



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,643	0.1%▲
Open Interest (OI)	1,63,69,875	1.3%▲
Change in OI (abs)	1,61,69,875	2,06,700▲
Premium / Discount (Abs)	102	4▲
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	57,690	0.2%▲
Open interest (OI)	25,61,510	2.4%▲
Change in OI (abs)	25,61,510	60,620▲
Premium / Discount (Abs)	230	11▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.53	0.26▼
Nifty ATM IV (%)	11.71	0.2▼
Bank Nifty ATM IV (%)	12.82	0.1▲
PCR (Nifty)	0.88	0.07▲
PCR (Bank Nifty)	1.15	0.07▲

The FII Long Ratio in Index Futures **jump** to 36.6%, **up** from 36.4% in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
AMBER	1,96,600	24.5%	7122	4.5%
CGPOWER	1,50,01,650	21.5%	687.3	0.2%
BLUESTARCO	12,28,500	15.4%	1705.8	4.1%
BDL	28,71,050	7.5%	1992.8	1.9%
BIOCON	3,98,02,500	7.2%	364.25	1.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	9,01,000	65.5%	1182.5	-1.6%
PGEL	25,57,100	46.9%	727.8	-4.2%
KFINTECH	5,57,550	22.7%	1342	-1.1%
MANKIND	10,09,575	12.7%	2301.6	-1.4%
NMDC	26,86,90,500	8.7%	68.37	-2.7%

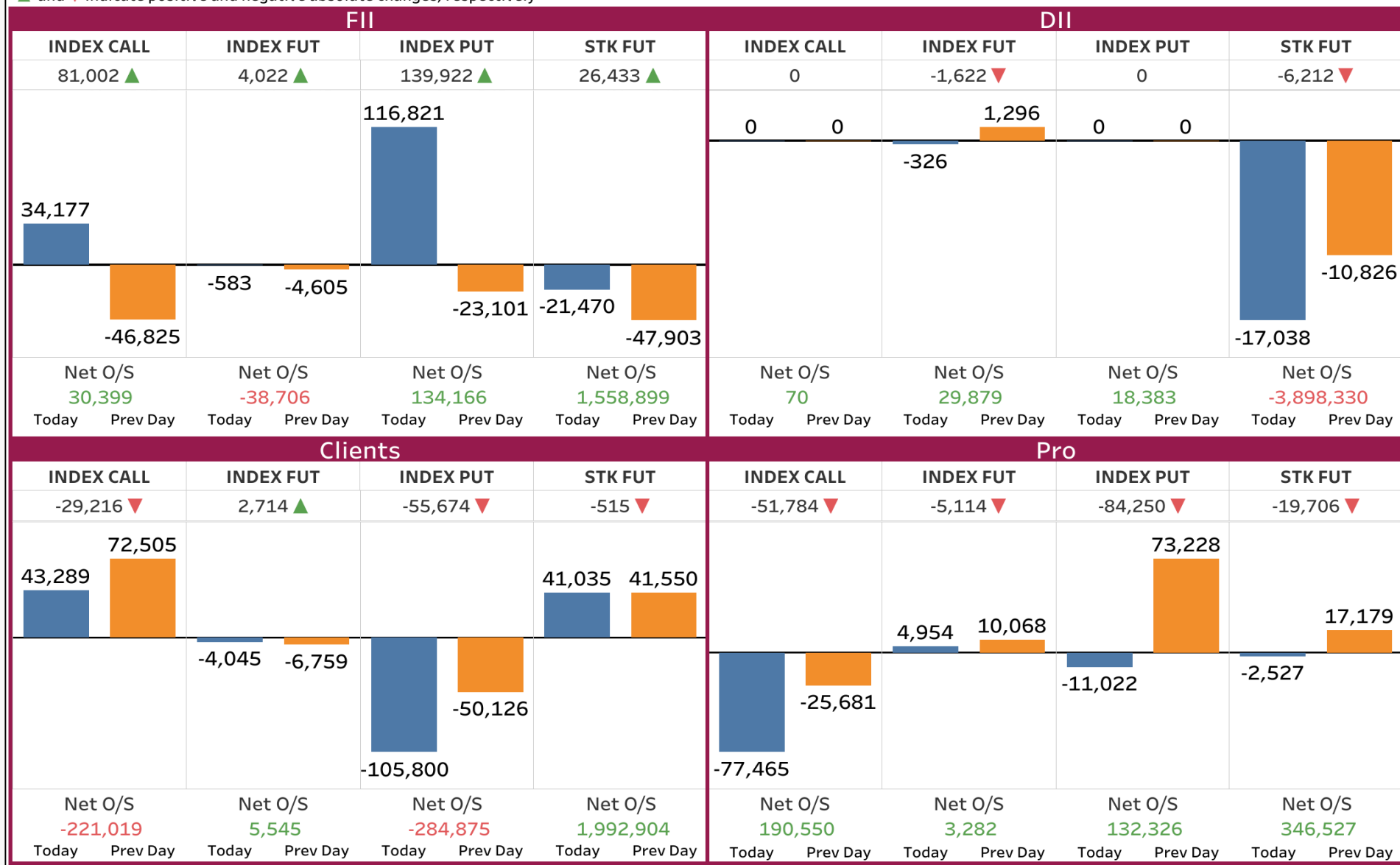
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RBLBANK	8,94,55,625	-7.6%	260.76	4.5%
APOLLOHOSP	26,61,500	-3.5%	7522.5	3.2%
KAYNES	6,29,000	-3.4%	6162	0.8%
BSOFT	1,11,35,800	-2.4%	437	1.1%
CYIENT	30,03,050	-2.4%	1284.9	0.2%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ATGL	46,32,250	-2.3%	669	-1.4%
BANKBARODA	9,29,94,525	-1.9%	248.39	-0.7%
IGL	1,59,08,750	-1.8%	216.97	-0.6%
ADANI PORTS	2,34,99,675	-1.7%	1452.3	-0.2%
CROMPTON	3,62,30,400	-1.5%	349.3	-1.4%

