

PRE-OPENING/ PRE-CLOSING/ FIXING RULES

Theoretical price formation (fixing)

The criteria for theoretical price formation are described below:

- I. First criterion: The auction price is the price at which the largest quantity of the asset or derivative is traded.
- II. Second criterion: In the event of a tie on the first criterion, i.e. if there are two or more prices at which the same quantity of assets or derivatives is traded, the prices that create the smallest imbalance in the sale are selected, and in the interval between these prices the theoretical price is the closest to the price of the last trade, or in its absence the closest to the adjusted closing price or, for derivatives only, the closest to the settlement price for the trading session, rounded in accordance with tick size.
- III. Third criterion: In the event of a tie on the first and second criteria, i.e. if there are two or more prices at which the same quantity of assets or derivatives is traded, and two or more prices at which the same imbalance is created on opposite sides, the auction price is the closest price to the price of the last trade among those that created the tie on the second criterion, or in its absence the closest to the adjusted closing price or, for derivatives only, the closest to the settlement price for the trading session, rounded in accordance with tick size.

Characteristics

The characteristics of theoretical price formation are described below:

- I. There is no pro-rata matching for orders at the same price, except in the cases specified in this trading procedures manual.
- II. The trading system uses a price scale rather than a single price to set the theoretical price, which is as close as possible to the last price or, where applicable, to the settlement price.
- III. **Bids** that are equal to or higher than the **theoretical price** and **asks** that are equal to or lower than the **theoretical price** cannot have their quantity reduced but can be changed only to improve the price or increase the quantity, except in cases of correction and/or cancellation of **orders** by B3. These **orders** can be freely canceled in the initial seconds

of the **auction**, and, after the free cancellation period, such **orders** can only be cancelled due to operational error. The length of the free cancellation period is available on B3 website.

- IV. Bids with a higher price than the theoretical price and asks with a lower price than the theoretical price are completely filled.
- V. Bids and asks at the theoretical price may be filled completely, partially or not at all, depending on the theoretical quantity for the auction.
- VI. Disclosed quantity (iceberg) orders cannot be registered during an auction. Disclosed quantity orders registered before the start of an auction must comply with the priority rule for the quantity publicly quoted when they join the auction. If an order is modified, the total quantity must be disclosed to the market.
- VII. Reminders of immediate-or-cancel (IOC) orders are canceled at the end of the auction.

Priority

The trading system uses the following priority rules to match trades subject to auction:

- I. Market-on-auction (MOA) orders for auctions and market-on-close (MOC) orders for closing calls are matched first. The balance of any such orders that are not completely filled when the auction begins is eliminated;
- II. Orders containing price limits have priority for matching at the same price level in accordance with the chronological sequence of their registration, except for orders originating with canceled trades and re-entered by B3.

Auction extensions

The following events may justify an auction extension:

- I. A change in the theoretical price;
- II. A change in the theoretical quantity;
- III. Registration of a new order that changes the filled quantity of a previously registered order;
- IV. A change in the unfilled balance;
- V. Triggering of the protection tunnel;
- VI. A decision by B3 to grant an extension.

B3 may extend or open an auction to preserve the regular development of trading.

Extension parameters for auctions

Extension parameters for auctions	Extension Time
1 ST extension: when there is a change to one of the 4 criteria in the last 3 minutes (including).	1 Minute (opening call)
2 ND extension: when there is a change to one of the 4 criteria in the last 30 seconds (including).	1 Minute
3 RD extension: when there is a change to one of the 4 criteria in the last 15 seconds (including).	1 Minute
4 TH extension: when there is a change to one of the 4 criteria in the last 15 seconds (including).	Random closing between 30 and 60 seconds

During the entire trading session for the Organized Over-the-counter Market if the first extension criterion is met, that is, there is a change in one of the 4 (four) criteria in the last 02 minutes (inclusive), the auction extension time will be 2 (two) minutes, the rest follow the rule in the table above.

After the third extension, the time for the auction to be extended as well as the extension time does not change and is repeated indefinitely.

*Notes:

- (i) exclusively for the closing call, the first extension of the auction will last for 5 minutes, as foreseen in B3's regulations; and
- (ii) For ETFs and Options in the 1st extension: if there is a change in one of the 4 criteria in the last 3 minutes (inclusive), the extension time in the call will be 1 minute closing.

Please note that, notwithstanding the changes, there will be no alteration to:

- (i) B3's ability to determine extensions to or the opening of the auction in order to maintain the regular development of business and
- (ii) the rules for postponing calls in cases where protection tunnels are triggered and when trading rules are broken; as well as in the case of material facts; of situations foreseen in subparagraphs V and VI of B3's Trading Procedures Manual, of the Pre-Opening, Pre-Closing and Fixing Rules; and other exceptional situations foreseen in B3's rules and in the prevailing regulations.