Subject: Net settlement of cash segment and F&O segment upon expiry of stock derivatives

1. Objective

1.1 This Board Memorandum proposes to apprise measures proposed to be introduced for strengthening the alignment of cash segment and Futures and Options segment (F&O Segment). The obligations arising out of cash segment settlement and physical settlement of F&O segment, upon expiry of stock derivatives, are proposed to be settled on net basis as against the current approach of settling such obligations separately.

2. Background

2.1 In August 2017, stock exchanges in consultation with SEBI had introduced a framework for facility of "Do not Exercise (DNE)" in cash settled equity options, wherein option holders holding close to money options (3 In The Money (ITM) strikes below the settlement price in case of call options and 3 ITM strikes above the settlement price in case of put options) may choose not to exercise the option. The said facility was introduced considering that certain ITM options holders were having negative pay off due to incidence of Securities Transaction Tax (STT) on the settlement price of the underlying (notional value).

2.2 SEBI, vide circular no. SEBI/HO/MRD/DP/CIR/P/2018/67 dated April 11, 2018, has inter-alia mandated physical settlement of stock derivatives, upon expiry of such derivatives, in a phased manner.

2.3 Subsequently, w.e.f. September 2019, Securities Transaction Tax (STT) began to be levied on the intrinsic value of the option (i.e., difference between the settlement price and the strike price of the option) instead of the settlement price, as was done earlier. Upon such change in computation of STT, the concerns related to negative pay off, as mentioned in para 2.1, were no more relevant since STT is levied on the intrinsic value (profit) of the option. Subsequently, based on the recommendations of the Risk Management Review Committee (RMRC) of SEBI, the said DNE facility was discontinued from October 2021.

2.4 In the absence of DNE facility upon expiry of stock option contracts, and the mandatory requirement of physical settlement of stock derivatives, if an Out of the Money (OTM) option suddenly turns ITM on the expiry day, the same poses the obligation on such ITM option holder to bring in the cash or securities to honour the physical settlement. If the position is large enough then there could be potential systemic risk in case such ITM option holder(s) fails to bring in the cash or securities to honour the physical settlement.

2.5 While restoring DNE facility, as an interim measure, in April 2022 to mitigate the above risk, it was decided to examine/ explore policy on Net settlement of cash segment and F&O segment upon expiry of stock derivatives in order to bring about a structural reform which while addressing the above concern should also further strengthen the alignment of cash and F&O market. An illustration highlighting the current settlement mechanism vis-à-vis the proposed net settlement is placed as Annexure 1.

3. Current settlement mechanism of cash segment and F&O segment:

3.1 **Cash segment:**

In cash segment, the settlement happens on rolling 'T+2' day basis, i.e., trades executed on exchange platform on 'T' day are settled on 'T+2' working day. It may also be noted that SEBI vide circular no. SEBI/HO/MRD2/DCAP/P/CIR/2021/628 dated September 07, 2021, has enabled T+1 settlement cycle for stocks. Further, in terms of joint press release by Market Infrastructure Institutions dated November 08, 2021, the stocks across exchanges shall be moved to T+1 cycle in a phased manner. Accordingly, all the stocks shall move to T+1 settlement by January 2023.

3.2 **F&O segment:**

Upon expiry, single stock derivatives (stock futures and stock options) are physically settled by creation of funds and delivery obligations based on the open positions on the expiry of the derivatives contracts.

3.2.1. In case of stock futures, all open positions after close of trading on expiry day are settled physically on "T+2" day.

3.2.2. In case of open positions in option contracts,

a) all ITM option contracts, which are exercised and assigned, are physically settled on T+2 day, and

b) all OTM option contracts expire worthless.

c) In case of Close To Money (CTM) option contracts, exchanges provide "Do Not Exercise" facility to such option holders, wherein the option holders may choose to not exercise the options.

3.2.3. Within the stock derivatives, net delivery obligations are generated considering netting across derivatives contracts – e.g., obligations arising out of a long call position and a short futures position is netted.

3.2.4. Upon full implementation of T+1 settlement cycle, the stock futures and options shall also be settled on T+1 day.

3.3 **Settlement sequence of Cash and F&O**

Currently, considering the day of expiry of F&O contract as 'E' day, the settlements are carried out on 'E+2' day in the following sequence:

- pay-in of funds and securities based on the cash market trades on E day
- pay-out of funds and securities based on the cash market trades on E day
- pay-in of funds and securities based on physical settlement obligations of stock derivatives that expired on E day
- pay-out of funds and securities based on physical settlement obligations of stock derivatives that expired on E day

3.4 As can be seen from above, the participants can make use of pay-out of securities/ funds in cash market for the purpose of pay-in of F&O segment. However, the above mechanism of settlement of cash segment and F&O segment does not provide netting efficiency i.e. the obligations arising out of cash segment settlement and physical settlement of F&O segment, upon expiry of stock derivatives, are not settled on net basis.

