



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,727	0.8% ▼
Open Interest (OI)	1,81,70,925	3.4% ▲
Change in OI (abs)	1,81,70,925	5,96,400 ▲
Premium / Discount (Abs)	9	40 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,614	1.2% ▼
Open interest (OI)	23,42,660	2.4% ▲
Change in OI (abs)	23,42,660	54,925 ▲
Premium / Discount (Abs)	87	100 ▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	15.08	1.06 ▲
Nifty ATM IV (%)	14.33	0.8 ▲
Bank Nifty ATM IV (%)	15.00	0.3 ▲
PCR (Nifty)	0.89	0.03 ▼
PCR (Bank Nifty)	0.73	0.10 ▼

The Long Ratio for FII Index Futures **fell** at 19 %, **down** from 19.5% in the **last session..**

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MANAPPURAM	4,26,09,000	12.6%	279.83	3.3%
OFSS	9,59,400	8.5%	9484.5	0.5%
KAYNES	2,80,300	6.9%	5487.5	0.1%
MUTHOOTFIN	42,24,275	5.3%	2606.3	2.1%
JUBLFOOD	1,93,42,500	5.1%	681.75	1.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HUDCO	4,44,42,400	8.1%	228.41	-1.2%
HFCL	8,17,87,050	6.3%	86.76	-1.8%
IOC	9,83,33,625	5.8%	140.81	-1.6%
HEROMOTOCO	51,93,150	5.4%	4315.9	-0.6%
MAZDOCK	27,12,325	5.2%	3209.1	-0.5%

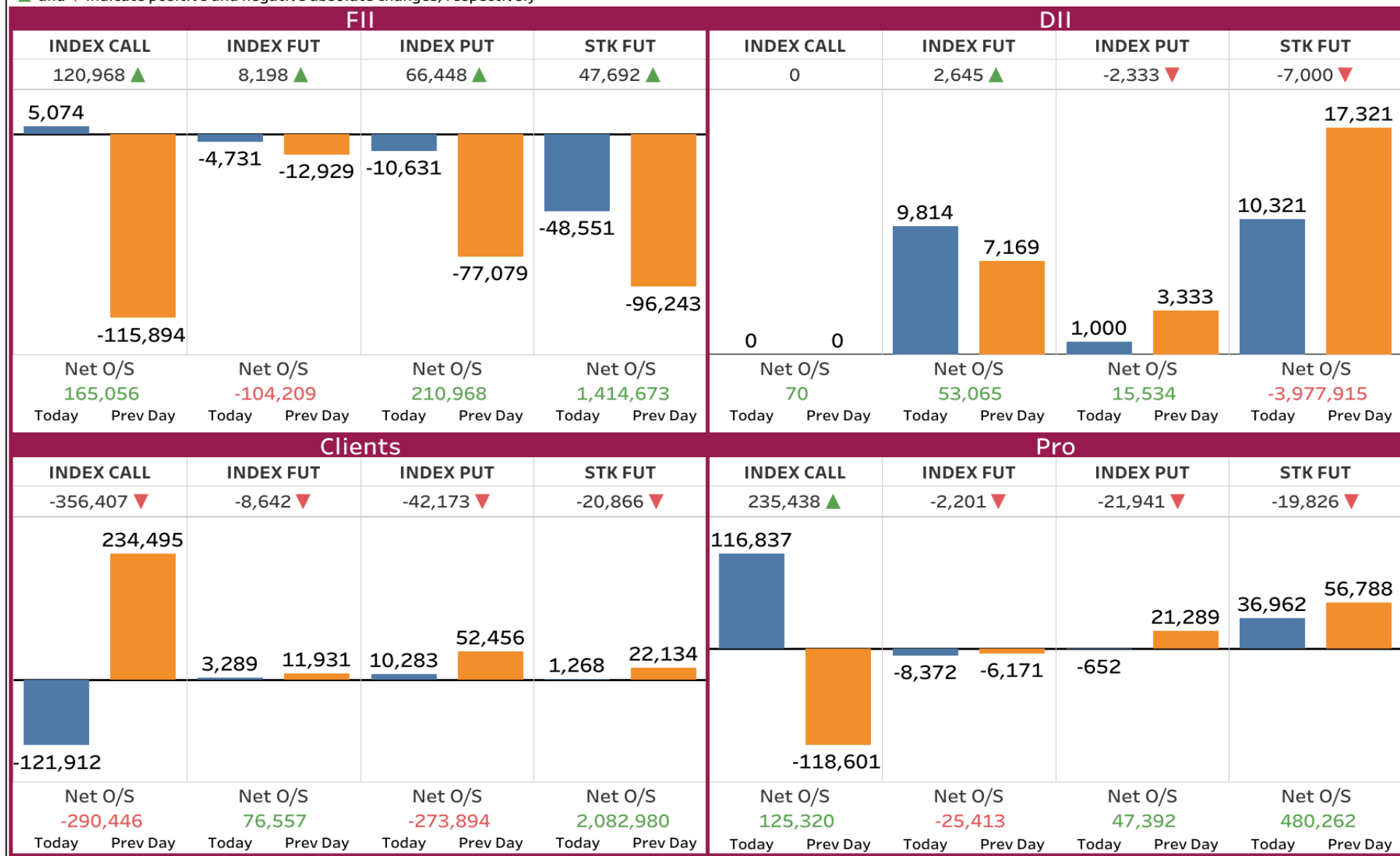
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CDSL	1,22,25,600	-2.6%	1650.6	0.1%
MAXHEALTH	1,08,70,125	-2.6%	1234.1	2.5%
ASTRAL	59,14,601	-2.1%	1529	1.8%
HAL	1,02,62,700	-2.0%	5035.8	1.4%
GODREJPROP	70,41,000	-1.9%	2409.5	0.7%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IREDA	5,54,88,450	-13.2%	167.72	-1.5%
ABCAPITAL	5,88,48,300	-7.6%	240.57	-1.3%
MGL	34,28,400	-6.6%	1344.8	-2.0%
BSOFT	1,36,84,500	-4.1%	416.25	-1.0%
IEX	5,64,30,000	-3.9%	187.26	-1.9%

