

JPX IR Day 2017



Derivatives Market Business

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I. Market Environment



Trading Volume

- The derivatives market grew approximately four times in size in the past decade.
- In FY2015, the trading volume hit a record high of 385 million contracts due to rising volatility in the cash equity markets. In FY2016, it decreased to 307 million contracts due to lower volatility.

Trading volume
(mil. contract)

Trading Volume for Derivatives Market

385 mil. contracts

approx. 4 times

97 mil. contracts



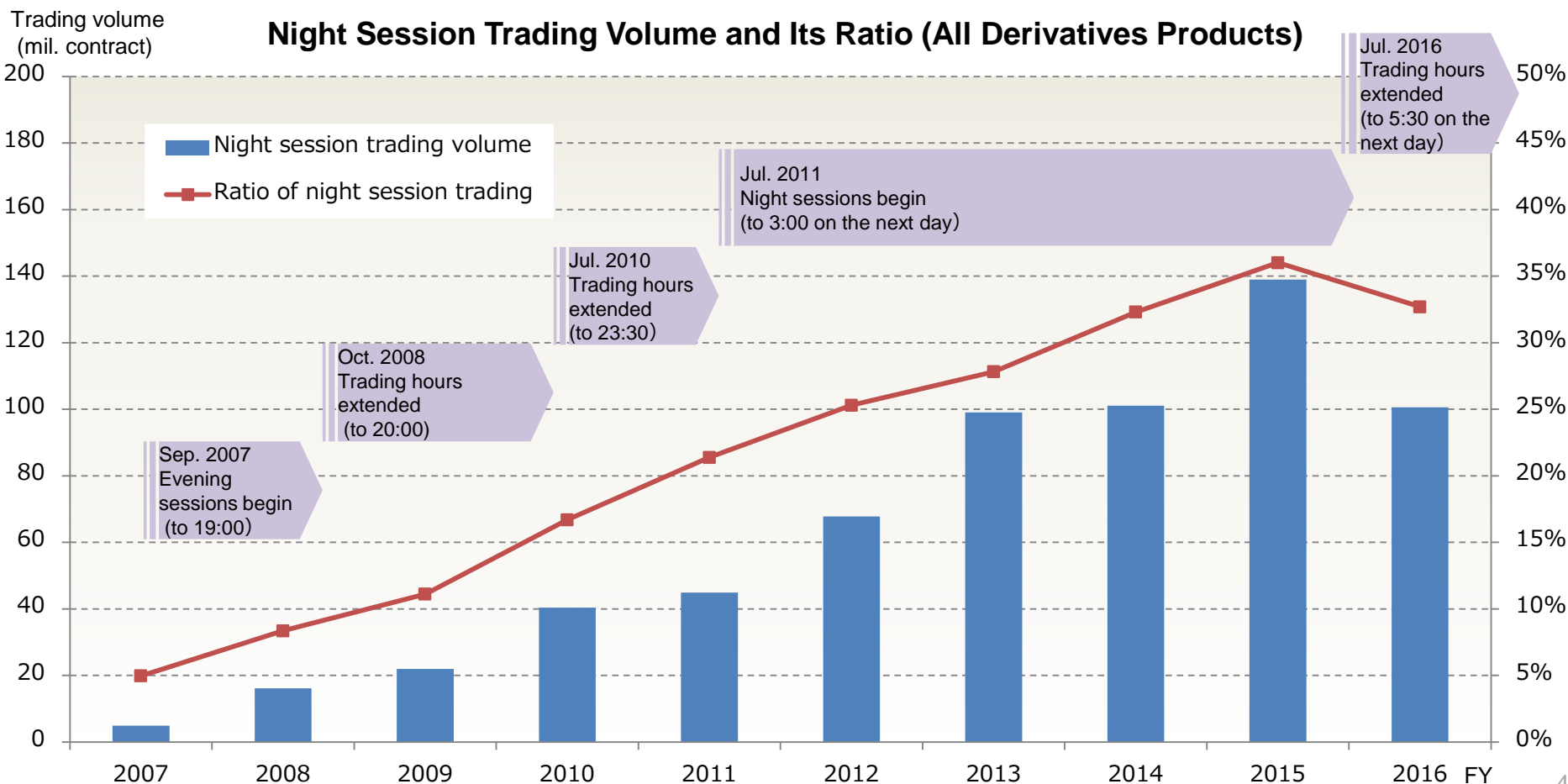
*Single count, including off-auction trading.

