

Consultation Paper on Enhancing Trading Convenience and Strengthening Risk Monitoring in Equity Derivatives

1. Objective:

- 1.1.Open Interest (OI) in derivatives markets represents the total outstanding positions held by all participants. Currently, OI is calculated by adding open interest of futures and options (in notional terms) for each investor.
- 1.2. Part A of this consultation paper seeks feedback on a proposal to transition the methodology for computing OI in equity derivatives from notional terms to a "Future Equivalent" (or Delta-based) approach and on related matters (see paragraphs 3.1 to 3.6) including a proposed revision of index derivatives position limits. These proposals aim to:
 - 1.2.1. Reduce instances where stocks are pushed into ban period without any extensive buildup of risk.
 - 1.2.2. Mitigate the possibility and risk of circumvention of intended position limits for index derivatives (including via short positions).
- 1.3. These changes will not materially affect small investors beyond reducing the frequency of stocks entering ban period, thereby simplifying their trading experience.
- 1.4. **Part B** solicits views on following three additional proposals designed to further improve trading convenience and strengthen risk monitoring (see paragraphs 4.1 to 4.3) :
 - 1.4.1. Introducing pre-open and post-closing sessions for derivatives
 - 1.4.2. Revising individual entity level position limits for single stocks
 - 1.4.3. Establishing eligibility criteria for derivatives on non-benchmark indices

2. Background:

- 2.1. A key objective of moving to a Future Equivalent (FutEq) or Delta-based OI is to address the limitations of notional-based OI, particularly its lack of meaningful aggregation across futures and options. Under a purely notional approach, there is potential for manipulation, such as artificially pushing a scrip into the ban period or obscuring the true risk exposure of certain positions.
- 2.2. By contrast, measuring OI on a Delta basis allows for combining the OI from futures (where Delta = 1 times the notional for long futures) and from options (where Delta ranges from -1 to +1 times the notional) to reflect the overall price sensitivity (FutEq OI) in the derivatives market for a given underlying. This



provides a more accurate snapshot of the exposure at a particular point in time and aligns more closely with the cash market activity (e.g., trading volumes, deliveries).

2.3. However, FutEq OI for options can change rapidly due to market movements, and option risks involve multiple "Greeks" (Gamma, Vega, Theta, etc.), not just Delta. Calendar spreads, conversions, and other arbitrage strategies may also limit the utility of Delta alone as a comprehensive risk measure. Rather than increasing complexity by specifying limits for other Greeks, it may be prudent to supplement net Delta limits with gross Delta limits for more robust risk assessment. For instance, an option 'straddle' or 'strangle' can have low net Delta risk at a point in time, but carry large Vega or Gamma risk, represented partly by the gross long and short Delta being run by the participant.

3. PART A: Recommendations on OI Measurement and Related Matters

3.1. Formulation of OI

3.1.1. Existing Practice and Concerns:

3.1.1.1. Current Notional-Based Approach:

At present, OI in Single Stocks Derivatives is measured by simply adding notional OI from futures and options. A more meaningful approach would be to aggregate the Delta or Future Equivalent of options positions with futures OI, thereby reflecting the true price sensitivity of outstanding positions.

3.1.1.2. Risk of Artificial Ban Periods:

A stock is placed in the ban period when combined OI reaches 95% of the Market Wide Position Limit (MWPL). Under a notional approach, participants could potentially take large notional positions in options with minimal Delta risk at a point in time (e.g., deep out-of-the-money options) to push the combined OI close to the MWPL and trigger a ban. Transitioning to Delta-based OI would greatly reduce this possibility by counting only the effective exposure of these out-of-money positions at a point in time.

3.1.2. **Proposal:**

3.1.2.1. **Delta-Based Calculation**:



For each underlying (including indices), OI would be calculated by summing the Delta of all open positions in futures and options. (Long futures have a Delta of +1 times notional; for options, Delta will range between 0 and +1 times notional for long calls/short puts and between 0 and -1 times notional for short calls/long puts.)

3.1.2.2. FutEq OI:

The net Delta values across all positions for a particular underlying for each client (UCC), gross aggregated across all UCCs would constitute the FutEq OI for that scrip/Index.

