

JPX Investor Day 2023



Derivatives Market

Exchange & beyond

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July 6, 2023



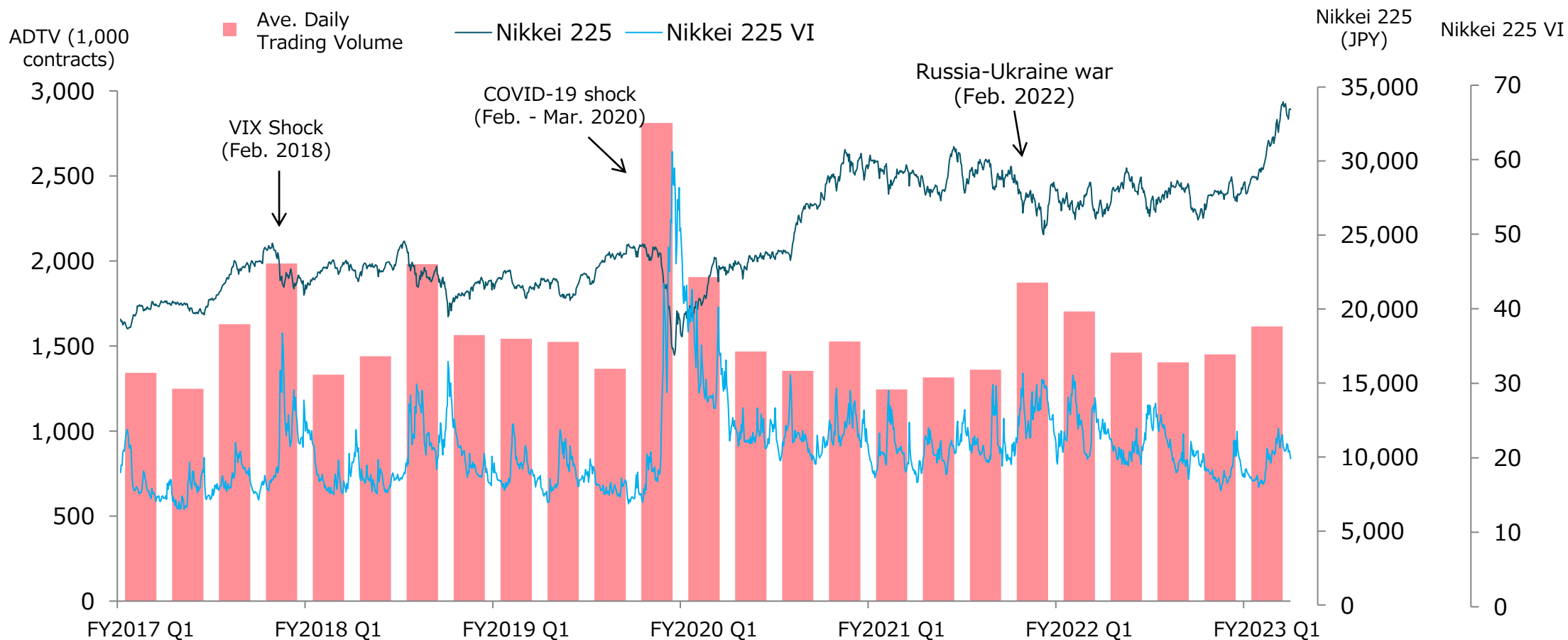
Market Environment



Overview of Derivatives Market - Overall Trading Volume

- Derivatives trading volume is strongly influenced by market conditions and has a strong correlation with volatility.
- In FY2022, volatility remained generally low and stable, although there were periods of increased volatility due to expectations of a change in monetary policy, and the average daily trading volume was 1.5 million contracts (+60,000 contracts, +4.1% year-on-year).

Derivatives Trading Volume (OSE/TOCOM combined)



Note 1: Trading volume is the average of each quarter.

Note 2: Nikkei 225 and Nikkei VI are daily changes.