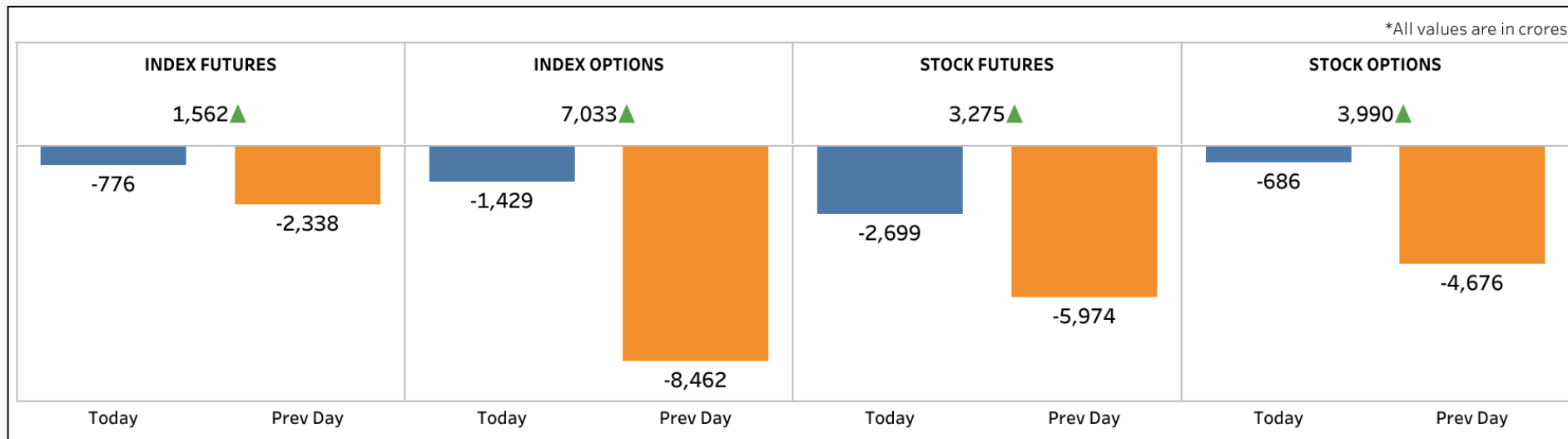
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

