SIX Exfeed

SIX Concentration Analytics (SCA) Product Guide

SIX-SCA-GDE-110/E
Version 1.1, 02.10.2023

C1 Public

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1 Introduction

1.1 Purpose and Scope

This Product Guide provides relevant information on SIX Concentration Analytics (SCA) according to the General Terms and Conditions for SIX Analytics Services.

This Product Guide does not take precedent over the Agreement on SIX Analytics Services (including the General Terms and Conditions for SIX Analytics Services).

2 Data Format

2.1 File Format

SCA is provided in a delimited text file (CSV) that uses a semicolon (";") to separate values.

2.2 File Name

The CSV file containing data for trading day YYYY-MM-DD has the file name "six_hhi_granularity_YYYYMMDD.csv". "granularity" is a placeholder for one of the two granularity levels as defined in Section 3.4 and can take the values "memberorg" or "member". For example, the data for April 19, 2023 for granularity level "memberorg" is provided in the file called "six_hhi_memberorg_20230419.csv".

3 Data Content

SCA provides insights into market concentration on SIX Swiss Exchange per day and security.

3.1 Security Universe

SCA is computed for securities in the following trading segments subject to the corresponding inclusion requirements:

Trading Segment Name	Trading segment ID	Inclusion requirements
Blue Chip Shares	26 (until and including 4 December 2020) and 25 (from 7 December 2020)	- At least 20 trades
Mid-/Small-Cap Shares	591	- At least 20 trades

Table 1 Security universe

The inclusion requirements are evaluated for each day, separately.

3.2 Execution Venues Covered

SCA is computed for executions on the following order books:

Trading Segment Name	Order books
Blue Chip Shares	CLOB
Mid-/Small-Cap Shares	CLOB

Table 2 Execution venues covered

3.3 Herfindahl-Hirschman Index (HHI)

Market concentration is measured by the Herfindahl-Hirschman Index (HHI). The HHI is the sum of the squared market shares of all market participants.

It is calculated as follows:

$$HHI = \sum_{i=1}^{N} s_i^2$$

s_i denotes market share of market participant i, where,

$$s_i = \frac{q_i}{\sum_{j=1}^{N} q_j}$$

q_i represents the number of shares traded by market participant i, q_j the number of shares traded by any market participant, and N denotes the total number of market participants.

Thus, the HHI can assume values from 0 to 1. In order to protect anonymity in markets with very high concentration, no exact HHIs are provided for values above 0.6. Instead, 0.6 is specified.

3.4 Market Participant Identification

Market participants are identified on two levels of granularity, for each of which a separate CSV with separate HHI calculations is provided on a daily basis:

Granularity Level	Comment
Member Organisation ID	Lower granularity level Note: Sponsored users are considered separate member organisations even though they route their orders via the member organisation ID of the sponsoring participant.
Member ID	Higher granularity level A member organisation may have several member IDs through which orders are routed.

Table 3 Granularity levels of market participant identification

3.5 Flow Classification

Order flow is classified as follows:

Classification	Definition
Overall flow	All shares traded during continuous trading, auctions and Trading-At-Last
Aggressive flow	Shares aggressively traded during continuous trading
Passive flow	Shares passively traded during continuous trading
Auction flow	Shares traded during auctions and Trading-At-Last
Customer flow	Trading under the risk-less principal capacity during continuous trading, auctions and Trading-At-Last and not originating from a Sponsored Access User
Non-customer flow	Shares traded under the principal capacity or originating from a Sponsored Access User during continuous trading, auctions and Trading-At-Last

Table 4 Market participant classification

3.6 Data Fields

Field name	Format	Definition
date	str	Date in YYYY-MM-DD format
isin	str	ISIN code
currency	str	Trading currency
group	str	ID for symbol grouping (board only)
trading_segment_id	str	ID for trading segment
hhi	float64	Market concentration of overall flow
hhi_buy	float64	Market concentration of overall buy flow
hhi_sell	float64	Market concentration of overall sell flow
hhi_aggressive	float64	Market concentration of aggressive flow
hhi_aggressive_buy	float64	Market concentration of aggressive buy flow
hhi_aggressive_sell	float64	Market concentration of aggressive sell flow
hhi_passive	float64	Market concentration of passive flow
hhi_passive_buy	float64	Market concentration of passive buy flow
hhi_passive_sell	float64	Market concentration of passive sell flow
hhi_auction	float64	Market concentration of auction flow
hhi_auction_buy	float64	Market concentration of auction buy flow
hhi_auction_sell	float64	Market concentration of auction sell flow
hhi_customer	float64	Market concentration of customer flow
hhi_customer_buy	float64	Market concentration of customer buy flow
hhi_customer_sell	float64	Market concentration of customer sell flow
hhi_noncustomer	float64	Market concentration of non-customer flow
hhi_noncustomer_buy	float64	Market concentration of non-customer buy flow
hhi_noncustomer_sell	float64	Market concentration of non-customer sell flow
trade_volume	int	Total buy and sell number of shares traded
aggressive_trade_volume	int	Total buy and sell number of shares aggressively traded during continuous trading
passive_trade_volume	int	Total buy and sell number of shares passively traded during continuous trading
auction_trade_volume	int	Total buy and sell number of shares traded during the auctions and Trading-At-Last
customer_trade_volume	int	Total buy and sell number of shares traded under the risk-less principal capacity and not originating from a Sponsored Access User
noncustomer_trade_volume	int	Total buy and sell number of shares traded under the principal capacity or originating from a Sponsored Access User

Table 5 Data fields

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