Source: QUICK

- Listing of new products and introduction of new systems to meet the diverse needs of market participants

Main initiatives in FY2022 and Beyond

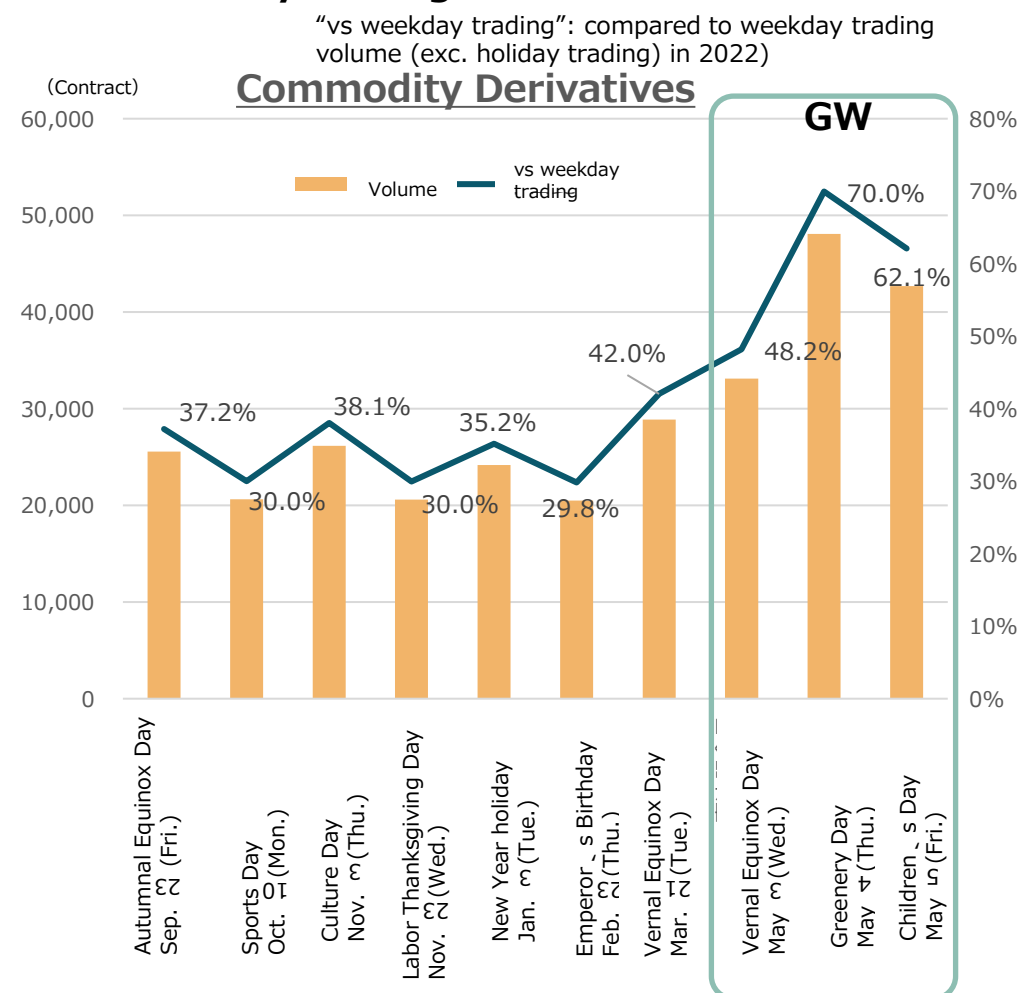
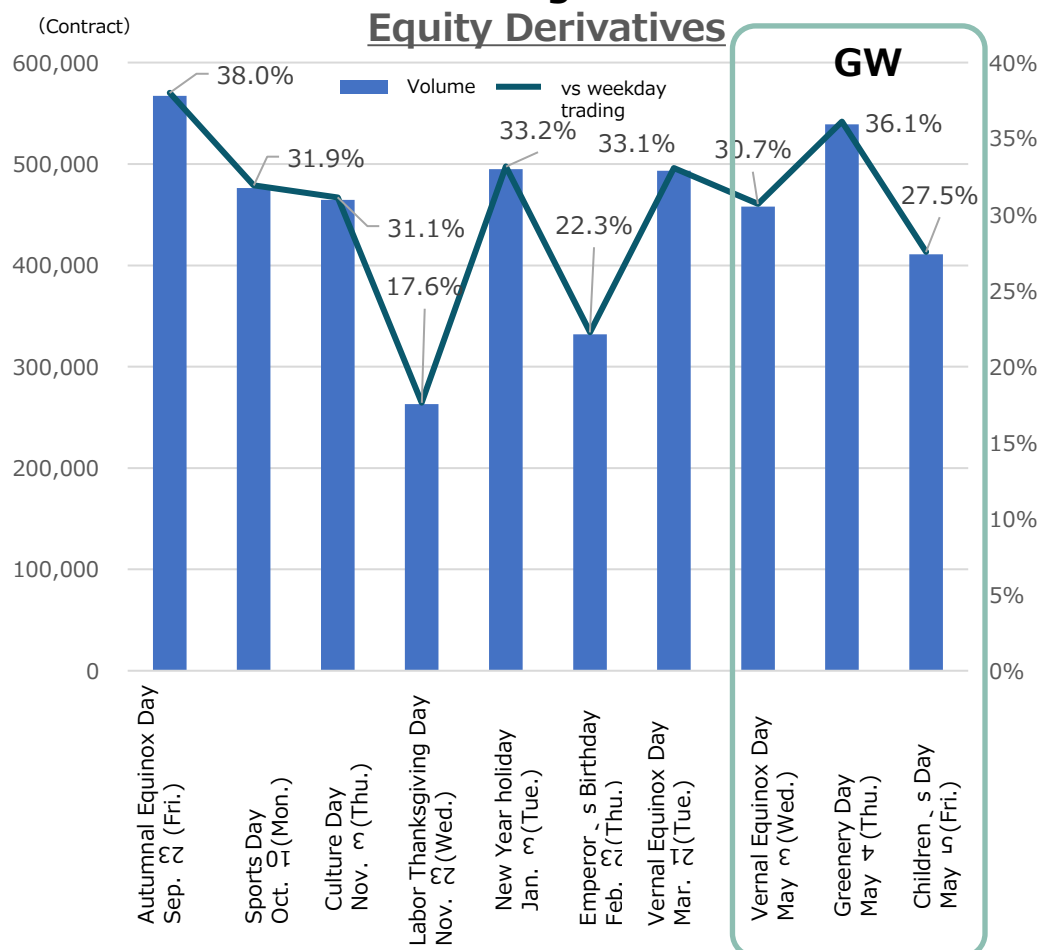
| | |
|-------------------|--|
| Apr. 2022 | Change of listing status from trial listing to permanent listing of Electricity Futures (TOCOM) |
| | Trial listing of LNG Futures (TOCOM) |
| Sept. 2022 | Launch of derivatives holiday trading (OSE/TOCOM) |
| Jan. 2023 | JPX Signed MOU with Japan Electric Power Exchange |
| May 2023 | Listing of Nikkei 225 micro Futures and Nikkei mini Options (OSE) |
| | Listing of Interest Rate (3-Month TONA) Futures (OSE) |
| | Listing of Three ESG Index Futures (OSE) |

