A summary of the New System Introduced today along with Frequently Asked Questions (FAQ) compiled by CSE from the BSE website for the benefit of the CSE member/user who trade in BSE platform through CSE. For further queries please do not hesitate to contact CSE Help Desk 22102203/06/09/Samik Bhaduri at 9836900210/22102207

BSE introduces
Call Auction Trading Mechanism
in Pre - open Session
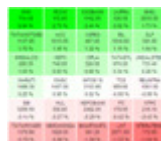
Heatmap   Streamer

In the continuous market a trade occurs whenever a buy order and a sell order match each other at a price during the hours when the market is open. In a Call Auction market, orders are gathered for execution at predetermined times when the market is called. At the call, all buy orders are aggregated into a downward sloping demand function and all sell orders are aggregated in an upward sloping supply function.

The market opening price and quantity traded are derived based on aggregated supply and demand for the underlying The orders that trade and the price and quantity at which they trade, are set by multilateral matching, rather than by the sequence of bilateral matching used to determine trades in a continuous market.

The concept of order batching which is core to the call auction mechanism. can be understood with the help of an example. We look at simple order book which shows buy and sell quantities at various price points.

Buy Orders	Buy Price	Sell Price	Sell Orders
1	54	50	2
1	53	51	1
2	52	52	1
2	51	53	2
3	50	54	1

The graphs below display how buy and sell orders are batched together to bring about an equilibrium quantity and price. The vertical axis shows the price and the horizontal axis shows the quantity.
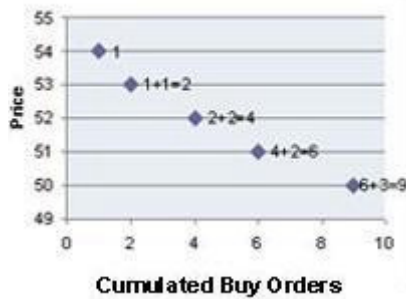

Figure 1: Cumulation of Buy Orders

All the buy orders are cumulated to form a downward sloping demand function. The cumulation happens from the highest to the lowest price. The highest buy order is at price 54 at which there is order of quantity 1. At price 53, an additional order of quantity 1 has been placed. This makes the cumulative quantity 2 orders at price 53. Similarly at price points 52, 51 and 50 the cumulative quantity is 4,6 and 9 orders respectively. Thus the cumulative buy quantity increases as the price decreases.
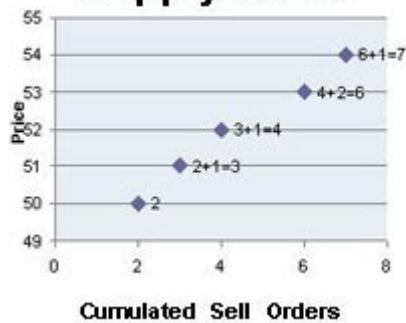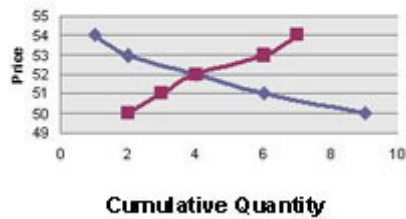

Figure 2: Cumulative of Sell Orders

Similar to the cumulation for the buy orders, all the sell orders are cumulated to form an upward sloping supply function. The sell orders are cumulated from the lowest to the highest price. The lowest sell order of quantity 1 is at a price of 50. At price 51 there are 2 orders making the cumulative quantity to 3 orders. Similarly, at price points 52, 53, 54 the cumulative sell quantity will be 4, 6 and 7 orders respectively. Thus the cumulative sell quantity increases as the sell price increases.

Intersection of Demand and Supply Curve

In figure 3: Intersection of cumulative buy orders and cumulative

The intersection of the demand and supply function occurs at price 52 where the quantity executable is maximum at 4 orders. Buy orders at and above 52 (53,54) and sell orders at and below 52 (51,50) are eligible to be executed at the single price determined (i.e the call auction price of 52).

Thus the intersection of the downward sloping demand function consisting of buy orders and upward sloping supply function consisting of sell orders determines the equilibrium quantity traded and the price. The call auction mechanism allows the most aggressively priced buy and sell orders to match each other and some orders (buy orders priced at 53 and 54 and sell orders priced at 51 and 50) receive a price improvement during execution. All other orders which are priced less aggressively (i.e. buy orders priced at lower than the call auction price and the sell orders priced at higher than the call auction price) will not be executed. These orders may be cancelled, moved on the continuous session or kept pending for the next call session depending on the Exchange specifications.

