



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,094	0.1% ▼
Open Interest (OI)	1,90,57,125	0.5% ▲
Change in OI (abs)	1,90,57,125	85,275 ▲
Premium / Discount (Abs)	33	4 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	56,805	0.3% ▼
Open interest (OI)	26,06,415	0.4% ▼
Change in OI (abs)	26,06,415	10,360 ▼
Premium / Discount (Abs)	49	20 ▲
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	10.75	0.45 ▼
Nifty ATM IV (%)	9.10	0.6 ▼
Bank Nifty ATM IV (%)	10.70	0.4 ▼
PCR (Nifty)	0.78	0.18 ▼
PCR (Bank Nifty)	0.78	0.10 ▼

The FII Long Ratio in Index Futures **drop** to 14.4 %, **down** from 15.1% in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ETERNAL	18,59,87,800	13.3%	300.75	10.8%
DELHIVERY	1,28,56,700	8.2%	434.85	0.5%
FORTIS	92,41,100	7.1%	810.25	0.8%
NYKAA	5,19,56,250	5.1%	220.1	2.1%
MFSL	60,45,600	3.6%	1566.3	1.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	36,53,000	101.3%	1143.2	-6.6%
IEX	5,11,38,750	25.1%	192.61	-1.9%
IRFC	5,46,80,500	13.3%	130.14	-3.5%
AUBANK	1,86,32,000	8.3%	728.2	-3.3%
IGL	1,87,88,000	7.9%	213.5	-0.2%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HAVELLS	90,90,000	-13.7%	1581.2	3.1%
KFINTECH	10,58,400	-7.3%	1283.1	0.5%
PAYTM	2,56,74,425	-6.0%	1055.2	3.5%
ANGELONE	28,61,500	-4.3%	2816.6	3.9%
COALINDIA	8,70,30,450	-4.0%	390.1	0.7%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BDL	42,90,975	-4.8%	1717.6	-0.3%
BALKRISIND	12,68,100	-4.6%	2763.9	-0.5%
MPHASIS	45,18,250	-4.2%	2784.3	-0.8%
HINDCOPPER	3,12,80,600	-3.8%	273.05	-0.4%
BOSCHLTD	3,28,850	-3.7%	37350	-1.7%

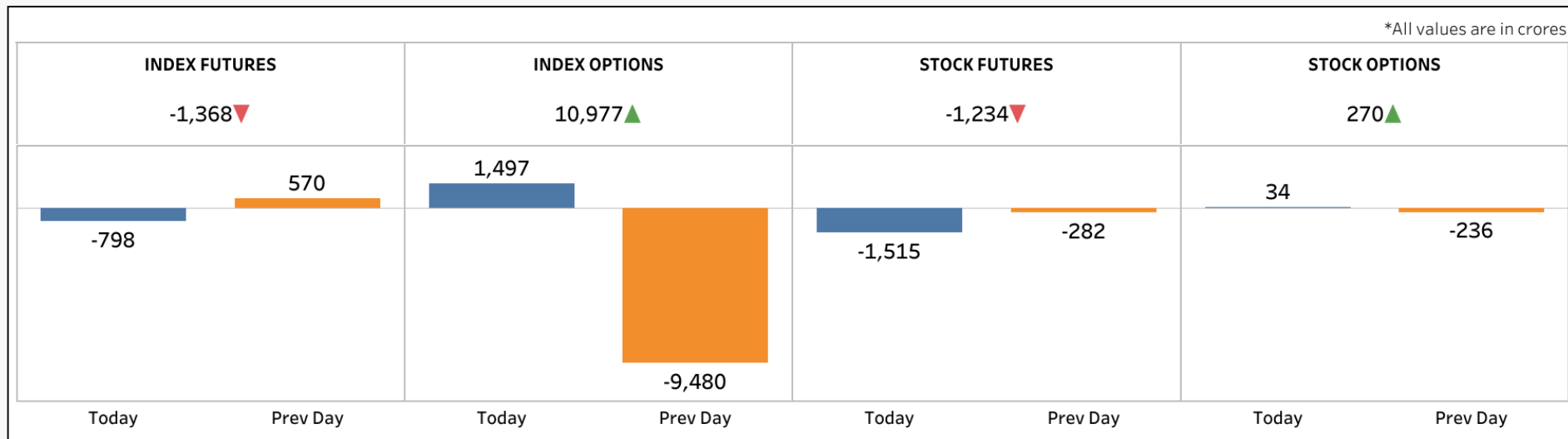
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