Status of Each initiative



- Holiday trading of derivatives started on September 23, 2022 (Autumnal Equinox Day) to further enhance investor convenience by providing hedging opportunities during holidays
- 10 holiday trading days have been conducted with a trading volume of about 30-40% of weekdays

➤ Trading volume exceeded initial expectations based on holiday trading results of overseas derivatives exchanges.



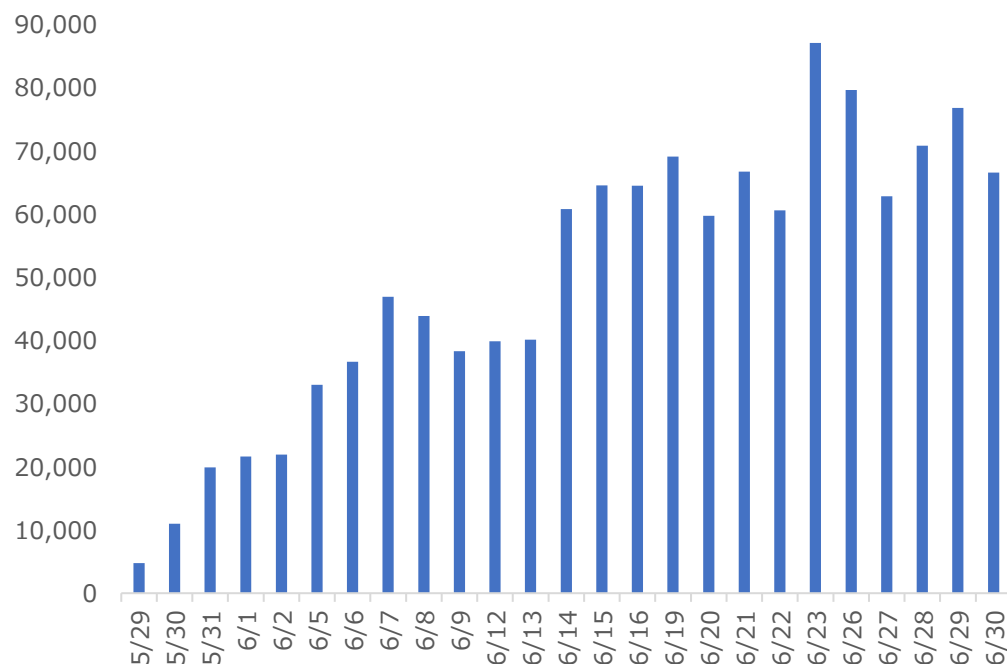
- Several securities companies are currently preparing for and considering participation in holiday trading, and we expect that the investor base will expand further.

Listing of Nikkei 225 micro Futures and Nikkei mini Options

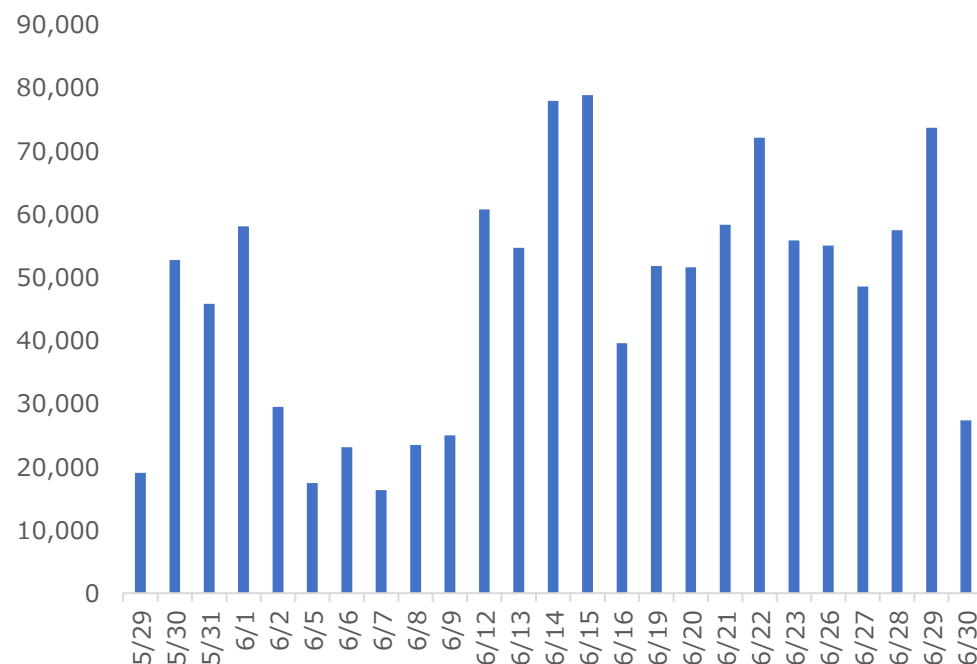


- Listed on May 29 as an entry-level product for those who have not yet used futures and options, in line with the trend toward smaller-lot equity investments.
 - Newly listed products 1/10th the size of conventional products
- Steady increase in volume for both products