Call Auctions across the world have been applied to various sessions during the trading day –

- At the Open
- At the Close
- Intraday
- Post Halt
- IPO Listing

Salient Features of the pre open session

- All executable orders for a particular stock will match at one market opening price
- Orders are collected in the order entry period & execution occurs in the order matching period
- Duration of Pre-open session - 15 minutes from 9:00am – 9:15am
- Limit orders will get priority over market orders at the time of execution of trades.
- All orders shall be disclosed in full quantity, i.e. orders where revealed quantity function is enabled, will not be allowed during the pre-open session.
- Unexecuted, eligible orders will be moved to the continuous session
- In the event of no trades in the pre-open session, the orders entered in the pre-open session will be moved the continuous trading session on time priority basis.The price of the first trade during the continuous trading session will be taken as the opening price.
- Indicative opening price & matchable quantity for each stock and indicative SENSEX will be disseminated at regular intervals of order entry period.
- At the end of the matching period, the system will compute & disseminate the opening values for all stocks, SENSEX and other indices.
- Uniform price band of 20% will be applicable to all eligible stocks during the pre-open session.

Advantages

Call Auction method of trading has several advantages –

- **Reduces price volatility** due to multiple matching of orders at a single price
- **Greater liquidity** due to deeper demand supply schedule
- **Better Price discovery**
- **Minimised impact cost**
- Fairer market especially for small, non professional investors because all trades get executed at the same price
- Simultaneity of trades eliminates possibility of front running customer orders

Session Timings

Session	Time	Action
Order Entry Period	9:00am - 9:07/08am	Order Addition/Modification/Cancellation **Random stoppage between 7th and 8th minute** Dissemination of Indicative Price, Cumulative buy & sale Quantity & Indicative Index **Uniform price band of 20% is applicable**
Order Matching & Confirmation Period	9:08am - 9.12am	No Order Addition/Modification/Cancellation Opening price determination, order matching and trade confirmation & trade confirmation
Buffer Period	9:12am - 9:15am	To facilitate transition between pre open and continuous trading session
Continuous Trading Session	9:15am – 3:30pm	Trades occur continuously as orders match at time/price priority

With the introduction of the Call Auction session the trading day will look like:
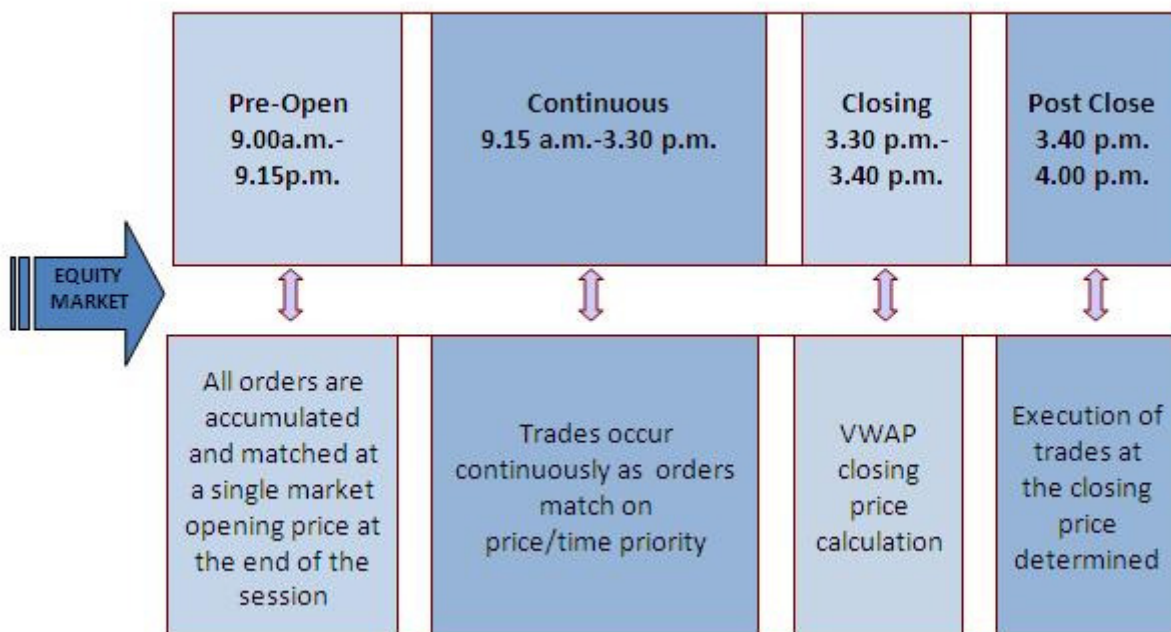
continuous trading session will commence only after the pre open session ends. The two trading sessions, continuous and call
ion (pre-open) sessions will not run concurrently.

block deal trading session (35 minutes) will start with the commencement of the continuous session.

