

JPX IR Day 2018



OSE Strategy for Expanding Product Lineup and Attracting New Investors

Your Exchange of Choice

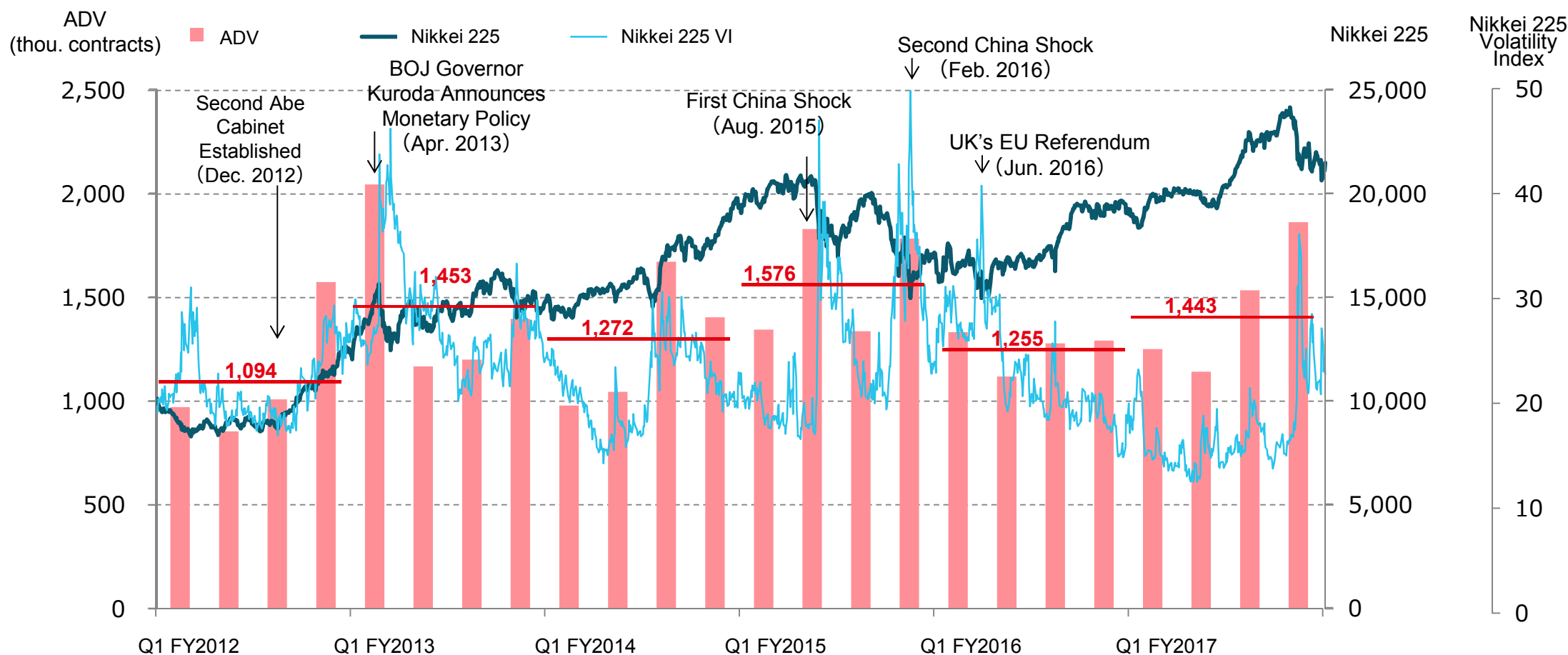
Akira Tagaya, Executive Officer
Osaka Exchange, Inc.

July 3, 2018



OSE Derivatives Market Overview – Trading Volume

- Derivatives trading volume is largely influenced by the market environment, having an especially high correlation with volatility.
- OSE trading volumes have exceeded 300 mil. contracts every year since the establishment of JPX, however, a prolonged period of low volatility will affect trading volumes.