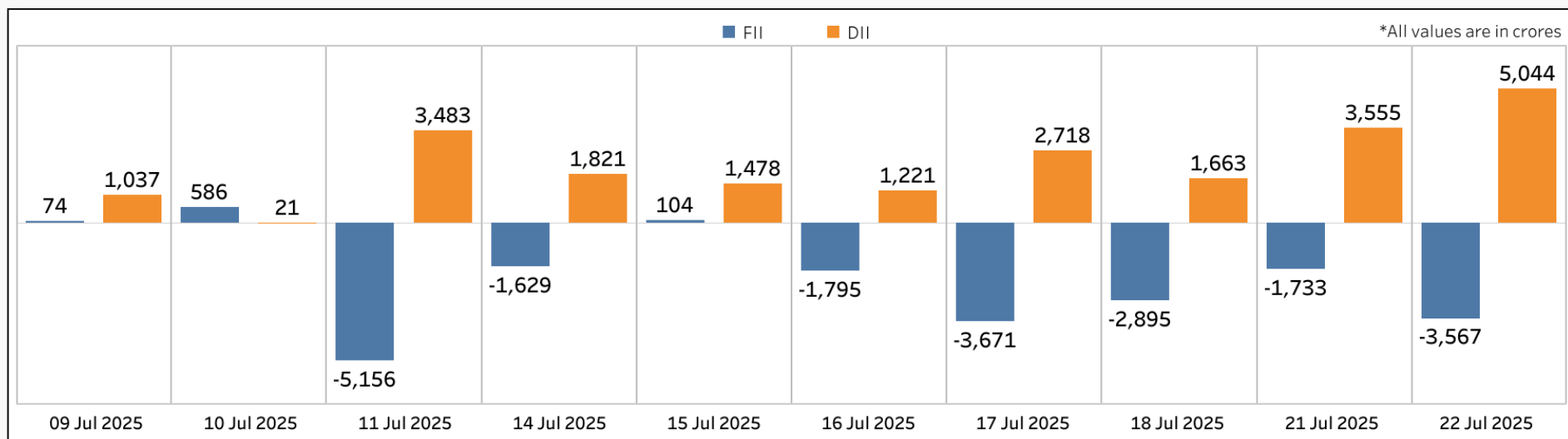
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-17,141 ▼	-7,030 ▼	73,837 ▲	-18,527 ▼	1,659 ▲	-2,176 ▼	0	24,069 ▲
		26,123					11,744
-18,646	-1,505	-4,210	-9,932	0	1,257	0	-12,325
		-47,714	-28,459	-1,659	-919		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-20,032	-149,454	177,828	1,308,933	5,911	36,280	14,283	-3,976,176
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
332,978 ▲	293 ▲	-66,453 ▼	23,343 ▲	-317,495 ▼	8,913 ▲	-7,386 ▼	-28,885 ▼
172,641				163,500			
	2,124	1,831	24,298		3,005		21,302
		48,937	955		-5,908	-8,608	-7,583
		-17,516		-153,995		-1,222	
-160,337							
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-23,170	97,945	-408,505	2,226,751	37,291	15,229	216,394	440,492
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

