Market Quality Metrics® in Bonds

SIX Swiss Exchange makes a major contribution to transparency - not only by publishing all of the relevant trading information, but also with our "Market Quality Metrics" (MQM) service.

This pre-trade information tool allows you to check the pre-trade data of all Bonds. With it, you can view and analyze the historic availability of quotations, daily average spreads and the average levels of amounts offered on both sides of the order book.

Below you can find the complete history of Market Quality Metrics (MQM) data for Bonds. Files are provided in CSV format (comma-separated-values) for every trading day along with ZIP archives on a monthly basis.

The definition of the attributes is as follows - in each case only the first level of the order book (inside market) is considered:

Time weighted average spread

The spread for given security for a specific time, Ti, is defined as

$$\text{Spread}_{TI} := \frac{AP_{TI} - BP_{TI}}{(AP_{TI} + BP_{TI})/2}$$

where AP_{Ti} is the best (lowest) ask price at this time and BP_{Ti} is the best (highest) bid price. All double-sided quotes/orders generated by the market maker or participants are used to calculate the spread value.

Then the time weighted average spread is:

$$\text{Time weighted average spread} = \frac{\sum_{TI}(\text{Spread}_{TI} * \text{Length}_{TI})}{\sum_{TI}\text{Length}_{TI}}$$

where Length_{Ti} is the length of time this spread is present in the order book. The spread value is denominated in %.

Spread availability ratio

The percentage of the time where a spread exists during continuous trading of the product:

$$\text{Spread availability ratio} := \frac{\sum_{TI}\text{Length}_{TI}}{\text{Duration of continuous trading}}$$

Average buy/sell volume

The time averaged buy/sell volume during continuous trading:

$$\text{Average buy / sell volume} := \frac{\sum_{TI}\text{Duration}_{TI} * \text{Volume}_{TI}}{\sum_{TI}\text{Duration}_{TI}}$$

Average buy/sell value

The time averaged buy/sell value during continuous trading:

$$\text{Average buy / sell value} := \frac{\sum_{TI}\text{Duration}_{TI} * \text{Volume}_{TI} * \text{Price}_{TI}}{\sum_{TI}\text{Duration}_{TI}}$$

Note: all quotes and orders on the first level of the order book are taken into account. A quote is an offer from a market maker. Therefore the average buy/sell value & volume is usually the quoted offer of the market maker on top level of the order book but might be in some cases (or for a short time) also be a standard order.