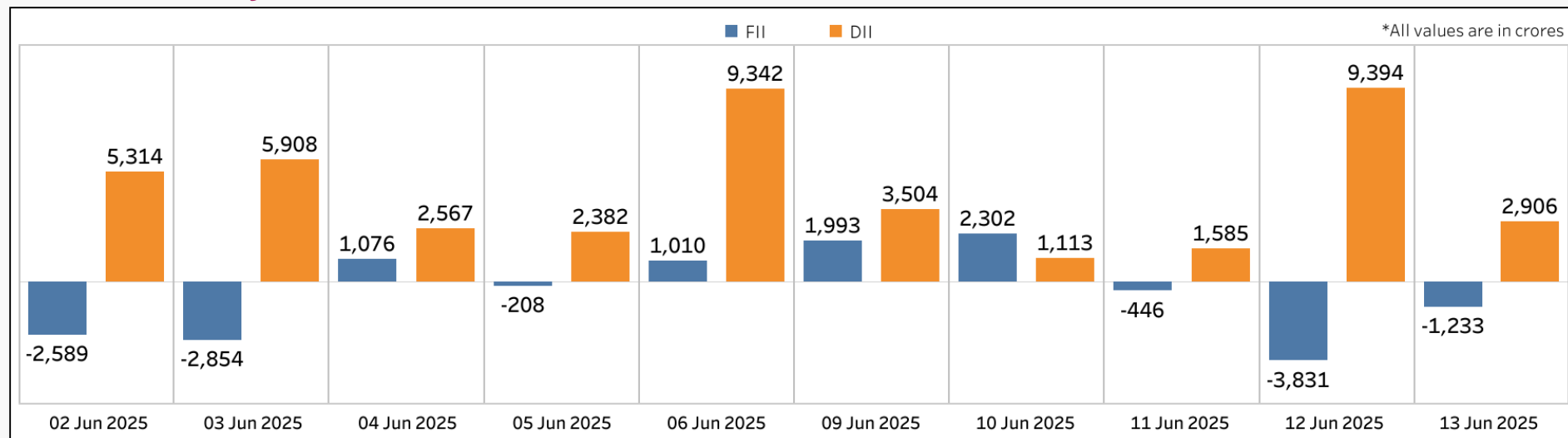
▲ and ▼ indicate positive and negative absolute changes, respectively