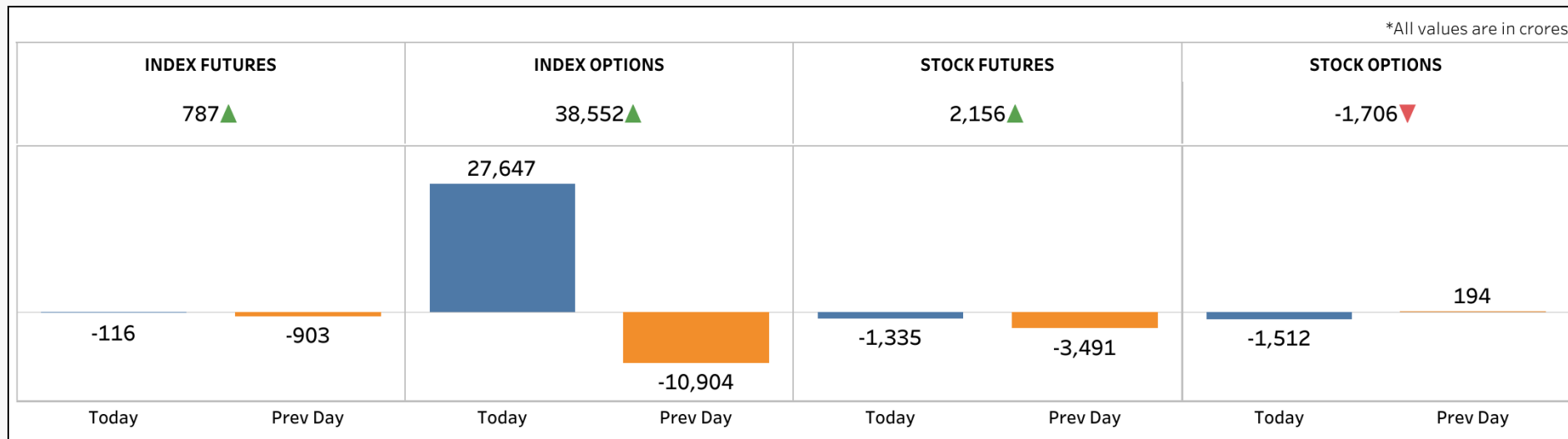
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