3.1.2.3. Dissemination of FutEq OI:

Clearing Corporations (CCs) have already begun disseminating end-ofday, portfolio-level FutEq OI for each client (via secure logins) and endof-day scrip-level FutEq OI (via dedicated reports on exchange/CC websites) for a while now. This has allowed market participants to familiarize themselves with the new methodology.

3.2. Definition of Market Wide Position Limits (MWPL)

3.2.1. Existing Practice and Concerns:

3.2.1.1. Current MWPL:

Currently, MWPL for each single stock equals 20% of the stock's freefloat market capitalization and is applied to the total notional OI of futures and options.

3.2.1.2. Need for Calibration:

Because FutEq OI is generally lower than notional OI, a simple transition to Delta-based OI implies a necessary adjustment of the existing MWPL. An analysis of end-of-day data (July–September 2024) for all stocks is summarized in Table-1 below:

	Min	Quartile 1	Quartile 2	Quartile 3	Мах	
FutEq OI as % of Notional OI	49.4%	54.2%	57.1%	64.2%	79.3%	

Table-1: Relation Between Notional OI and FutEq OI

It is seen that in 50% of observations, the FutEq OI was at or below 57.1% of the corresponding notional OI, highlighting the need for recalibrating MWPL accordingly.



3.2.1.3. Link to Cash Market Activity:

Given the nexus between cash and derivative markets, high OI relative to the average daily delivery in the cash market can cause settlement risks in the case of single stocks, or in general increase risks of price manipulation or excessive volatility. Currently, the MWPL formulation does not explicitly consider such cash market activity.

3.2.2. Proposal:

3.2.2.1. New MWPL Formula:

- 3.2.2.1.1. It is proposed that the MWPL for single stocks be set as the lower of (15% of free-float market capitalization) or (60 times the Average Daily Delivery Value, ADDV, in the cash market across exchanges).
- 3.2.2.1.2. This metric will be recalculated every three months based on the rolling ADDV for the preceding three-month period.
- 3.2.2.1.3. Tying the MWPL to cash market delivery volumes will reduce potential manipulation and better align derivatives risk with the underlying cash market liquidity.

3.2.2.2. Impact on Ban Period Instances:

Back testing for July 1, 2024, to September 30, 2024, indicates that under current MWPL rules, there were 366 separate instances of stocks entering the ban period. Under the proposed formulation, these instances drop to 27—over a 90% reduction. This highlights how the new MWPL approach would (a) reduce artificial pushes into the ban period and (b) make such manipulation more difficult.

3.2.2.3. Index Derivatives:

Index derivatives are cash-settled and presently do not have an MWPL. Data from Exchanges and CCs indicates that the FutEq OI of index derivatives is not excessively large in relation to the daily ADDVs of the individual constituents of the indices. SEBI will separately and subsequently explore the need for an MWPL for index derivatives, in consultation with market participants, to ensure market integrity and prevent excessive volatility.

3.3. Position Creation for Single Stocks During Ban Period

3.3.1. Existing Practice and Concerns:



3.3.1.1. Current Restrictions:

Once a scrip exceeds the MWPL, further trading in its derivatives is permitted only for closing out existing positions.

3.3.1.2. **Opportunity to Reduce Risk:**

If participants were allowed to take offsetting trades that reduce their overall FutEq OI (rather than just squaring off positions), this could help lower both individual and systemic risk.

3.3.2. Proposal:

3.3.2.1. Reducing FutEq OI:

During the ban period, any new trade to be permitted only if it reduces the participant's starting FutEq OI for that day. For example, a holder of a long futures position could buy put options or sell call options to reduce total Delta exposure.

3.3.2.2. Broker System Check:

A mechanism would be built into brokers' trading software to ensure compliance with these rules, i.e., to confirm that any new trade during the ban period decreases the participant's net Delta exposure in that scrip.

3.4. Monitoring MWPL Utilization for Single Stocks

3.4.1. Existing Practice and Concerns:

3.4.1.1. End-of-Day Checks:

Currently, MWPL breaches are checked only once—at the end of the trading day—across all exchanges.

3.4.1.2. Intraday Delta Sensitivity:

Because FutEq OI can change significantly during the trading session (especially on high-volatility days, including on expiry days or eventdriven days), solely end-of-day monitoring may be inadequate to address real-time risk.