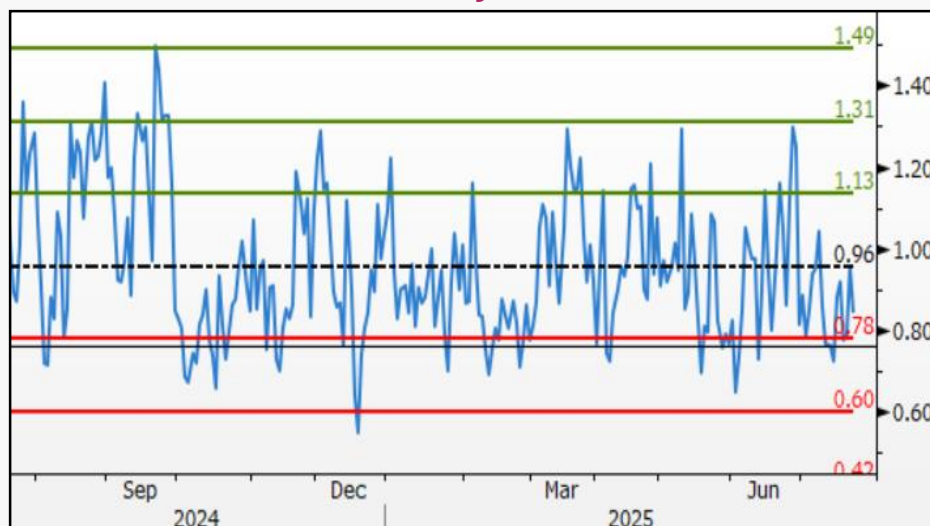
Daily Net Open Interest Change



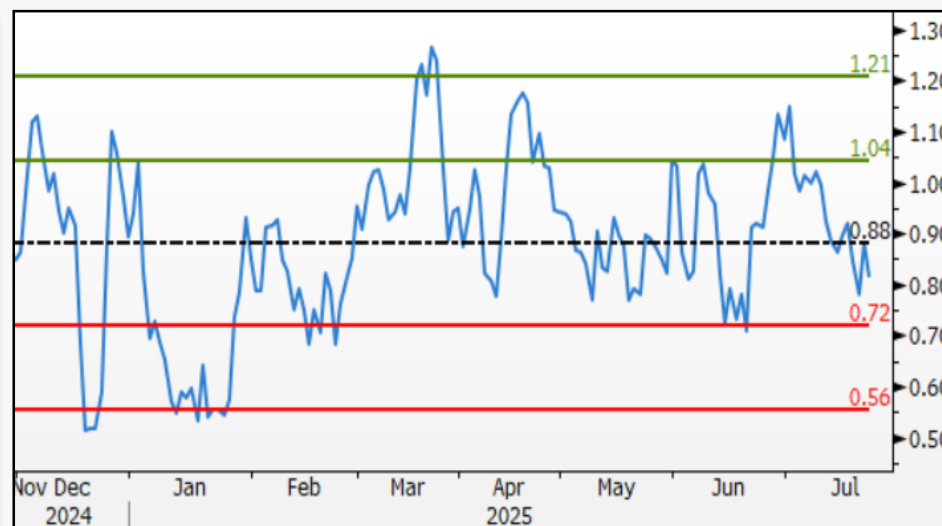
DII and FII Daily Cash Market Flows



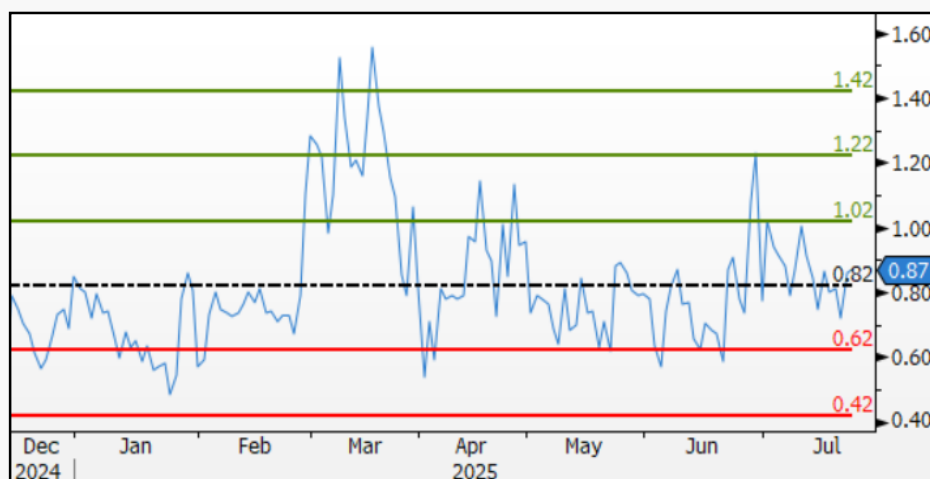
Nifty



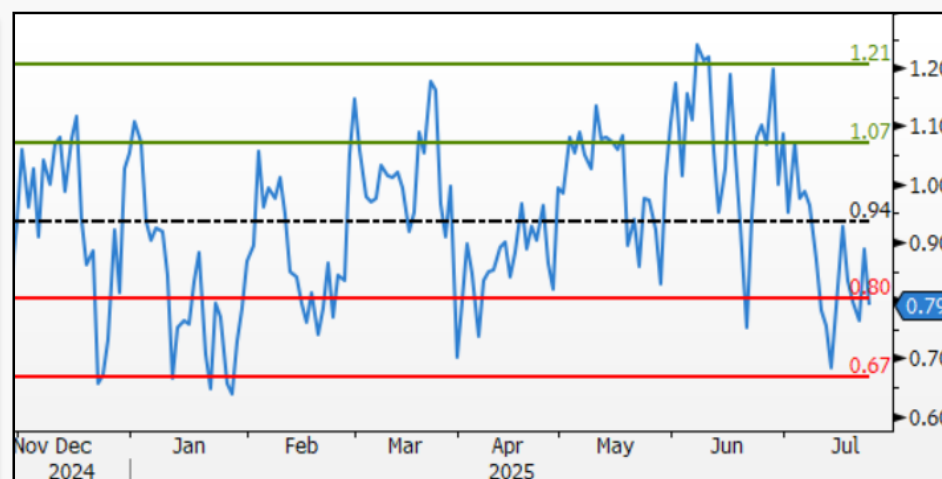
