



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,161	0.1% ▼
Open Interest (OI)	1,70,86,575	1.8% ▼
Change in OI (abs)	1,70,86,575	3,06,825 ▼
Premium / Discount (Abs)	56	22 ▼
<b>Inference</b>	<b>Long Unwinding</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	56,999	0.4% ▼
Open interest (OI)	23,60,535	1.5% ▼
Change in OI (abs)	23,60,535	35,700 ▼
Premium / Discount (Abs)	160	24 ▼
<b>Inference</b>	<b>Long Unwinding</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.02	0.67 ▼
Nifty ATM IV (%)	13.17	1.1 ▼
Bank Nifty ATM IV (%)	14.47	1.0 ▼
PCR (Nifty)	0.97	0.04 ▼
PCR (Bank Nifty)	0.98	0.06 ▼

The Long Ratio for FII Index Futures **jump** at 20%, **up** from 19.7% in the **last session**..

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BLUESTARCO	8,77,825	70.5%	1632.3	3.6%
BDL	18,52,175	10.7%	1974.8	0.9%
OFSS	8,08,800	10.3%	9517	3.8%
COFORGE	1,27,60,125	8.2%	1833.5	2.0%
ATGL	44,20,300	7.7%	714.45	2.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DMART	42,26,700	16.0%	4079	-2.9%
KAYNES	2,17,000	15.4%	5612	-1.1%
PPLPHARMA	72,92,500	14.7%	207.01	-2.4%
IREDA	6,97,76,650	11.5%	174.22	-1.7%
AARTIIND	1,30,69,375	9.1%	482.7	-0.7%

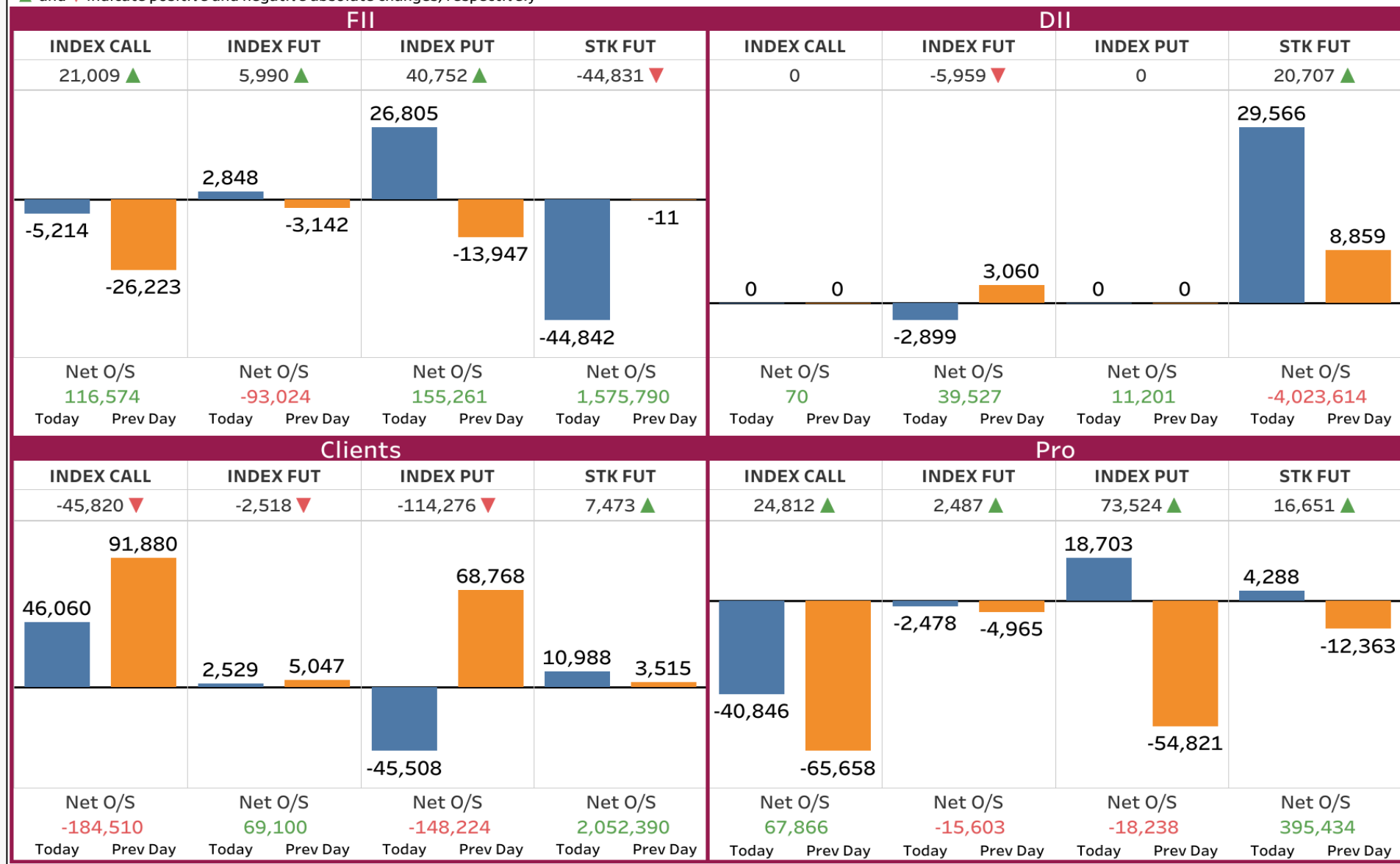
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MUTHOOTFIN	44,52,525	-8.7%	2556.3	0.4%
HINDCOPPER	3,76,51,200	-7.3%	264.18	1.8%
BHEL	6,12,49,125	-6.0%	261.5	0.8%
CHAMBLFERT	1,35,75,500	-5.8%	565.9	2.3%
HAVELLS	75,88,000	-5.4%	1573.1	1.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IIFL	1,12,52,550	-7.4%	482.7	-1.3%
ANGELONE	29,26,550	-7.2%	3153	-1.9%
HDFCAMC	28,59,900	-6.6%	5094.6	-1.2%
PRESTIGE	41,20,475	-5.4%	1668.5	-2.5%
POONAWALLA	1,40,03,150	-5.0%	427.05	-1.3%