Price Determination

Opening Price = Price at which maximum quantity is traded
If multiple prices exist then

⇩

Opening Price = Price at which there is Minimum Order Imbalance
If multiple Prices exist then

⇩

Opening Price = Price closest to the previous closing price

Order Execution Priority

The priority of execution of the orders will be in the sequence mentioned below:
    Eligible Limit orders to be matched with eligible limit orders
    Unmatched limit orders to be matched with market orders
    Unmatched market orders to be matched with market orders

Treatment of Unexecuted Orders

All orders entered in the system for a particular stock will match at a single price i.e. the market opening price

All unmatched limit orders in the pre-open session will be shifted to the order book of the continuous trading session on price-time priority basis.

All unmatched market orders will be shifted to the continuous trading session as limit orders priced at the market opening price on time priority basis. In other words, unmatched market orders will be moved to the continuous session as limit orders priced at the opening price, and will retain their original time stamp.

In case the opening price is not discovered in the pre open session, wherein, there are only market orders, the market orders will be matched at the previous day's closing price. All the unmatched market orders will be shifted to the continuous session as limit orders priced at the previous day's close. The previous day's close shall be the opening price of the stock.

In case the opening is not discovered and there are no market orders to be matched, then all unmatched market orders (priced at the previous day's close) and limit orders will be shifted to the continuous market following price- time priority. The price of the first trade in the continuous markets will be the opening price of the stock.

Examples

Example 1: Exactly one limit price at which executable volume is maximum

Order Book

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	100	ATO	91	100	7
2	100	96	91.5	100	8
3	150	95	93	100	9
4	50	93	95	100	10
5	100	91.5	96	200	11
6	100	91			

Demand Supply Schedule:

Price Point	Cumulative Buy Quantity	Cumulative Sell Quantity	Tradable Quantity	
96.00	200	600	200	
95.00	350	400	350	
93.00	400	300	300	
91.50	500	200	200	
91.00	600	100	100	

The opening price is determined at 95, where the tradable quantity is maximum at 350 units

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity	
2	7	100	
3	8	100	
3	9	50	
1	9	50	
1	10	50	

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
4	50	93	95	50	10
5	100	91.5	96	200	11
6	100	95	91		

Example 2: There are several possible limits with maximum executable volume

Order Book:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	1000	ATO	ATO	500	7
2	1000	96.30	94.00	500	8
3	3000	96.20	96.20	1000	9
4	1500	94.00	96.30	3500	10
5	2000	92.00	98.00	3000	11
6	1000	90.00			

Demand Supply Schedule:

Price Point	Cumulative Buy Quantity	Cumulative Sell Quantity	Tradable Quantity	Absolute Order Imbalance **
98.00	1000	8500	1000	
96.30	2000	5500	2000	3500
96.20	5000	2000	2000	3000
94.00	6500	1000	1000	
92.00	8500	500	500	
90.00	9500	500	500	

The opening price is determined at 96.20, where the tradable quantity is maximum and the absolute order imbalance is minimum

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity
2	8	500
2	9	500
3	9	500
3	7	500

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	1000	96.20(market carried forward as limit at the opening price)	96.30	3500	10
3	2000	96.20	98.00	3000	11
4	1500	94			
5	2000	92			
6	1000	90			

Example 3: There are several possible limits with maximum executable volume and minimum order imbalance

Order Book:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	1000	ATO	ATO	500	7
2	1000	96.30	94.00	500	8
3	3000	96.20	96.20	1000	9
4	1500	94.00	96.30	3000	10
5	2000	92.00	98.00	3000	11
6	1000	90.00			

Demand Supply Schedule:

Price Point	Cumulative Buy Quantity	Cumulative Sell Quantity	Tradable Quantity	Absolute Order Imbalance **
98.00	1000	8000	1000	
96.30	2000	5000	2000	3000
96.20	5000	2000	2000	3000
94.00	6500	1000	1000	
92.00	8500	500	500	
90.00	9500	500	500	

Here at price points 96.20 and 96.30 the tradable quantity is maximum and the absolute order imbalance is minimum. We therefore reference the previous closing price to arrive at the final opening price.