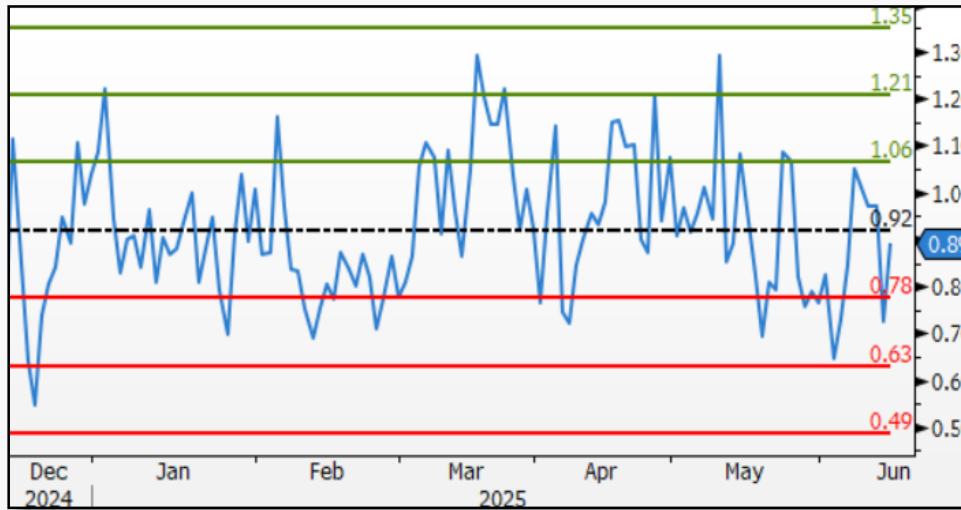
Daily Net Open Interest Change



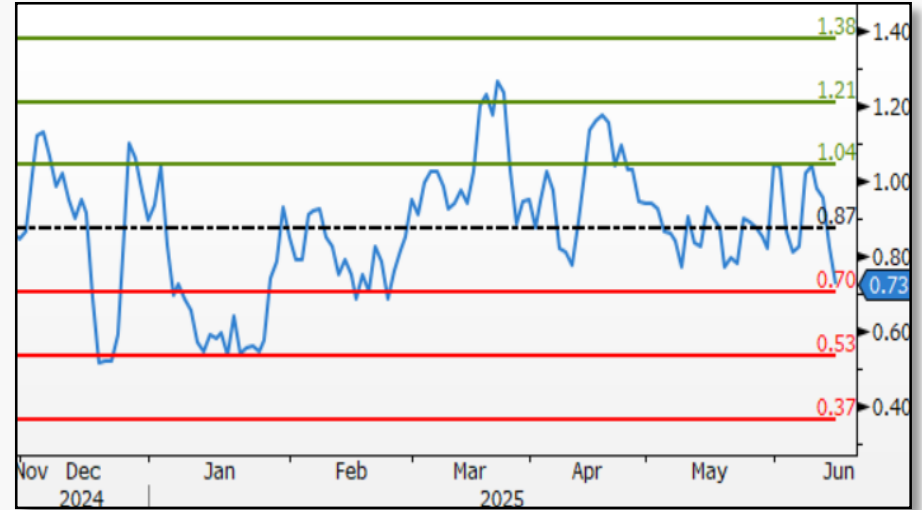
DII and FII Daily Cash Market Flows



Nifty



Bank Nifty



Fin Nifty

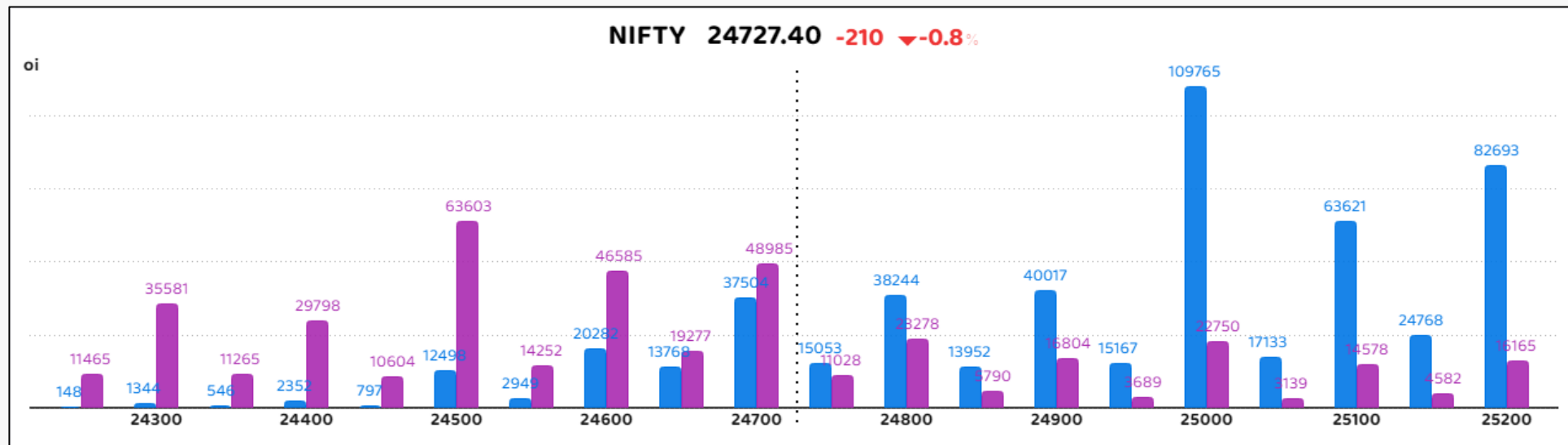


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,200 Call and the 24,500 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.