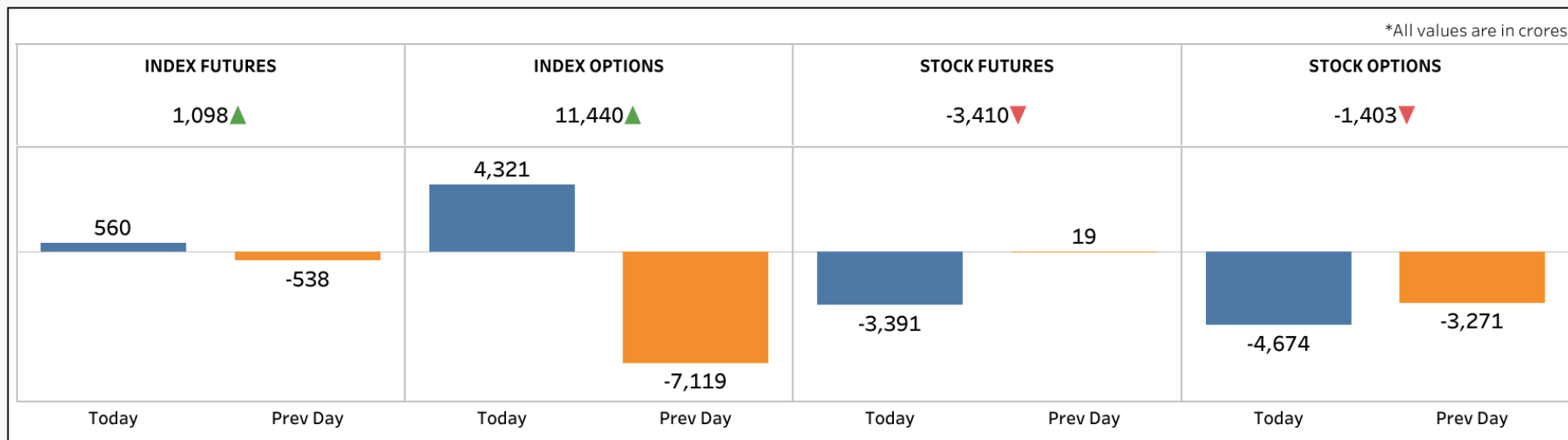
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

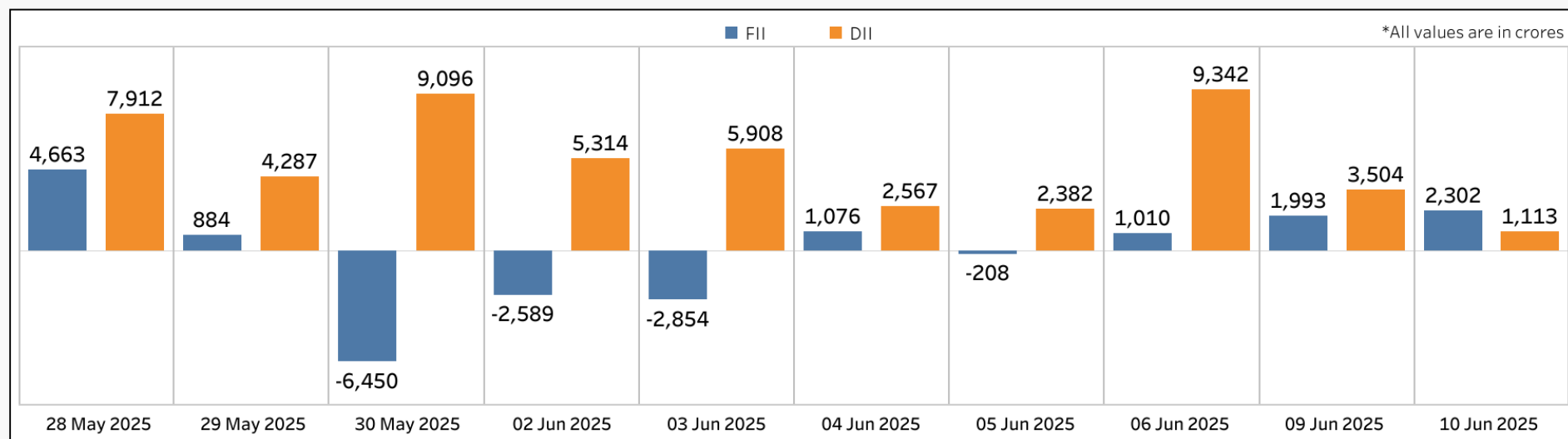
▲ and ▼ indicate positive and negative absolute changes, respectively