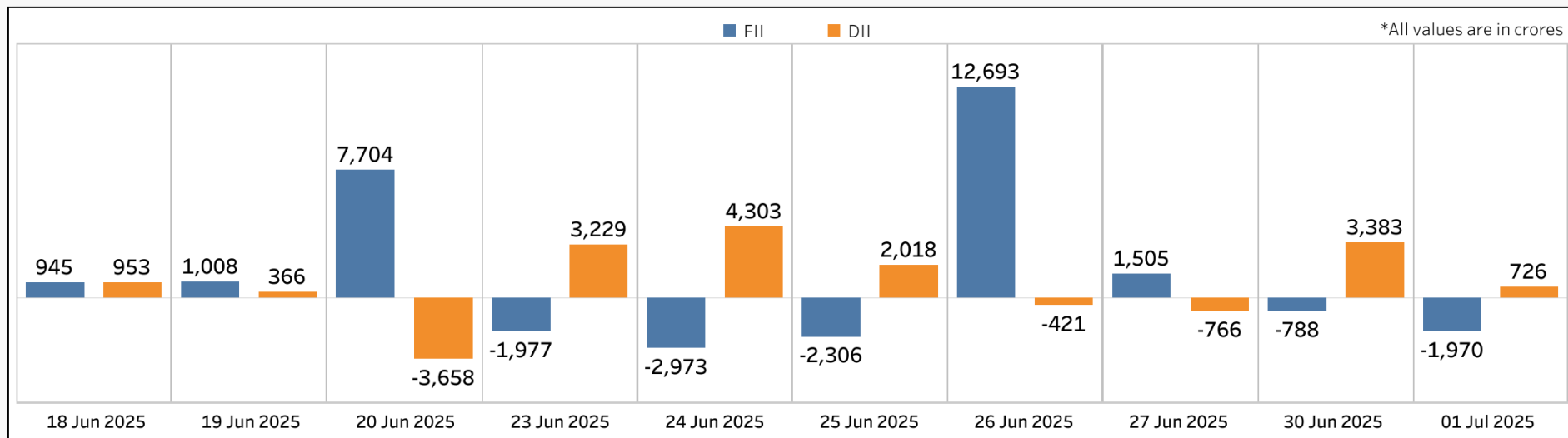
▲ and ▼ indicate positive and negative absolute changes, respectively



