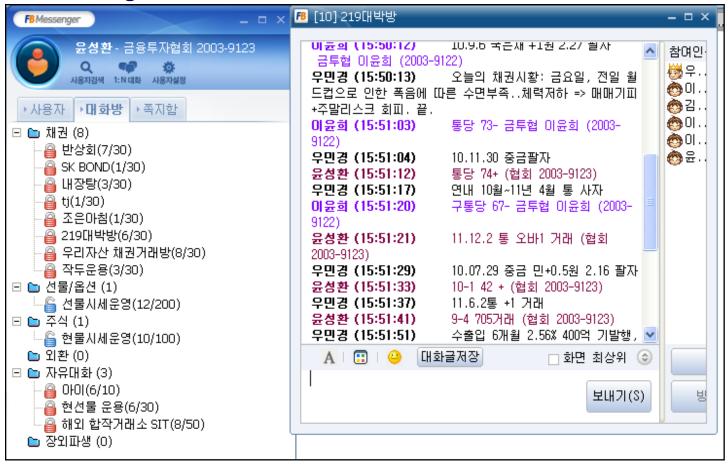






☐ FreeBond Components

Chatting Room





2. Disclosure of Real-Time Bond Index

a. Purpose

Yield real-time bond index based on KOFIA's FreeBond which is used as a benchmark index for bond ETFs

b. Expected Effects

- Understand real-time trends of the bond market
- ✓ (Investor-side) Facilitate spread trading between spot bonds and bond ETFs and enable investment in baby bonds
- ✓ (Issuer-side) Reduce capital-raising costs due to the increased demand
- ✓ (Financial firms-side) Use as a standard to evaluate investment performance and as a risk management index





2. Disclosure of Real-Time Bond Index

c. Types of Real-Time Bond Index

Index Name	Cycle	Source	First Disc.	Starting Index	Standard Point of Time
MKF TB Index	30 Sec.	FreeBond	Jun. 09	100	'04. 6. 16
KTB Index	1 Min.	Collected by KRX, etc.	Jun. 09	10,000	'09. 6. 1
KEBI TB Index	5 Min.	FreeBond	Jul. 09	100	'09. 6. 30
MK MSB Index	1 Min.	FreeBond	Jan. 10	10,000	'10. 1. 1
MK MMI* Index	1 Min.	FreeBond	Jul. 10	10,000	'10. 6. 1
KOBI Credit Index	1 Min.	FreeBond	Dec. 10	10,000	'10. 9. 1

^{*} MMI : Money Market Index (short term market)





2. Disclosure of Real-Time Bond Index

d. Types of Bond ETF listed **%** 7 ETFs, Total value US\$ 1.3 bill.

ETF Name	Managed by	Bench Marking	Agg. MKT value* (KRW 100 mil.)	Present price* (KRW)	Listed date
KODEX TB	Samsung Asset Mgt.	MKF TB Index	785	52,330	'09. 7.29
KStar TB	KB Asset Mgt.		2,861	103,705	03. 1.23
KOSEF TB	Woori Asset Mgt.	KTB	3,796	103,715	'09. 7.31
KINDEX TB	Korea Inv. Mgt.	Index	591	103,710	09. 7.31
TIGER TB3	Mirae Asset Maps Grobal Inv.		936	104,020	'09. 8.27
KOSEF MSB	Woori Asset Mgt.	MK MSB Index	3,111	100,355	'10. 1.14
KOSEF Short Term Money	Woori Asset Mgt.	MK MMI Index	1,626	100,395	'10. 7.29

- ➤ Based on the price of 2011. 1.24
- > Corporate bond ETF is supposed to be listed(during Feb. 2011)





■ Example : MKF TB Index (www.kofiabond.or.kr)







3. Bond Mall (Bond Sales Information System)

- □ (Definition) A website run by KOFIA providing sales information of baby bonds (bondmall.or.kr)
- ✓ Sales information of small-amount bonds by individual securities firms are collected into KOFIA real-time and provided for investors, facilitating bond investment by individuals





3. Bond Mall (Bond Sales Information System)

- ☐ (Main Functions)
- ✓ Efficient searching for bonds offered by securities firms
- ✓ Price discovery function by bond types guaranteeing the highest profits
- ✓ Enhance insight of the information users through bulletin board
- ✓ Provide basic information on bond investment such as characteristics of bonds and risk factors



■ Bond Mall website(www.bondmall.or.kr)





Bond Markets in Korea & KOFIA's Role