(Contract) Trading Volume of Nikkei 225 micro
Futures



(Contract) Trading Volume of Nikkei 225 mini
Options



※ Aggregated by trading day

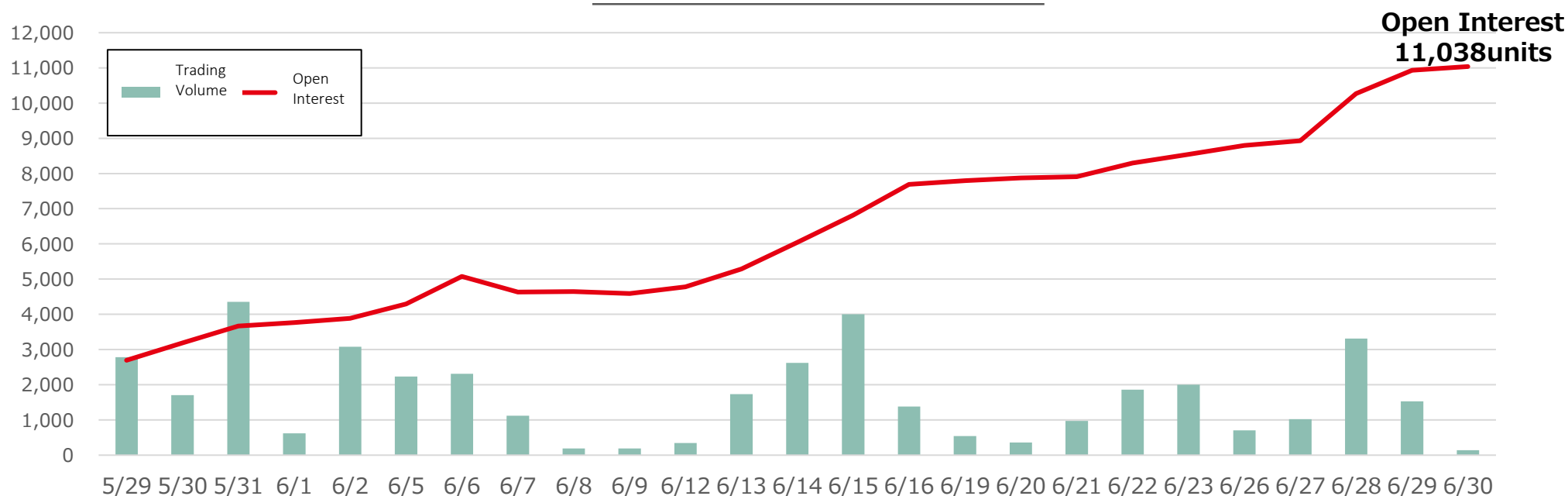
- In order to encourage more investors to use these derivatives, we will continue to promote awareness of the significance and usage of them with the cooperation of securities companies, and aim to increase the number of securities companies that handle these products.

Listing of Interest Rate (3-Month TONA*) Futures

- On May 29, new short-term interest rate futures were listed given the increased attention to Japanese yen interest rates in Japan and overseas due to interest rate hikes in other countries and rising prices, etc.
 - Provide market participants with the convenience of one-stop trading of short- and long-term interest rate futures along with existing 10-year JGB Futures.
- Daily trading and open interest increased steadily despite limited interest rate movements.
 - Promotion to waive trading and clearing fees until the end of March 2024.

