



Tenth Annual
OECD/World Bank/IMF
Bond Market Forum

Secondary Market Liquidity in Domestic Debt Markets

April 29–30, 2008
Washington, D.C. • IFC Auditorium

The views expressed in these papers and presentations are those of the author(s) only, and the presence of them, or of links to them, on the IMF website does not imply that the IMF, its Executive Board, or its management endorses or shares the views expressed in the papers or presentations.





Market Liquidity of Japanese Government Bonds

Ministry of Finance Japan

10th Annual OECD-WB-IMF Global Bond Market Forum
April 2008, Washington DC

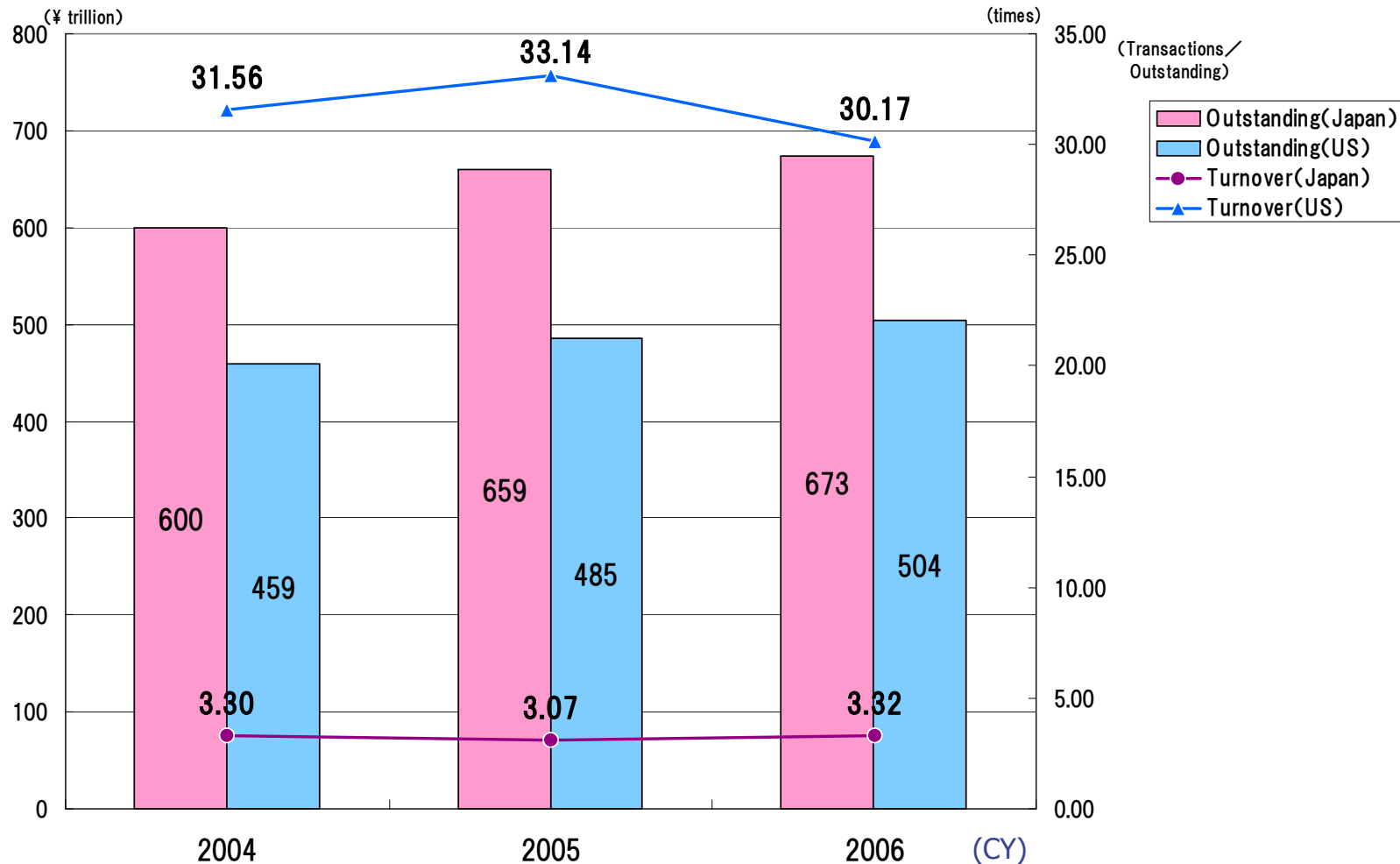


While debt outstanding of JGBs is huge, its market liquidity is said to remain relatively low compared with foreign counterparts.

- ◆ Low turnover ratio
- ◆ Wide bid-offer spread
- ◆ Relatively small presence of foreign investors in the JGB cash market compared with the JGB futures market
- ◆ Occasional squeezes of specific issues in the JGB cash and repo markets



Government Bonds Outstanding and Turnover



(Source) Japan: MOF, Japan Securities Dealers Association US: US Treasury, FRB

(Note 1) US Government Bonds outstanding is denominated in yen by Government Expenditure Rate (\$1=¥116)(FY2007)

(Note 2) Transactions exclude repo transaction



Comparison of bid-offer spread in the secondary market (Japan, USA, Germany)

		Japan (per face value ¥100) Survey of JGB Market Special Participants (March 3, 2008~March 27, 2008)	USA (per face value 100\$) BLOOMBERG BONDTRADER (March 19, 2008)	Germany (per face value 100€) BLOOMBERG BONDTRADER (March 19, 2008)
2-year	bid-offer spread	Average JPY 0.011	USD 0.008	EUR 0.015
5-year	bid-offer spread	Average JPY 0.032	USD 0.016	EUR 0.025
10-year	bid-offer spread	Average JPY 0.055	USD 0.016	EUR 0.025
30-year	bid-offer spread	Average JPY 0.257	USD 0.031	EUR 0.100

(Note)

Figures for Japan are based on responses to questionnaire of 16 companies which are JGB Market Special Participants.

Bid-offer spread above is only indicative prices at a time of research.