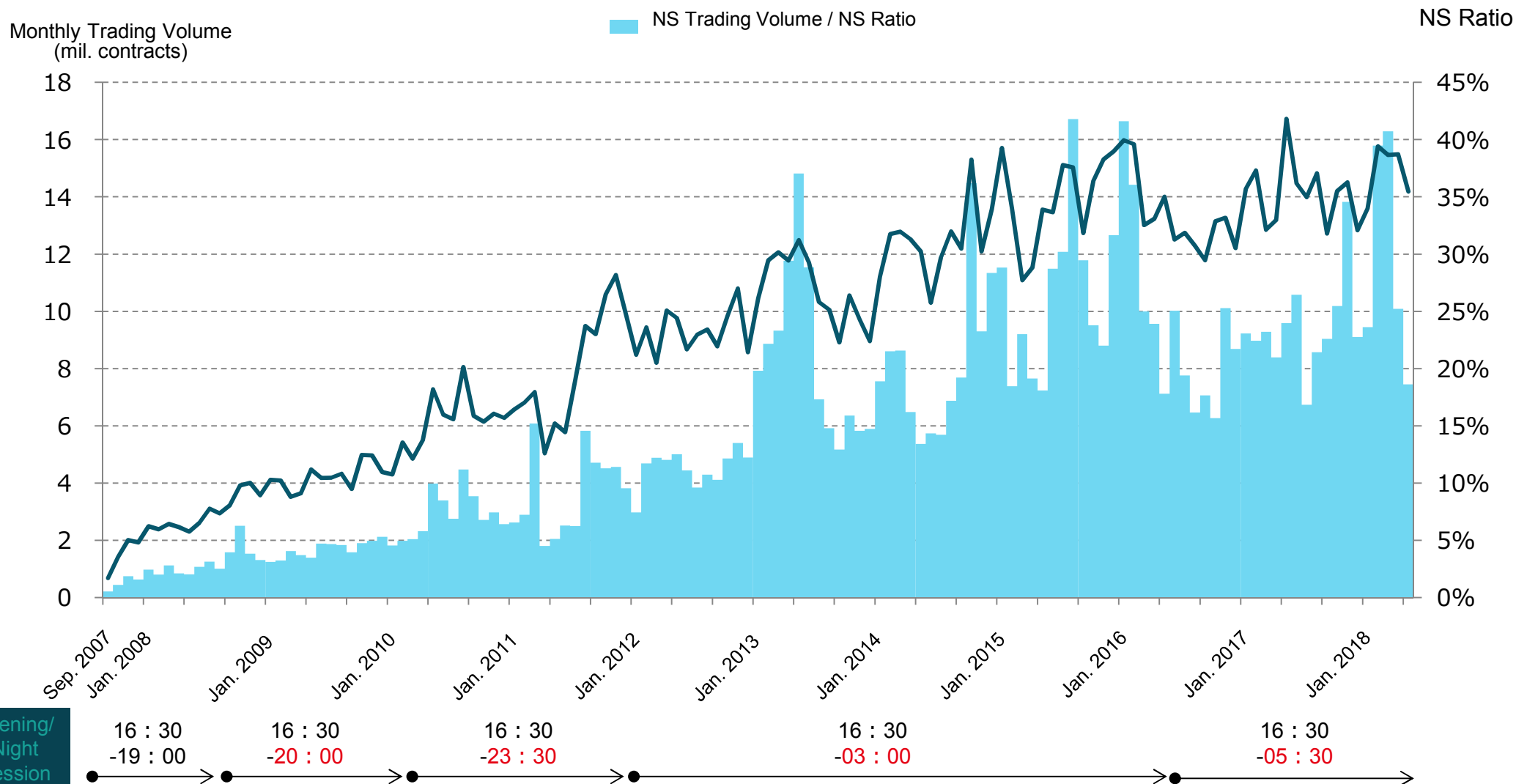


* Trading volumes are daily averages for each quarter, index values are as of the end of each quarter, and figures in the graph are averages for each fiscal year (thou. contracts). The same applies to graphs on pages 4 and 5.