(Contract)

3-Month TONA Futures

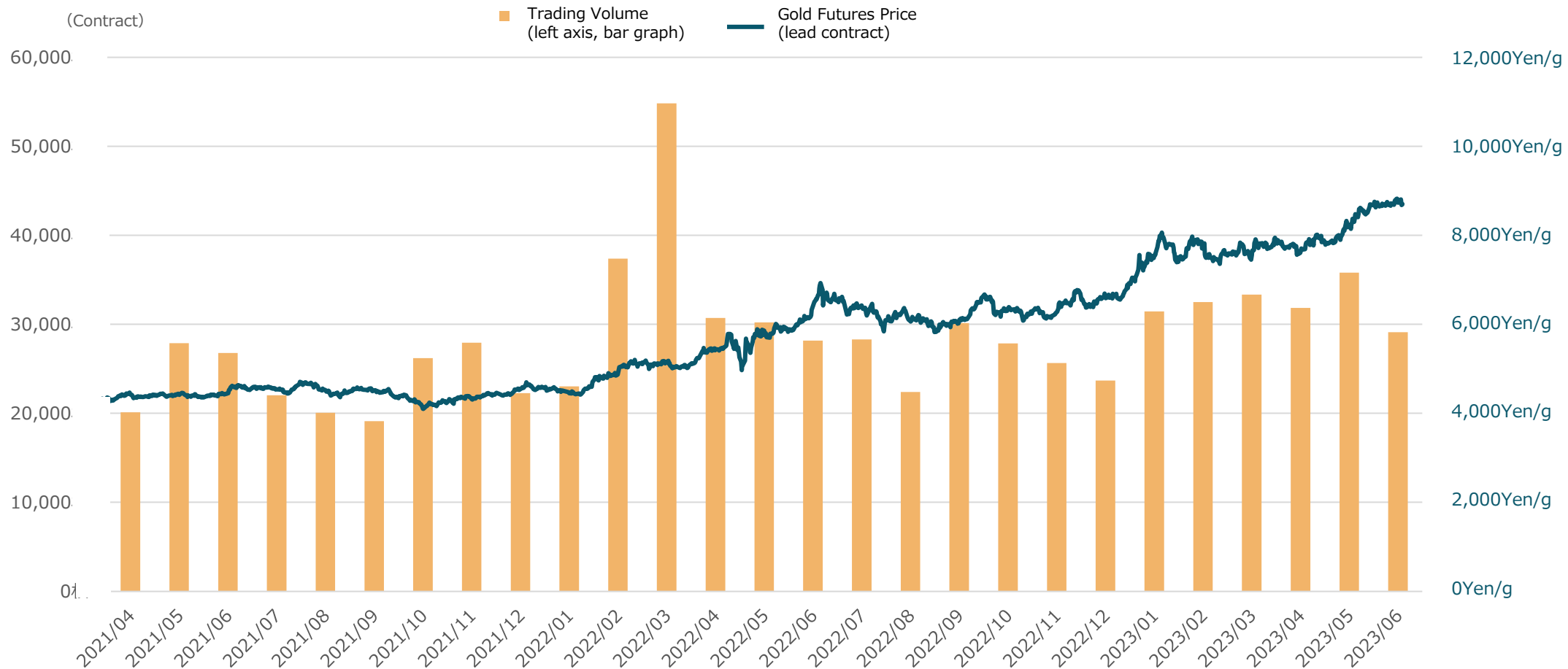


- To expand trading, we will continue to work on improving convenience, including the implementation of a cross margin system that enables investors with positions in interest rate swaps and short-term interest rate futures to reduce their collateral burden.

Note: TONA is an abbreviation for Tokyo Over Night Average rate and represents the interest rate for transactions in which short-term funds are borrowed without collateral in the call market and repaid the next day. In Japan, TONA has been identified as a risk-free alternative to LIBOR.

- Gold has risen to record highs as global inflationary trends drive commodity prices higher.
- Trading volume in Gold Futures, the main product in commodities, also remained at about 30,000 contracts.