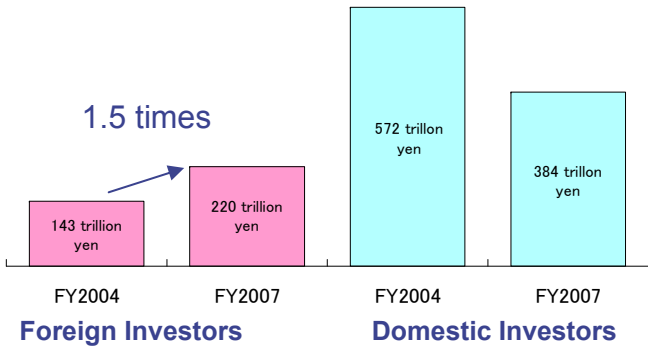
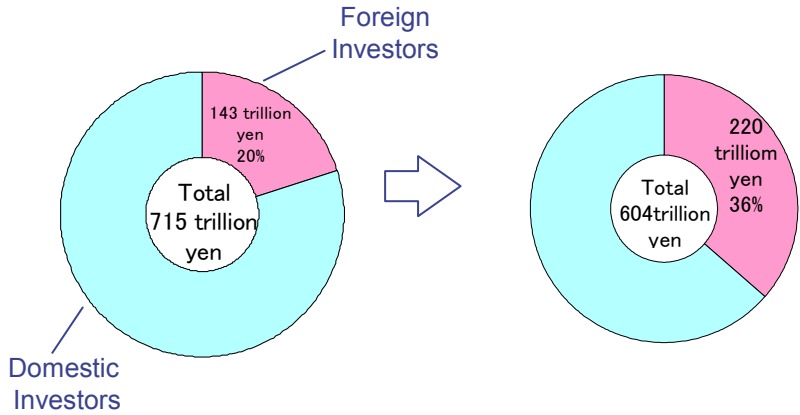


Foreign Investors Presence in the JGB Secondary Market

<JGB market >

FY 2004

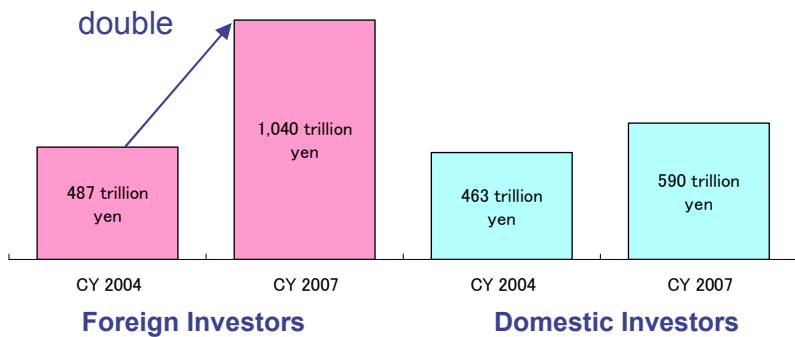
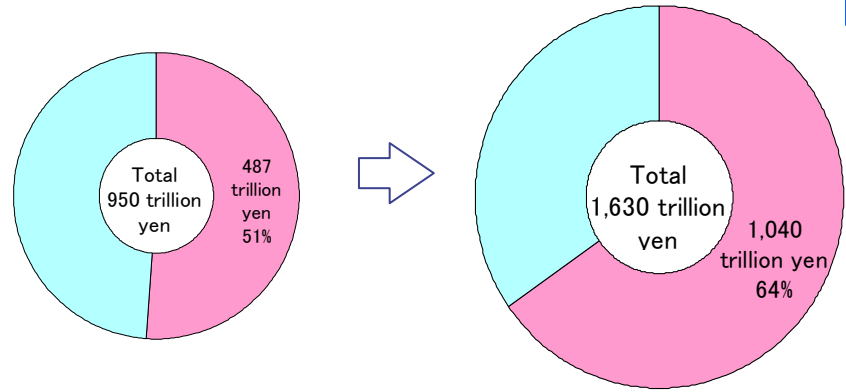
FY 2007