Source: QUICK

OSE Derivatives Market Overview – Night Session Trading Grows

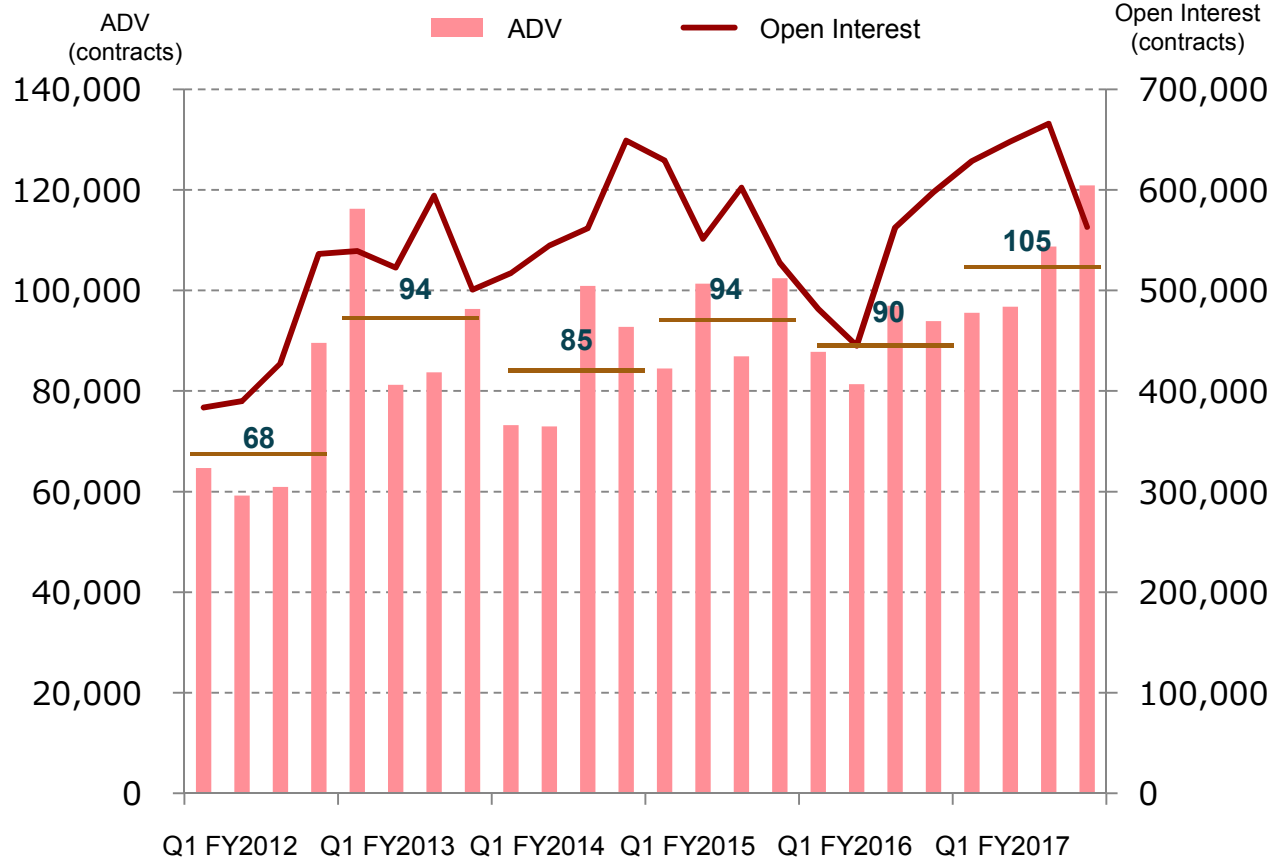
- Night session trading volume has steadily increased along with the extension of trading hours, which was implemented in phases.
- In July 2016, trading hours **were extended to 5:30 a.m. on the following day, creating an almost complete overlap with U.S. trading hours** to allow investors to trade immediately responding to global political and/or economical events.



OSE Derivatives Market Overview – Market Growth 1: TOPIX Futures

- **TOPIX Futures trading volume has steadily increased (for four consecutive quarters), reaching a record high in FY2017**, while that of Nikkei 225 Futures is impacted by market conditions.
- The growth in passive management, a larger investor base resulting from merger synergies, and enhanced convenience due to improved liquidity have contributed to higher trading volumes.