*Total volume of all derivatives products listed on TSE and OSE before derivatives market integration in March 2014.

Source: OSE

Night Session Trading

- Ratio of night session trading (ratio of night trading volume in whole day trading volume) is rising every year due to extension of trading hours, etc.
- Ratio in FY2016 was the second highest ever at 32.7%.
(The record in FY 2015 was the highest at 36.0%.)



II. Core Initiatives



OSE Core Initiatives

■ New J-GATE Launch (July 19, 2016)

- ✓ In addition to improved processing capabilities, the following functions were expanded to ensure quality of service and reliability.

Expansion of trading hours

- ✓ Opening time of the day session for index futures was moved up 15 min. to 8:45 a.m.
- ✓ Closing time of the night session was extended 2.5 hours to 5:30 a.m.

Listing of new products

- ✓ TSE Mothers Futures, TAIEX Futures, and FTSE China 50 Index Futures were listed.
- ✓ JPX-Nikkei Index 400 Options was listed.

Strengthening of risk management function

- ✓ A hard-limit function to reject erroneous large orders (pre-trade checking) was made available to trading participants for use on a mandatory basis.
- ✓ At-trade checking function to reject additional orders as per the trading participant's pre-set risk values (no. of orders, positions, etc.) was made available for use on a voluntary basis.

- ✓ Ratio of night session trading of Nikkei 225mini recorded 49.6% in May 2017, which shows a positive effect from extension of trading hours.

■ Diversifying Derivatives Lineup

- ✓ Promote TSE Mothers Index Futures
- ✓ Continue working toward comprehensive exchange initiatives

■ Expanding the investor base

- ✓ Approach retail investors
- ✓ Approach institutional investors/foreign investors

Diversifying Derivatives Products

Promote TSE Mothers Index Futures

Challenges

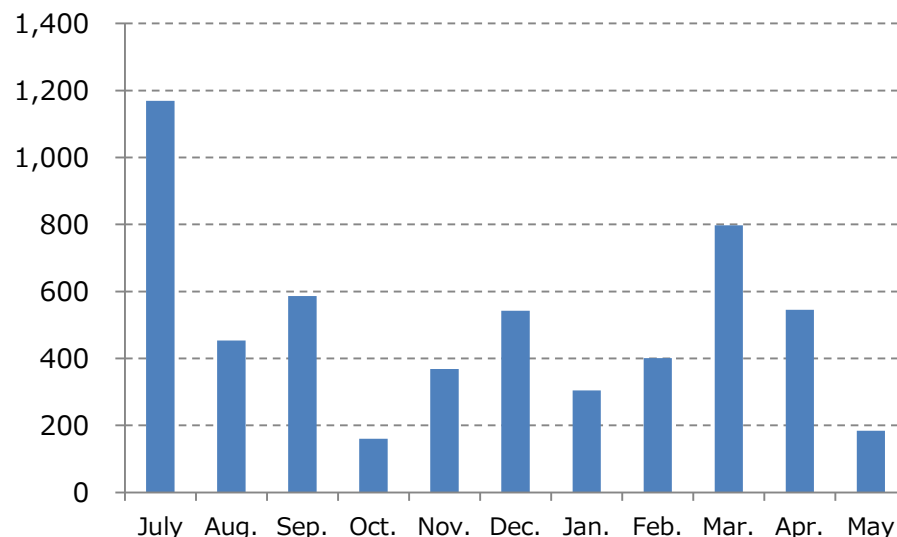
- ✓ Investors lose interest due to low liquidity.
- ✓ With a gradual increase in quotes by primary market makers, it became necessary to further stress the benefits of improvements/changes to quoting and tick sizes to takers.

