

Japannext PTS Trading Rules for Bonds

Version 1.0

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This document explains the trading rules for the bonds trading services of Japannext PTS.

Rule	Description
1. Product Universe	<ul style="list-style-type: none"> Japanese Government Bonds (JGB) issued by the government of Japan. Tradable names are specified by Japannext PTS on a daily basis. New issues will be tradable from the business day following the auction.
2. Product Type	<ul style="list-style-type: none"> Cash JGB only. Fixed rate coupon-bearing bonds with maturity periods of 2, 5, 10, 20, 30, and 40-years. <ul style="list-style-type: none"> The unit face value of these bonds is JPY 50,000.
3. Post-Trade Processing	<ul style="list-style-type: none"> Pre-settlement matching is done through JASDEC (Japan Securities Depository Center) PSMS (Pre-Settlement Matching System). All matched trades on JASDEC PSMS are cleared through JSCC (Japan Securities Clearing Corporation). All settlement processing is done through BOJ-NET (Bank of Japan Financial Network System).
4. Participants	<ul style="list-style-type: none"> A participant must be a registered broker-dealer in Japan and be able to complete post-trade processing as described in Section 3.
5. Trading Hours and Days	<ul style="list-style-type: none"> Trading hours: <ul style="list-style-type: none"> Morning session: 08:20 – 11:05 JST Afternoon session: 12:25 – 18:00 JST Japannext PTS is open five days a week from Monday to Friday except for national, observed, and exchange holidays. Please refer to the Japannext PTS Holiday Calendar document for the exact dates.
6. Trade Date	<ul style="list-style-type: none"> Always actual calendar date of the execution (T).
7. Settlement Date	<ul style="list-style-type: none"> Two business days after trade date (T+2).
8. Order Placement	<ul style="list-style-type: none"> Trading participants can place orders via FIX and OUCH order entry ports. Orders will be accepted within the trading hours. Orders remaining in the order book at the end of the morning session are carried into the afternoon session. Between the morning and afternoon sessions orders can only be canceled. Supported order transaction types: <ul style="list-style-type: none"> New order creation Order amendment Order cancellation Orders are placed in terms of number of bonds and simple yield. Supported order types:

Rule	Description
	<ul style="list-style-type: none"> – Limit – Immediate or Cancel (IOC) – Fill or Kill (FOK) – Post-only • Time In Force: <ul style="list-style-type: none"> – Day: An order submitted to the Japannext PTS execution system which stays in effect until the end of trading hours. – IOC: An order submitted to the Japannext PTS execution system with a specified minimum execution size which executes either in full or in part upon entry, the remainder of the order is automatically canceled. – FOK: An order submitted to the Japannext PTS execution system which must execute in full upon entry, otherwise the order is automatically canceled. • The capacity of the firm placing the order must be specified as Principal or Agency. • Orders can be optionally prevented from self-trade upon entry (refer to the Self-Trade Prevention document for details).
9. Matching Process	<ul style="list-style-type: none"> • Order driven continuous matching: <ul style="list-style-type: none"> – When a new order's limit yield matches with the ones already resting in the order book of the execution system, it will be executed at the limit yield of the order book. – Order matching takes place within the trading hours. • Matching priority: Yield-time. <ul style="list-style-type: none"> – For sell orders, an order at a higher limit yield has priority over one at a lower limit yield. – For buy orders, an order at a lower limit yield has priority over one at a higher limit yield. – For orders with the same limit yield, an order accepted earlier has higher priority. – Amending an order's limit yield or increasing its quantity changes its priority. Decreasing an order's quantity does not change its priority.
10. Lot Size	<ul style="list-style-type: none"> • Japannext PTS uses a trading lot of 2,000 bonds, i.e. JPY 100 million face value.
11. Tick Size	<ul style="list-style-type: none"> • Japannext PTS uses a tick size of 0.001% for yield.
12. Base Price	<ul style="list-style-type: none"> • Japannext PTS calculates base prices using an interpolated yield curve built from observed prices around the end of trading hours, whilst also taking into account JSDA (Japan Securities Dealers Association) reference statistical prices and considerations of issue liquidity. • Base prices are converted to base simple yields.
13. Price Range	<ul style="list-style-type: none"> • Japannext PTS uses the following price ranges: <ul style="list-style-type: none"> – Base price \pm JPY 3 for bonds with residual maturity of 10 years or less. – Base price \pm JPY 6 for bonds with residual maturity greater than 10 years. – Residual maturity is the bond maturity date minus the trade date. • Price ranges are converted to simple yield ranges.

