

# Detail Breakdown Trading Data Data Specifications (External Distribution Service)

(Ver. 1.4)

JPX Market Innovation & Research, Inc.

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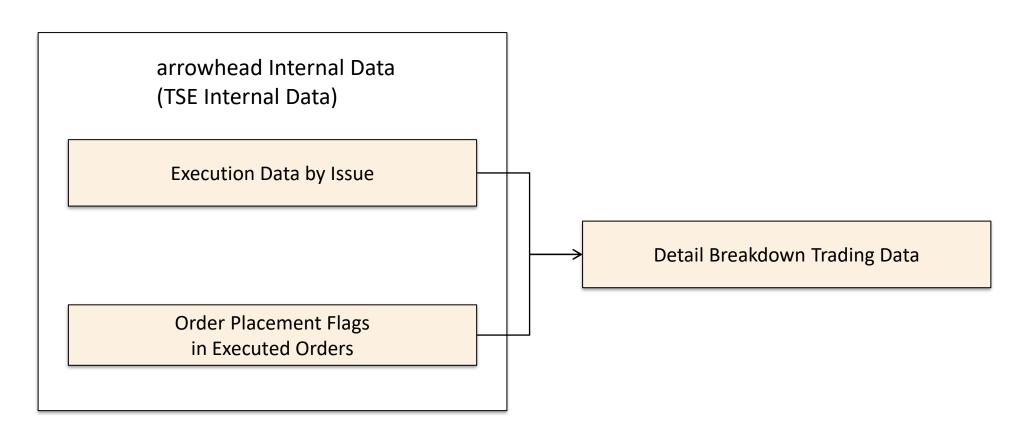


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#### 1. Data Generation Method



- Detail Breakdown Trading Data is extracted from daily trading values and volumes (only regular trading sessions on the TSE market) per TSE-listed issue based on flags for margin transactions and short selling that are attached to orders at the time of placement.
- When an investor places an order to the TSE market, he/she is required to enter attribute information for the order (flags to indicate a margin transaction or short selling). These flags are normally used for applying restrictions.
- JPX Market Innovation & Research, Inc. uses these flags to compile the execution data by issue available in the arrowhead trading system and provides them to data users as "Detail Breakdown Trading Data".



# 2. Margin Transactions



- Features of margin transactions
- ✓ Margin transactions involve investors pledging collateral with the securities companies to borrow securities or funds for trading. (\*1)
- ✓ An investor can use margin transactions to trade up to 3.3 times the value of the pledged collateral. A margin sale is a short sale of securities borrowed from the securities company.

(Ref.) Outline of margin transactions <a href="https://www.jpx.co.jp/english/equities/trading/margin/outline/index.html">https://www.jpx.co.jp/english/equities/trading/margin/outline/index.html</a>

- Standardized margin transactions and negotiated margin transactions
- ✓ Margin transactions are classified into standardized margin transactions and negotiated margin transactions. The former refer to those involving eligible securities and settlement deadlines specified by TSE, while the latter refer to those where the investor and the securities company negotiate such conditions. The settlement deadline for standardized margin transactions can be up to six months, but for negotiated margin transactions there may sometimes be no specific settlement date.
- Securities for loans for margin transactions
- ✓ In general, all listed securities can be bought on margin, but most of those that can be sold on margin are securities selected by TSE as eligible for loans for margin transactions. Currently, about 60% of listed securities are eligible for loans for margin transactions. (Ref.) List of securities for loan transactions https://www.jpx.co.jp/english/listing/others/margin/index.html
- Margin transaction flag
- ✓ When conducting a margin transaction, the investor is required to attach a flag to indicate whether the order is a transaction to create a new position or one to close an existing position. (\*2)
- ✓ When settling a margin transaction, the outstanding position is normally closed by an opposite matching transaction. For example, an equivalent margin sell transaction is made to close (settle) a margin buy position.

(\*1) Transactions by overseas investors that involve securities or funds borrowed from brokers that are not registered financial instruments business operators do not fall under margin transactions.

(\*2) The flag does not differentiate between standardized or negotiated margin transaction.

### 3. Short Selling



- Overview
- ✓ Short selling is sale of securities not held by the seller but borrowed from another party.
- Short selling may or may not involve margin transactions.
   Normally, non-margin short selling accounts for a larger portion of short selling than selling on margin on the market.
- ✓ Short selling is subject to regulations such as marking requirement and price restriction.