3 a) if previous close is 96.50, then the opening price will be 96.30

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity
2	8	500
2	9	500
1	9	500
1	10	500

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
3	3000	96.20	96.30(Market carried forward as Limit at the opening price)	500	7
4	1500	94.00	96.30	2500	10
5	2000	92.00	98.00	3000	11
6	1000	90.00			

3 b) If previous close is 96.10, then the opening price will be 96.20

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity
2	8	500

Pending Orders:

Order	Buy	Buy Price	Sell	Sell	Order

No.	Quantity		Price	Quantity	No.

Left upper table:

2	8	500
2	9	500
3	9	500
3	7	500

No.	Quantity		Price	Quantity	No.
1	1000	96.20(Market carried forward as Limit at the opening price)	96.30	3000	10
3	2000	96.25	98.00	3000	11
4	1500	94.00			
5	2000	92.00			
6	1000	90.00			

3 c) If Previous Close is 96.25- which is exactly between the potential opening prices, then the opening price will be 96.25

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity
2	8	500
2	9	500
1	9	500
1	7	500

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
3	3000	96.20	96.30	3000	10
4	1500	94.00	98.00	3000	11
5	2000	92.00			
6	1000	90.00			

Example 4: If there are only market orders on sell side of the order book

Order Book

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	100	ATO	ATO	100	6
2	50	95	ATO	50	7
3	100	94	ATO	50	8
4	100	93			
5	200	92			

Demand Supply Schedule:

Price Points	Cumulative Buy	Cumulative Sell	Tradable Quantity	Order Imbalance
95.00	150	200	150	
94.00	250	200	200	50
93.00	350	200	200	150
92.00	550	200	200	350

The Opening Price is determined at 94.00 at which the tradable quantity is maximum and the absolute order imbalance is minimum

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity
2	6	50
3	6	50
3	7	50
1	8	50
1	10	50

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	50	94(Market order carried forward as limit at opening price)			
4	100	93			
5	200	92			

Example 5: If there are only market orders on the buy side of the order book

Order Book

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	100	ATO	200	ATO	5
2	150	ATO	100	92	6
3	50	ATO	100	93	7
4	100	ATO	150	94	8
			100	95	9

Demand Supply Schedule:

Price Points	Cumulative Buy	Cumulative Sell	Tradable Quantity	Order Imbalance
95.00	400	650	400	250
94.00	400	550	400	150
93.00	400	400	400	0
92.00	400	300	300	100

The opening price determined is 93.00, where the tradable quantity is maximum and the absolute order imbalance is minimum

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity	
1	6	100	
2	7	100	
2	5	50	
3	5	50	
4	5	100	

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
			150	94	8
			100	95	9

Example 6: If there are only market orders in the order book

Order Book

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	50			50	5
2	100			150	7
3	50			100	7
4	100			150	8

In case there are only market orders in the order book then matching will occur at the previous closing price and all unexecuted orders will be shifted to the order book of the continuous market as limit orders priced at the previous day's closing price.
Let the previous day's closing price be 100

Matching of Orders:

Buy Order No.	Sell Order No.	Match Quantity	
1	5	50	
2	6	100	
3	6	50	

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
			100(Market carried forward as limit at previous day's close	150	8

4	7	100	
4	5	100	

Example 7: No matchable quantity exists

Order Book

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	100	95	97	50	7
2	100	95	98	150	8
4	200	94	99	100	9
6	150	92			

Here there is no overlap in the buy and the sell prices. All the sell prices are greater than the buy prices. No matching is possible in this scenario. All Orders will be shifted to the order book of the continuous trading session following price time priority.

Pending Orders:

Order No.	Buy Quantity	Buy Price	Sell Price	Sell Quantity	Order No.
1	100	95	97	50	7
2	100	95	98	150	8
4	200	94	99	100	9
5	100	93	100	100	10
6	150	92			

The opening price will be the price of the first trade executed during the continuous session

Information Dissemination

Market Picture Display

The following information will be disseminated to the market at regular intervals during the order entry period pre-open session –
- Indicative market opening price, populated in the 'LTP' field
- Matchable quantity at the indicative market opening price, populated in the 'LTQ' field

If the indicative opening price/matchable quantity at the indicative opening price is not available then the 'LTP'/'LTQ' field is left blank.