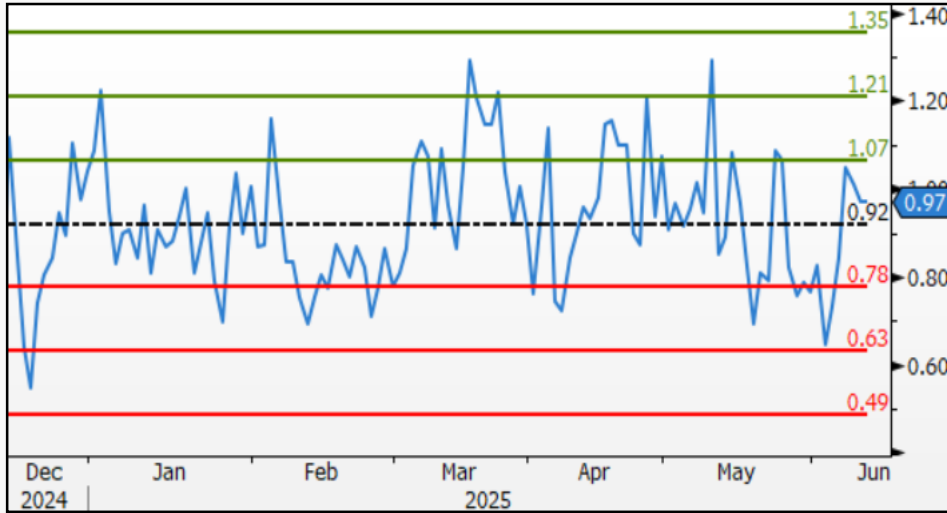
## Daily Net Open Interest Change



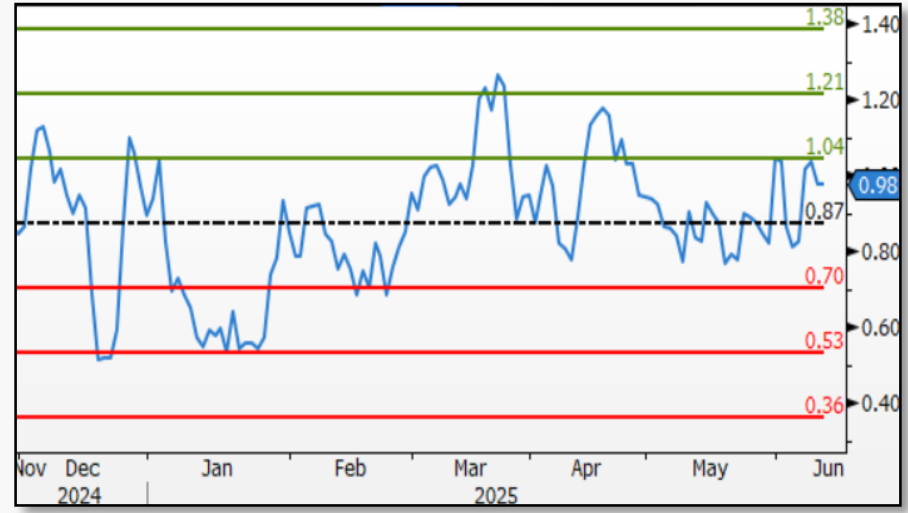
## DII and FII Daily Cash Market Flows



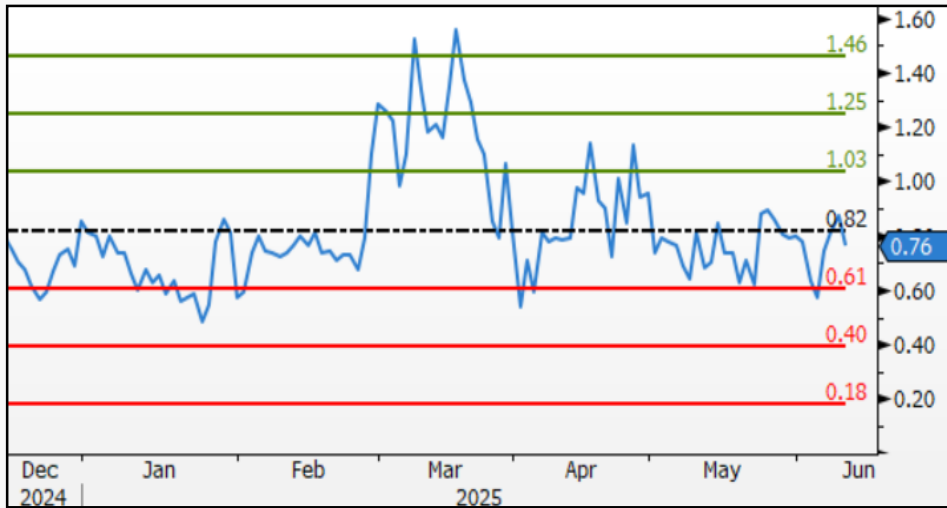
## Nifty



## Bank Nifty



## Fin Nifty



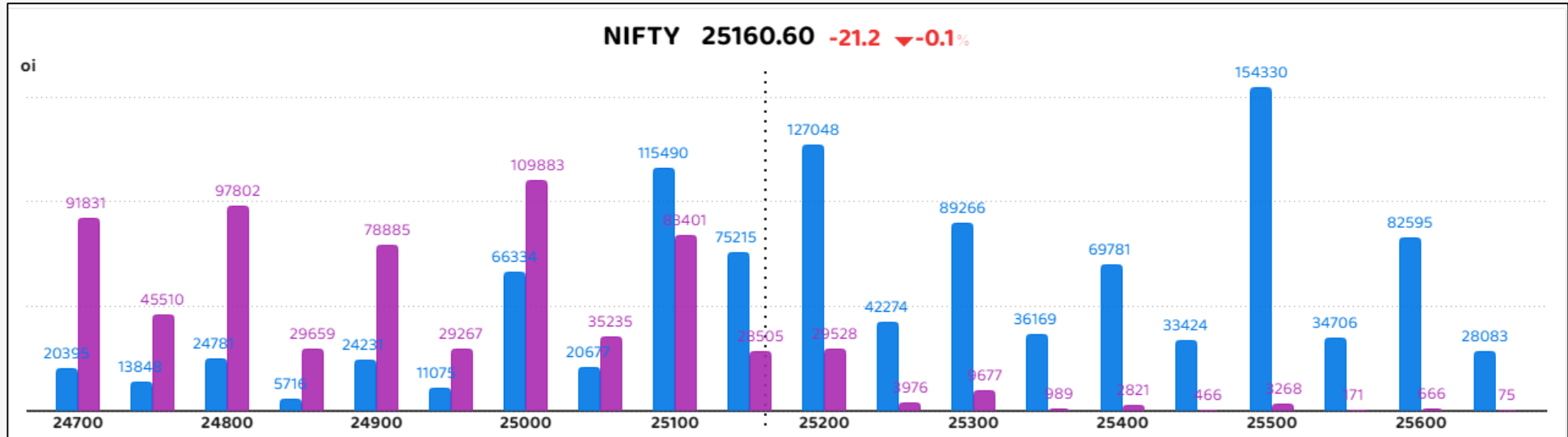
## Midcap Select Nifty



On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation

## Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call  Put 



For the Nifty, the 25,500 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 56,000 Put saw the most amount of open interest.