3.4.2. Proposal:

3.4.2.1. Intraday Monitoring:

To safeguard market integrity and limit settlement risk from intraday spikes in FutEq OI, CCs would perform intraday monitoring at least four random times during the trading session.



3.4.2.2. **Dissemination**:

These intraday FutEq OI snapshots would be circulated to market participants in near real time, enabling timely risk management decisions.

3.5. Computation of Exposure Limits for Mutual Funds and AIFs in Derivatives 3.5.1. Existing Practice and Concerns:

3.5.1.1. Different Measurements for Different Positions:

- 3.5.1.1.1. Exposure for futures/short options is currently measured in notional terms, whereas long options exposure is measured solely by premium paid. This does not account for the significant leverage embedded in long options.
- 3.5.1.1.2. Moreover, hedged positions in derivatives are not granted any offsetting benefit, and overall exposure is essentially computed on a gross basis without adequate netting of risk.

3.5.1.2. Inadequate Risk Capture:

This approach may not fully capture the actual risk or leverage in an AIF or Mutual Fund's derivatives portfolio.

3.5.2. Proposal:

3.5.2.1. Futures Exposure:

No change in how futures exposure is computed for single stocks and indices, since notional values for long futures already align with their FutEq (Delta = 1 times notional).

3.5.2.2. **Options Exposure**:

Both long and short options to be measured on a FutEq (Delta) basis, capturing their real price sensitivity at a point in time rather than just premium outlay.

3.5.2.3. Netting at Scrip/Index Level:

For each underlying (stock or index), the net exposure to be the difference between long and short Delta values across all instruments (futures, calls, puts, etc.).

3.5.2.4. Aggregated Exposure:



The total exposure of a fund is then the gross aggregate of net FutEq exposures across all scrips and indices.

3.5.2.5. Calibration of Existing Limits:

Current MF and AIF exposure limits would be recalibrated to align with these new FutEq calculations.

3.5.2.6. Basis Risk:

More complex strategies (e.g. calendar spreads) carry basis and other risks that are not fully captured by Delta alone. SEBI may review such nuances in consultation with stakeholders at a later stage.

3.6. Position Limits for Index Futures and Index Options

3.6.1. Existing Practice:

In March 2020, SEBI introduced the following limits for index derivatives positions:

- 3.6.1.1. **Short Positions** in index derivatives (short futures, short calls, long puts) cannot exceed (in notional value) the participant's holding of underlying stocks.
- 3.6.1.2. **Long Positions** in index derivatives (long futures, long calls, short puts) cannot exceed (in notional value) the participant's holding of cash or cash-like instruments (government securities, T-Bills, etc.).
- 3.6.1.3. **Additional Limits** of INR 500 crore in net equity index futures and INR 500 crore in net notional equity index options
- 3.6.1.4. **Margin Requirement**: Any entity exceeding these limits to furnish an additional surveillance deposit equivalent to twice the margin on the excess position. The deposit is retained by the exchange/CC for three months.

3.6.2. Concerns and Regulatory Intent:

3.6.2.1. Netting Effect:

Currently, for index options, the monitoring mechanism adds long and short notional positions to arrive at a net figure. This allows an entity to hold large long and large short notional positions that effectively net out to zero in notional terms, despite carrying significant net Delta risk. As an example, long at-the-money call options and short out-of-the-money call options would not show net notional utilization, while implying a large net (long) delta risk.



3.6.2.2. Futures Vs. Options:

Index futures are not as prone to this distortion, since their notional and FutEq exposures are identical (Delta = 1 times notional for long futures).

3.6.3. Data Analysis:

3.6.3.1. For each trading day of November 2024, the top 50 OI holders (by net FutEq exposure) on both long and short sides were analyzed for two liquid index derivative products. The distribution of their net Delta positions (by day/ index) is summarized in Table 2:

Entity level FutEq OI Range (INR Cr.)	% of Instances
0 to ±500	89%
±500 to ±1,000	6%
±1,000 to ±5,000	3%
±5,000 to ±10,000	2%
> ±10,000	1%

Table 2: FutEq OI range for Nov 2024

3.6.3.2. Most top entities for the month had net FutEq OI in the ±500 crore range, with fewer entities at higher exposures. Note that in 1% of instances, entities were carrying significant Delta risk of over INR 10,000 crores, while staying far below that in net notional terms, basis exchange data.