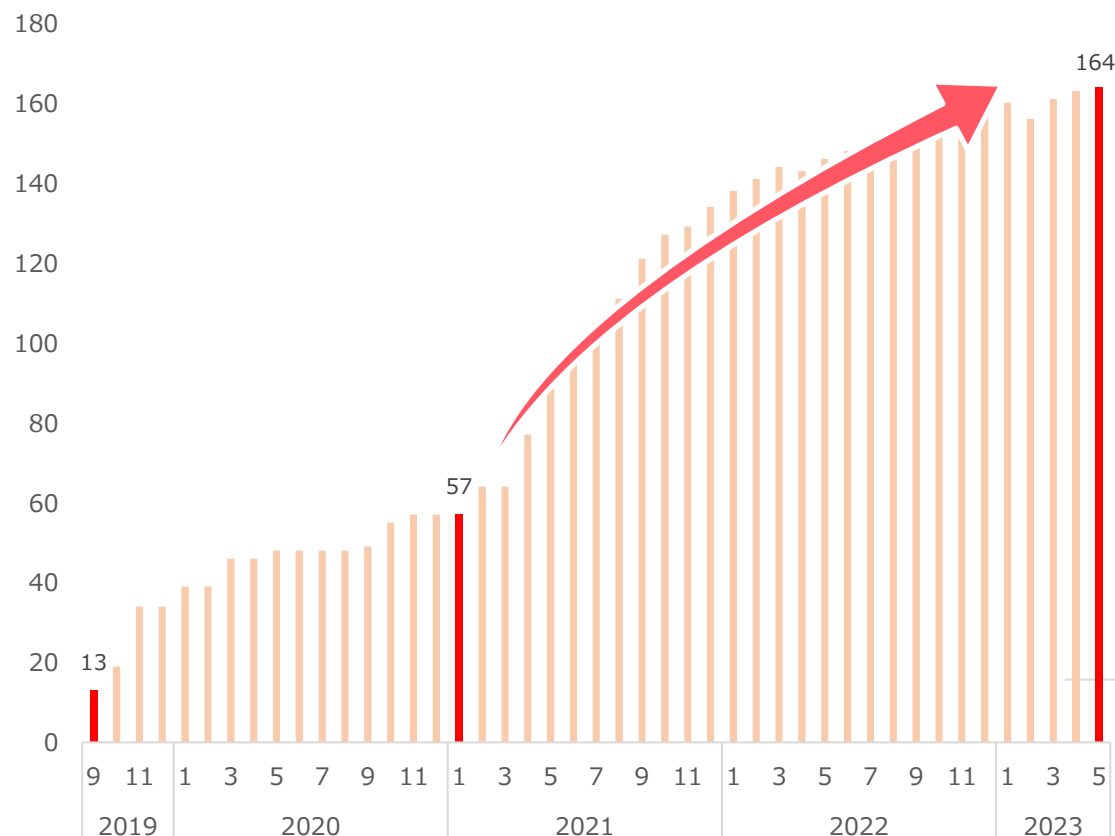
Ave. Daily Trading and Price Changes of Gold Standard Futures