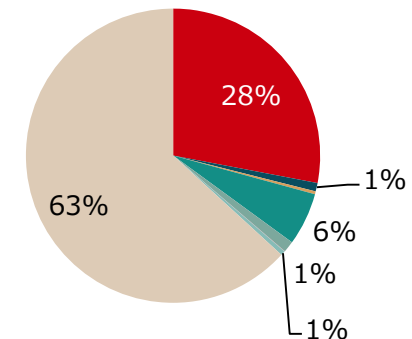
Trading Volume / Open Interest



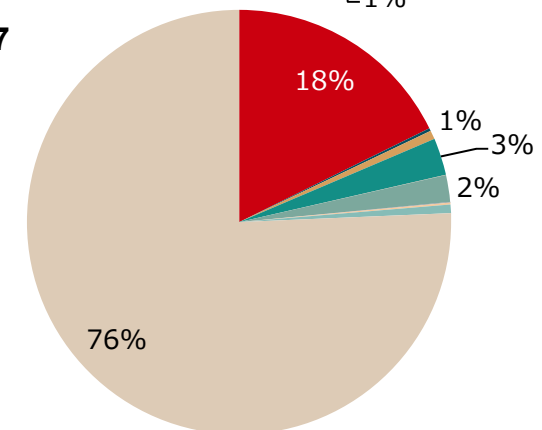
Trading Volume by Investor Type



FY2012

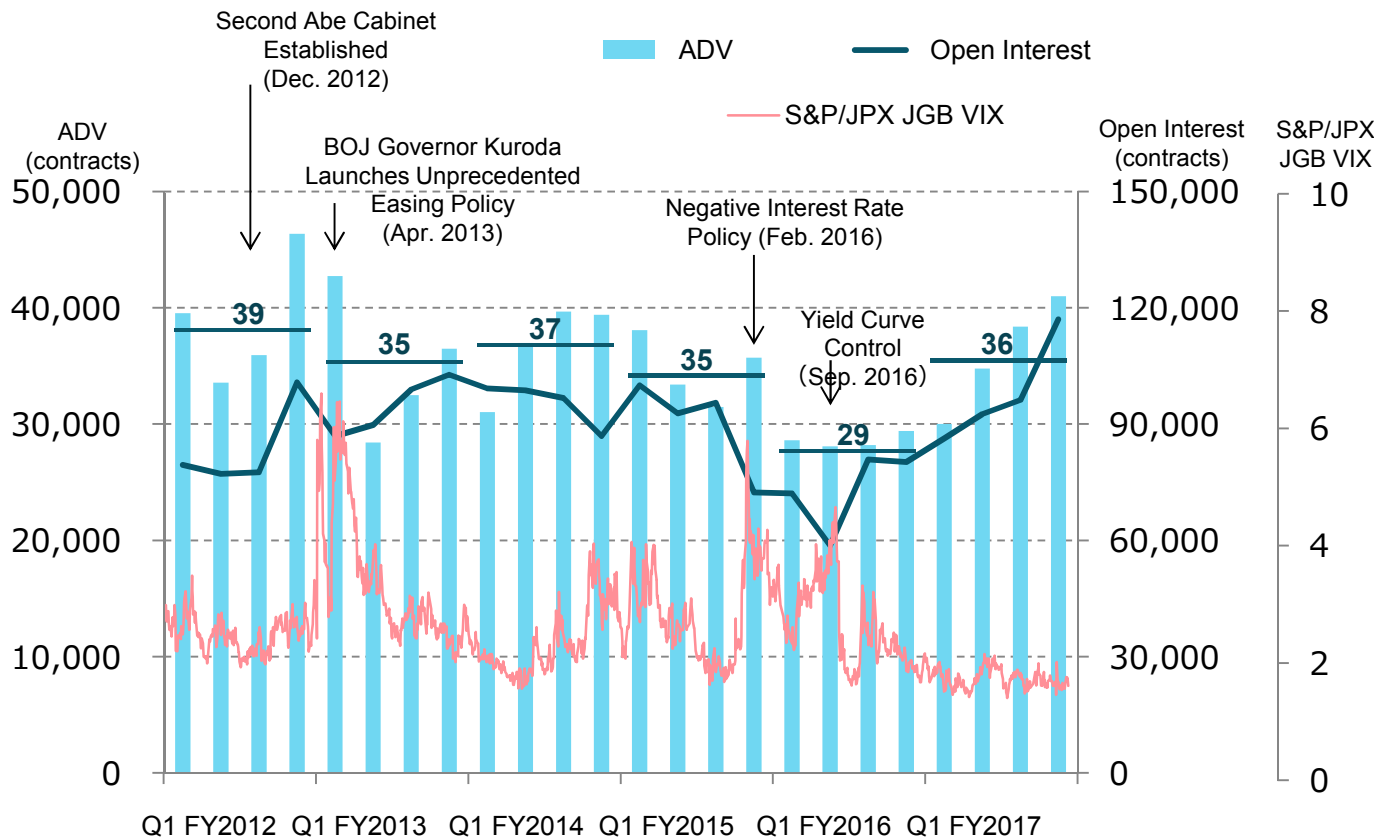


FY2017



- While there are concerns over the declining function of the bond market as a whole in a low interest rate, low volatility environment, **10-year JGB Futures trading volume is on an upward trend due partly to the entry of new investors.**