(Ref.) Trading restrictions <a href="https://www.jpx.co.jp/english/equities/trading/regulations/02.html">https://www.jpx.co.jp/english/equities/trading/regulations/02.html</a>

- Short selling marking requirement
- ✓ When making a short sale, the investor is required to indicate whether the sell order is a short sale when placing the order. However, there are also short sales that are exempted from this marking requirement.
- Short selling price restriction (up-tick rule)
- ✓ If the price of an issue falls by 10% during the trading day, short selling will be subject to the price restriction. However, there are also short sales that are exempted from this price restriction.
- Short selling flag
- ✓ When making a short sale, the investor is required to attach a flag to indicate whether the order is a short sale exempted from price restriction.
- ✓ A short sale that is exempted from the marking requirement is normally placed to TSE as a long sale (i.e., selling excluding short selling).
- ✓ A short sale that is exempted from the short selling price restriction is normally placed to TSE as "short selling without price restriction".

# 4. Data Specifications (External Distribution Service) 1/3



- Data service name
- Detail Breakdown Trading Data
- Data contents
- ✓ Trading value and volume data per issue regarding margin transactions and short selling extracted based on flags at the time of order placement. Data is based on daily trading value and volume on the TSE market per TSE-listed issue (limited to regular trading sessions).
- Format
- ✓ All issue data is stored in a single csv file (1 file per day).
- Data Period, Acquisition method
- ✓ Data from April 2015 available
- ✓ Please refer to the connection specifications provided at the time of contract for the acquisition method.

# 4. Data Specifications (External Distribution Service) 2/3



- File layout
- ✓ A csv file containing 16 columns with the following headers (common to both historical data and daily data).
- ✓ For details on the meanings of the headers, please see the next page.

date	code		CSEIIWO	ginSell_		va_Lon gBuy	ginBuy_	va_Mar ginBuy_ Close	vo_Lon gSell	vo_Shor tSellwo Margin	ginSell_	vo_Mar ginSell_ Close	aBuy	vo_Mar ginBuy_ New	
20140107	XXXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
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Trade date (YYYYMMDD)
Securities code (4-digit or 5-digit)

Breakdown of execution value

Breakdown of execution volume

# 4. Data Specifications (External Distribution Service) 3/3



Header	Contents	Unit	Remarks		
date	Trade date (YYYYMMDD)	-	-		
code	Securities code (4-digit or 5-digit) (*1)	-	-		
va_LongSell	Long selling execution value				
va_ShortSellwoMargin	Execution value of short selling (excluding new margin sell)		Breakdown of sell		
va_MarginSell_New	Execution value of new margin selling (sell orders that create new margin sell positions)	7	execution value		
va_MarginSell_Close	ginSell_Close Execution value of closing margin selling (sell orders that close existing margin buy positions)				
va_LongBuy	Long buying execution value				
va_MarginBuy_New	rginBuy_New Execution value of new margin buying (buy orders that create new margin buy positions)		Breakdown of buy execution value		
va_MarginBuy_Close					
vo_LongSell	Long selling execution volume				
vo_ShortSellwoMargin	Execution volume of short selling (excluding new margin selling)		Breakdown of sell		
vo_MarginSell_New	Execution volume of new margin selling (sell orders that create new margin sell positions)		execution volume		
vo_MarginSell_Close	Closing margin selling (sell orders that close existing margin buy positions) execution volume	Shar es			
vo_LongBuy	Long buying execution volume		Breakdown of buy		
vo_MarginBuy_New	Buy_New Execution volume of new margin buying (buy orders that create ne				
vo_MarginBuy_Close	Execution volume of closing margin buying (buy orders that close existing margin sell positions)				

<sup>(\*1)</sup> Please note that alphabetic characters will be implemented for securities codes newly established on or after January 1, 2024.

#### 5. Notes on Using the Data



Short selling and selling on margin

Selling on margin is a type of short selling. Normally, non-margin short selling accounts for a larger portion of the market than selling on margin. Also, most short sales by professional investors are non-margin short sales.

Actual condition of margin transactions

Margin transactions can start with either a margin buy (new margin buy, closed later by margin sell) or a margin sell transaction (new margin sell, closed later by margin buy). In general, there are more margin transactions that start with buying on margin. Also, more than half of trading by retail investors are margin transactions.

https://www.jpx.co.jp/english/markets/statistics-equities/investor-type/index.html

Outstanding margin transactions

Users can use margin transaction and short selling data with outstanding margin transactions by issue (at the end of the week) to estimate the daily outstanding margin transactions by issue. Note, however, that figures in margin transaction and short selling data may differ from actual figures because it does not include off-auction transactions and those involving physical delivery.

- ✓ Outstanding margin buying (estimated) = Outstanding margin buying at end of week1 + new margin buying in week2 closing margin selling in week2
- ✓ Outstanding margin selling (estimated) = Outstanding margin selling at end of week1 + new margin selling in week2 closing margin buying in week2

Data on outstanding margin transactions (including historical data) can be obtained from TSE Reference Data Service. https://www.jpx.co.jp/english/markets/paid-info-equities/reference/