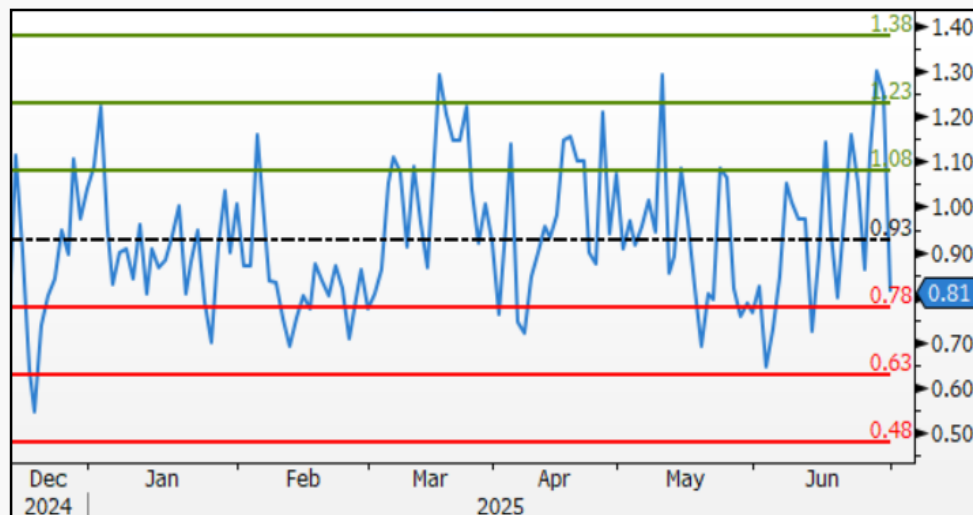
Daily Net Open Interest Change



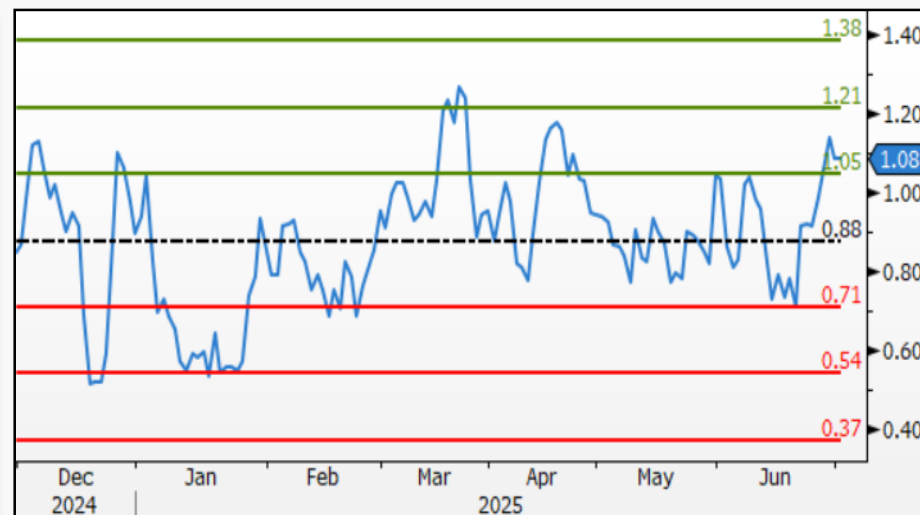
DII and FII Daily Cash Market Flows



Nifty



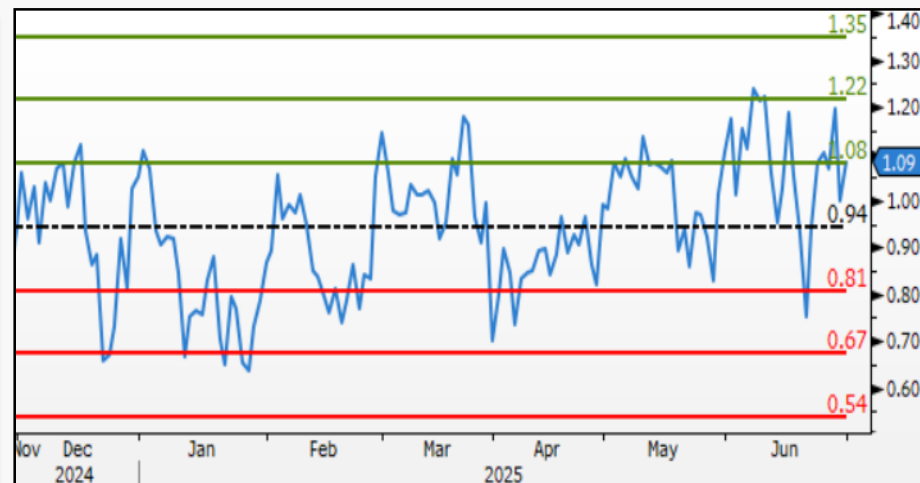
Bank Nifty



Fin Nifty