- Indicative values of SENSEX and other BSE indices
- Total buy /sell depth of the book will be populated in the 'Buy /Sell depth' fields
- Percentage change in the indicative price from the previous day's closing price
- High/ Low prices will be disseminated based on the indicative opening prices
- The 'open' field in the BOLT system will be populated only when the actual opening price has been determined in the order matching and confirmation period.

- The 'Close' field will display the previous day's closing price

   The market depth would display:

- The indicative opening price + next best 4 bids and offers. If the indicative opening price is not determined, then the best bids and offers will be displayed
- The cumulative quantities at each of these price points
- Market order quantity will be added to the best available price point

Example of the market depth display
Order Book

Buy Quantity	Buy Price	Sell Price	Sell Quantity
100	ATO	91	100
100	96	91.5	100
150	95	93	100
50	93	95	100
100	91.5	96	200
100	91	97	50
100	90	98.5	50
		99	100

Example of the market depth display
Demand Supply Schedule

Price Point	Cumulative Buy Quantity	Cumulative Sell Quantity	Tradable Quantity	Absolute Order Imbalance
96	200	600	200	400
95	**350**	**400**	**350**	**50**
93	400	300	300	100
91.5	500	200	200	300
91	600	100	100	500

Here the opening price determined is 95.00 at which the tradable quantity is maximized.
The market depth display would be as follows:

During Pre-open trading session:

During the Order Entry period of the pre-open session, indicative opening price(s) will be calculated for each stock at regular intervals and disseminated. Indicative cumulative buy and sell quantity for that stock will also be displayed. An indicative index will be calculated based on the indicative prices and disseminated.

Market picture window for various periods in the pre open session

Fields	Before any orders are entered	Order Entry Period	Order Matching and Confirmation Period
LTP	Blank	indicative Opening Price	Indicative Opening Price displayed till the actual opening price is discovered
LTQ	Blank	Indicative matchable Quantity	Traded quantity of the last trade at the opening price
OPEN	Blank	blank	Actual opening price, once discovered; till then remains Blank
HIGH	Blank	Highest indicative price	Highest indicative price displayed until actual Open Price is discovered
LOW	Blank	Lowest indicative price	Lowest indicative price displayed until actual Open Price is discovered
LCktlm/ UCktlm	Blank	Blank	Blank
CLOSE	Previous day's close price	Previous day's close price	Previous day's close price
TOTAL BUY DEPTH	Blank	Highest indicative price	Total buy quantity of all orders in the order book
TOTAL SELL DEPTH	Blank	Total sell quantity of all orders in the order book	Total sell quantity of all orders in the order book
SENSEX	Previous day's closing value	Indicative value based on indicative open price of SENSEX scrips	Will get updated as & when actual open price of SENSEX scrips is discovered

Index Computation

Index Computation

Indicative values for all BSE indices will be calculated and disseminated at regular intervals during the order entry period. Post order entry, the indicative index will incorporate the opening price(s) of the stock(s) as and when determined to compute actual opening value. In the absence of the indicative price, the previous closing price of the stock will be used. Once the opening price of all SENSEX 30 stocks is determined, The real index will be calculated and displayed.

Risk Management

Margins & Collateral: In the order entry period (9:00-9:08) of the pre open session, upfront margins will be adjusted against the available collateral of members on a cumulative quantity basis at the time of entering the orders. In other words, orders will not be accepted in the system if the member does not have adequate collateral. In case of cancellation of orders, the blocked margins will be released immediately during this period.

During the order matching and confirmation period of the pre open session (from 9:08 onwards), all the order level blocked margins will be released and actual trade level margins will be blocked based on the trades generated.

The current risk management system for cash market (i.e. blocking of upfront margins at the trade level) shall continue to be applicable to the continuous trading session from 9:15am – 3:30pm.

Price Bands: A uniform price band of 20% will be applicable to all eligible securities during the pre open session.

Circuit Filters: In the event the Index breaches its prescribed threshold imit upon calculation of the opening value of SENSEX, a trading halt (market wide circuit breakers) will be triggered as per current practice (SEBI Circular Ref. No. SMDRPD/Policy/Cir-37 /2001 dated June 28, 2001). The halt shall be applicable at the start of the continuous trading session. The index breach will not impact the execution and confirmation of trades during the pre-open matching session.

