

Unofficial Translation

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Doc	Type	Announcement
	No	2022/
	Subject	Calculation of Order-to-Trade Ratio and Daily Reporting to Members in Derivatives Market
	Apr. Date	/ /2022
	From	Derivatives Market
	To	Derivatives Market Members

To Whom It May Concern,

An expected increase has been observed in the number of orders entered/modified/canceled in the trading system of Borsa İstanbul due to increase in trading volume, interaction between markets, algorithmic and high frequency transactions. Similar trend has been observed for a long time in the global exchange industry in line with the technological development. In this context, monitoring, reporting and analysis of orders has gained great importance.

Order-to-Trade Ratio (OTR), which is calculated by various approaches and methods, has stand out as the primary indicator globally in analysing orders that reach much higher numbers compared to trades.

In this framework, Borsa İstanbul has decided to calculate and share OTR reports with the members at its Derivatives Market. OTR reports consisting of OTR per account/contract basis will be uploaded to the “Connect” system daily as of 16/09/2022. In the calculation of OTR, all entered, modified and canceled orders and all trades except for trade reports are taken into consideration. Details of the calculation method are attached.

Our members are expected to have necessary infrastructure in order to monitor the order/trade patterns and risks of the investors as real time as possible in their own systems and check the OTR figures with the OTR reports provided by Borsa İstanbul.

Kindly for your information.

Korkmaz ERGUN
CEO and Board Member

Attachment : Borsa İstanbul Derivatives Market Order-to-Trade Calculations

ATTACHMENT: DERIVATIVES MARKET ORDER-TO-TRADE RATIO (OTR) CALCULATIONS

OTR is calculated per account per instrument on a daily basis. In general, OTR formula is given as below:

$$\text{OTR} = (\text{order count} / \text{trade count}) - 1$$

Entered, modified and cancelled orders are included in order count. Order amendments are counted as order cancellation and new entry. All trades having distinct trade number, including those arising from partially executed orders, are included in trade count.

CALCULATION METHOD

Order Entries

The following orders are included in calculations.

- Orders which have been entered on previous days and reloaded into the system at the beginning of the calculation day
- Limit orders
- Market to limit orders
- Stop orders
- Orders that are accepted by the system as “Paused” since they are outside of the price limits
- Intermonth strategy orders (treated as a single order)

The following orders are not included in calculations.

- Limit orders resulting from unmatched part of the market to limit orders after partial execution
- Triggered stop orders
- Activation of “paused” orders after changes in price limits are not re-counted
- Orders generated automatically by the system as a result of trades on leg contracts as a result of intermonth strategy orders
- Trade reports

Order Amendments

The following order amendments are included in calculations as order cancellation and new entry.

- Changes in price, quantity, time validity, position open/close, order validity and reference fields

Order Cancellations

The following order cancellations are included in calculations.

- Orders canceled/inactivated by Member's users
- Orders canceled by the Exchange on behalf of Members
- Orders canceled due to user limits in PTRM Risk Group Checks
- Orders canceled by the system due to disconnection
- Orders canceled by PTRM due to margin breach

The following order cancellations are not included in calculations.

- Orders canceled by the Exchange (except the ones canceled upon member request)
- Orders canceled due to Member/User/Account suspension
- Orders canceled by the system due to expiration of time validity
- Unmatched and canceled FaK/FoK orders
- Unmatched and canceled part of partially executed FaK orders
- Orders which are previously "active" being "paused" due to change in price limits or session state
- Stop orders canceled when they are triggered since they are not validated at triggering time

Trades

The following trades are included in calculations.

- All trades executed intraday in all sessions
- Trades on leg contracts as a result of intermonth strategy orders
- Trades transferred to the account with rectified trade process

The following trades are not included in calculations.

- Trade reports
- Trades canceled by the Exchange
- Trades transferred to another account with rectified trade process

OTR REPORT

The OTR reports to be shared with our members via Connect and the fields they contain are given in the following table. The content is also included in [Derivatives Market Data Reporting and Acceptance Format](#) Document.