<Futures market >

CY 2004

CY 2007

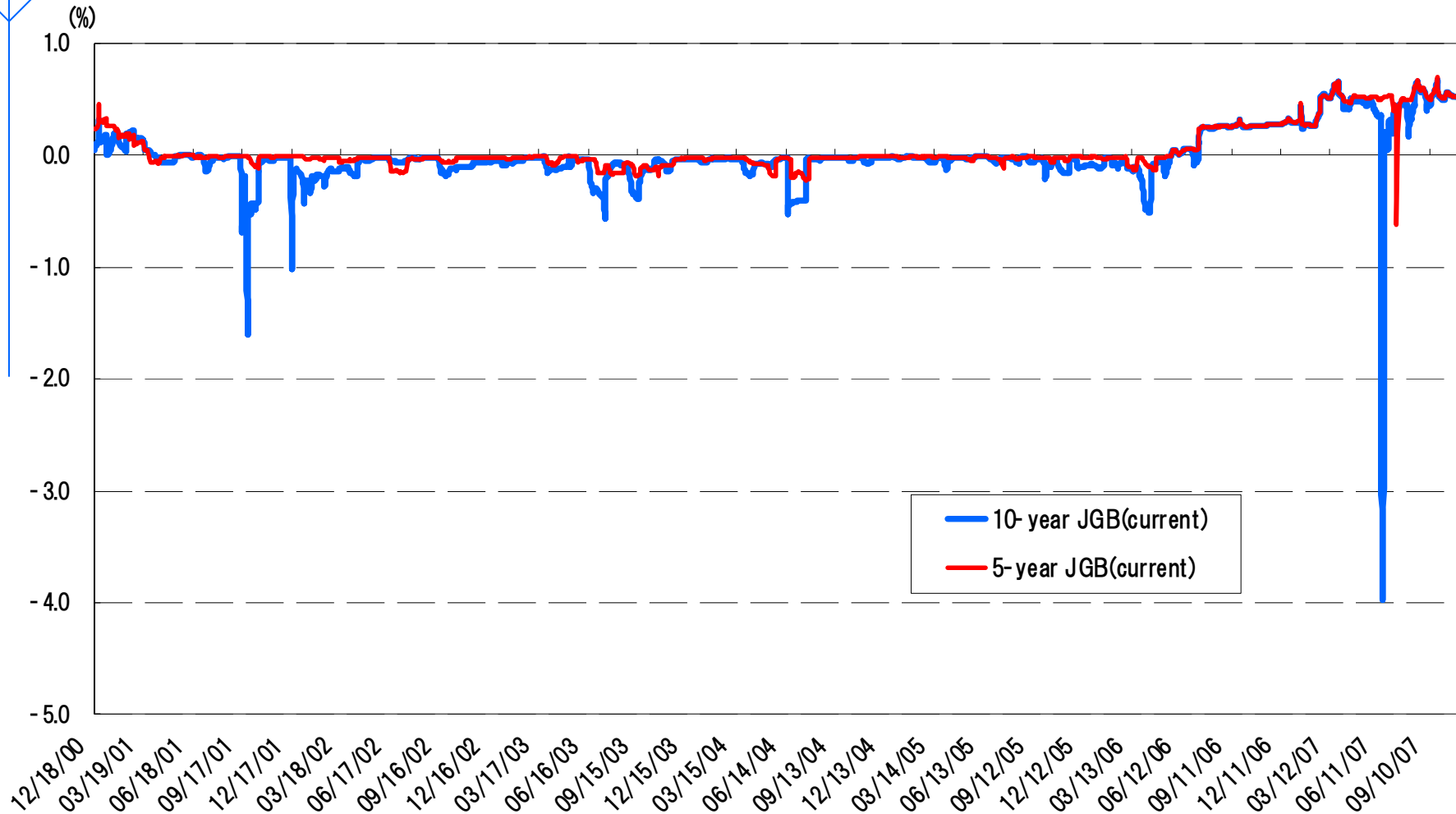


(Note) Excluding inter-dealers' transaction. Excluding repo transactions and FBs.

(Source) Japan Securities Dealers Association, Tokyo Stock Exchange



Historical Changes in Special-Collateral Repo rate (Over night)



(Source) Bank of Japan

(Note) All rate are only indication rate.



What are the backgrounds?

- ◆ **Too Many Issues per Product**
 - ◆ Monthly issues of 2, 5, 10 and 20 year JGBs → 12 issues per year per product
 - ◆ Specific issues are held by certain investors and seldom available in the market
- ◆ **Certain asset classes (Ultra Long and JGBi) are still in a development stage and their outstanding to be further accumulated.**
- ◆ **Business practices not accepting “Fail” to occur**

Number of securities remained and annual number of securities issued in major countries



Japan					U.S.A		Germany		U.K.		France					
annual number of securities issued	number of securities remained	maximum annual number of securities issued	maximum number of securities issued		annual number of securities issued	number of securities remained	annual number of securities issued	number of securities remained	annual number of securities issued	number of securities remained	annual number of securities issued	number of securities remained				
2-year	12	24	12	24	2-year	13	24	2-year	4	8	Short-term (up to 7 year)	1	5	2-year	1	2
5-year	8	44	max12	max60	3-year	2	9	5-year	3	11	Middle-term (7 year to 15 year)	1	7	5-year	2	9
10-year	6	88	max12	max120	5-year	13	56	10-year	2	22	Long-term (beyond 15 year)	2	30	10-year	2	18
20-year	7	93	max12	max240	10-year	4	32	30-year	1	11	Short-term inflation indexed (up to 7 year)	0	0	15-year	1	5
30-year	2	27	2	60	30-year	2	46	5-year inflation indexed bonds	1	1	Middle-term inflation indexed bonds (7 year to 15 year)	0	1	30-year	0	4
40-year	1	1	1	1	5-year inflation indexed bonds	1	3	10-year inflation indexed bonds	0	1	Long-term inflation indexed (beyond 15 year)	3	13	50-year	0	1
15-year CMT	3	40	2	30	10-year inflation indexed bonds	2	15						10-year floating rate	0	1	
JGBi	4	14	4	40	20-year inflation indexed bonds	1	4						4-year inflation indexed bonds	0	1	
					30-year inflation indexed bonds	0	3						10-year inflation indexed bonds	0	6	
													15-year inflation indexed bonds	0	1	
													30-year inflation indexed bonds	4	3	
Total	43	331	max57	max575	Total	38	192	Total	9	53	Total	7	56	Total	10	51

(SOURCE) Japan: MOF, U.S.A, U.K., France: Debt Management Office HP, Germany: Central Bank HP

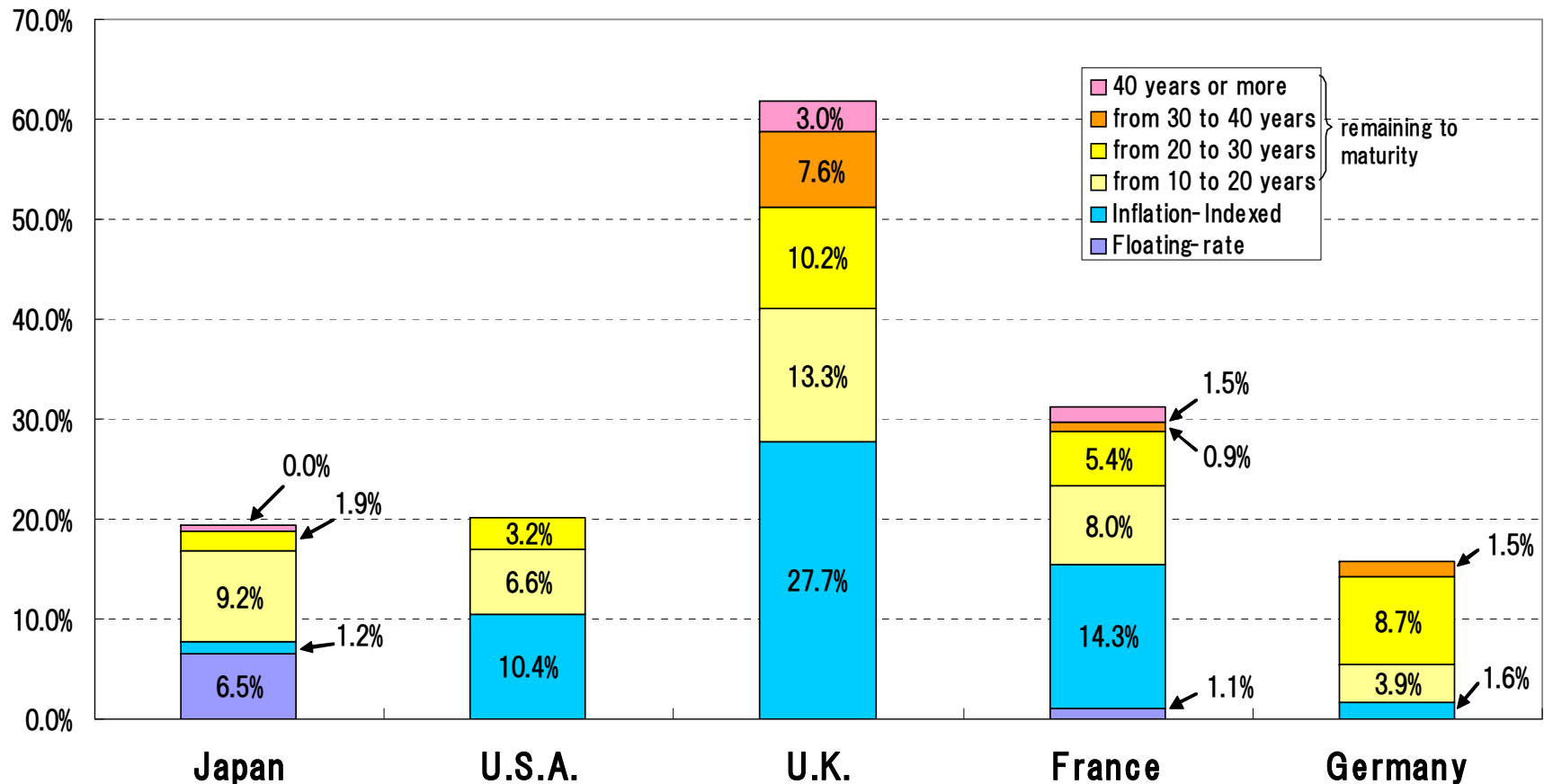
(NOTE1) Japan: annual number of securities issued (FY 2007), number of securities remained (at the end of March, 2007), U.S.A.: annual number of securities issued (CY 2007), number of securities remained (at the end of December, 2007), Germany: annual number of securities issued (CY 2007), number of securities remained (at March, 2008), U.K.: annual number of securities issued (CY 2007), number of securities remained (at the end of December, 2007), France: annual number of securities issued (CY 2007), number of securities remained (at the end of March, 2008)