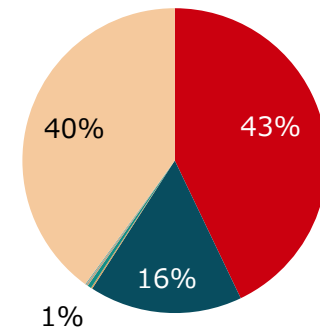
Trading Volume / Open Interest



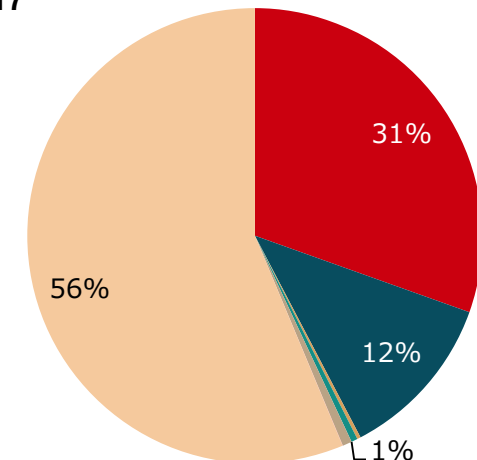
Trading Volume by Investor Type



FY2012



FY2017



Strategy for Expanding Product Lineup



Promotion of TSE Mothers Index Futures

- In line with the core initiative of the 2nd Medium-Term Management Plan to “Diversify derivatives lineup”, four new products, including TSE Mothers Index Futures, were introduced at the launch of New J-GATE.

2017

- Offered promotion campaign, etc. for TSE Mothers Index Futures, which is positioned as a focus product
- Captured a higher level of liquidity

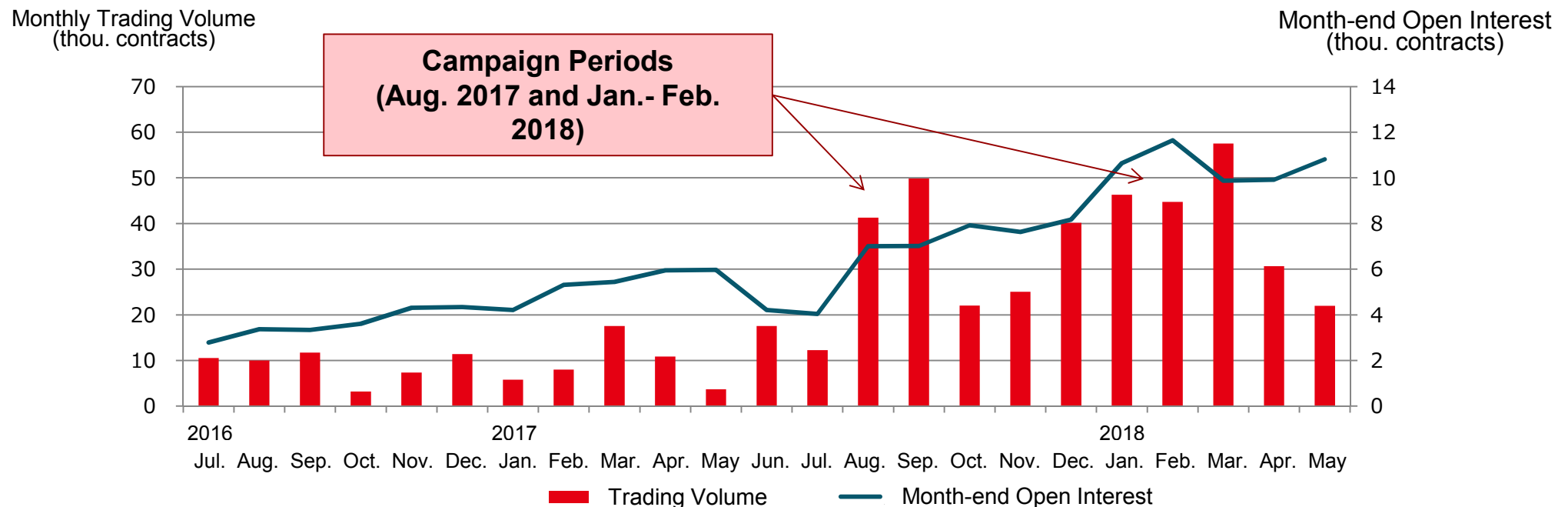
Early 2018

- Offered promotion campaign again
- Launched an ETF tracking TSE Mothers Index
- Aimed to create ETF-futures cross-product synergy