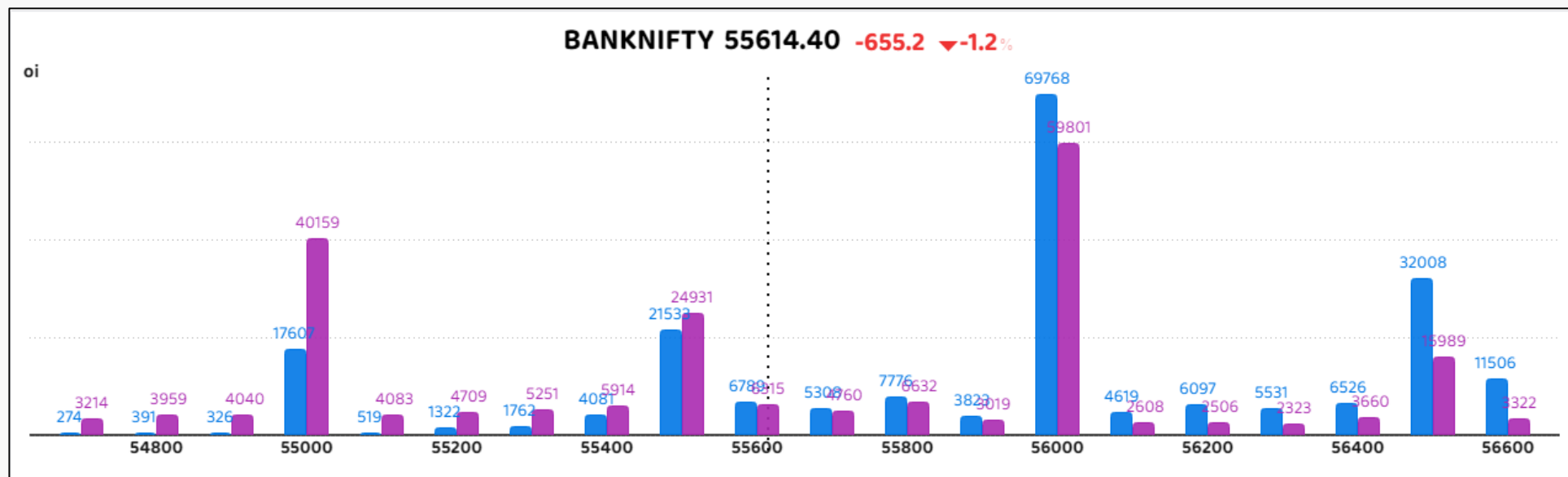
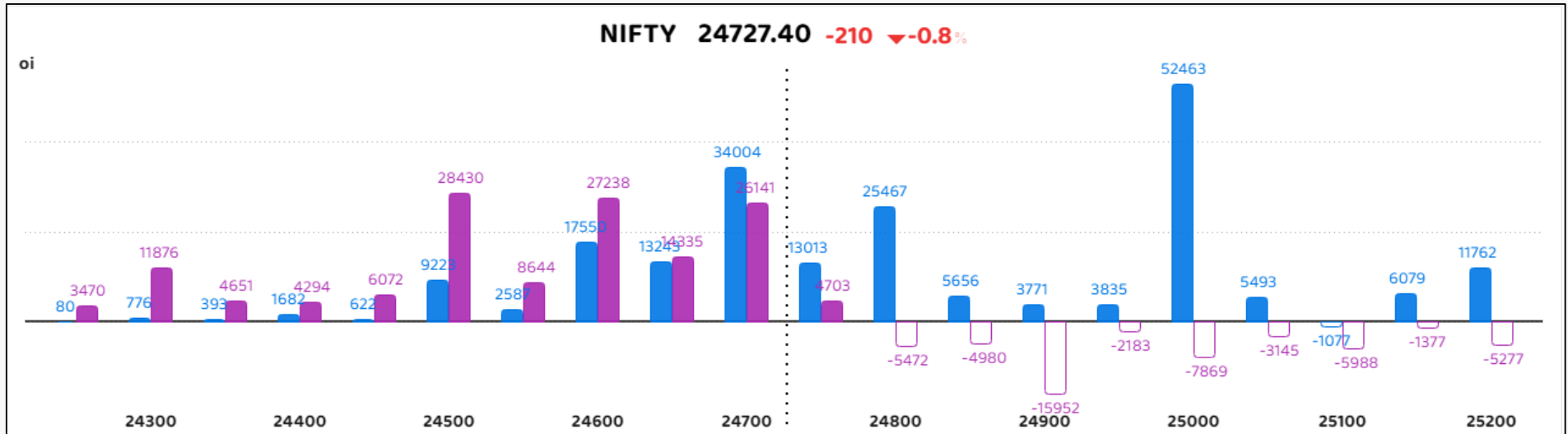