(NOTE2) The maximum annual number of securities issued in Japan is based on FY 2008 JGB issuance plan.

(NOTE3) Long-term bond in U.K. include 13 issues of Rump gilts



Inflation Indexed and Super Long as a Proportion of Total Outstanding Debts



(Source) Japan: MOF U.S.A, U.K., France: Website of relevant governments
 (Note1) Non-marketable bonds are excluded. (e.g. bonds for individual investors)
 (Note2) In U.K., "40 years or more" includes perpetual gilts.
 (Note3) Japan: Dec. 2007 U.S.A., Germany: Jan. 2008 U.K., France: Dec. 2007

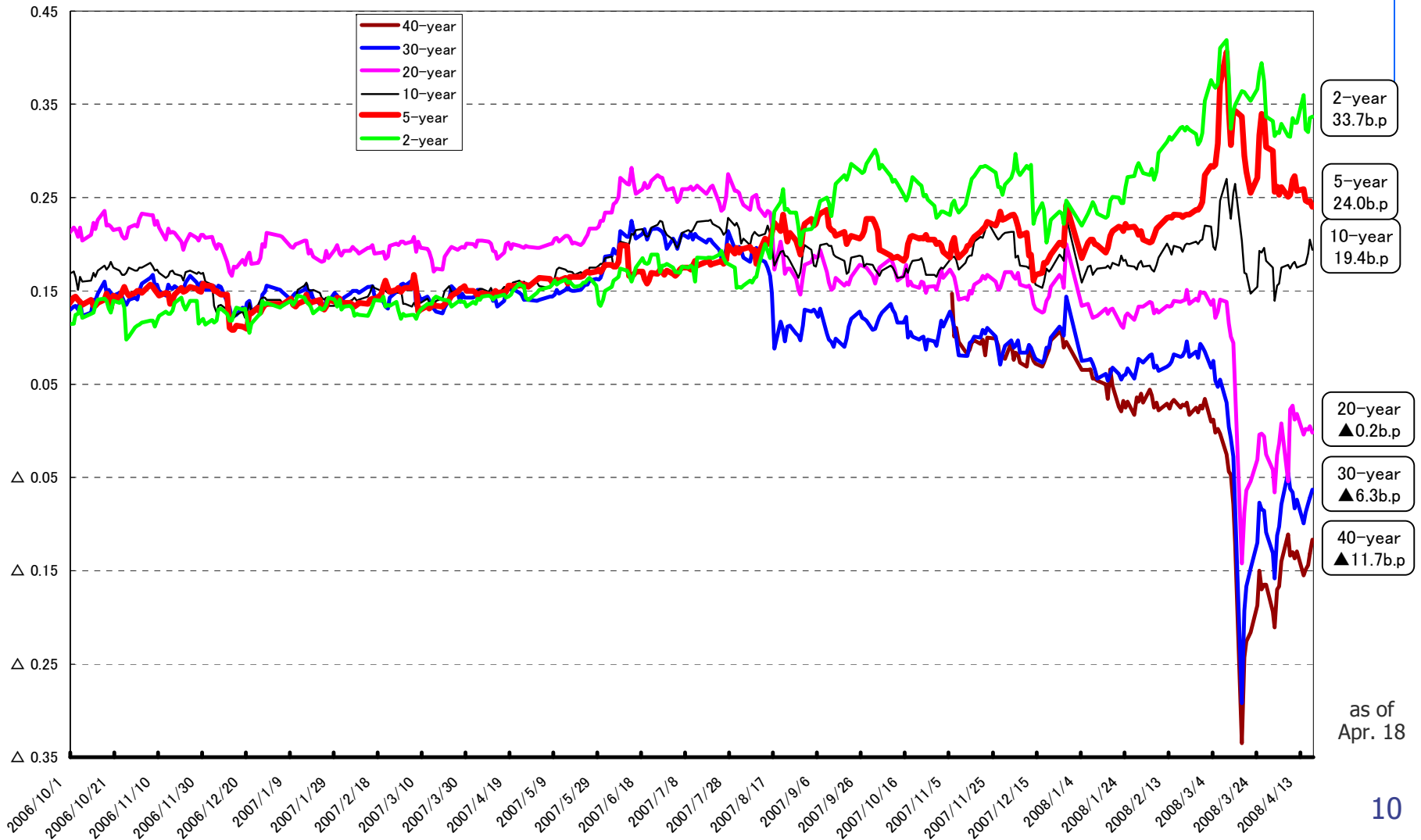


The recent financial turmoil highlighted the liquidity of specific asset classes of JGBs.