Future

- To obtain approval as a product suitable for investment from the Taiwanese regulator
- Aiming to acquire inflows from Taiwanese and other overseas investors

TSE Mothers Index Futures Trading Volume



- After the global financial crisis, OTC derivatives regulations were tightened based on the agreement at the G20 Summit.
- This resulted in **an acceleration in the shift from OTC to exchange-traded derivatives.**

Mar. 2013

~

Jan. 2022

(Sequentially
legislated and
adopted)

Basel III

**Capital
Requirements**

**Capital requirement for OTC positions
was increased**

⇒ Costs increased significantly

* Risk amount varies among listed, centrally-cleared OTC and non-centrally cleared OTC derivatives.

* Other Basel III-related regulations will be implemented in each jurisdiction by Jan. 2022.

Sep. 2016

~

Sep. 2020

(Adopted in phases)

**IOSCO-BCBS
Framework**

**Margin
Requirements**

**Mandatory initial and variation margin
for non-centrally cleared OTC derivatives**

* Regulations vary according to jurisdiction. Japan implemented the regulations to single stock options and stock index options ahead of other major countries. (In Europe, exemptions will apply until 2020.)

Introduction of Flexible Options - Characteristics

- Flexible Options are products that combine **the flexibility in contract terms** of OTC derivatives and **the stability, transparency, and convenience** of listed derivatives.
- Applications can be made from June 25, 2018.

	Listed Options (Regular Options)	Listed Flexible Options	OTC Options
Underlying	Index: Nikkei 225, TOPIX, JPX-Nikkei 400 Single Stock: 229 issues*	Index: Those on the left, TOPIX Banks Index, and TSE REIT Index Single Stock: Same as on the left	Any asset
Expiration	SQ date only (second Fridays)	Flexibly set on per day basis	Flexibly set on per day basis
Strike Price	Fixed price increments *JPY 125 increments for Nikkei 225 Options	Flexibly set with decimals	Flexibly set
Final Settlement	Index: Cash sett. by SQ Securities: Physical sett.	Optionally available as: Index: Cash sett. by closing price Securities: Cash sett. by closing price	Flexibly set
Counterparty Risk	Centrally cleared at JSCC; No specific counter party risk	Centrally cleared at JSCC; No specific counter party risk	Bilaterally negotiated; Exposure to counter party risk
Margin Requirements	Calculated using SPAN	Calculated using SPAN (Can offset with regular options)	New margin rule applicable (Margin required by both parties)
Contract	Listed derivatives contract (Exchange rules + Trading Account Agreement)	Listed derivatives contract (Exchange rules + Trading Account Agreement)	ISDA Contract (in English)
Settlement Price	Calculated and announced daily by OSE/JSCC	Calculated and announced daily by OSE/JSCC	N/A

* Including stocks, REITs, and ETFs. 209 issues as of Jul. 3, 2018. As announced, 20 will be added by Aug. 2018 to bring the total to 229 issues.