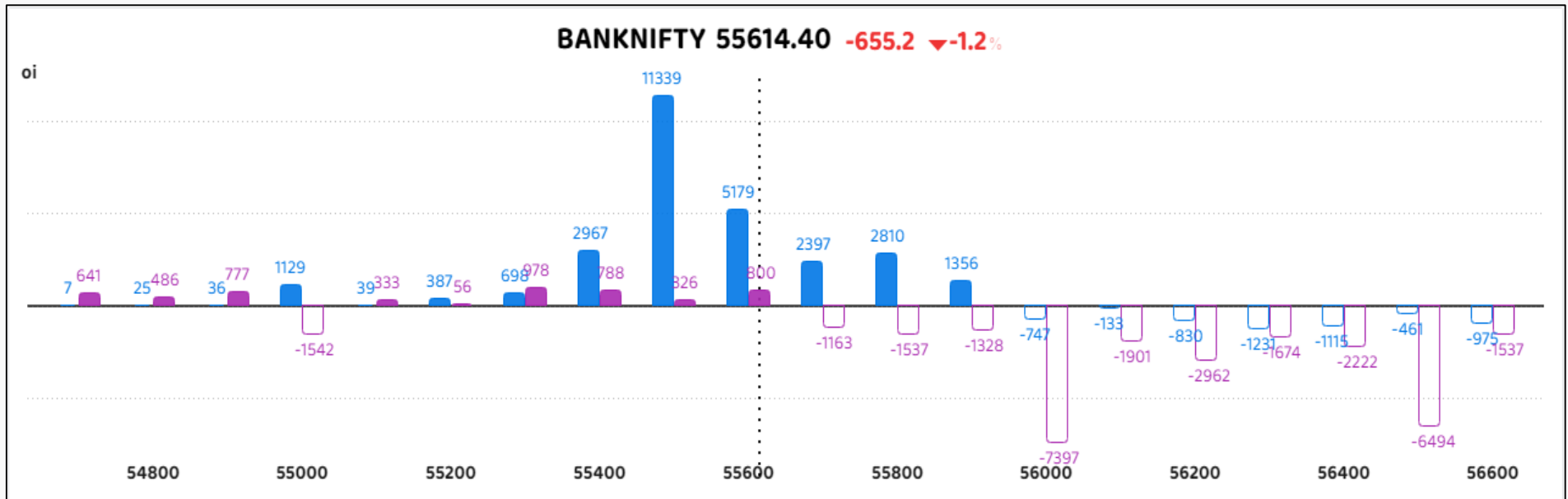
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,500 Call & the 56,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BLUE STAR LTD	1644.9	1.4	37.9	37.9	29.2	100.0
SUPREME INDS LTD	4349.8	1.6	45.0	50.8	23.2	79.0
BIRLASOFT LTD	415.7	-1.0	40.9	52.7	10.1	72.3
MARUTI SUZUKI	12408	0.1	21.3	29.9	0.4	71.0
MANKIND PHARMA	2381.3	-0.4	31.8	33.2	28.6	69.0