3.6.4. **Proposal:**

3.6.4.1. Revised Index Options Limits:

- 3.6.4.1.1. End-of-Day Limits:
 - a. **Net FutEq Limit**: INR 500 crore (difference between long and short Delta).
 - b. **Gross FutEq Limit**: INR 1,500 crore (sum of each of long and short Delta separately). This is to account for the possibility of high risks beyond Delta (such as Vega, Gamma, or basis risks) that are not captured by net Delta alone, without introducing the complexity of setting explicit limits for each of these parameters.
- 3.6.4.1.2. **Intraday Limits**: To allow for market making, higher limits are proposed on an intraday basis.



- a. Net FutEq Limit: INR 1,000 crore.
- b. **Gross FutEq Limit**: INR 2,500 crore.

3.6.4.2. Revised Index Futures Limits:

- 3.6.4.2.1. **End-of-Day Limit**: Increase from INR 500 crore to INR 1,500 crore. This is to account for the fact that index levels and trading volumes have gone up by about three times since these limits were last set in March 2020.
- 3.6.4.2.2. **Intraday Limit**: INR 2,500 crore, to allow for intraday market making.

3.6.5. Applicability:

These limits apply to all participants (FPIs, MFs, trading members (proprietary), and clients). In line with current practice, positions backed by underlying securities (for short exposures) or by cash/ cash-like instruments (for long exposures) are exempt from these stated limits.

4. PART B: Additional Measures to Enhance Trading Convenience and Risk Monitoring

4.1. Pre-Open and Post-Closing Sessions for the Derivatives Market

4.1.1. Existing Practice and Concerns:

4.1.1.1. Cash vs. Derivatives Sessions:

Pre-open and post-closing sessions already exist in the cash market. Extending these to futures could improve alignment between the two segments and enhance price discovery.

4.1.1.2. Reduced Volatility at Market Open:

Currently, there is often a lack of resting (passive) orders in the derivatives order book at 9:15 a.m., which can lead to spikes in volatility at market open.

4.1.2. Proposal:

4.1.2.1. **Scope**:

4.1.2.1.1. Extend pre-open and post-closing sessions to current-month futures on both single stocks and indices, mirroring the modalities of the cash market's pre-open and post-closing sessions.



4.1.2.1.2. In the last five trading days before expiry, extend these sessions to next-month futures contracts as liquidity shifts from one expiry to the other.

4.1.3. Benefits:

- 4.1.3.1. Improved price discovery.
- 4.1.3.2. Smoother transition at market open and close, with potentially lower volatility.

4.2. Eligibility Criteria for Derivatives on Non-Benchmark Indices

4.2.1. Existing Practice and Concerns:

4.2.1.1. **Diversification Requirements**:

While benchmark indices are generally broad-based, sectoral or thematic indices can be more concentrated, with the top few constituents significantly influencing the index.

4.2.1.2. Cash Settlement vs. Physical Settlement:

Index derivatives are cash-settled, but the nexus between cash and derivative markets nevertheless exists. If a high proportion of index weightage is attributable to a small number of stocks, participants could effectively replicate a large (and unmonitored) position in those constituents, giving rise to fears or risks of market manipulation and / or excessive market volatility.

4.2.2. **Proposal:**

Additional Criteria for introducing derivatives on non-benchmark indices:

- 4.2.2.1. Minimum of 14 constituents.
- 4.2.2.2. The top constituent's weight \leq 20%.
- 4.2.2.3. The combined weight of the top three constituents \leq 45%.
- 4.2.2.4. All other constituents' individual weights must be lower than those of the higher-weighted constituents (i.e., a descending weight structure).

4.3. Individual Entity-Level Position Limits for Single Stocks

4.3.1. Existing Practice and Concerns:

4.3.1.1. **Position Limits Tied to MWPL**:

Some entity-level limits are set as a percentage of MWPL (e.g., 20% of MWPL for Stockbroker / FPI (Category I) / MF, and the greater of 5% of MWPL or 5% of OI for a client).

4.3.1.2. High MWPL vs. Low OI:



For certain stocks with high MWPL but relatively low OI, a single entity could hold a large proportion of open positions, raising risks of exposure concentration.