System Screen Shots

BOLT Screen Shot during Pre-open session:

The system will display the touchline based on the indicative opening price, along with cumulative buy and sell quantities at these price points. The cumulative quantity will include the market orders.s

In the market depth window, the indicative opening price along with the next four prices will be disseminated. The price points would also have the details of aggregate quantities available on the buy and sell side separately.

If no indicative price is calculated, then the best available buy & sell orders will be displayed.

FAQs on the Call Auction Pre-Open Session

INTRODUCTION

SESSION TIMINGS

OPERATION & EXECUTION

Others

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1. Q. What is Call Auction?

A. In a call auction, orders are entered into the system continuously filling the auction order book but remain unexecuted till the end of the order entry period when the orders get matched into trades at a single price. Call auctions represent an alternative trading strategy, where the order flow over a certain time period is collected, and the market opening price and quantity traded are derived based on aggregated supply and demand for the underlying.

It follows the concept of multi-lateral order matching as compared to constant bilateral (buy/ sell) matching of orders that happens in the continuous trading session to determine trades.

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2. Q. What are the applications of Call Auction?

A. The potential areas where Call Auction can be applied to determine market price are –
- At open
- At close
- Resume after trading halt
- New and re-listings
- Illiquid scrips

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3. Q. What are the advantages of Call Auction?

A. Call Auction method of trading has several advantages –

- It leads to <u>reduced price volatility</u> due to multiple matching of orders at a single price.
- <u>Greater liquidity</u> due to the collection of orders providing a deeper demand-supply schedule.
- <u>Better Price discovery</u> as errors get reduced due to collection of orders.
- It leads to <u>reduced market impact</u> as any given size of the order is small in relation to the counterpart orders when the latter are collected over time.
- It leads to <u>lower cost of transaction</u> as the trades executed during the call auction session do not incur impact cost.
- It acts as a <u>fairer market</u> especially for small, non professional investors because all trades get executed at the same price. Also the simultaneity of trades eliminates the possibility of front running customer orders in the same security.

4. Q. Which stocks will be traded in the pre open session?

A. Initially, 50 stocks which form part of SENSEX & NIFTY indices will be traded in the pre-open session.

5. Q. What will be the timings of Call Auction Pre-Open Session? When will the continuous trading session start?

A. Note: The indicative schedule is given below. The call auction timings would be intimated by the Exchange from time to time. Also the exchange will publish the list of scrips eligible for call auction from time to time

Session	Time	Action
Order Entry Period	9:00am - 9:07/08am	Order Addition/Modification/Cancellation **Random stoppage between 7th and 8th minute** Dissemination of Indicative Price, Cumulative buy & sale Quantity & Indicative Index **Uniform price band of 20% is applicable**
Order Matching & Confirmation Period	9:08am - 9.12am	No Order Addition/Modification/Cancellation Opening price determination, order matching and trade confirmation & trade confirmation
Buffer Period	9:12am - 9:15am	To facilitate transition between pre open and continuous trading session
Continuous Trading Session	9:15am – 3:30pm	Trades occur continuously as orders match at time/price priority

6. Q. When will the Block deal session start?

A. Market-wide block deal session is conducted during the first 35 minutes of the continuous session. Hence, it will start at 9:15am, after the pre-open session and will end at 9:50am.

7. Q. For which segment will the Call Auction pre-open session be allowed? When will trading in the other segments start?

A. Call auction during the pre-open session is allowed only for the Equity segment. The continuous trading session for all segments will begin at 9:15am.

8. **Q.** **How will the trading process work during the pre-open session?**

A. During the first 7-8 minutes of the session, members would be allowed to only enter new orders and modify/cancel entered orders. Order entry session will randomly stop anytime between the 7th & 8th minute. Stock-wise order matching will start post the order entry & trades will get executed. All orders entered in the system for any particular stock that will get executed into trades will match at the same price, i.e. the market opening price for that stock. Once the order matching & trade execution period is over, there will be a buffer period before the start of the continuous trading session.

9. **Q.** **How will the market opening price of a stock be determined during the Call Auction session?**

A. The market opening price of a stock will be determined through a 4-step process as follows –

Step 1: Sorting and Aggregating Orders at Different Price Points

All limit orders in the order book will be organized in the following manner:

- Consider the limit order price points at and within the range of the highest buy price and lowest sell price. Arrange the limit order price points in descending order.
- Calculate the cumulative buy and sell quantity at each price point. Cumulative buy quantity shall increase or remain constant as the price decreases. Cumulative sell quantity shall decrease or remain constant as the price decreases.