- ◆ Generally, the JGB market has provided a destination for safe heaven investment.
- ◆ There is a tendency of polarization in the JGB market: buying shorter maturity products (low delta) and selling longer maturity products, CMT and JGBi (unwinding by highly leveraged foreign hedge fund for the risk reduction purpose).
 - ◆ Negative swap spread for Super Long
 - ◆ Drastic undervaluation of CMT and JGBi

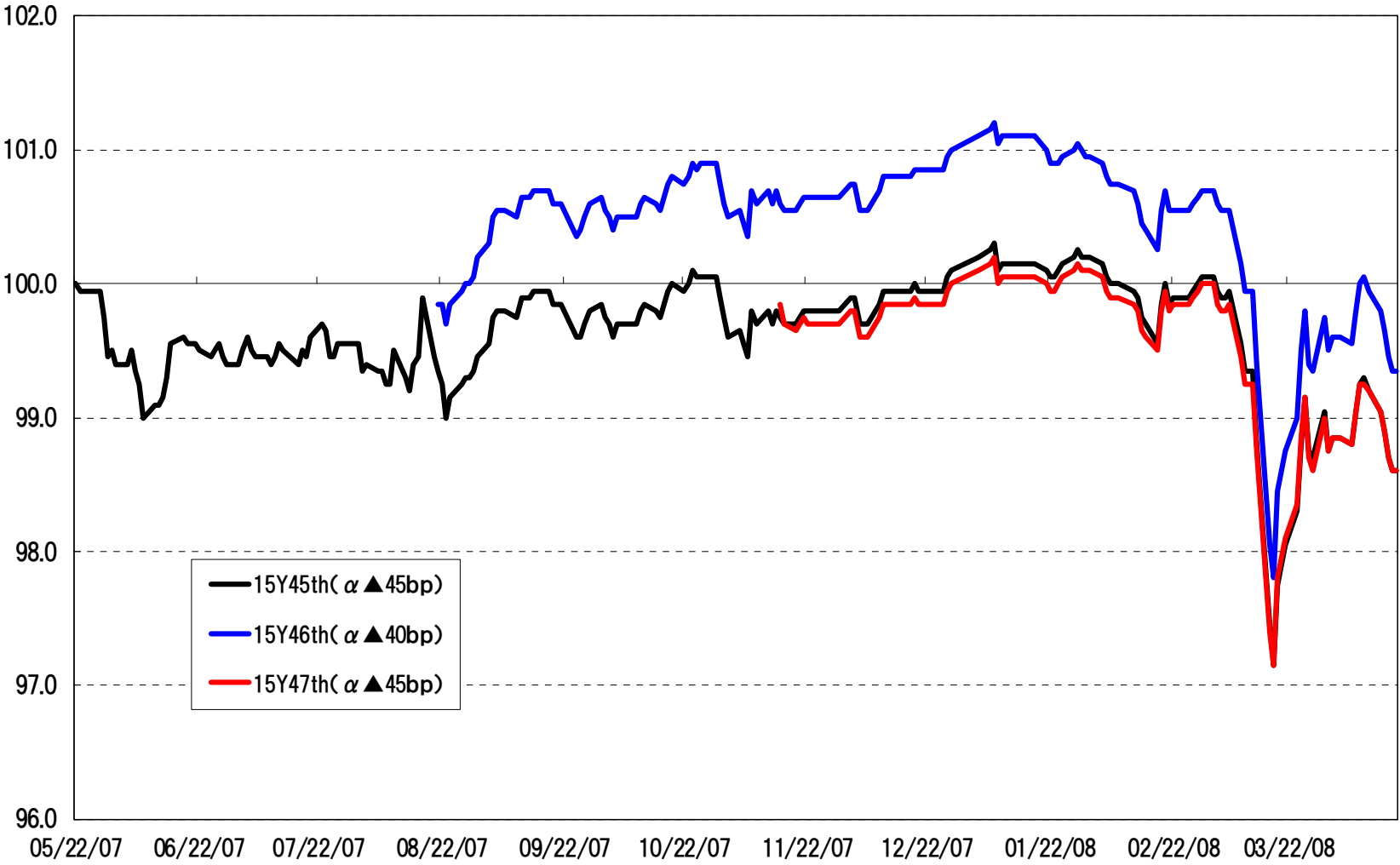


Historical Changes in SWAP Spread



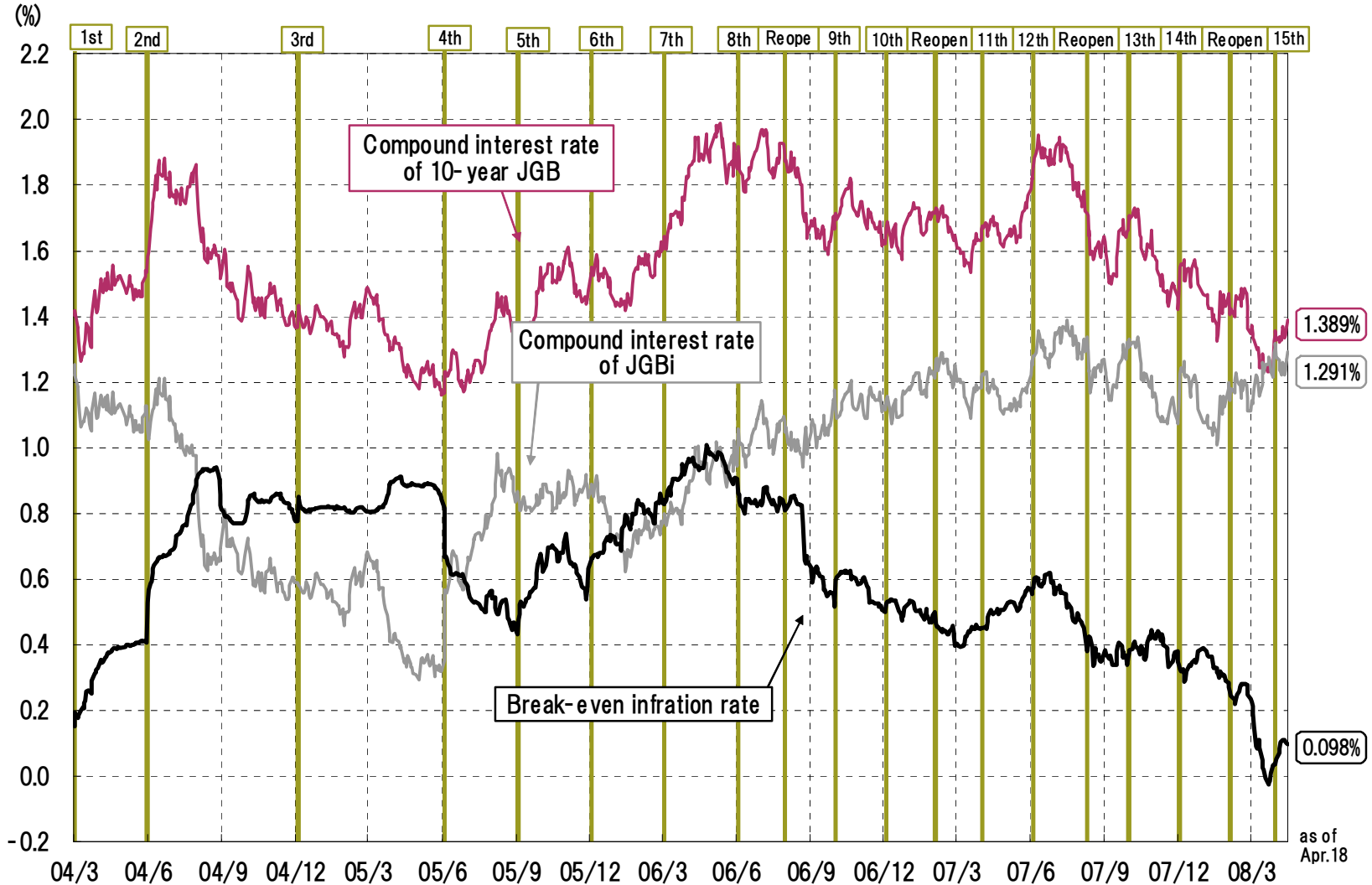


Market Price of 15-year CMT





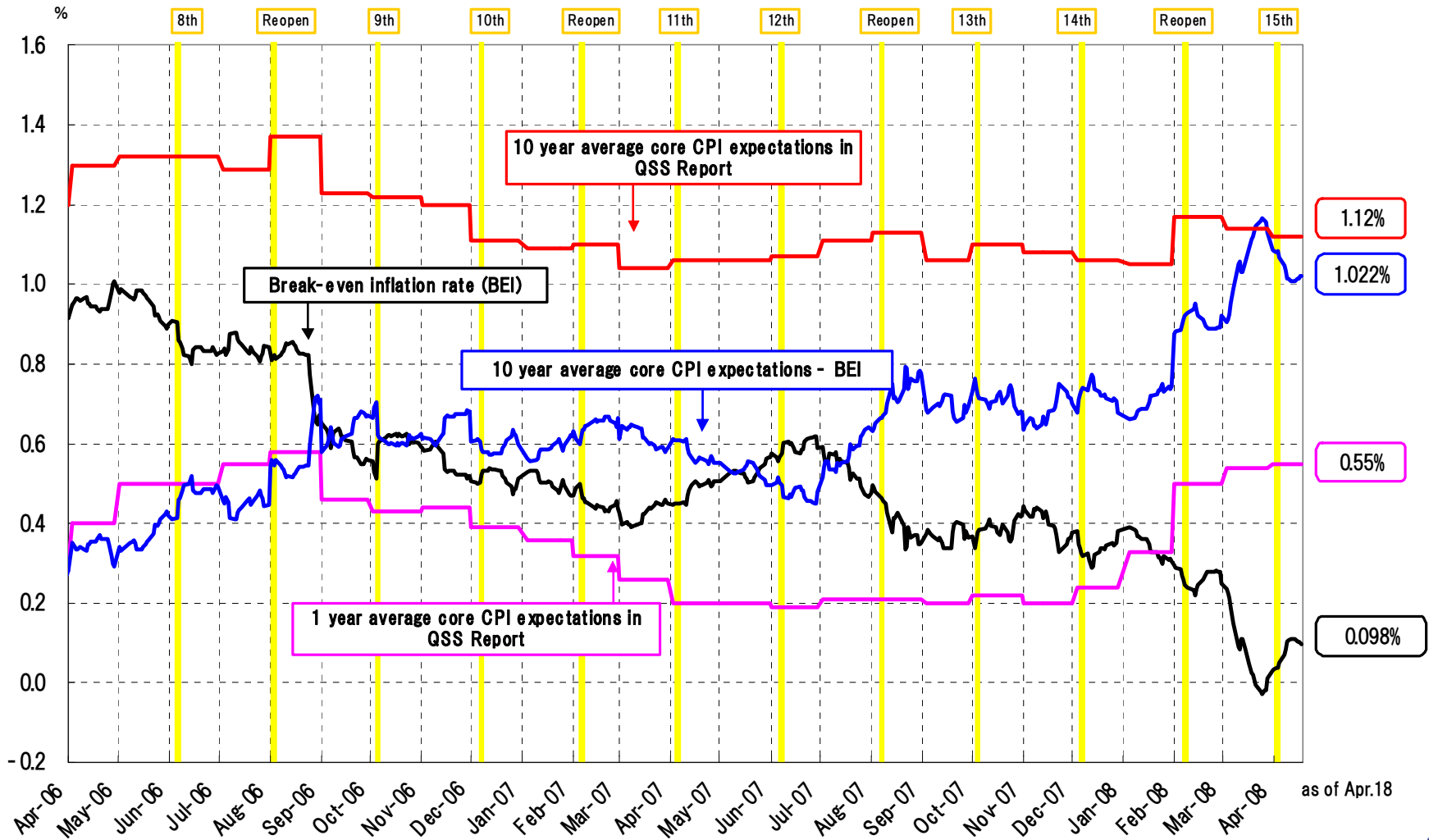
Interest Rate on JGBi



as of Apr. 18



CPI Expectations & BEI



(Note) QSS: QUICK Survey System



The MOF, Japan has adopted certain policy measures to enhance market liquidity of JGBs.