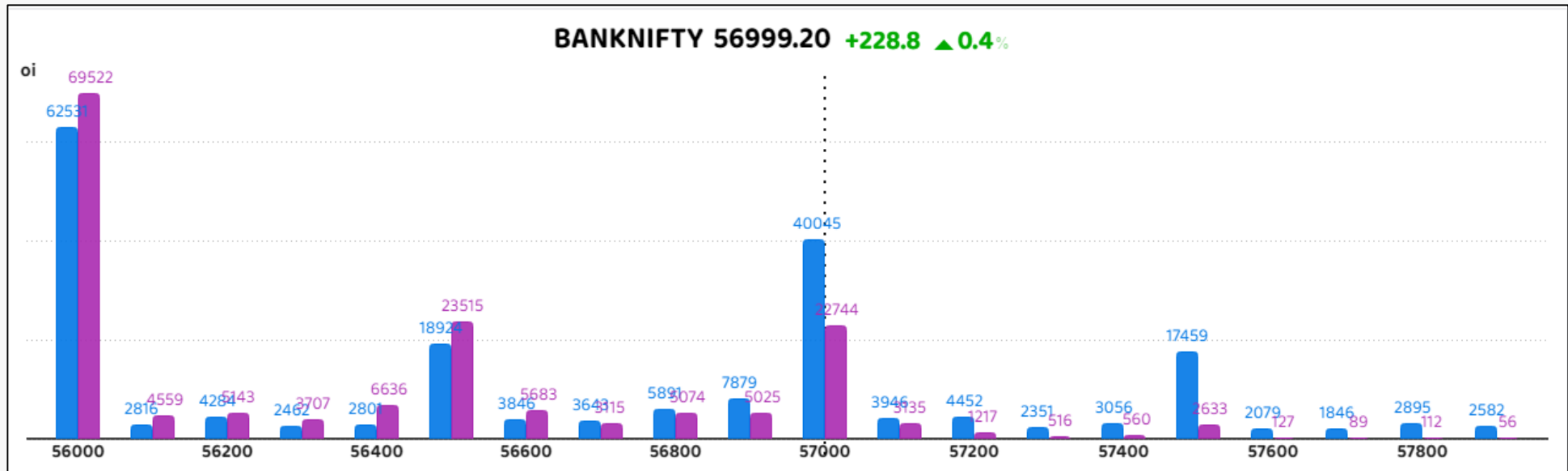
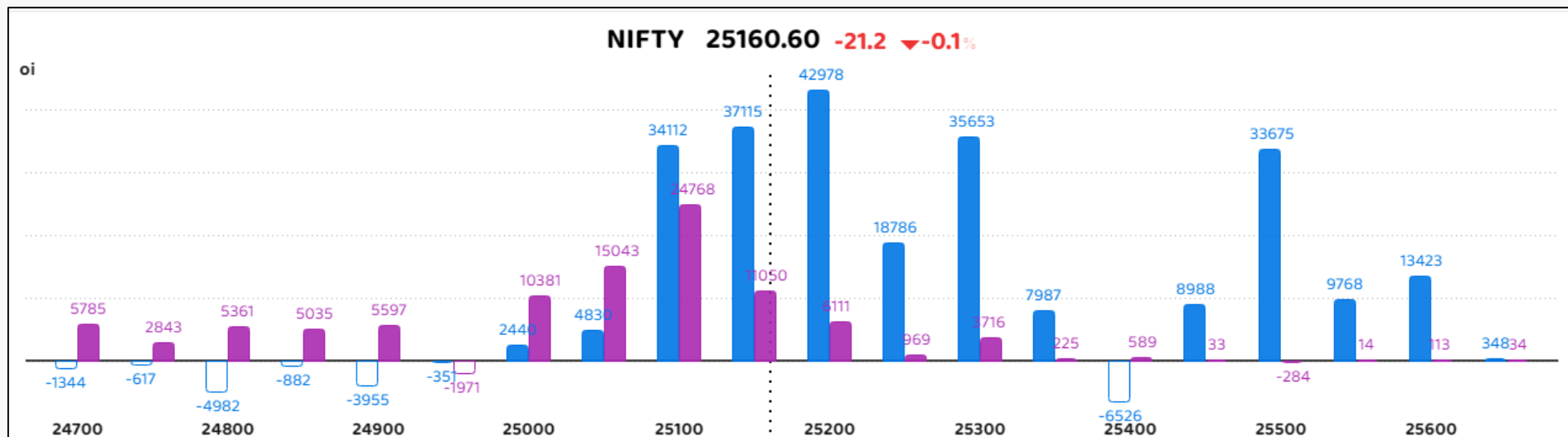


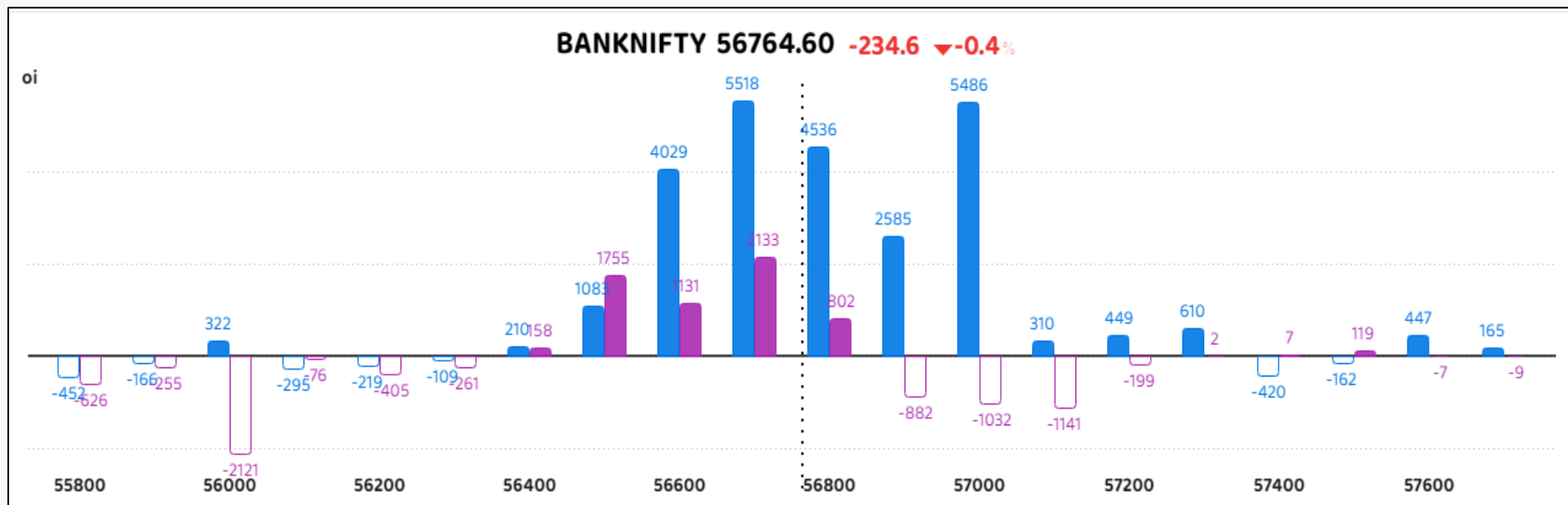
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,200 Call and the 25,100 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,000 Call & the 56,700 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
PIRAMAL PHARMA	206.07	-2.4	38.8	39.1	36.1	92.7
KAYNES TECHNOLOGIES	5583.5	-1.2	37.8	38.5	34.4	83.3
TATA CONSUMER	1115.1	-0.5	26.0	34.4	5.5	71.0
ASTRAL LTD	1520.7	-0.9	27.1	38.4	2.9	68.2
MARUTI SUZUKI	12520	-0.9	19.4	29.9	0.4	64.5