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
RAIL VIKAS NIGAM	407	-1.4	39.3	45.7	39.3	0.0
YES BANK LTD	20.16	-1.3	25.8	55.3	25.8	0.0
UNO MINDA LTD	1062.9	-1.0	32.3	42.4	32.3	0.0
PHOENIX MILLS	1595.9	-0.6	31.5	64.3	31.5	0.0
FORTIS HEALTHCARE	754	-0.8	24.4	36.0	24.4	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BLUE STAR LTD	1644.9	1.4	37.9	37.9	29.2	100.0
SUPREME INDS LTD	4349.8	1.6	45.0	50.8	23.2	97.1
HINDUSTAN COPPER	253.71	-0.4	51.4	72.3	14.5	88.7
JINDAL STAINLESS	712.05	-1.6	42.4	59.2	25.3	85.0
OBEROI REALTY	1903.1	0.7	38.3	50.6	23.1	84.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	407	-1.4	39.3	45.7	39.3	0.0
YES BANK LTD	20.16	-1.3	25.8	55.3	25.8	0.0
UNO MINDA LTD	1062.9	-1.0	32.3	42.4	32.3	0.0
PHOENIX MILLS	1595.9	-0.6	31.5	64.3	31.5	0.0
FORTIS HEALTHCARE	754	-0.8	24.4	36.0	24.4	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
MAX HEALTHCARE	1232.8	2.5	58350	10056	5.8
KPIT TECHNOLOGIES	1352.5	-0.6	5236	1018	5.1
TORRENT POWER LTD	1414	1.1	5338	1168	4.6
BHARAT DYNAMICS	1900	1.5	41737	9297	4.5
MAZAGON DOCK	3200.4	-0.3	38174	9116	4.2

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
NCC LTD	226.58	-2.1	6732	18644	2.8
APL APOLLO TUBES	1846	0.5	2764	4568	1.7
ADANI PORTS	1405	-2.8	55648	69582	1.3
ZYDUS LIFESCIENCES	974.95	-0.4	6709	7915	1.2
DLF LTD	851.25	0.4	36392	40693	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDUSTAN ZINC	514.25	-0.6	16338	16338	100.0
MAZAGON DOCK	3200.4	-0.3	21879	21879	100.0
MAX HEALTHCARE	1232.8	2.5	7572	7572	100.0
RAIL VIKAS NIGAM	407	-1.4	11837	11837	100.0
BHARAT DYNAMICS	1900	1.5	13280	13280	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	3200.4	-0.3	7319	7319	100.0
MUTHOOT FINANCE	2598.7	1.7	15320	15320	100.0
RAIL VIKAS NIGAM	407	-1.4	4215	4215	100.0
BHARAT DYNAMICS	1900	1.5	4590	4590	100.0
OIL INDIA LTD	477.75	2.0	5442	5442	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MAX HEALTHCARE	1232.8	2.5	58350	58350	100.0
BHARAT DYNAMICS	1900	1.5	41737	41737	100.0
MAZAGON DOCK	3200.4	-0.3	38174	38255	99.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
INTERGLOBE AVIATION	5262	-3.9	129209	129209	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
UNITED SPIRITS	1453.1	-2.2	31230	9814	3.2
OIL INDIA LTD	477.75	2.0	11623	3930	3.0
KAYNES TECHNOLOGIES	5475.5	0.0	3143	1254	2.5
HINDUSTAN ZINC	514.25	-0.6	16338	6834	2.4
SONA BLW PRECISION	501.85	-1.8	7708	3444	2.2

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
UNITED SPIRITS	1453.1	-2.2	13357	5222	2.6
OIL INDIA LTD	477.75	2.0	5442	2280	2.4
HINDUSTAN ZINC	514.25	-0.6	6661	3295	2.0
GLENMARK PHARMA	1669.9	1.8	9226	4989	1.8
RAIL VIKAS NIGAM	407	-1.4	4215	2374	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
MAX HEALTHCARE	1232.8	2.5	58350	12307	4.7
OIL & NATURAL GAS	251.51	1.5	166938	39904	4.2
KAYNES TECHNOLOGIES	5475.5	0.0	5321	1304	4.1
BHARAT DYNAMICS	1900	1.5	41737	11171	3.7
OIL INDIA LTD	477.75	2.0	46415	13164	3.5

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
INTERGLOBE AVIATION	5262	-3.9	129209	28277	4.6
INDIAN OIL CORP	140.34	-1.9	22373	5996	3.7
NCC LTD	226.58	-2.1	18644	5055	3.7
BHARAT DYNAMICS	1900	1.5	9297	2522	3.7
OIL INDIA LTD	477.75	2.0	21322	6061	3.5

