

Historical Prices

Calculation of the "60 day VWAP"

The "60 day VWAP" is defined to be the volume-weighted average price (VWAP) of all on-orderbook trades executed during the last 60 trading days.

That is to say, if in the following formula v is the volume of an individual trade and p is the price:

$$VWAP \equiv \frac{\sum_{i=1}^n v_i p_i}{\sum_{i=1}^n v_i}$$

Since, for a given trading day,

$$\sum_{i=1}^n v_i p_i = T$$

is the total on-orderbook turnover for the day, and

$$\sum_{i=1}^n v_i = V$$

is the total on-orderbook volume for the day, the 60 day VWAP is given by

$$VWAR(60) = \frac{\sum_{i=1}^{60} T_i}{\sum_{i=1}^{60} V_i}$$

In the case of a capital restructuring of the security during the 60 day period the equation is modified to

$$VWAR(60) = \frac{\sum_{i=1}^{60} T_i}{\sum_{i=1}^{60} V_i / R_i}$$

Where R_i is the adjustment factor (sometimes called the "R-factor") which is defined as the ratio of the new share price, after the corporate action, and the old share price, before the corporate action. For example, for a stock split at the ratio 1:10, $R = 0.1$.

Data extent

The VWAP is calculated as part of the end-of-day processing at SIX Swiss Exchange. In a small number of cases mistrades can be reported on the following traded day. When the VWAP is calculated these cases are unknown for the final day out of the 60 days and so naturally can not figure into the calculation. To ensure the reproducibility of the VWAP calculation the value given for a trading date T explicitly excludes the contribution from possible mistrades reported at $T+1$.