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
IIFL FINANCE LTD	481.3	-1.3	6.4	73.1	6.4	0.0
TATA COMMUNICATIONS	1735	-0.6	20.2	39.8	20.2	0.0
FORTIS HEALTHCARE	778.9	1.5	29.1	36.0	29.1	0.0
CESC LTD	171.3	0.7	30.0	53.6	30.0	0.0
MAZAGON DOCK	3397.7	0.8	40.5	48.4	40.5	0.0



### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
PIRAMAL PHARMA	206.07	-2.4	38.8	39.1	36.1	97.3
KAYNES TECHNOLOGIES	5583.5	-1.2	37.8	38.5	34.4	92.5
TATA CONSUMER	1115.1	-0.5	26.0	34.4	5.5	82.4
PI INDUSTRIES	3924.3	-0.3	30.8	40.3	18.3	70.4
BAJAJ FINSERV	1998.1	-1.0	25.5	33.8	19.2	67.2

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MAZAGON DOCK	3397.7	0.8	40.5	48.4	40.5	0.0
BHARAT DYNAMICS	1967.2	1.0	41.5	46.7	41.5	0.0
FORTIS HEALTHCARE	778.9	1.5	29.1	36.0	29.1	0.0
TATA COMMUNICATIONS	1735	-0.6	20.2	39.8	20.2	0.0
INOX WIND LTD	186.68	1.3	40.5	85.7	40.5	0.0

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BLUE STAR LTD	1624.5	3.5	17881	2527	7.1
TORRENT POWER LT	1451.6	3.2	9320	1423	6.6
PAGE INDUSTRIES	46670	0.7	10505	1651	6.4
PI INDUSTRIES	3924.3	-0.3	7529	1211	6.2
BHARAT DYNAMICS	1967.2	1.0	25152	4160	6.1

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
CUMMINS INDIA	3388.7	-0.7	4601	9941	2.2
AARTI INDUS LTD	481.9	-0.4	12922	19284	1.5
IIFL FINANCE LTD	481.3	-1.3	5523	6865	1.2
APL APOLLO TUBES	1892.1	0.5	2657	2830	1.1
ETERNAL LTD	255.68	-0.5	32992	29798	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDUSTAN ZINC	534.05	1.7	11736	11736	100.0
MAZAGON DOCK	3397.7	0.8	15211	15211	100.0
MANKIND PHARMA	2376.4	0.8	1793	1793	100.0
INDIAN BANK	628.75	-3.5	4665	4665	100.0
RAIL VIKAS NIGAM	426.7	-1.2	8925	8925	100.0

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAZAGON DOCK	3397.7	0.8	6286	6286	100.0
CUMMINS INDIA	3388.7	-0.7	8541	8541	100.0
MUTHOOT FINANCE	2553.6	0.5	13099	13099	100.0
INDIAN BANK	628.75	-3.5	3533	3533	100.0
RAIL VIKAS NIGAM	426.7	-1.2	3544	3544	100.0

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
GRASIM INDS LTD	2708	3.8	121847	121847	100.0
KAYNES TECHNOLOGIES	5583.5	-1.2	1922	1922	100.0
BLUE STAR LTD	1624.5	3.5	17881	17881	100.0
PHOENIX MILLS	1627.1	0.7	10674	11502	92.8
BHARAT DYNAMICS	1967.2	1.0	25152	28756	87.5

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NO STOCK OPTION MET THE CONDITION MENTIONED IN THE FOOTNOTE					

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
HINDUSTAN ZINC	534.05	1.7	11736	5059	2.3
IREDA	182.46	-0.4	18663	9190	2.0
RAIL VIKAS NIGAM	426.7	-1.2	8925	4450	2.0
PHOENIX MILLS	1627.1	0.7	3629	1882	1.9
INOX WIND LTD	186.68	1.3	9717	5270	1.8

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
HINDUSTAN ZINC	534.05	1.7	5790	2540	2.3
RAIL VIKAS NIGAM	426.7	-1.2	3544	1800	2.0
MCX INDIA LTD	7890.5	-0.8	20333	10470	1.9
IREDA	182.46	-0.4	7555	4518	1.7
GLENMARK PHARMA	1615.6	1.0	7027	4306	1.6