4.3.1.3. Stock Broker (Prop) Limits:

Presently, there is an overall limit for stock brokers, but no specific sublimit for proprietary positions (Prop). Introducing separate limits for Stock Brokers (Prop) and Stock Brokers (Prop + Client) may allow for better risk monitoring.

4.3.1.4. **Cross-CC Positions**:

Since position limits are monitored by individual CCs on an end-of-day basis, there is a possibility of exceeding permissible limits by splitting positions across multiple clearing members or CCs.

4.3.2. **Proposal:**

4.3.2.1. **Dual Reference Points**:

Entity-level position limits for single stocks to be the lower of (a) a percentage of MWPL and (b) a percentage of the total FutEq OI across all exchanges as of the end of the previous day. This ensures that in scrips where overall OI is much lower than MWPL, no single entity can dominate the market.

4.3.2.2. Measurement Method:

For regulatory simplicity, these limits would initially be measured in notional terms (as is done currently), aggregating positions across all CCs. A move to a pure Delta-based computation for these limits, consistent with the approach for indices, will be considered in the future with market consultation.

4.3.2.3. **Proposed Limits**:

- 4.3.2.3.1. Client / Stock Broker (Prop) / NRI: The lower of (5% of MWPL) or (20% of FutEq OI across exchanges as of the previous day).
- 4.3.2.3.2. Stock Broker (Prop + Client) / FPI (Cat-I) / MF: The lower of (20% of MWPL) or (30% of FutEq OI across exchanges as of the previous day).
- 4.3.2.3.3. FPI (Cat-II other than FPIs in sub-category individuals, family offices, corporates): The lower of (10% of MWPL) or (15% of FutEq OI across exchanges as of the previous day)



- 4.3.2.3.4. **FPI (Cat-II FPIs in sub-category individuals, family offices, corporates):** The lower of (5% of MWPL) or (7.5% of FutEq OI across exchanges as of the previous day)
- 4.3.2.3.5. A fixed minimum limit will be specified to accommodate scrips with low OI or newly introduced stocks in the derivatives segment.
- 4.3.2.3.6. In the event of a passive breach, participants may either hold the positions until expiry or reduce them.

5. Invitation for Public Comments

SEBI invites comments and suggestions, supported by rationale, from all stakeholders—including individual investors, market participants, intermediaries, investor associations, and academic institutions—on the proposals outlined in this paper and summarized in the **Draft Circular (Annexure A)**.

Please submit your comments **by March 17, 2025**, via the online platform at the following link:

https://www.sebi.gov.in/sebiweb/publiccommentv2/PublicCommentAction.do?doPublicComments=yes

In case of any technical issues with the online submission form, you may email your feedback to: <u>mrd consultation@sebi.gov.in</u>, with the subject line: "Issue in submitting comments on Consultation Paper on Enhancing Trading Convenience and Strengthening Risk Monitoring in Equity Derivatives



Annexure A

Draft Circular

То

All Stock Exchanges

All Clearing Corporations

Subject: Measures to Enhance Trading Convenience and Improve Risk Monitoring in Equity Derivatives

1. Pursuant to consultations with the Expert Working Group on derivatives, SEBI proposes the following measures to enhance trading convenience and strengthen risk monitoring in equity derivatives. Adequate time will be provided for implementation and rollout.

Part A: Recommendations on OI Measurement and Related Matters

2. Formulation of OI:

Overall OI in derivatives in a scrip / index shall be determined by aggregating the Delta (or Future Equivalent FutEq) of open positions in futures and options for the underlying. The gross sum of these positions across all UCCs will constitute the "FutEq OI" for that scrip.

3. Formulation of Market Wide Position Limit (MWPL):

3.1. MWPL for single stocks shall be recalibrated to the FutEq OI metric and linked to cash market activity. Specifically, the MWPL shall be the lower of:(i) 15% of free-float market capitalization, or

(ii) 60 \times the Average Daily Delivery Value (ADDV) in the cash market across exchanges.

3.2. This MWPL shall be recomputed every three months based on the rolling ADDV for the preceding three-month period.

4. Position Creation for Single Stocks during Ban Period:

Once a scrip enters the ban period, participants may only reduce their net Delta exposure relative to the start of trading day. This restriction shall be enforced through checks in trading members' software.