- ◆ Re-opening as a general rule (30 and 40 year JGB, CMT and JGBi)
- ◆ Auction for Enhanced-liquidity: expanding target issues (JGBs with remaining maturities 6-29 year, excluding those with remaining maturities 9-11 and 19-21)
- ◆ Special Auction for Enhanced-liquidity in order to respond to such temporal lack of market liquidity as seen in the squeeze
- ◆ Buy-back program: annual buy-back amount increased to 3.0 trillion yen from 1.8 trillion yen, focusing on CMT and JGBi
- ◆ Efforts to diversify investors bases especially for CMT and JGBi



Reopening

- Introducing Reopening as a general rule

JGBi (Feb. 2007-)
 30-year JGB (Jul. 2007-)
 15-year CMT (Feb. 2008-)
 40-year JGB (May. 2008-)

- Issuance calendar and Reopening Style of JGBi, 30-year JGB, 15-year CMT and 40-year JGB

<Issuance calendar and Reopening Style of JGBi, 30-year bonds and 15-year CMT>

(trillion yen)

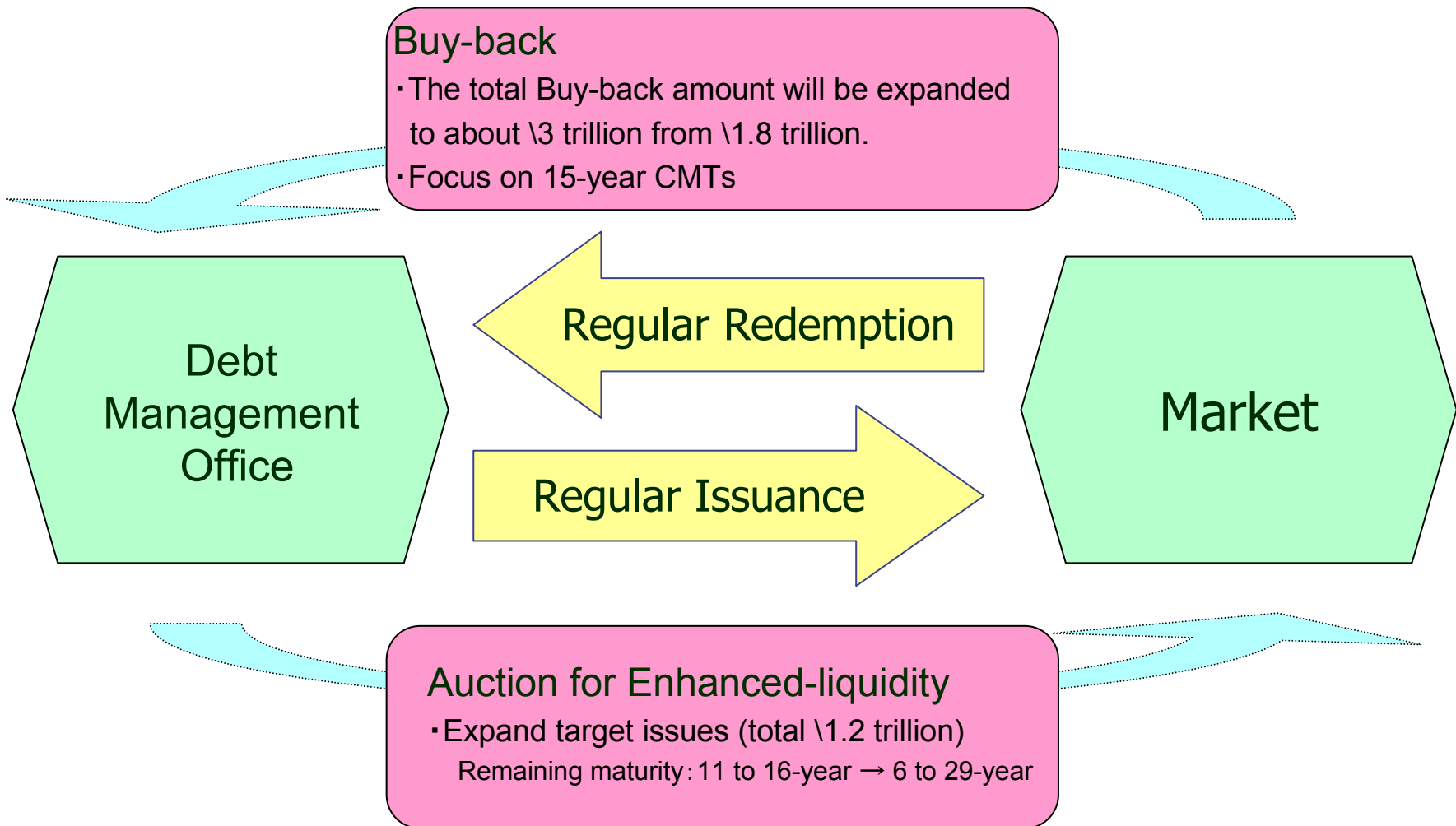
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total
JGBi	0.5 new issue		0.5 new issue	←→ 0.5 reopen			0.5 new issue		0.5 new issue	←→ 0.5 reopen			3.0
30-year JGB	0.6 new issue	←→ 0.6 reopen					0.6 new issue	←→ 0.6 reopen					2.4
15-year CMT		0.6 new issue	←→ 0.6 reopen					0.6 new issue	←→ 0.6 reopen				2.4
40-year JGB	←→ 0.2 reopen*							0.2 reopen*					0.4

* To the first issue (0.1 trillion yen, Nov, 2007)



Enhancing Market Liquidity

Buy-back and Auction for Enhanced-liquidity Function Together like Two Wheels of a Cart





Auction for Enhanced-liquidity

- ◆ MOF conducts the Auction for enhanced-liquidity (100 billion yen per month)