Cumulative market buy and sell orders will be added to each of the cumulative buy and sell quantities at available price points.

Step 2: Determining the Maximum Tradable Quantity

The tradable quantity at an eligible price point is the minimum of the cumulative buy quantity and cumulative sell quantity at that price point. The price point, at which the tradable quantity is maximum, is considered the opening price. If there is a single price point at which the quantity traded is maximum then that is the opening price.

If there are multiple price points with the same traded quantity, we proceed to the next step.

Step 3: Establishing Order Imbalance

The order imbalance is calculated as the difference between the cumulative buy quantity and cumulative sell quantity at each eligible price point. If there is a single volume maximizing price at which the absolute unfilled/unmatched quantity (order imbalance) is minimum that price is the opening price.

If there is multiple volume maximizing prices at which the order imbalance is minimum, then we proceed to the next step.

Step 4: Comparing with the Previous Closing Price

To arrive at the final price we choose the potential price (obtained from the previous steps) which is closest to the previous closing price. This single price point is chosen as final opening price at which all orders are executed. In case the previous day's closing price is the mid value of a pair of prices which are closest to it, then the previous day's closing price itself will be considered the market opening price. In case of corporate actions, previous day's closing price will be the adjusted for the corporate action.

10. **Q.** **Is modification/cancellation of orders allowed during the pre-open session?**

A. Modification/ cancellation of orders would be allowed only during the first 7-8 minutes of order entry period before it is randomly stopped by the system. Order modification/ cancellation would not be allowed from 9:08 – 9:15am till start of

continuous session.

11. **Q.** **When will we know whether our orders have been executed or not?**

A. After the order entry session, i.e. post 9:08am, as and when order matching happens, orders would be executed into trades and trade confirmation will be sent. In the event of the opening price not determined during the call auction period, all pending market orders would be moved to the continuous session at the previous close price.

12. **Q.** **What happens to those orders which do not get executed?**

A. All unmatched **limit orders** in the pre-open session will be shifted to the order book of the continuous trading session on price-time priority basis.

All unmatched **market orders** will be shifted to the order book of the continuous trading session at the market opening price on price-time priority basis. In other words, unmatched market orders will be moved to the continuous session as limit orders priced at the opening price, and will retain their original time stamp. In the event of the opening price not determined during the call auction period, all pending market orders would be moved to the continuous session at the previous close price.

13. **Q.** **What type of orders will be permitted during the pre-open session & which will get priority?**

A. During the pre-open session, only Limit Orders & Market Orders would be allowed during order entry. Limit orders will get priority over market orders at the time of trade execution. If there are no limit orders in the system, all market orders will be executed at the last closing price.

14. **Q.** **What happens if there are no limit orders for any particular stock(s) during the pre-open session?**

A. If there are only market orders and not a single limit order for any particular stock(s), all such market order will assume the price of previous close price for determining the price point. Unmatched orders shall be shifted to the order book of the continuous market at the previous closing price following time priority. Previous days closing price willl be the opening price.

15. **Q.** **What happens if there are no trades for any particular stock(s) during the pre-open session? How will the opening price be discovered?**

A. If no trades get executed for any particular stock(s) during the pre-open session, the orders entered in the pre-open session will be shifted to the order book of the continuous trading session on time priority basis. The price of the first trade during the continuous trading session will be taken as the opening price for that particular stock(s).

16. **Q.** **How will the SENSEX and other indices be calculated during the pre-open session? When will actual SENSEX be calculated?**

A. During the Order Entry period, based on the orders received, indicative opening price(s) will be calculated at regular intervals and disseminated along with the indicative cumulative buy and sell quantity for the stock. Based on the indicative opening prices, an indicative value of SENSEX and other indices will also be displayed. At the end of the order matching

period, when the opening price of all stocks is determined, the actual value of SENSEX will be calculated which will be the opening value of SENSEX.

17. **Q.** **What kind of information will be available during the pre-open session? Will the Order book be displayed?**

A. In the pre-open session, indicative opening price(s) will be calculated for each stock at regular intervals and disseminated along with the indicative cumulative buy and sell quantity for that stock and the indicative index.

The system will disseminate the following information for all stocks –
- Cumulative Buy Quantity at the price point
- Cumulative Sell Quantity at the price point
- Match-able Quantity at the price point
- The potential matching price

The system will display the TOUCHLINE based on the possible open price so calculated along with the details of quantities available at the TOUCHLINE PRICES.