Bank Nifty



Fin Nifty

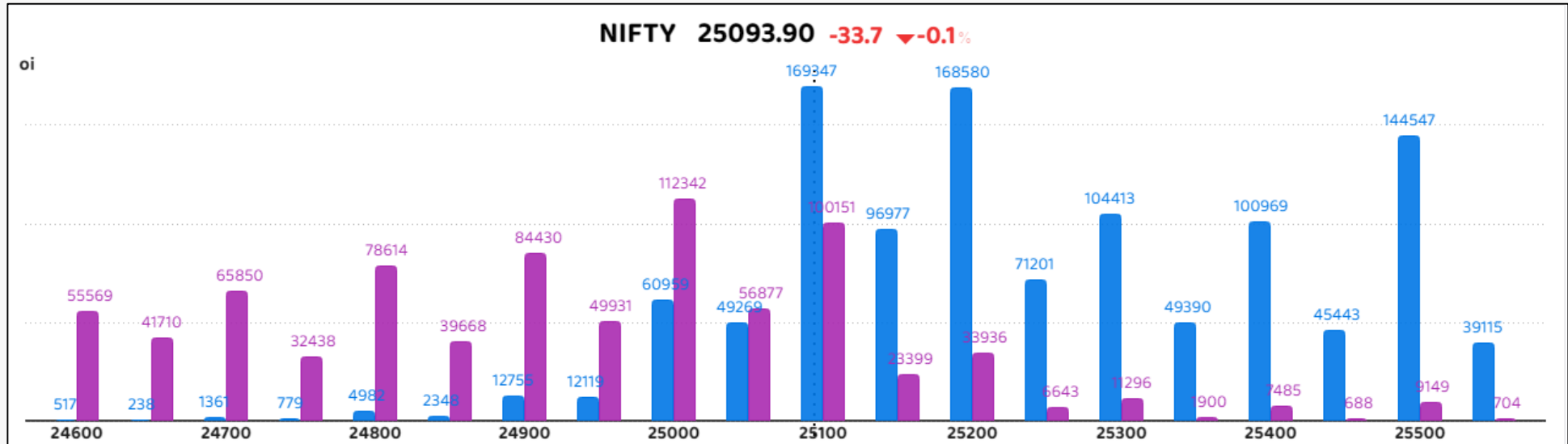


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,100 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 56,000 Put saw the most amount of open interest.