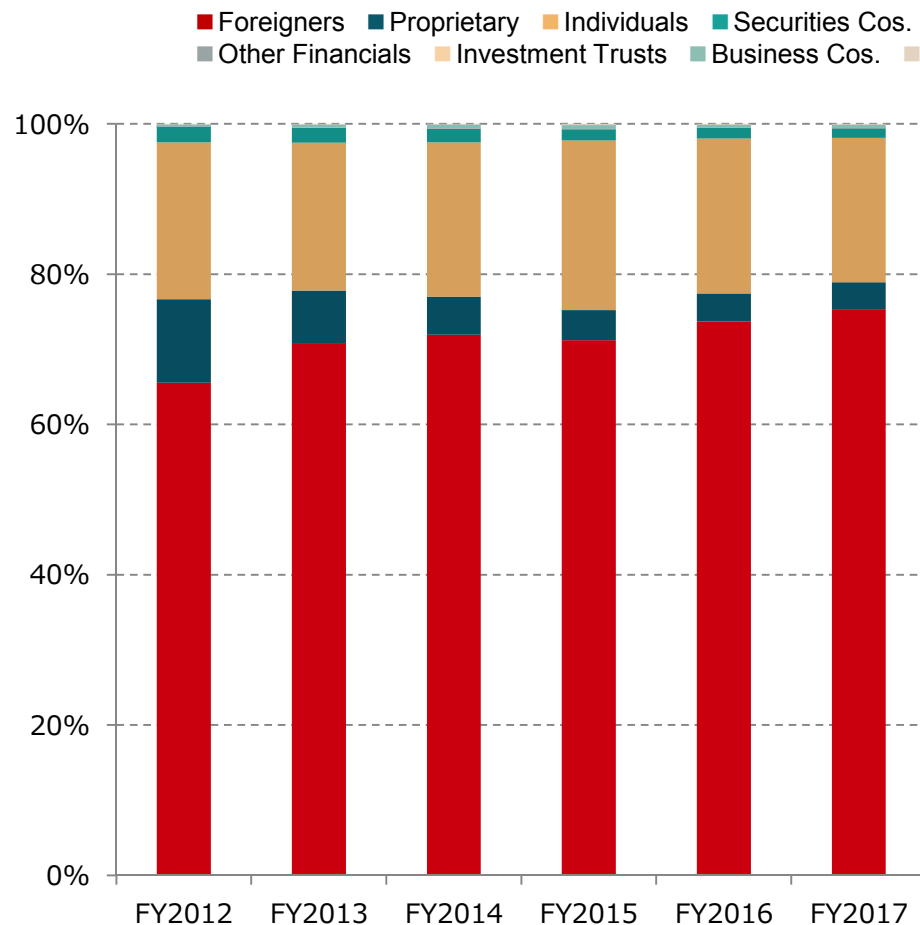
Strategy for Attracting New Investors



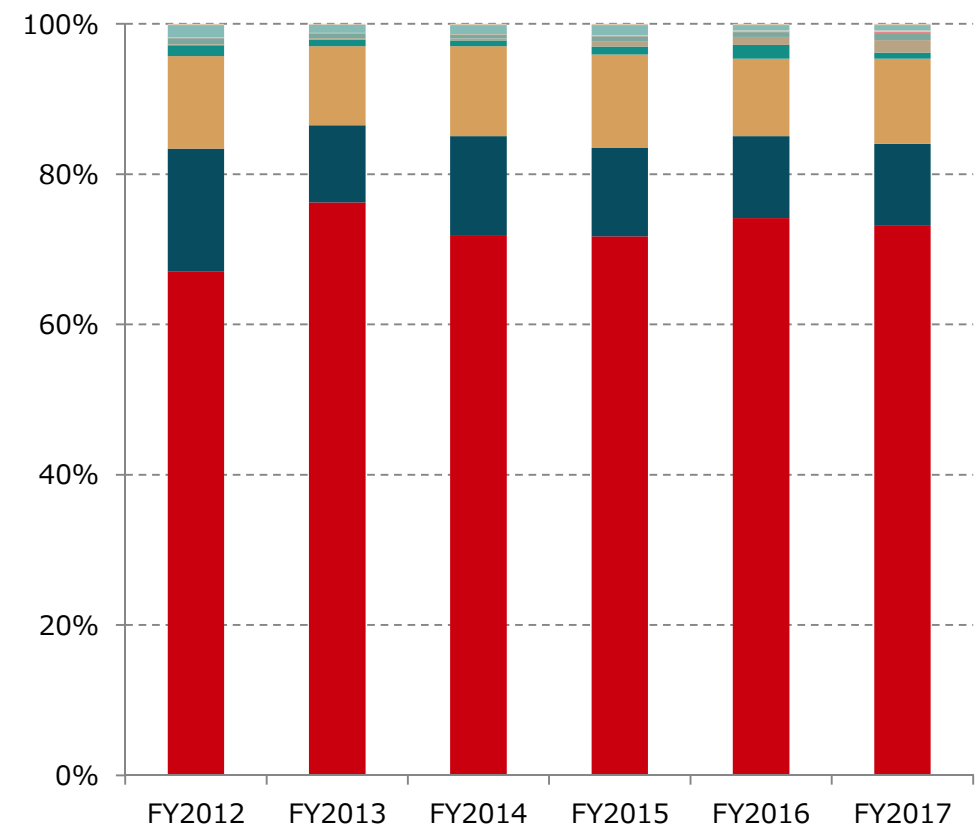
Share by Investor Type

- Foreign investor share has expanded with HFT amid strong algorithmic trading. However, participation from domestic proprietary trading desks has shrunk while domestic institutional investors have remained less active.
- Individual investors continue to maintain a certain presence in the mini futures and options markets.