In the market depth window, the indicative opening price along with the next four prices will be disseminated. The price points would also have the details of aggregate quantities available on the buy and sell side separately.

If no indicative price is calculated, then the best available buy & sell orders will be displayed.

18. **Q.** **Is Batch file upload facility for orders available during the pre-open session?**

A. Yes, batch file upload facility will be available during the pre-open session.

19. **Q.** **Will the revealed quantity facility be available in the order entry window during the pre-open session?**

A. All orders where the revealed quantity function has been used by the dealers/ traders will not be allowed during the pre-open session. Such orders will be rejected by the system.

20. **Q.** **Are margins applicable during the pre-open session?**

A. The current system of levying upfront trading margins stock-wise & collateral management will continue to be applicable during the pre-open session. The margins will get blocked as order level.

21. **Q.** **Will the Passive/Active Transaction Fee structure be applicable to trades during the pre-open session?**

A. Yes, the Passive/Active Transaction Fee structure will be applicable during the pre-open session, and will be levied as and when trades get confirmed.

22. **Q.** **What happens when some stocks are moved out of SENSEX or NIFTY? Will new stocks that form part of the SENSEX or NIFTY also be traded during the pre-open session?**

A. In the event of change in the Index composition, the incoming stock(s) will be included in the list of eligible stocks for the pre-open session. At the same time, the stock(s) moving out of the Index will continue to be calculated via the call auction mechanism, though they will not be considered for the computation of the Index. The Exchange will publish the list of scrips eligible for call auction from time to time.

23. **Q.** **Will there be any price band applied to the stocks during the pre-open session?**

A. A uniform price band of 20% will be applicable to all eligible stocks in the pre open session.

24. **Q.** **What happens if SENSEX crosses 10%, 15% or 20% during the pre-open session?**

A. In the event SENSEX breaches the threshold levels given above upon calculation of opening value, market wide circuit breakers will be applicable & a trading halt will be triggered as per SEBI Circular Ref. No. SMDRPD/Policy/Cir-37 /2001 dated June 28, 2001. The halt shall be applicable at the start of the continuous trading session. However, the Index breach will not impact execution and confirmation of trades during the pre-open matching session.

LIST OF ELIGIBLE STOCKS

Sr.No	Stocks	Sr.No	Stocks
1	ACC LIMITED	26	LARSEN & TOUBRO LTD.
2	AMBUJA CEMENTS LTD	27	MAHINDRA & MAHINDRA LTD
3	AXIS BANK LIMITED	28	MARUTI SUZUKI INDIA LTD.
4	BAJAJ AUTO LTD	29	NTPC LTD
5	BHARTI AIRTEL LIMITED	30	OIL AND NATURAL GAS CORP.
6	BHEL	31	PUNJAB NATIONAL BANK
7	BHARAT PETROLEUM CORP LTD	32	POWER GRID CORP. LTD.
8	CAIRN INDIA LIMITED	33	RANBAXY LABS LTD
9	CIPLA LTD	34	RELIANCE COMMUNICATIONS LTD.
10	DLF LIMITED	35	RELIANCE CAPITAL LTD
11	Dr REDDY'S LABORATORIES LTD	36	RELIANCE INDUSTRIES LTD
12	GAIL (INDIA) LTD	37	RELIANCE INFRASTRUCTURE LTD
13	HCL TECHNOLOGIES LTD	38	RELIANCE POWER LTD.
14	HDFC LTD	39	SESA GOA LTD
15	HDFC BANK LTD	40	STEEL AUTHORITY OF INDIA
16	HERO HONDA MOTORS LTD	41	STATE BANK OF INDIA
17	HINDALCO INDUSTRIES LTD	42	SIEMENS LTD
18	HINDUSTAN UNILEVER LTD.	43	STERLITE INDS (IND) LTD
19	ICICI BANK LTD.	44	SUN PHARMACEUTICALS IND.
20	INFRA. DEV. FIN. CO. LTD	45	SUZLON ENERGY LIMITED
21	INFOSYS TECHNOLOGIES LTD	46	TATA MOTORS LIMITED
22	ITC LTD	47	TATA POWER CO LTD
23	JINDAL STEEL & POWER LTD	48	TATA STEEL LIMITED
24	JAIPRAKASH ASSOCIATES LTD	49	TATA CONSULTANCY SERV LTD.
25	KOTAK MAHINDRA BANK LTD	50	WIPRO LTD

- As of October 1, 2010