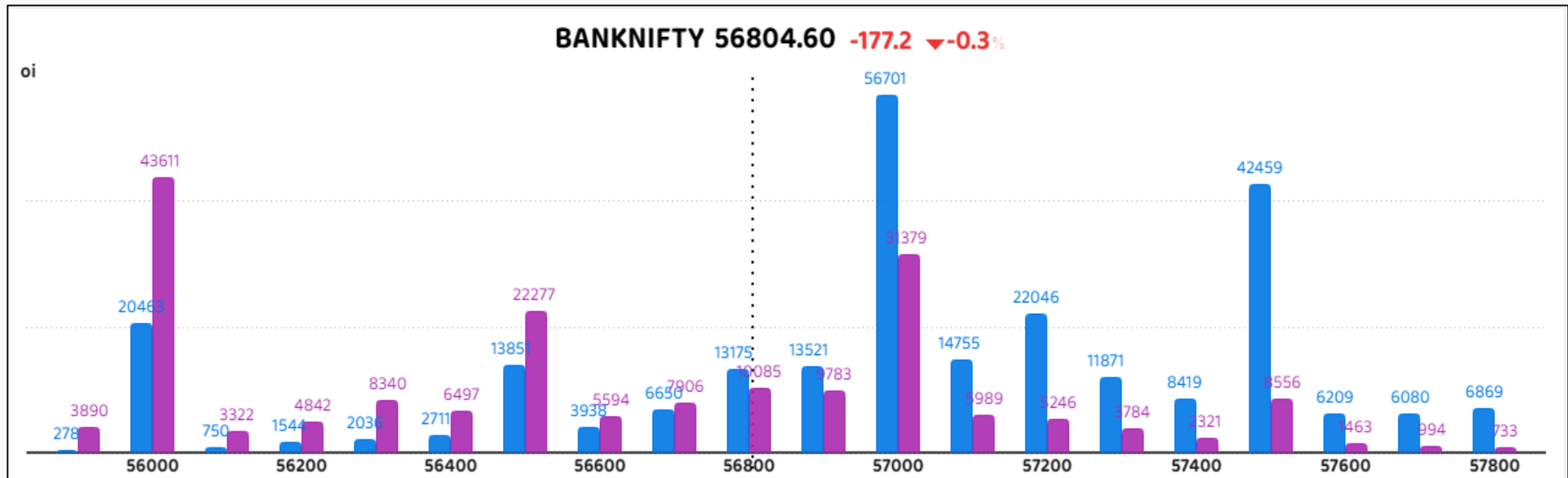
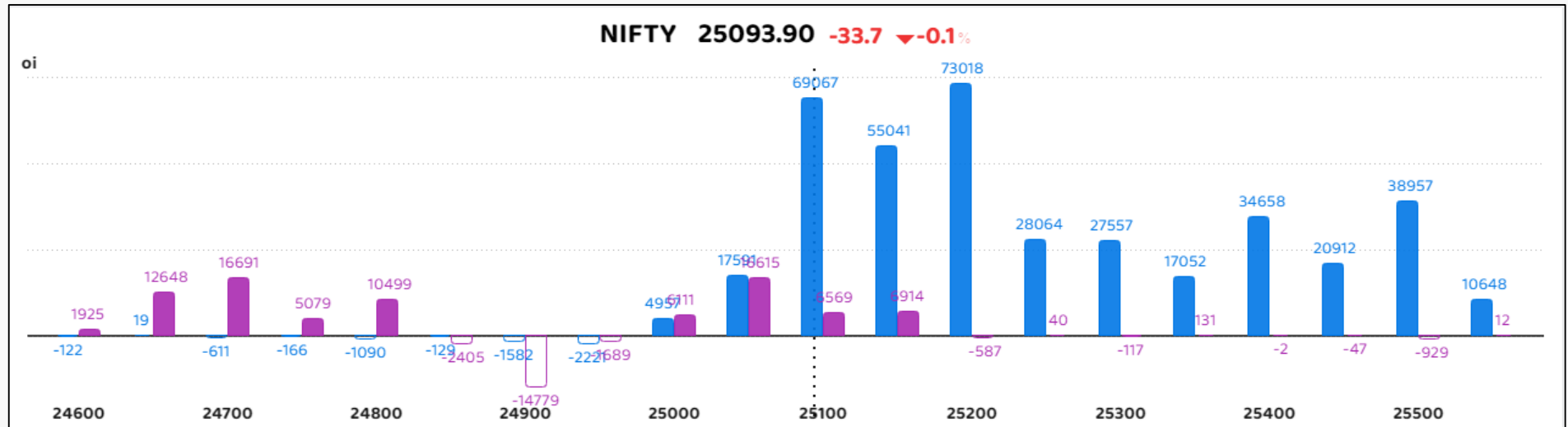