Measures

- ✓ Reinforce approach to investors interested in the Mother's market, mainly targeting investors who stopped trading TSE Mothers Index Futures due to liquidity issues post-listing with enhanced information distribution channels, including use of a website as a marketing tool, face-to-face events, etc.
- ✓ Aim to further encourage primary market makers to continuously display at least ten-unit order volumes at each of the +/- 3 ticks from the BBO.

Mothers Futures Daily Average Volume

Trading volume
(contracts)



Continue working toward comprehensive exchange initiatives

Challenges

- ✓ Managed to realize a wide line of products mainly in equities but yet to enter into **commodities**

Measures

- ✓ Continue working toward comprehensive exchange initiatives

Expanding the Investor Base

Approach Retail Investors

Increase no. of derivatives accounts

- ✓ Increase number of accounts by targeting investors of cash equities (index products such as ETFs, etc. in particular) or for competitive products (FX, etc.) and by joint promotion, etc. with online securities firms
- ✓ Continue raising the ratio of active accounts by strengthening information distribution that provides opportunities for trading to investors who are interested in derivatives

Promote understanding of derivatives (options) products

- ✓ Provide concrete investment ideas on weekly options or securities options by inviting visiting lecturers to seminars or holding joint seminars with securities firms
- ✓ Attract more market makers and develop an environment that investors can enter and more easily invest in

Approach Institutional Investors/Foreign Investors

Institutional investors in Japan

- ✓ Approach institutional investors in Japan such as pension funds (*), regional banks, and financial institutions about using derivatives
- ✓ Consider working with trust banks or asset management companies to provide ideas to institutional investors about investment product management

Foreign investors

- ✓ Continue approaching HFT firms and trading arcades (non HFT proprietary trading firms that place many traders under their umbrellas) to attract new customers
- ✓ In preparation for planned introduction of registration regime for HFT in Japan, support HFT firms currently in talks with the Exchange

*A bill enacted in Dec. 2016 will allow GPIF to expand direct investments in derivatives through its in-house management. (GPIF will be allowed to trade stock index derivatives through its in-house management.)