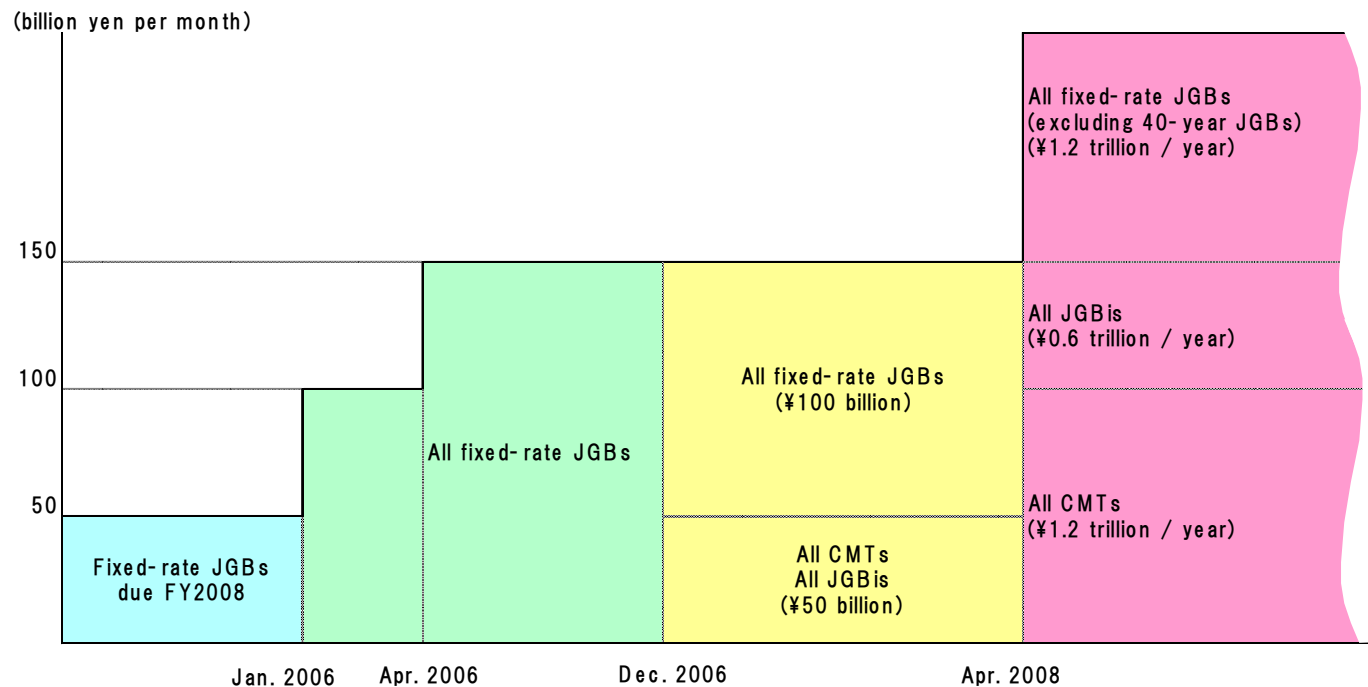
- ◆ Target Issues
 - ◆ 20-year JGBs with approx. 11-16 years remaining to maturity (Apr. 2006-)
 - ◆ JGBs with remaining maturities from 6 to 29-year (Apr. 2008-) (excluding JGBs with maturities from 9 to 11-year and 19 to 21-year, inflation-indexed bonds, and 15-year CMTs)

- ◆ Special Auction for Enhanced-liquidity
 - Establishing a scheme of Special Auction for Enhanced-liquidity in FY2008 in order to respond to such temporal lack of market liquidity as seen in the squeezes.



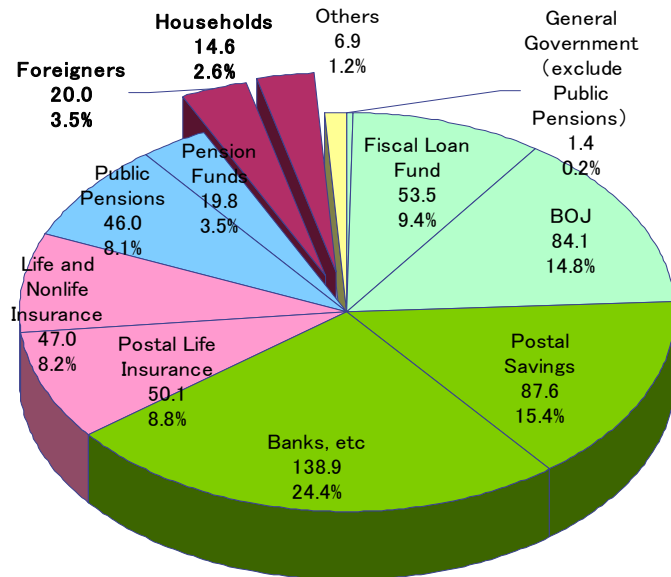
Buy-back Program

- ◆ Expanded to include all fixed-rate JGBs starting Jan. 2006 (30-year JGB became eligible on April 4, 2008).
- ◆ Increased Buy-back amount from 100 billion yen/month to 150 billion yen/month from Apr. 2006.
- ◆ Expanded to include all CMTs and JGBis from Dec. 2006.
- ◆ Increased Buy-back amount from 1.8 trillion yen to about 3.0 trillion yen, focusing on 15-year CMTs and JGBis in FY2008.



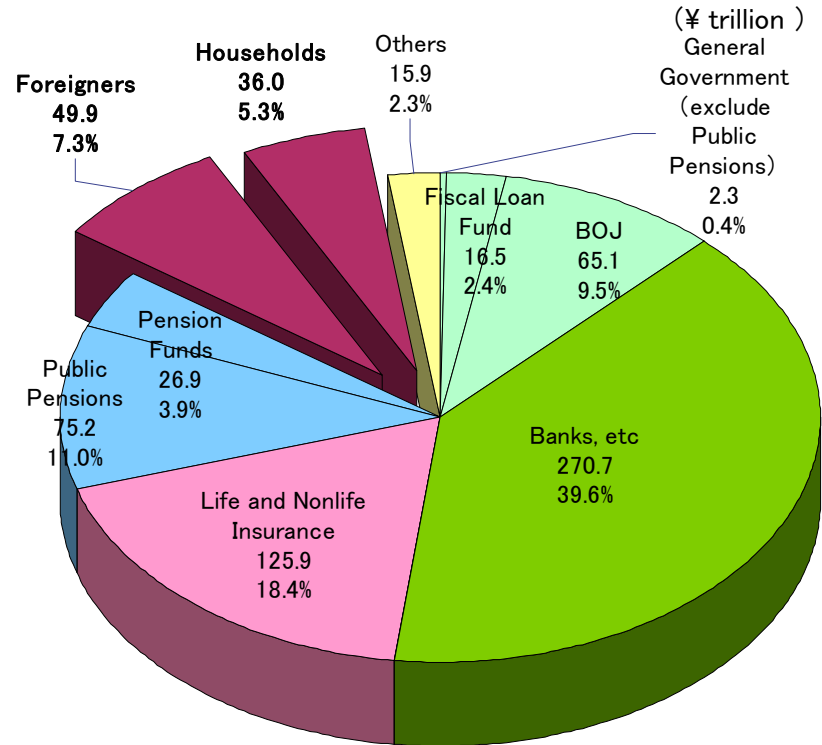


Breakdown of JGB Holders



Total 569.9 trillion yen

The end of Mar. 2004



Total 684.3 trillion yen

The end of Dec. 2007

(QE)

(Note) From preliminary figures of the end of December 2007, Banks, etc includes Japan Post Bank. Life and Nonlife Insurance includes Japan Post Insurance.

(Source) Bank of Japan "Flow of Funds"