4. Proposed Mechanism

The proposal was also discussed in the Secondary Market Advisory Committee (SMAC) meetings held on July 26, 2022 and September 09, 2022. Based on the recommendations of the SMAC, the proposed mechanism of net settlement of cash segment and F&O segment upon expiry of stock derivatives, which shall be specified by way of a circular, is as under:

4.1 The obligations arising out of cash segment settlement and physical settlement of F&O segment, upon expiry of stock derivatives, are proposed to be settled on net basis as against the current approach of settling such obligations separately.

4.2 The benefit of netting (merged settlements) shall be available to investors whose trading member (TM) clears trades in F&O segment and cash segment through the same clearing member (CM) i.e. benefit of netting shall be available to investors who trade and clear through the same TM-CM combination in Cash and F&O segment. However, investors whose TM clears trades through different CM / Clearing Corporation (CC) will not be able to avail the benefit of netting.

4.3 Netting of settlement obligations of cash segment and physical settlement of F&O segment shall not be available for the institutional investors (including all categories of FPIs) since the extant regulatory framework specifies that all transactions by the institutional investors (including all categories of FPIs) in cash market should be backed by delivery. [This has been excised for reasons of confidentiality]

4.4 Netting of settlement shall be available for non-institutional Custodial Participants (CPs) clearing through the same entity registered both as a custodian in cash market and as a CM in F&O segment, except and otherwise for those investors/ clients/ participants (for instance Portfolio Managers- PMS) which have been mandatorily directed to enter into delivery backed transactions only.

4.5 Currently, Securities Transaction Tax (STT) and Stamp Duty are computed and levied at a segment level. Under the instant proposal, netting of delivery obligations shall be only for the purpose of settlement. Therefore, STT and Stamp Duty may continue to be computed, levied and reported on a segment wise level. As no change is proposed in computation and levy of STT and stamp duty, there shall be no loss to the exchequer on account of the proposed netting of settlement across cash and F&O segments.

4.6 CCs may continue to maintain segment-wise default waterfalls, regardless of a single settlement across segments. The losses, if any, in case of default of a CM to CC shall be computed on the basis of the segment-wise obligation of CM to CC, on a pro-rata basis.

5. Envisaged benefits of the proposed net settlement:

5.1 Better alignment of cash segment and F&O segment: Under the current framework, although upon expiry, the open positions of F&O segment devolve into physical delivery of the underlying shares, the settlement of the same was kept separate from cash segment. Therefore, the proposed net settlement is expected to strengthen the alignment of cash segment and F&O segment.

5.2 Netting efficiencies for participants: The market participants would be able to avail the benefits of netting efficiencies by settling both cash and derivatives trades through the same clearing member, which include:

a) Avoiding of cost of purchase of security for delivery, if netting done for offsetting positions in cash and F&O segments
b) Avoiding of pay-in default in case of offsetting positions
c) Increase in cash liquidity to investors leading to better utlilisation
d) Reduction in transaction charges to investors (like demat transfer charges)
e) Reduction in overall default and auction, thereby leading to reduction in risk to CC and system at large.

5.3 Mitigation of price risk in certain cases: Under the current framework, the settlement of cash segment happens before the physical settlement in F&O segment. Accordingly, in case of any pay-out of securities in F&O segment, the participant needs to wait upto T+1 to sell the same in cash market therefore exposing himself to price risk. However, the proposed net settlement is expected to mitigate the price risk as the participant can sell the pay-out of securities from F&O segment in the same settlement cycle.

5.4 Reduced margin requirements: In the current framework, since the cash and physical delivery settlements happen separately, the margins for both these settlements have to be maintained separately. In case of net settlement, the margin towards physical settlement, after expiry, would be required to be maintained on the net delivery position only.

6. Proposal:

6.1 This memorandum is submitted to the Board for information.

Annexure 1

Illustration:

Suppose an investor has following positions:

1. Long In The Money (ITM) put option of strike price Rs.110, with underlying settlement price as Rs.100.
2. A cash market trade done on the expiry day, with security purchased at Rs. 101.

In this case, under the existing mechanism of separate settlements of cash and F&O segments, the settlement would happen in the following manner:

1. The investor will make funds pay-in of Rs. 101 in cash segment.
2. The investor will receive pay-out of the stock in cash segment.
3. The investor will deliver the stock in F&O settlement.
4. The investor will receive Rs. 110.

Further, under the existing mechanism, margin would be applicable on delivery obligations in cash segment and F&O segment separately.

Under the proposed net settlement, there would be no need for the investor to arrange for funds of Rs. 101, i.e., the investor would have a net pay-out of Rs. 9 and would not have any requirement of securities pay-in or pay-out. Further, there would be no margin requirement, after expiry, since there would be only cash receivable and no delivery obligation.

Annexure 2

This has been excised for reasons of confidentiality.