Supplementary Information

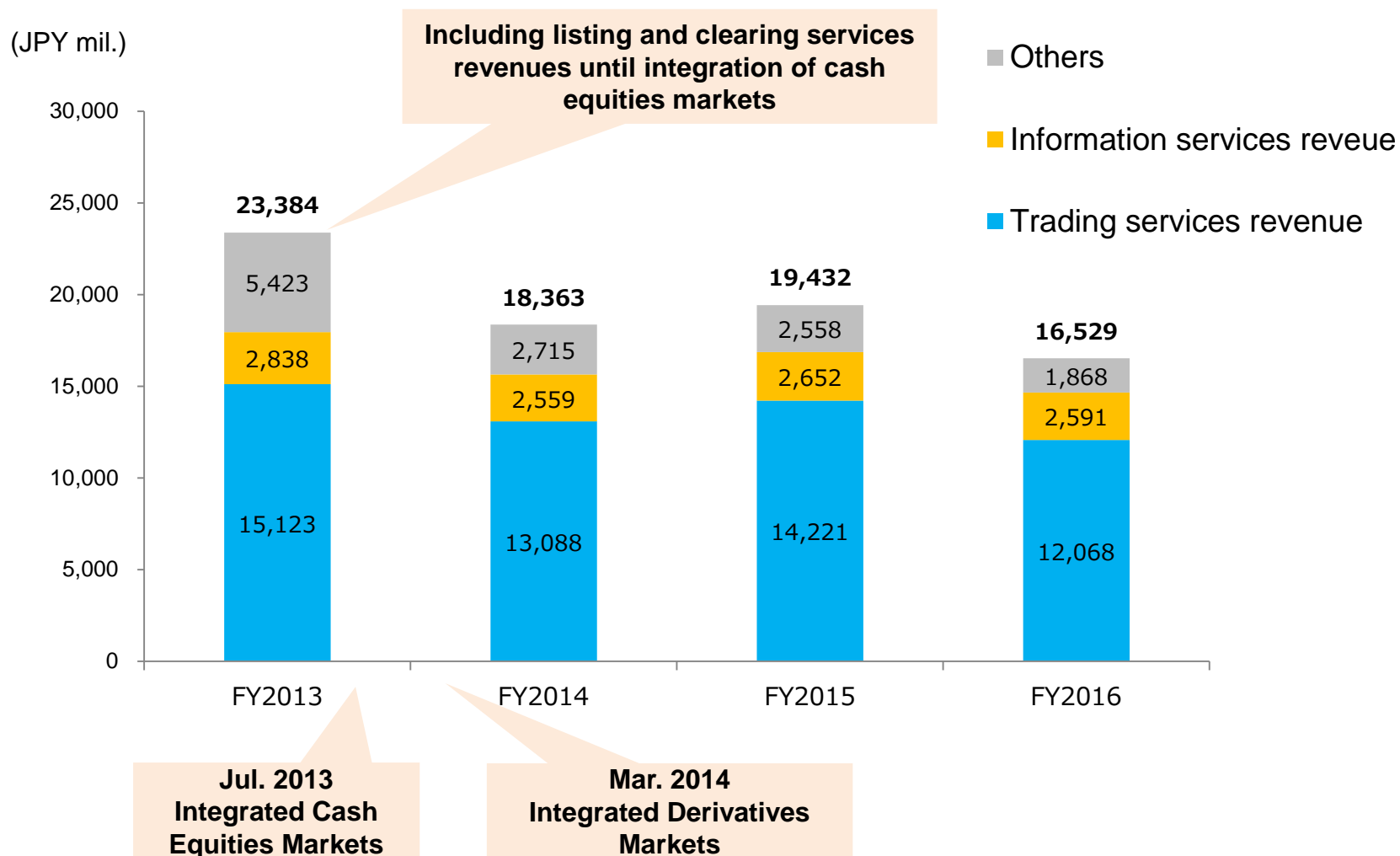


List of Products

- A broad range of products including futures/options with domestic/overseas indices and standardized JGB as underlying asset and securities options

Category	Underlying Asset/Index	Product
Japanese Indices	Nikkei Stock Average (Nikkei 225)	Nikkei 225 Futures (Large Contracts)
		Nikkei 225 mini
		Nikkei 225 Options Weekly Options
	Tokyo Stock Price Index (TOPIX)	TOPIX Futures
		mini-TOPIX Futures
		TOPIX Options
	JPX-Nikkei Index 400	JPX-Nikkei Index 400 Futures JPX-Nikkei Index 400 Options
	TSE Mothers Index	TSE Mothers Index Futures
Overseas Indices	TOPIX Core30	TOPIX Core30 Futures
	Russell/Nomura Prime Index (RN Prime Index)	RN Prime Index Futures
	TOPIX Banks Index	TOPIX Banks Index Futures
	Dow Jones Industrial Average (DJIA)	DJIA Futures
Dividend Indices	Nifty 50	India Nifty50 Futures
	TAIEX Index	TAIEX Index Futures
	FTSE China 50 Index	FTSE China 50 Futures
Volatility Indices	Nikkei 225 Dividend Index	Nikkei 225 Dividend Index Futures
	TOPIX Dividend Index	TOPIX Dividend Index Futures
	TOPIX Core30 Dividend Index	TOPIX Core30 Dividend Index Futures
REIT Indices	Nikkei Stock Average Volatility Index (Nikkei 225 VI)	Nikkei 225 VI Futures
Government Bonds	TSE REIT Index	TSE REIT Index Futures
	Standardized 3%, 5-year JGB	5-year JGB Futures
	Standardized 6%, 10-year JGB	10-year JGB Futures Options on JGB Futures
	Price of standardized 6%, 10-year JGB	mini-10year JGB Futures
	Standardized 3%, 20-year JGB	20-year JGB Futures
Individual Security	Individual Securities	Securities Options

Changes in Revenues of OSE



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