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	1810200	7.7%	2508	2700	1534500	7.7%	ITC	440	12284800	6.3%	414	420	4830400	1.5%
ADANIPTS	1500	2152800	6.8%	1405	1400	1097600	-0.4%	JIOFIN	310	7441500	5.4%	294	290	4016100	-1.4%
APOLLOHOSP	7000	341000	0.1%	6995	6800	141875	-2.8%	JSWSTEEL	1020	1611225	3.3%	987	980	617625	-0.7%
ASIANPAINT	2300	1285200	3.9%	2214	2200	936000	-0.6%	KOTAKBANK	2160	1285600	2.5%	2107	2000	633200	-5.1%
AXISBANK	1250	4721250	3.7%	1206	1200	1248750	-0.5%	LT	3700	1420200	3.1%	3587	3500	487200	-2.4%
BAJAJ-AUTO	9000	592050	6.3%	8464	8500	140475	0.4%	M&M	3100	1225525	3.1%	3006	3000	657650	-0.2%
BAJAJFINSV	2100	1836500	4.4%	2011	1900	555000	-5.5%	MARUTI	13000	348250	4.8%	12408	12000	102550	-3.3%
BAJFINANCE	10000	1033375	7.2%	9331	9000	498375	-3.5%	NESTLEIND	2500	259000	5.2%	2377	2200	174000	-7.4%
BEL	400	19981350	1.5%	394	380	6680400	-3.6%	NTPC	350	8379000	5.4%	332	340	3337500	2.4%
BHARTIARTL	1880	3220025	2.2%	1840	1860	1216475	1.1%	ONGC	260	16479925	3.4%	252	250	2598750	-0.6%
CIPLA	1600	1208675	6.3%	1505	1320	561275	-12.3%	POWERGRID	300	9349200	5.1%	286	270	3236400	-5.4%
COALINDIA	400	5861100	2.2%	391	400	3520650	2.2%	RELIANCE	1500	6640500	5.0%	1428	1420	2697000	-0.6%
DRREDDY	1300	1210000	-4.6%	1363	1300	760625	-4.6%	SBILIFE	1860	1122375	6.0%	1755	1800	203625	2.6%
EICHERMOT	6000	316050	12.8%	5319	5000	127400	-6.0%	SBIN	820	12549750	3.5%	792	820	5649750	3.5%
ETERNAL	270	9822000	8.4%	249	240	9240000	-3.6%	SHRIRAMFIN	700	1968750	4.9%	667	660	671250	-1.1%
GRASIM	2800	338000	5.1%	2664	2600	264000	-2.4%	SUNPHARMA	1700	1812300	0.7%	1688	1680	726250	-0.5%
HCLTECH	1720	969150	1.5%	1695	1640	602000	-3.3%	TATACONSUM	1200	1053360	11.3%	1078	1000	236664	-7.3%
HDFCBANK	2000	7286400	4.3%	1918	1940	2655950	1.2%	TATAMOTORS	800	7520150	12.4%	712	700	3808200	-1.7%
HDFCLIFE	800	3822500	6.3%	753	730	594000	-3.0%	TATASTEEL	161.4	20245500	6.1%	152	146.4	7546000	-3.8%
HEROMOTOCO	4500	749400	3.8%	4334	4200	202050	-3.1%	TCS	3500	1224825	1.6%	3446	3400	980350	-1.3%
HINDALCO	700	4736200	9.1%	642	600	1127000	-6.5%	TECHM	1660	768600	0.1%	1659	1600	692400	-3.6%
HINDUNILVR	2400	3288900	3.5%	2319	2300	870900	-0.8%	TITAN	3600	567175	5.2%	3422	3500	202125	2.3%
ICICIBANK	1450	5189800	2.4%	1416	1450	2207100	2.4%	TRENT	6000	558600	7.3%	5590	5500	408500	-1.6%
INDUSINDBK	820	4447000	0.4%	817	800	1626000	-2.1%	ULTRACEMCO	12000	235650	6.9%	11224	9800	117750	-12.7%
INFY	1600	2238800	-0.1%	1602	1600	1336800	-0.1%	WIPRO	270	7515000	3.8%	260	250	4293000	-3.9%

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), 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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