Share of Nikkei 225 mini

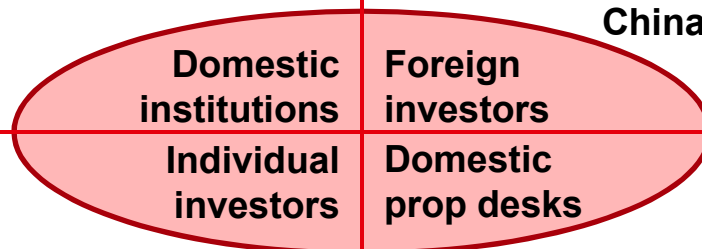


Share of Nikkei 225 Options



- ❑ Lay foundations for pension participation
 - Hold seminars for pension funds (e.g., on using derivatives for sophisticated risk management)
- ❑ Encourage direct/indirect use among financial institutions
 - Encourage the creation of products such as investment trusts and ETFs that involve listed derivatives
 - Hold workshops for local financial institutions

- ❑ Attract new investors
 - Promote the Japanese market to new investors by means including “New User Program”
 - Provide updates on new regulatory requirements such as the HFT registration regime
- ❑ Capture Asian FCM flows
 - Collaborate more with FCMs (futures commission merchants) in Taiwan, Korea, China, and other Asian markets



- ❑ Provide content to facilitate understanding of product characteristics and risks
 - Increase understanding of risks associated with derivatives
 - Then, employ various channels to introduce ways to use derivatives depending on one's investment experience and needs
- ❑ Propose tax revision
 - Work together with JSDA and other industrial bodies to push for a system that taxes gains and losses across cash and derivatives trading

- ❑ Work to encourage recovery in proprietary dealing
 - Hold workshops for the financial industry on investment techniques employing derivatives
 - Hold training sessions for dealers and also operations managers

Supplementary Information



Listed Derivative Products

Asset	Product	2017 Trading Vol. (thou.)	YoY change	Ranking
Japanese Stock Price Index	Nikkei 225 Futures	23,054	-14%	4
	Nikkei 225 mini	219,518	-6%	1
	Nikkei 225 Options	33,089	-3%	2
	TOPIX Futures	24,393	+8%	3
	mini-TOPIX Futures	3,625	+23%	7
	TOPIX Options	259	+78%	11
	JPX-Nikkei Index 400 Futures	7,669	+4%	6
	TOPIX Core30 Futures	3	-48%	17
	TOPIX Banks Index Futures	172	+423%	13
	TSE Mothers Index Futures	254	+369%	12
Foreign Stock Price Index	DJIA Futures	71	+12%	14
	India Nifty50 Futures	1	+32%	19
Dividend Index	Nikkei 225 Dividend Index Futures	7	-65%	16
Volatility Index	Nikkei 225 VI Futures	17	-78%	15
REIT Index	TSE REIT Index Futures	306	+21%	10
Japanese Government Bonds	10-year JGB Futures	8,190	+11%	5
	20-year JGB Futures	0.3	-64%	20
	mini 10-year JGB Futures	2	-72%	18
	Options on JGB Futures	862	-10%	9
Individual Securities	Securities Options	916	-1%	8
-	Total	322,409	-4%	-

As of end of 2017

These materials are prepared solely for the purpose of providing information regarding Japan Exchange Group Inc., and as such, they are not intended as an offer or sale of securities or other similar action whether inside or outside Japan. Our securities have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act"), and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

These materials contain forward-looking statements. These statements are based on our assumptions and beliefs in light of the information currently available to us and are subject to risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, our actual results may vary materially from those we currently anticipate. Given these risks and uncertainties, you are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of these materials. We disclaim any obligation to update any of the forward-looking statements contained in these materials to reflect future actual events or developments.