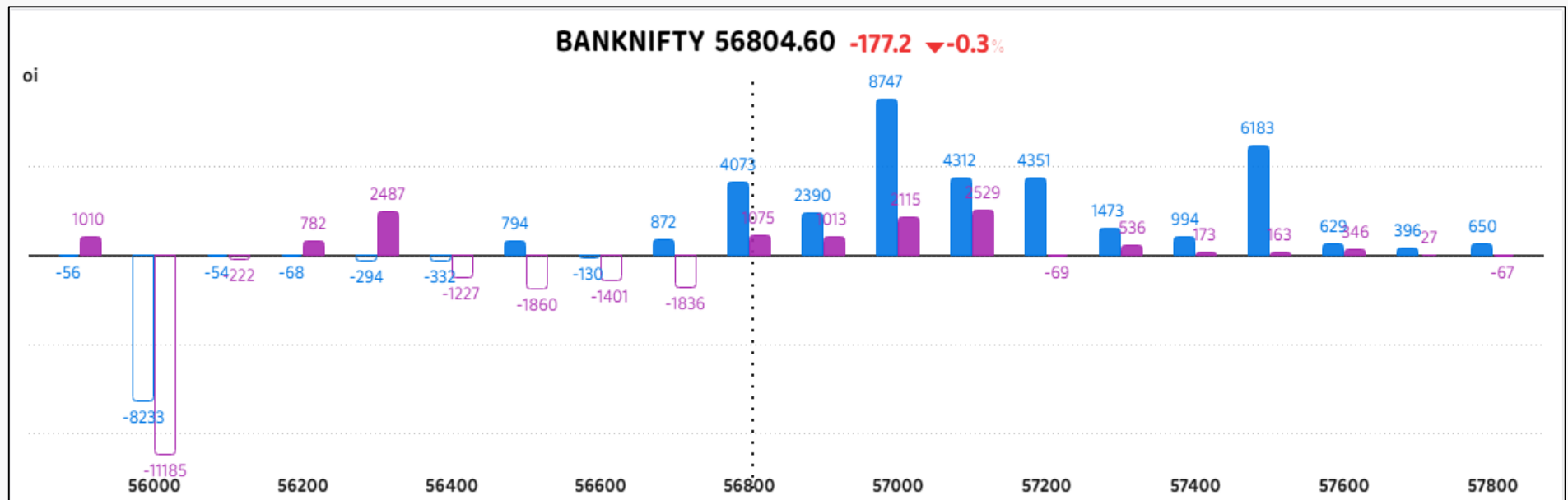
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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 25,050 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	37755	-1.5	31.5	34.9	3.3	89.0
SHREE CEMENT	32345	2.6	28.0	31.9	7.9	83.7
RAIL VIKAS NIGAM	372.25	-1.6	42.0	45.7	32.0	72.6
DIXON TECHNOLOGIES	16112	-1.0	38.3	53.0	1.8	71.3
BLUE STAR LTD	1764.2	-3.0	33.8	38.3	23.4	70.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN ZINC	443.2	-0.3	27.0	54.2	27.0	0.0
NHPC LTD	86.33	-1.4	23.3	53.0	23.3	0.0
COMPUTER AGE	4247.5	0.0	24.3	55.7	24.3	0.0
VARUN BEVERAGES	485.25	-0.8	23.8	51.1	23.6	0.5
FED BANK LTD	212.4	-0.2	23.0	130.9	22.0	1.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
IEX	192.56	-1.8	47.1	66.6	25.8	98.6
BANDHAN BANK LTD	180.94	-0.7	51.5	66.9	15.9	98.0
BOSCH LTD	37755	-1.5	31.5	34.9	3.3	97.7
SHREE CEMENT	32345	2.6	28.0	31.9	7.9	91.1
INFOSYS LTD	1570.9	-0.8	28.8	60.8	4.9	90.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN ZINC	443.2	-0.3	27.0	54.2	27.0	0.0
NHPC LTD	86.33	-1.4	23.3	53.0	23.3	0.0
COMPUTER AGE	4247.5	0.0	24.3	55.7	24.3	0.0
VARUN BEVERAGES	485.25	-0.8	23.8	51.1	23.6	0.8
BHEL	250.5	-1.6	30.9	56.6	29.7	1.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
VODAFONE IDEA LTD	7.37	-3.4	7995	1275	6.3
TUBE INVESTMENTS	2949.5	0.3	7111	1195	6.0
EXIDE INDUS LTD	394.25	1.3	18703	3579	5.2
SHREE CEMENT	32345	2.6	37613	7419	5.1
FSN E-COMMERCE	220.03	2.3	23660	4758	5.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
IEX	192.56	-1.8	31910	68887	2.2
INDRAPRASTHA GAS	212.88	-0.1	9020	9607	1.1
BANK OF BARODA	239.48	-1.6	18785	17570	0.9
GLENMARK PHARMA	2157.9	-1.2	12502	11656	0.9
VEDANTA LTD	450.6	-0.7	14468	13011	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BHARAT DYNAMICS	1717.4	-0.1	17734	17734	100.0
UNO MINDA LTD	1061.4	-1.5	3337	3337	100.0
BLUE STAR LTD	1764.2	-3.0	5115	5115	100.0
PIRAMAL PHARMA	205.3	-3.0	3361	3361	100.0
PNB HOUSING	1086.6	0.2	5199	5361	97.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
ETERNAL LTD	299.8	10.3	40446	40446	100.0
PIRAMAL PHARMA	205.3	-3.0	1895	1895	100.0
LAURUS LABS LTD	823.35	-0.7	11307	11400	99.2
TRENT LTD	5360.5	-0.3	34424	35330	97.4
KAYNES TECHNOLOGY	5783	-1.9	2493	2600	95.9