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
BLUE STAR LTD	1624.5	3.5	17881	2050	8.7
GRASIM INDS LTD	2708	3.8	121847	21774	5.6
PERSISTENT SYSTEMS	5946	2.7	92108	20015	4.6
TECH MAHINDRA LTD	1610.9	2.0	46022	10262	4.5
MANAPPURAM	265.35	0.2	30934	7251	4.3

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
MANAPPURAM	265.35	0.2	20460	3986	5.1
AVENUE SUPERMART	4080	-2.4	29707	6059	4.9
GRASIM INDS LTD	2708	3.8	40614	10015	4.1
RBL BANK LTD	221.87	-3.7	11555	3451	3.3
HINDUSTAN ZINC	534.05	1.7	12015	3883	3.1

## Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	2700	1868700	3.3%	2613	2700	1550100	3.3%	ITC	440	10352000	3.0%	427	420	5006400	-1.6%
ADANIPTS	1500	1606000	1.8%	1474	1400	894000	-5.0%	JIOFIN	310	6070350	2.4%	303	290	4149750	-4.2%
APOLLOHOSP	7000	359750	1.2%	6919	6800	137750	-1.7%	JSWSTEEL	1020	1255500	1.7%	1003	980	661500	-2.3%
ASIANPAINT	2300	1104800	3.7%	2219	2200	654000	-0.9%	KOTAKBANK	2200	947200	2.3%	2151	2100	897600	-2.4%
AXISBANK	1250	4619375	1.4%	1233	1200	1726250	-2.7%	LT	3740	1319100	1.6%	3680	3500	371850	-4.9%
BAJAJ-AUTO	9000	518475	4.3%	8626	8500	144000	-1.5%	M&M	3100	1101100	1.1%	3068	3000	503650	-2.2%
BAJAJFINSV	2100	1767000	5.1%	1998	1900	940500	-4.9%	MARUTI	12500	315950	-0.2%	12520	12500	117150	-0.2%
BAJFINANCE	10000	1005750	5.3%	9498	9000	441625	-5.2%	NESTLEIND	2500	240200	2.8%	2431	2200	179400	-9.5%
BEL	400	19140600	0.7%	397	390	5708550	-1.9%	NTPC	350	7546500	3.2%	339	340	2716500	0.2%
BHARTIARTL	1880	3085125	1.2%	1857	1860	1136200	0.2%	ONGC	250	11209275	2.2%	245	240	2048200	-1.9%
CIPLA	1600	1605175	5.9%	1511	1320	566150	-12.6%	POWERGRID	310	6643800	3.0%	301	270	3452400	-10.3%
COALINDIA	400	4270350	0.1%	400	400	2938950	0.1%	RELIANCE	1500	5724500	4.3%	1439	1400	2735000	-2.7%
DRREDDY	1300	1299375	-3.6%	1349	1300	724375	-3.6%	SBILIFE	1860	1104375	4.2%	1786	1800	239625	0.8%
EICHERMOT	5500	230650	2.3%	5378	5000	130375	-7.0%	SBIN	820	10923000	0.4%	817	800	6192000	-2.1%
ETERNAL	270	10392000	5.6%	256	240	10192000	-6.1%	SHRIRAMFIN	720	1413000	2.8%	700	660	525750	-5.8%
GRASIM	2700	453500	-0.3%	2708	2700	247500	-0.3%	SUNPHARMA	1700	2087750	0.7%	1689	1700	779800	0.7%
HCLTECH	1820	719600	9.1%	1668	1600	430850	-4.1%	TATACONSUM	1200	933432	7.6%	1115	1100	205656	-1.4%
HDFCBANK	2000	6755650	1.8%	1965	1940	2751100	-1.3%	TATAMOTORS	800	6120950	9.3%	732	700	3387450	-4.4%
HDFCLIFE	800	3569500	4.9%	762	750	783200	-1.6%	TATASTEEL	161.4	19013500	3.7%	156	156.4	9416000	0.5%
HEROMOTOCO	4400	646500	0.5%	4379	3700	176100	-15.5%	TCS	3600	1115625	4.0%	3463	3400	837375	-1.8%
HINDALCO	700	4068400	6.3%	658	600	1212400	-8.9%	TECHM	1600	744000	-0.7%	1611	1360	465600	-15.6%
HINDUNILVR	2400	2280300	0.2%	2395	2400	486300	0.2%	TITAN	3600	449925	2.2%	3524	3500	230125	-0.7%
ICICIBANK	1450	5514600	1.9%	1423	1450	2286900	1.9%	TRENT	6000	393800	3.2%	5814	5500	341300	-5.4%
INDUSINDBK	820	4394000	-3.0%	845	800	1953000	-5.3%	ULTRACEMCO	12000	213550	5.3%	11391	9800	117850	-14.0%
INFY	1600	2583600	0.3%	1596	1600	1252000	0.3%	WIPRO	260	7233000	2.0%	255	250	5604000	-1.9%