Table 1. Account and Instrument Based OTR Report

	Field Name	Description	Explanation	Sample Content
1	DATE	Date of the report		03/08/2022
2	MEMBER_CODE	Short member code		AAA
3	ACCOUNT	Account number		BI_AAA_DE-XXXXX
4	ACCOUNT TYPE	Account type		MM_C
5	INSTRUMENT SERIES	Instrument code		F_XAUUSDMMYY
6	INSTRUMENT TYPE	Instrument type		D_PM_FUT
7	INSTRUMENT CLASS	Instrument class		DE_XAUUSD_FUT
8	UNDERLYING	Underlying security of the instrument		D_XAUUSD
9	INSTRUMENT GROUP	Instrument group	Futures/Options	FUTURES
10	ORDER_COUNT	Order count	Order count included in OTR calculations	500
11	TRADE_COUNT	Trade count	Trade count included in OTR calculations	10
12	OTR_COUNT	OTR	Order count/trade count -1 (If trade count is 0 then order count-1)	(500/10)-1=49

Table 2. Account Based OTR Report

	Field Name	Description	Explanation	Sample Content
1	DATE	Date of the report		03/08/2022
2	MEMBER_CODE	Short member code		AAA
3	ACCOUNT	Account number		BI_AAA_DE-XXXXX
4	ACCOUNT TYPE	Account type		MM_C
5	ORDER_COUNT	Order count	Order count included in OTR calculations	500
6	TRADE_COUNT	Trade count	Trade count included in OTR calculations	10
7	OTR_COUNT	OTR	Order count/trade count -1 (If trade count is 0 then order count-1)	(500/10)-1=49

Table 3. Member and Instrument Based OTR Report

	Field Name	Description	Explanation	Sample Content
1	DATE	Date of the report		03/08/2022
2	MEMBER CODE	Short member code		AAA
3	INSTRUMENT SERIES	Instrument code		F_XAUUSDMMYY
4	INSTRUMENT TYPE	Instrument type		D_PM_FUT
5	INSTRUMENT CLASS	Instrument class		DE_XAUUSD_FUT
6	UNDERLYING	Underlying security of the instrument		D_XAUUSD

7	INSTRUMENT GROUP	Instrument group	Futures/Options	FUTURES
8	ORDER_COUNT	Order count	Order count included in OTR calculations	500
9	TRADE_COUNT	Trade count	Trade count included in OTR calculations	10
10	OTR_COUNT	OTR	Order count/trade count -1 (If trade count is 0 then order count-1)	(500/10)-1=49

Table 4. Member Based OTR Report

	Field Name	Description	Explanation	Sample Content
1	DATE	Date of the report		03/08/2022
2	MEMBER CODE	Short member code		AAA
3	ORDER_COUNT	Order count	Order count included in OTR calculations	500
4	TRADE_COUNT	Trade count	Trade count included in OTR calculations	10
5	OTR_COUNT	OTR	Order count/trade count -1 (If trade count is 0 then order count-1)	(500/10)-1=49

UNFILTERED ALL ORDERS REPORT

In order to share the whole order records subject to OTR calculations with our members, Unfiltered All Orders Report will be shared via Connect apart from Normal Session and After Hours Session All Orders Reports. Unfiltered All Orders Report is not filtered with any session, order change reason code etc. The fields and the formats of the fields of this report is included in [Derivatives Market Data Reporting and Acceptance Format](#) Document.

DETERMINING THE ORDER COUNT USED IN OTR CALCULATION

- Orders with “ORDER CATEGORY=1” is filtered in Unfiltered All Orders Report. This filter excludes trade reports (“ORDER CATEGORY=32”) and automatically generated orders on leg contracts as a result of intermonth strategy orders being traded (“ORDER CATEGORY=16”).

Order Entries : number of records with “ORDER CHANGE REASON=6”

Order Amendments : 2 x number of records with “ORDER CHANGE REASON=5”

Order Cancellations : Sum of number of the following records

All records with “ORDER CHANGE REASON=1, 4 or 10” (covers all transactions canceled by user/ inactivated by user / canceled by the system due to disconnection / canceled by the Exchange on behalf of Members)

- Records with “ORDER CHANGE REASON=116, 117 or 120” (the orders canceled due to user limit configurations in PTRM Risk Group Checks / canceled by PTRM due to margin breach)