

Department: FUTURES AND OPTIONS SEGMENT

Download Ref No: NCL/CMPT/65087

Date: November 14, 2024

Circular Ref. No: 138/2024

All Members,

Sub: Dissemination of Futures Equivalent Open Interest

Currently, Symbol wise Futures Equivalent Open Interest at market level in Futures & Options segment is currently being disseminated on website on a daily basis. The same is available under daily reports section with name as “Combined Delta Equivalent Open Interest across exchanges”.

In addition to the above, NSE Clearing shall provide a report on Symbol wise Futures Equivalent Open Interest details at client level to its Clearing Members and Trading Members on a daily basis. The details of the report are as follows:

File path: FAOFTP/F<MEMBER CODE>/REPORTS

File Nomenclature:

- *For Clearing Members: F_CM_DELOI_<MEMBER CODE>_DDMMYYYY.csv.gz*
- *For Trading Members: F_TM_DELOI_<MEMBER CODE>_DDMMYYYY.csv.gz*

File Details:

Position/Trade Date	DD-MM-YYYY
CM Code	Primary Code shall be provided
TM Code	Primary Code shall be provided. It shall be blank in case of CP code
Client Account/CP Code	
Symbol	
Gross Open Interest	Sum of Long and Short positions of the given client in a respective Symbol
Net Delta OI	Futures Equivalent Open Interest netted across futures and options of the given client in a respective Symbol

The detailed information on computation of Futures Equivalent Open Interest has been provided in the Annexure.

Clients shall also be able to view the same through the web portal facility available. Details have been provided in the Annexure.

The provisions of the circular shall be effective from November 18, 2024.

Members are requested to take note of the above.

**For and on behalf of
NSE Clearing Limited**

Huzefa Mahuvawala
Chief Risk Officer

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ANNEXURE

Futures Equivalent of a contract (FE)

The computation methodology for FE shall be:

- FE of a call option contract is equal to N(d1)
- FE of a put option contract is equal to N(d1) – 1
- FE of a futures contract is equal to 1

The computation methodology for d1 of an option contract:

$$d1 = \{ \ln(S/K) + (Rf + 0.5 * Vol_Annual^2) * T \} / (Vol_Annual * \text{sqrt}(T))$$

where:

- ln = natural log
- S = Underlying Price
- K = Strike Price
- Rf = Risk-Free Interest Rate
- Vol_Annual = Annualized Applicable Volatility
- T = Time to Expiry [Formula: (Expiry Date – T Date) / 365]
- N(d1) is the cumulative probability distribution function

Currently, Rf value is fixed at 7%.

Client-Symbol wise Futures Equivalent Open Interest (FE OI) Computation

The Client Symbol wise FE OI file shall contain two columns namely “Gross Open Interest” and “Net Delta Open Interest” which shall be computed as below:

- Gross Open Interest at Client-Symbol level shall be sum of Long and Short positions of the given client in a respective Symbol.
- Net Delta OI (Client Symbol wise FE OI) at a Client-Symbol level shall be the netted FE OI.

Detailed computation is as below:

Client	Contract	Net Position	FE	Client-Contract FE OI
C1	Stock A Futures	-10	1	-10
	Stock A call @ 20000	50	0.5	25

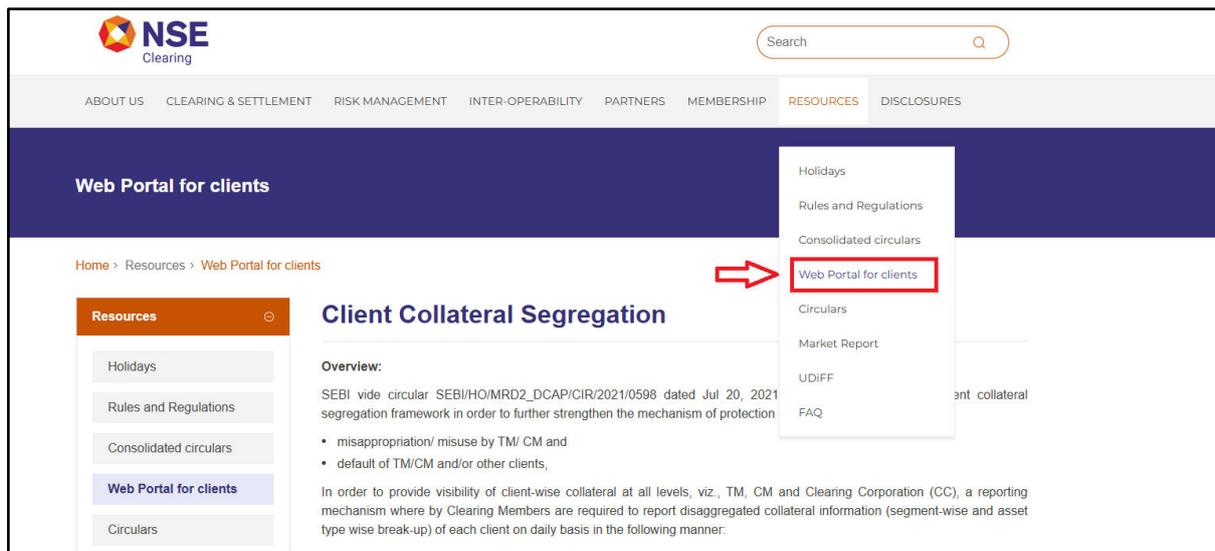
Client	Symbol	Gross Open Interest	Net Delta OI
C1	A	60 (50 + abs(-10))	15 (25-10)

Guideline to view the Futures Equivalent Open Interest data by investors

- Investors have been provided with a facility to view the Futures Equivalent Open Interest information on the web portal in addition to the disaggregated collateral data. This information is provided in separate tab.
- In order to view the data, investors are advised to follow the below steps -

Navigation:

NSE Clearing Website → Resources → Web Portal for clients



The screenshot shows the NSE Clearing website interface. At the top, there is a search bar and a navigation menu with 'RESOURCES' highlighted. Below the menu, a dropdown list is open, showing options like 'Holidays', 'Rules and Regulations', 'Consolidated circulars', 'Web Portal for clients' (highlighted with a red box and a red arrow), 'Circulars', 'Market Report', 'UDIIF', and 'FAQ'. On the left, a 'Resources' sidebar lists the same options, with 'Web Portal for clients' selected. The main content area displays the title 'Client Collateral Segregation' and an overview section with text and bullet points.