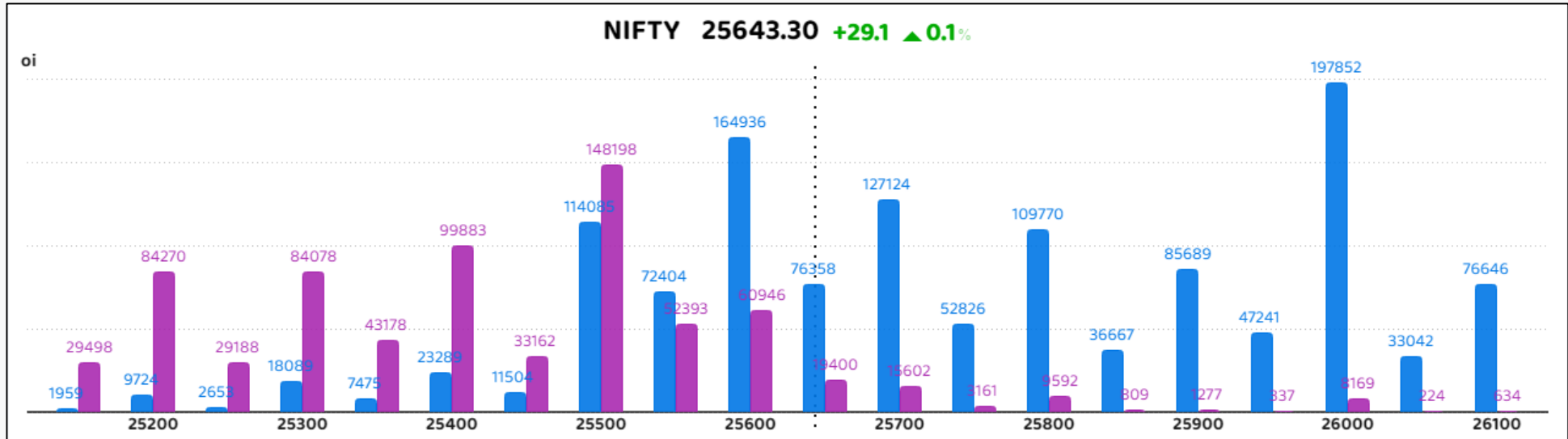


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,000 Call and the 57,000 Put saw the most amount of open interest.

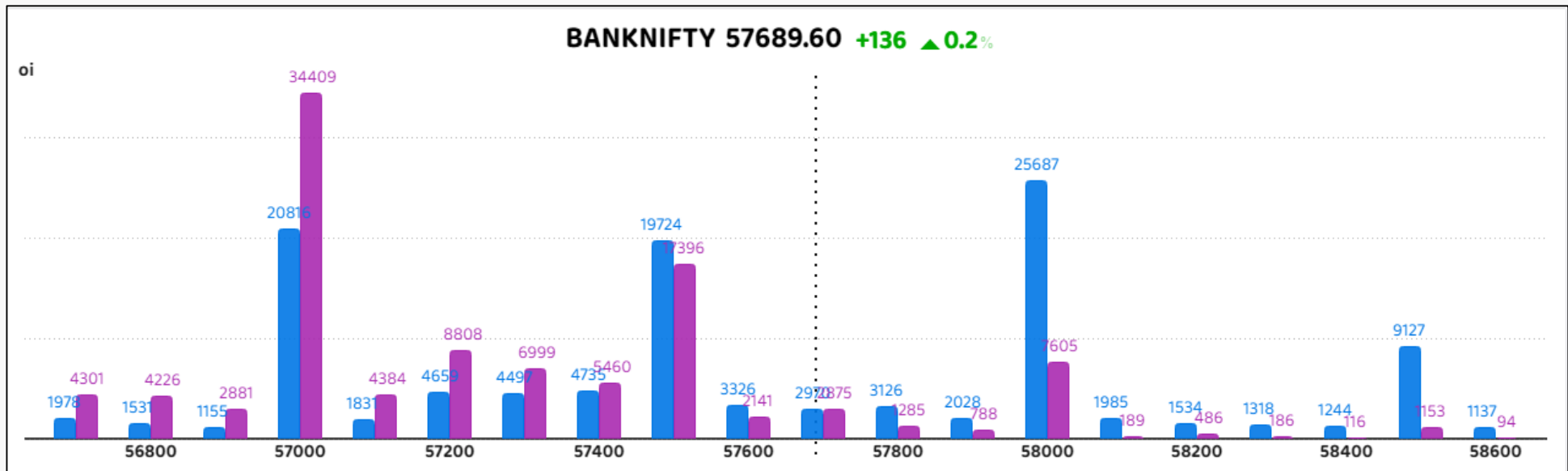
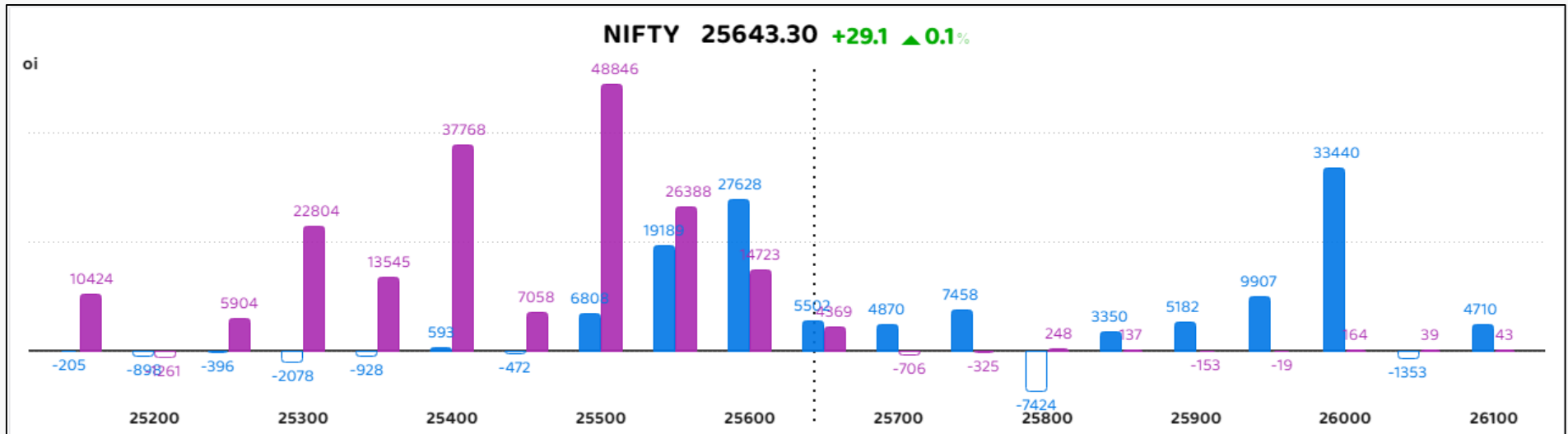


