# Trends in High-Speed Trading

December 2022



#### Terms and Data in the Document

### [Terms]

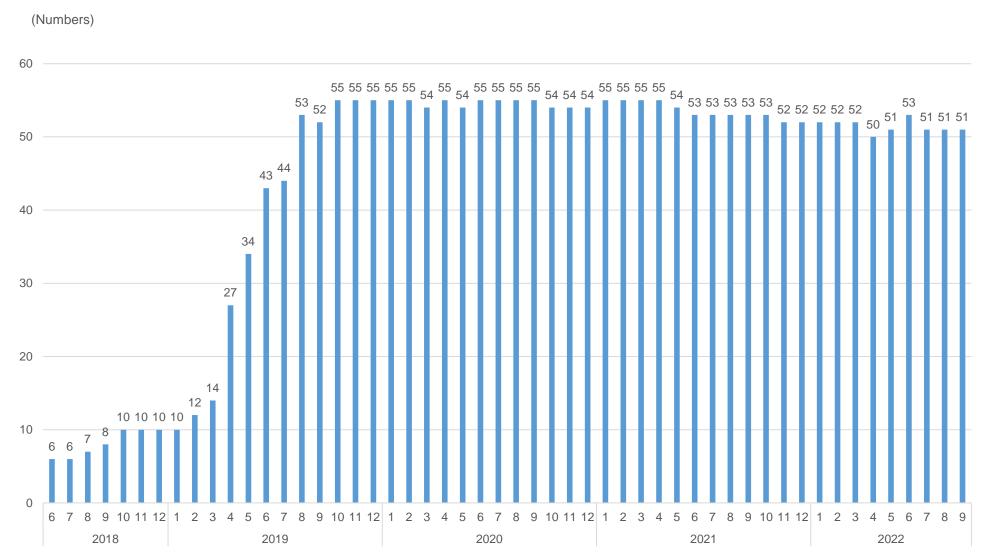
- High-Speed Trading: Acts specified by Article 2, paragraph (41) of the Financial Instruments and Exchange Act.
- High-Speed Traders: a person specified by Article 2, paragraph (42) of the Financial Instruments and Exchange Act or a financial instruments business operator who engages in the high-speed trading listed in Article 29-2, paragraph (1), item (vii) of the Financial Instruments and Exchange Act.

#### [Data from page 4 onward]

- Prepared by the Financial Services Agency based on data from the Tokyo Stock Exchange.
- Extracted from all listed stocks on the Tokyo Stock Exchange (4,207 stocks as of the end of September 2022).
- The figures for transactions by High-Speed Traders in the materials are the aggregate figures for High-Speed Trading by High-Speed Traders.
- Numbers are rounded down to the indicated units, and ratios are rounded off, in principle.

## 1. Number of Registered High-Speed Traders

## (Figure 1-1) Changes in the number of registered High-Speed Traders

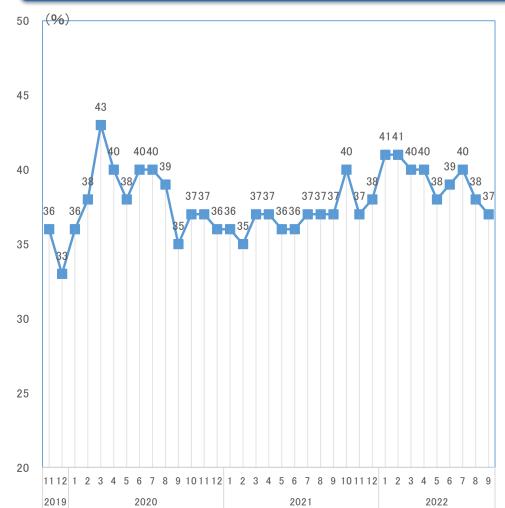


<sup>(1)</sup> The number of registered High-Speed Traders is as of the end of each month.

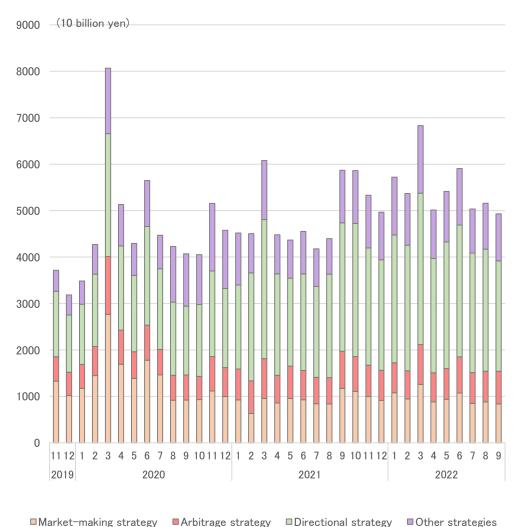
<sup>(2)</sup> Only persons specified in Article 2, paragraph (42) of the Financial Instruments and Exchange Act are covered; i.e., financial instruments business operators who engage in the High-Speed Trading listed in Article 29-2, paragraph (1), item (vii) of the Financial Instruments and Exchange Act are not covered.