Rule	Description
14. Order Restrictions	<ul style="list-style-type: none"> • Minimum quantity: <ul style="list-style-type: none"> – The minimum order quantity is the same as the lot size, i.e. 2,000 bonds, i.e. JPY 100 million face value. – An order with a quantity less than the minimum quantity will be rejected. • Maximum quantity: <ul style="list-style-type: none"> – The soft order quantity limit is 200,000 bonds, i.e. JPY 10 billion face value. – The hard order quantity limit is 2 million bonds, i.e. JPY 100 billion face value. – By default, orders placed via FIX order entry ports have the soft order quantity limit applied. FIX orders can optionally specify to have the hard order quantity limit applied. – Orders placed via OUCH order entry ports have the hard order quantity limit applied. – An order with a quantity exceeding the quantity limit will be rejected. • Yield range: <ul style="list-style-type: none"> – The limit yield of an order should be within the yield range specified by Japannext PTS. – An order with a limit yield outside the yield range will be rejected.
15. Trading Halt	<ul style="list-style-type: none"> • Japannext PTS may suspend or restrict trading in the following cases: <ul style="list-style-type: none"> – When the base price is not generated. – When there are irregular or potentially irregular order flows for the name and Japannext PTS evaluates that it is inappropriate to continue trading with the name. – When there is a system issue and Japannext PTS evaluates that it is inappropriate to continue trading on its system. – Any other cases when Japannext PTS evaluates that it is unable to sustain fair trading. • A trading suspension or restriction can be done at any time including during trading hours. Japannext PTS will attempt to notify all participants via e-mail or fax. • Trading suspension and restriction information may be obtained from market data vendors in real-time.
16. Market Data	<ul style="list-style-type: none"> • Available via market data vendors. • Available directly from Japannext PTS.

Appendix 1: Price and simple yield conversions

Simple yield to price conversion:

$$p = (100 + c * T) / (100 + y * T) * 100$$

Price to simple yield conversion:

$$y = [c + (100 - p) / T] / p * 100$$

p is clean price, i.e. per JPY 100 face value without accrued interest.

y is simple yield in percent.

c is nominal coupon rate in percent.

T is time to maturity in years.

Time to maturity is the time from the settlement date to the maturity date, calculated based on the conventions Actual/365 Fixed when the maturity date is earlier than the one-year anniversary of the settlement date and Actual/365 No Leap Year otherwise. If the settlement date is a leap day then the one-year anniversary is on February 28.

Appendix 2: Settlement amount

Accrued interest rate is based on the convention Actual/365 Fixed and defined as:

$$\text{accrued interest rate} = c * d / 365 \text{ when } d < 183 \text{ and } c / 2 \text{ otherwise}$$

where c is the nominal coupon rate in percent and d is the number of days from the last coupon payment date (or corresponding date for the first accrual period) to the settlement date. If the settlement date matches the next coupon payment date then d is zero.

The settlement amount can be expressed in terms of the execution and accrued interest amounts:

$$\text{execution amount} = \text{clean price} / 100 * \text{face value}$$

$$\text{accrued interest amount} = \text{accrued interest rate} / 100 * \text{face value}$$

$$\text{settlement amount} = \text{execution amount} + \text{accrued interest amount}$$

Alternatively, the settlement amount can be expressed in terms of the dirty price:

$$\text{dirty price} = \text{clean price} + \text{accrued interest rate}$$

$$\text{settlement amount} = \text{dirty price} / 100 * \text{face value}$$