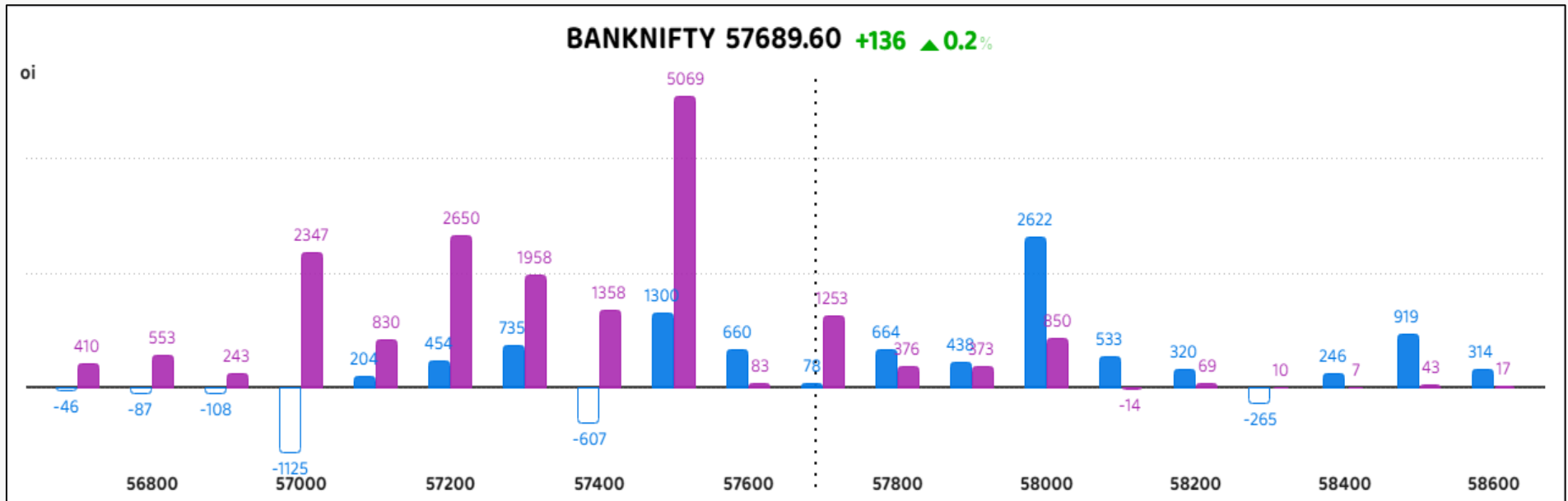
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,000 Call & the 57,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SBI CARDS & PAYMENTS	931.8	-2.2	27.2	36.9	4.6	70.0
MARUTI SUZUKI	12442	0.3	20.2	29.9	0.4	67.1
DIXON TECHNOLOGIES	14716	-1.8	36.0	53.0	1.8	66.8
ASTRAL LTD	1494.4	-0.8	25.5	38.4	2.9	63.7
POWER GRID CORP	297.55	-0.8	22.3	34.5	1.2	63.4