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ETERNAL LTD	299.80	10.3	345102	345102	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ETERNAL LTD	299.80	10.3	266253	266253	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
AARTI INDUS LTD	422.95	-4.3	14204	5751	2.5
ETERNAL LTD	299.8	10.3	38282	15712	2.4
ULTRATECH CEMENT	12452	-1.0	38271	16076	2.4
AU SMALL FINANCE	725.8	-3.6	13363	5639	2.4
RELIANCE INDS	1412.8	-1.1	226114	98553	2.3

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
IEX	192.56	-1.8	28104	7179	3.9
ETERNAL LTD	299.8	10.3	40446	11784	3.4
HDFC ASSET MANAGEMENT	5592.5	-0.5	9442	3833	2.5
SOLAR INDUSTRIES	14938	0.1	7200	3453	2.1
PATANJALI FOODS	1942	0.0	8812	4242	2.1

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ETERNAL LTD	299.8	10.3	345102	38966	8.9
HAVELLS INDIA	1578.6	3.1	75002	9422	8.0
SHREE CEMENT	32345	2.6	37613	6767	5.6
INFO EDGE	1458.8	4.2	51672	9479	5.5
COLGATE PALMOLIVE	2379.5	-0.5	36094	7219	5.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ETERNAL LTD	299.8	10.3	266253	25927	10.3
HAVELLS INDIA	1578.6	3.1	43685	5602	7.8
IEX	192.56	-1.8	68887	9945	6.9
AARTI INDUS LTD	422.95	-4.3	9843	1786	5.5
OBEROI REALTY	1826.2	-0.5	12955	2486	5.2