5. Monitoring MWPL utilization for Single Stocks:

To manage settlement and systemic risk, MWPL utilization (in FutEq terms) for single stocks shall be monitored intraday at least four random times by Clearing Corporations, and the readings shall be disseminated to market participants.

6. Computation of Exposure Limits for Mutual Funds and AIFs in derivatives:

- 6.1. Futures contracts to retain the existing notional calculation.
- 6.2. Options (both long and short) shall be computed on a FutEq/ Delta basis.
- 6.3. For each scrip/ index, the net position will be the difference between long and short Delta exposures.
- 6.4. Overall exposure will be the gross sum of these net FutEq exposures across scrips/ indices.
- 6.5. Existing MF and AIF exposure limits will be calibrated in line with these FutEqbased computations.

7. Position Limits for Index Futures and Index Options:

7.1. Index Options:

- 7.1.1. End-of-Day Limits:
 - 7.1.1.1. Net FutEq position: INR 500 crore.
 - 7.1.1.2. Gross FutEq position: INR 1,500 crore.
- 7.1.2. Intraday Limits:
 - 7.1.2.1. Net FutEq position: INR 1,000 crore.
 - 7.1.2.2. Gross FutEq position: INR 2,500 crore.

7.2. Index Futures:

- 7.2.1. End-of-Day Limit: INR 1,500 crore (increased from INR 500 crore).
- 7.2.2. Intraday Limit: INR 2,500 crore.
- 7.3. These limits will apply uniformly to all participant categories, including FPIs, Mutual Funds, trading members (proprietary), and clients. As before, any position backed by holdings of underlying securities (for short exposure) or by cash/cashequivalent instruments (for long exposure) remains beyond these specified caps.

Part B: Other Measures to Enhance Trading Convenience and Risk Monitoring

8. **Pre-Open and Post-Closing Sessions for the Derivatives Market:**

- 8.1. Pre-open and post-closing sessions shall be introduced for derivatives, mirroring the cash market's framework. Initially, these sessions will only apply to:
 - 8.1.1. Current-month futures contracts on single stocks and indices.
 - 8.1.2. Next-month futures contracts during the final five trading days of the currentmonth contract's expiry.



9. Eligibility Criteria for Derivatives on Non-Benchmark Indices:

- 9.1. Minimum number of constituents: 14
- 9.2. Weight of top one constituent: $\leq 20\%$
- 9.3. Combined weight of top three constituents: $\leq 45\%$
- 9.4. All other constituents: Must individually weigh less than the higher-weighted constituents

10. Individual Entity-Level Position Limits for Single Stocks:

- 10.1. **Client / Stock Broker (Prop) / NRI:** The lower of (5% of MWPL) or (20% of FutEq OI across exchanges as of the previous day).
- 10.2. **Stock Broker (Prop + Client) / FPI (Cat-I) / MF:** The lower of (20% of MWPL) or (30% of FutEq OI across exchanges as of the previous day).
- 10.3. FPI (Cat-II other than FPIs in sub-category individuals, family offices, corporates): The lower of (10% of MWPL) or (15% of FutEq OI across exchanges as of the previous day)
- 10.4. **FPI (Cat-II FPIs in sub-category individuals, family offices, corporates):** The lower of (5% of MWPL) or (7.5% of FutEq OI across exchanges as of the previous day)
- 10.5. A fixed minimum permissible limit shall apply to scrips with extremely low OI or that are recently introduced in the derivatives segment.
- 10.6. Position limit utilization for single stock derivatives will be monitored notionally (as per existing practice) across Clearing Corporations. Future consultations may explore adopting a Delta-based approach for these limits.

11. Implementation:

Stock Exchanges and Clearing Corporations are instructed to take all necessary steps to implement these measures, including appropriate amendments to their bye-laws, rules, and regulations, where needed.

- 12. This circular is being issued in exercise of powers conferred under Section 11(1) read with Section 11(2)(a) of the SEBI Act, 1992, read with Regulation 51 of SECC Regulations, 2018, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.
- 13. This circular is available on SEBI website at <u>www.sebi.gov.in</u> under the category "Legal Circulars".