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADANI PORTS	1447	-0.2	23.1	99.7	23.1	0.0
HDFC LIFE	809.9	-0.5	19.5	80.6	19.5	0.0
GMR AIRPORTS LTD	86.01	1.0	24.1	51.9	24.1	0.0
TATA TECHNOLOGIES	710.45	-0.1	26.2	54.4	26.2	0.0
IRB INFRASTRUCTURE	49.67	0.1	27.9	59.6	27.9	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SBI CARDS & PAYMENTS	931.8	-2.2	27.2	36.9	4.6	79.2
UNO MINDA LTD	1079.3	-2.3	37.6	42.4	32.3	78.8
KAYNES TECHNOLOGY	6140.5	0.7	37.3	49.4	32.2	73.2
BPCL	332.05	0.0	32.9	69.0	8.7	72.8
LTIMINDTREE LTD	5304	-0.2	31.4	43.3	20.0	71.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI PORTS	1447	-0.2	23.1	99.7	23.1	0.0
HDFC LIFE	809.9	-0.5	19.5	80.6	19.5	0.0
GMR AIRPORTS LTD	86.01	1.0	24.1	51.9	24.1	0.0
TATA TECHNOLOGIES	710.45	-0.1	26.2	54.4	26.2	0.0
IRB INFRASTRUCTURE	49.67	0.1	27.9	59.6	27.9	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
TITAGARH RAIL	963.75	2.2	10968	1815	6.0
KAYNES TECHNOLOGY	6140.5	0.7	7334	1250	5.9
TATA COMMUNICATIONS	1725.8	2.1	8918	1540	5.8
PIDILITE INDS	3045.8	-0.3	6119	1153	5.3
BLUE STAR LTD	1704.9	4.2	7994	1573	5.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SJVN LTD	100.45	-0.1	1022	1697	1.7
TATA POWER CO	406.55	0.3	8435	9839	1.2
NESTLE INDIA LTD	2410.1	-2.2	7333	5867	0.8
MARICO LTD	717.3	-0.7	5660	4355	0.8
DABUR INDIA LTD	482.4	-0.6	4766	3537	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
UNO MINDA LTD	1079.3	-2.3	2219	2219	100.0
KAYNES TECHNOLOGY	6140.5	0.7	3910	4010	97.5

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MANKIND PHARMA	2287	-1.4	1312	1450	90.5

Call Volume Relative to Record High

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

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
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
UNO MINDA LTD	1079.3	-2.3	2219	1400	1.6
TORRENT PHARMA	3416.7	0.2	3944	2572	1.5
KPIT TECHNOLOGIES	1247.3	-0.9	8451	5722	1.5
KAYNES TECHNOLOGY	6140.5	0.7	3910	2743	1.4
SBI CARDS & PAYMENTS	931.8	-2.2	8965	6698	1.3

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
KPIT TECHNOLOGIES	1247.3	-0.9	4841	2830	1.7
SHREE CEMENT	31185	0.5	2107	1250	1.7
LAURUS LABS LTD	746.05	2.9	4944	3099	1.6
TORRENT PHARMA	3416.7	0.2	1798	1173	1.5
UPL LTD	671.05	1.5	5429	4080	1.3

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
APOLLO HOSPITALS	7496	3.5	115648	25001	4.6
UPL LTD	671.05	1.5	31832	11337	2.8
IDFC FIRST BANK	77.24	6.0	41585	18952	2.2
TORRENT PHARMA	3416.7	0.2	16706	7836	2.1
TATA COMMUNICATIONS	1725.8	2.1	8918	4360	2.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
APOLLO HOSPITALS	7496.0	3.5	46933	9469	5.0
TORRENT PHARMA	3416.7	0.2	9396	2730	3.4
SHREE CEMENT	31185.0	0.5	5378	1978	2.7
MANKIND PHARMA	2287.0	-1.4	2928	1087	2.7
MARICO LTD	717.3	-0.7	4355	2058	2.1