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	2600	1752000	0.5%	2588	2700	1796100	4.3%	ITC	420	10451200	1.0%	416	420	4715200	1.0%
ADANIPTS	1500	1407425	5.6%	1421	1400	1151400	-1.5%	JIOFIN	330	13049550	6.2%	311	300	5466100	-3.5%
APOLLOHOSP	8000	284125	10.4%	7247	7000	169375	-3.4%	JSWSTEEL	1180	1336500	14.5%	1031	1000	855900	-3.0%
ASIANPAINT	2500	1667500	5.7%	2365	2300	473250	-2.8%	KOTAKBANK	2200	1144800	1.8%	2160	2100	841200	-2.8%
AXISBANK	1200	8105625	9.3%	1098	1100	2314375	0.2%	LT	3700	1853425	6.8%	3465	3500	631225	1.0%
BAJAJ-AUTO	9000	225225	8.5%	8295	8000	125325	-3.6%	M&M	3300	916800	1.3%	3257	3200	535800	-1.8%
BAJAJFINSV	2100	1359500	3.0%	2040	2000	603000	-1.9%	MARUTI	12800	577300	2.5%	12492	12500	95850	0.1%
BAJFINANCE	1000	2595000	5.0%	953	900	2145000	-5.5%	NESTLEIND	2500	484500	2.3%	2444	2400	276250	-1.8%
BEL	420	10741650	4.2%	403	400	5873850	-0.8%	NTPC	345	34186500	1.2%	341	345	4366500	1.2%
BHARTIARTL	2000	3029075	4.9%	1907	1900	865450	-0.4%	ONGC	250	19579500	1.5%	246	245	2583000	-0.6%
CIPLA	1600	848250	9.3%	1464	1340	403875	-8.5%	POWERGRID	300	5525200	0.7%	298	300	1922800	0.7%
COALINDIA	400	8812800	2.8%	389	400	3153600	2.8%	RELIANCE	1500	13761000	6.2%	1413	1400	3213000	-0.9%
DRREDDY	1300	1549375	4.8%	1240	1100	801875	-11.3%	SBILIFE	1860	1533375	2.8%	1809	1800	346125	-0.5%
EICHERMOT	5800	248325	6.6%	5440	5800	115675	6.6%	SBIN	820	19012500	0.6%	815	820	8370750	0.6%
ETERNAL	300	10029800	0.1%	300	300	10168025	0.1%	SHRIRAMFIN	700	2810775	9.3%	640	650	627000	1.5%
GRASIM	2800	352750	2.8%	2723	2600	131000	-4.5%	SUNPHARMA	1720	2601200	2.5%	1678	1600	409150	-4.6%
HCLTECH	1600	1848000	5.3%	1520	1600	566300	5.3%	TATACONSUM	1230	941050	13.4%	1085	980	554400	-9.7%
HDFCBANK	2020	5957050	0.6%	2007	2000	2534400	-0.4%	TATAMOTORS	700	8968000	4.0%	673	680	3538400	1.0%
HDFCLIFE	820	3226300	7.4%	763	740	1163800	-3.1%	TATASTEEL	170	22995500	4.3%	163	160	10054000	-1.9%
HEROMOTOCO	4500	926250	3.6%	4342	4300	236400	-1.0%	TCS	3500	3520825	10.8%	3160	3200	1075725	1.3%
HINDALCO	700	3085600	1.4%	690	670	1339800	-2.9%	TECHM	1600	2207400	3.4%	1547	1500	424200	-3.1%
HINDUNILVR	2560	1125000	3.2%	2480	2400	737700	-3.2%	TITAN	3500	863450	0.8%	3472	3400	319200	-2.1%
ICICIBANK	1470	2566900	-0.2%	1474	1400	2062900	-5.0%	TRENT	6000	1107200	11.9%	5361	5500	354200	2.6%
INDUSINDBK	900	3994900	6.7%	843	800	1141000	-5.1%	ULTRACEMCO	13000	366500	4.4%	12452	12000	95750	-3.6%
INFY	1600	5872000	1.9%	1571	1600	2288800	1.9%	WIPRO	270	16635000	4.0%	260	250	5856000	-3.7%

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 (DIIs), 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, 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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