## 2. Trading Value Ratio and Trading Value of High-Speed Traders





#### (Figure 2-2) Changes in trading value of High-Speed Traders<sup>3</sup>



Trading value ratio of High-Speed Traders to total trading value

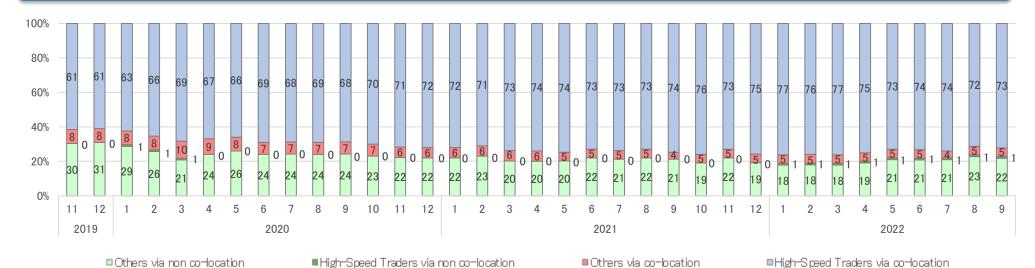
<sup>(1)</sup> The monthly total of the selling price and the buying price.

<sup>(2)</sup> Calculation of the trading value ratio: the monthly trading value of High-Speed Traders / the monthly total trading value.

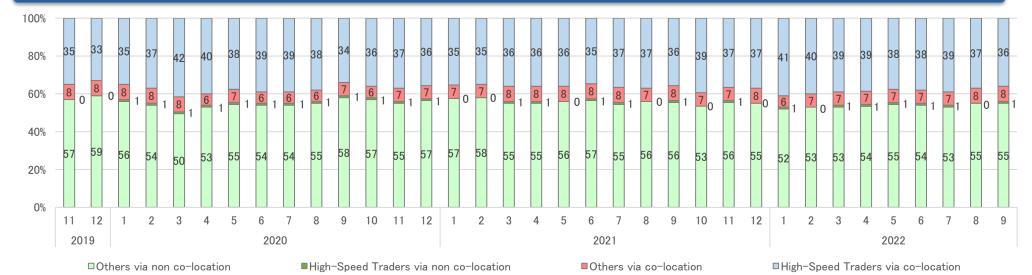
<sup>(3)</sup> The definition of trading strategies is based on the Comprehensive Guidelines for Supervision of Financial Instruments Business Operators, etc. (Supplementary Guidelines): Guidelines for Supervision of High-Speed Traders III-3-1-1(2)(i).

## 3. Ratio of Orders and of Trading Value by Order Server Location and Trading Entity





## (Figure 3-2) Ratio of trading value by order server location and trading entity to total trading value<sup>2</sup>



<sup>(1)</sup> The monthly total of new orders, amended orders, and cancelled orders.

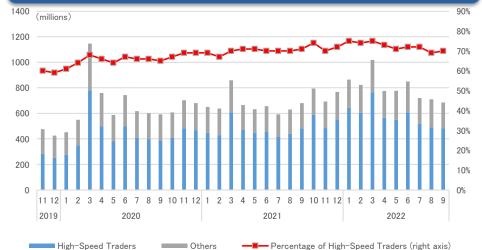
<sup>(2)</sup> The monthly total of the selling price and the buying price.

<sup>(3)</sup> Co-location is the installation of participant servers in close proximity to the trading system of an exchange.