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	1597800	3.0%	2622	2700	1770600	3.0%	ITC	420	8912000	1.2%	415	420	5243200	1.2%
ADANIPTS	1500	1352325	3.7%	1447	1400	1377025	-3.2%	JIOFIN	330	6208700	0.1%	330	300	5280450	-9.0%
APOLLOHOSP	8000	245375	6.7%	7496	7000	192750	-6.6%	JSWSTEEL	1020	894375	-0.9%	1030	890	589950	-13.6%
ASIANPAINT	2400	622500	1.3%	2370	2300	370750	-2.9%	KOTAKBANK	2200	848000	0.8%	2184	2100	633600	-3.8%
AXISBANK	1200	2415000	2.3%	1173	1200	1771250	2.3%	LT	3800	816025	3.6%	3667	3500	385700	-4.5%
BAJAJ-AUTO	9000	137775	7.2%	8399	8000	93450	-4.8%	M&M	3200	984400	0.8%	3176	3200	393600	0.8%
BAJAJFINSV	2100	834000	2.2%	2054	1980	361000	-3.6%	MARUTI	12800	226400	2.9%	12442	12500	80850	0.5%
BAJFINANCE	950	2775750	1.4%	937	900	2094750	-3.9%	NESTLEIND	2500	422000	3.7%	2410	2300	156000	-4.6%
BEL	440	7290300	1.8%	432	400	5811150	-7.5%	NTPC	345	9312000	3.7%	333	330	2551500	-0.8%
BHARTIARTL	2040	2461925	1.0%	2019	1900	982775	-5.9%	ONGC	250	10444500	2.7%	243	245	2560500	0.7%
CIPLA	1680	686250	10.8%	1516	1500	329250	-1.0%	POWERGRID	300	4081200	0.8%	298	290	2314200	-2.5%
COALINDIA	400	5892750	2.6%	390	400	3532950	2.6%	RELIANCE	1600	3920000	4.7%	1528	1500	2936000	-1.9%
DRREDDY	1400	922500	9.6%	1277	1100	418125	-13.8%	SBILIFE	1900	880125	2.0%	1863	1800	170625	-3.4%
EICHERMOT	5800	237825	1.5%	5716	5800	115150	1.5%	SBIN	820	7181250	0.0%	820	800	5526750	-2.5%
ETERNAL	290	5085225	11.1%	261	250	3947900	-4.2%	SHRIRAMFIN	700	1689600	0.5%	696	700	628650	0.5%
GRASIM	3000	229250	5.3%	2848	2740	110000	-3.8%	SUNPHARMA	1700	1517950	2.0%	1667	1500	492450	-10.0%
HCLTECH	1960	649600	14.1%	1718	1700	315700	-1.1%	TATACONSUM	1100	353100	0.4%	1096	990	278300	-9.6%
HDFCBANK	2100	2830850	4.4%	2012	2000	2109250	-0.6%	TATAMOTORS	700	6039200	2.4%	684	680	3479200	-0.6%
HDFCLIFE	820	2266000	1.2%	810	740	957000	-8.6%	TATASTEEL	170	10807500	6.2%	160	160	7194000	0.0%
HEROMOTOCO	4400	522600	4.1%	4226	4300	216000	1.8%	TCS	3500	1360800	2.0%	3430	3400	745150	-0.9%
HINDALCO	700	2654400	0.8%	694	670	897400	-3.5%	TECHM	1700	1008600	1.7%	1671	1700	362400	1.7%
HINDUNILVR	2400	1405800	4.6%	2296	2300	1073100	0.2%	TITAN	3880	575050	4.9%	3701	3600	296100	-2.7%
ICICIBANK	1500	2346400	4.7%	1432	1400	1492400	-2.2%	TRENT	6200	328900	0.9%	6144	6000	245300	-2.3%
INDUSINDBK	900	2348500	2.4%	879	800	1141700	-9.0%	ULTRACEMCO	13600	69150	11.4%	12210	11000	39400	-9.9%
INFY	1700	1986000	5.8%	1607	1600	1396800	-0.4%	WIPRO	300	4821000	13.4%	265	240	2136000	-9.3%

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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