If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green

If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating existing positions**
- **Long build up:** Prices increase with a rise in open interest and is considered **bullish**
- **Long liquidation:** Existing longs liquidate their positions and open interest also falls; **moderately bearish**
- **Short build up:** Prices drop with a rise in open interest, and this is considered **bearish**
- **Short covering:** Existing shorts cover their positions, and open interest drop; this is **moderately bullish**
- PCR goes up when 1) both put and call open interest go up, but puts rise faster, or 2) both put and call open interest go down, but calls fall faster or, 3) when puts go up and calls go down
- Generally, a **rising PCR is bearish**, but when it reaches an extremely **high** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bullish**
- PCR goes down when 1) both put and call open interest go up, but calls rise faster, or 2) both put and call open interest go down, but puts fall faster or, 3) when puts go down and calls go up
- Typically, a **falling PCR is bullish**, but when it reaches an extremely **low** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bearish**

*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*



- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the open interest for the day is 20 contracts
- **Total open interest:** Total of all open positions for all available expirations. It is the sum of all outstanding long positions OR short positions. This is because the total number of long positions must equal the total number of short positions
- **Premium:** When the front-month futures are more expensive than the cash market price. For instance, if Nifty futures (first month contract) are at 25,500 when the cash Nifty is at 25,450, the premium is 50 points
- **Discount:** When the front-month futures are cheaper than the cash market price. For instance, if Tata Steel futures (first month contract) are at 160 when the stock is trading at 162 in the cash market, the discount is 2 points
- **At-the-Money (ATM):** When the strike price of an option is the same as the spot price, the option is called an ATM option
- **Implied Volatility (IV):** Measure of how much a stock is expected to move in the future (in either direction)
- **Put-Call Ratio (PCR):** Ratio of total number of outstanding puts to total number of calls outstanding. If this ratio is more (less) than one, it means more puts (calls) are open relative to calls (puts)
- **Derivatives market participants:** Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DII)s, proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** [www.nseindia.com](http://www.nseindia.com), Bloomberg, MyFnO

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR):** Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100

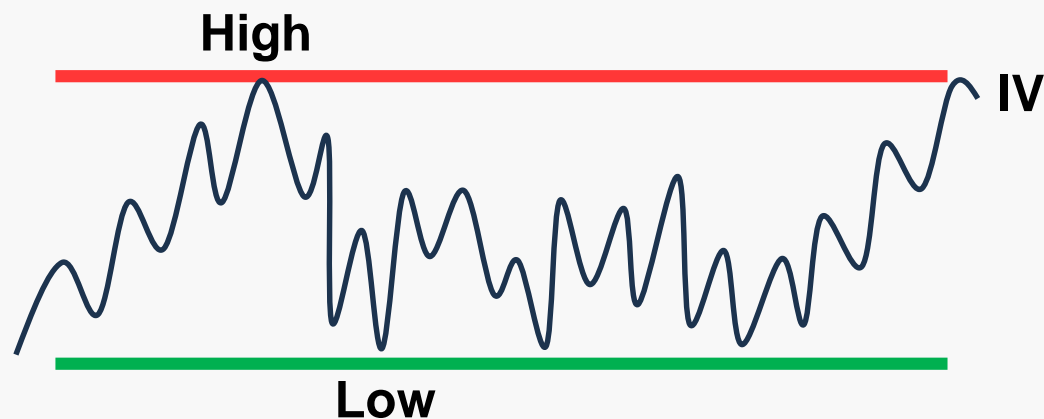


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

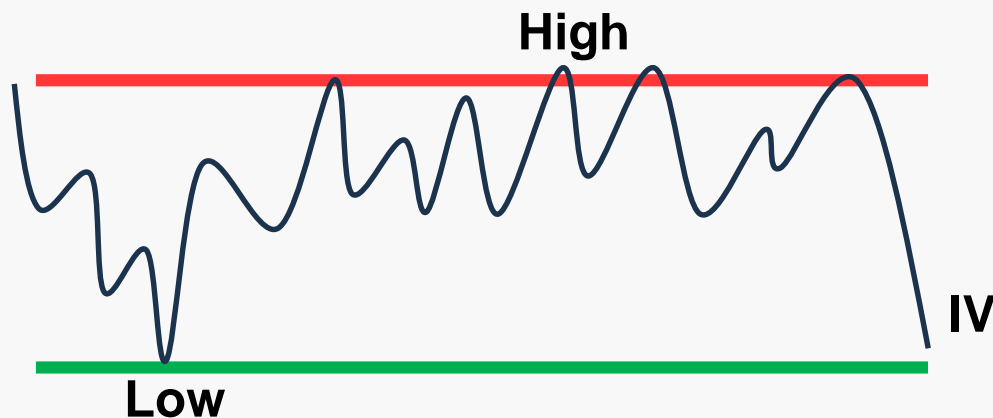


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **Implied Volatility Percentile (IVP):** Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.



In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.



Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

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