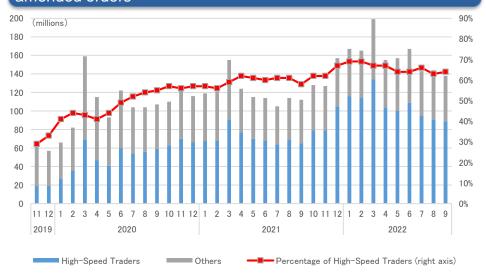
#### 4. Transactions by High-Speed Traders:

## (1) New Orders, Cancelled Orders, Amended Orders and Executed Orders

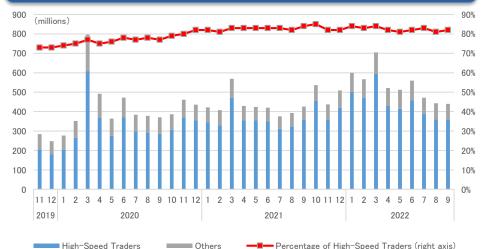




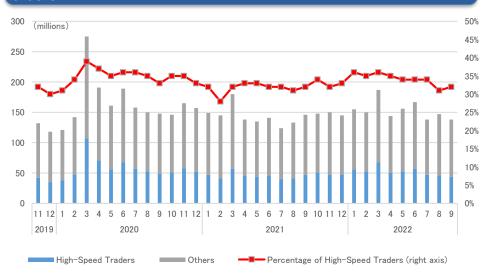
(Figure 4-3) Number of amended orders by trading entity and ratio of amended orders by High-Speed Traders to total amended orders



(Figure 4-2) Number of cancelled orders by trading entity and ratio of cancelled orders by High-Speed Traders to total cancelled orders



(Figure 4-4) Number of executed orders by trading entity and ratio of executed orders by High-Speed Traders to total executed orders



<sup>(1)</sup> Calculation of the ratio: the monthly total of new orders (cancelled orders, amended orders or executed orders) by High-Speed Traders / the monthly total of new orders (cancelled orders, amended orders or executed orders) by all participants.

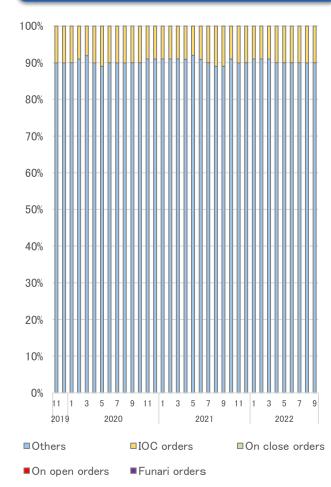
#### 4. Transactions by High-Speed Traders:

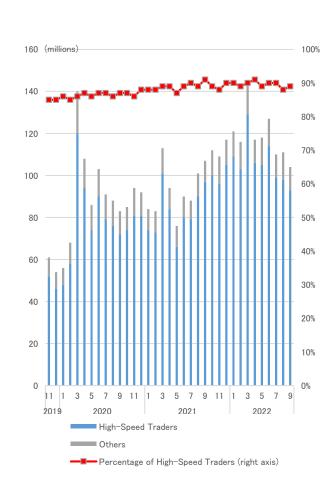
## (2) Conditional Orders (including IOC Orders<sup>1</sup>) and Market Orders

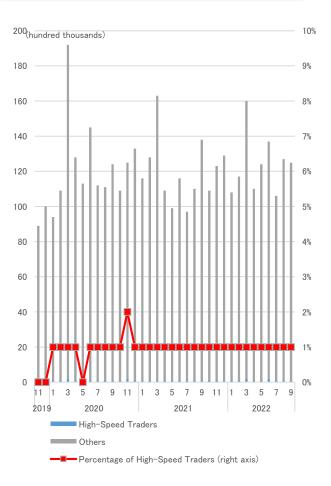
(Figure 4-5) Ratio of each type of conditional order to total orders by High-Speed Traders<sup>2</sup>

(Figure 4-6) Number of IOC orders by trading entity and ratio of IOC orders by High-Speed Traders to total IOC orders

(Figure 4-7) Number of market orders by trading entity and ratio of market orders by High-Speed Traders to total market orders







- (1) Immediate Or Cancel orders. A conditional order that immediately executes part or all of its quantity at a specified price or a more favorable price and forfeits the order quantity that was not executed.
- (2) Conditional orders refer to On open orders, On close orders, IOC orders and Funari orders.
- (3) Calculation of the ratio in Figure 4-5: the monthly number of On open orders (On close orders, IOC orders, Funari orders or others) by High-Speed Traders / the monthly total of conditional orders by High-Speed Traders.
- (4) Calculation of the ratio in Figure 4-6: the monthly total of IOC orders by High-Speed Traders / the monthly total of IOC orders by all participants.
- (5) Calculation of the ratio in Figure 4-7: the monthly total of market orders by High-Speed Traders / the monthly total of market orders by all participants.