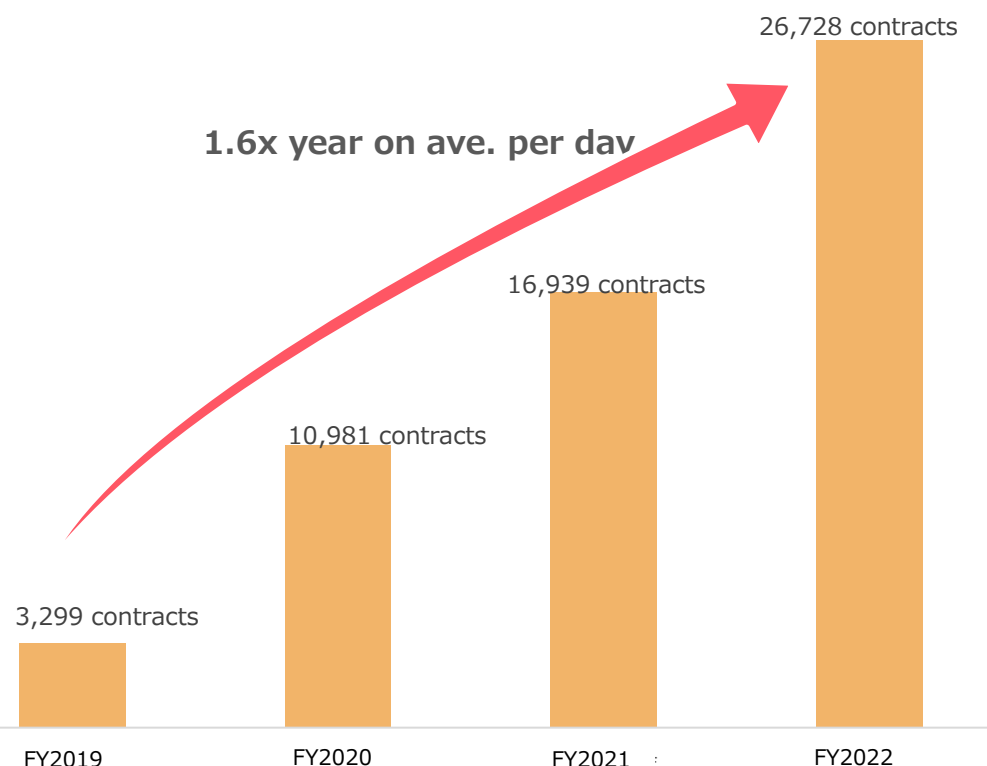
- We will capitalize on the momentum of increased investor focus on the gold price to attract more participants to commodity derivatives.

- The number of trading participants in Electricity Futures has increased significantly since the electricity price spike in June 2021, reaching 164 companies (as of the end of May).
- Trading volume also expanded at a pace of 1.6x/year for the FY2019-22 daily average. In the future, we will review the product design and improve the trading specifications to achieve further expansion.

No. of Trading Participants of Electricity Futures at TOCOM



Trading Volume of Electricity Futures at TOCOM



Note: Total trading volume for the four electricity commodity futures contracts (not including contracts whose final settlement has not been completed).

- We will revise the margin system in the fall of 2023 to streamline margin requirements for electricity futures and improve convenience for participants, and add weekly contracts in the spring of 2024 to strengthen the product lineup and improve overall liquidity in electric futures.

Reference Materials



(Reference) Top 20 Products by Trading Volume (FY2022)

| | Product | Trading Volume | y/y | Note |
|----|--------------------------------|----------------|--------|---------------------|
| 1 | Nikkei 225 mini | 256,184,813 | 6.1% | |
| 2 | TOPIX Futures | 25,581,747 | 8.9% | |
| 3 | Nikkei 225 Options | 24,963,946 | 1.9% | |
| 4 | Nikkei 225 Futures | 21,467,298 | 15.8% | |
| 5 | 10-year JGB Futures | 7,886,806 | -3.0% | |
| 6 | Gold Standard Futures | 7,008,630 | 5.0% | |
| 7 | mini-TOPIX Futures | 6,424,136 | -29.1% | |
| 8 | JPX-Nikkei Index 400 Futures | 2,708,396 | -28.0% | |
| 9 | Platinum Standard Futures | 2,471,660 | -1.7% | |
| 10 | TSE Mothers Index Futures | 2,392,494 | -2.3% | Second highest ever |
| 11 | Platts Dubai Crude Oil Futures | 2,094,716 | -42.1% | |
| 12 | Securities Options | 2,072,436 | 10.5% | Highest ever |
| 13 | Gold Mini Futures | 1,539,560 | -19.9% | |
| 14 | Gold Rolling-Spot Futures | 1,347,569 | 69.4% | |
| 15 | TSE REIT Index Futures | 1,056,821 | 23.5% | Highest ever |
| 16 | TOPIX Banks Index Futures | 741,015 | 85.7% | Highest ever |
| 17 | DJIA Futures | 691,002 | 59.8% | Highest ever |
| 18 | RSS3 Rubber Futures | 583,820 | -13.1% | |
| 19 | TOPIX Options | 553,501 | 8.3% | Second highest ever |
| 20 | Platinum Mini Futures | 406,444 | -3.4% | |

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