



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,752	0.1%▲
Open Interest (OI)	1,89,38,985	1.8%▼
Change in OI (abs)	1,89,38,985	3,43,525▼
Premium / Discount (Abs)	57	4▲
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	60,194	0.7%▲
Open interest (OI)	14,70,390	3.7%▲
Change in OI (abs)	14,70,390	52,890▲
Premium / Discount (Abs)	99	101▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	11.37	0.05▲
Nifty ATM IV (%)	9.52	0.52▼
Bank Nifty ATM IV (%)	10.96	0.48▼
PCR (Nifty)	0.76	0.05▼
PCR (Bank Nifty)	1.11	0.15▲

The FII Long Ratio in Index Futures **jump** to 9.3 %, **up** from 7.6 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	33,22,000	24.4%	1200.9	4.0%
ICICIPRULI	1,72,21,650	15.4%	680.1	1.4%
AUBANK	2,43,47,000	15.2%	1029.4	4.9%
AMBER	11,70,600	10.9%	6171	0.6%
NUVAMA	23,92,500	8.3%	1480.7	2.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POWERINDIA	4,35,200	16.6%	16287	-4.2%
NHPC	7,91,36,000	9.5%	80.48	-0.9%
DIXON	35,08,750	8.5%	10760	-3.3%
IEX	8,50,87,500	8.1%	139.68	0.0%
SWIGGY	2,87,95,000	7.6%	340.45	-2.2%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDUSINDBK	3,77,32,800	-6.3%	950.45	0.7%
VEDL	8,30,93,250	-5.2%	682.05	0.9%
TATAELXSI	14,94,300	-5.1%	5615	1.9%
TCS	1,89,93,275	-4.1%	3215.3	2.3%
HCLTECH	1,66,70,150	-3.7%	1698.4	2.4%

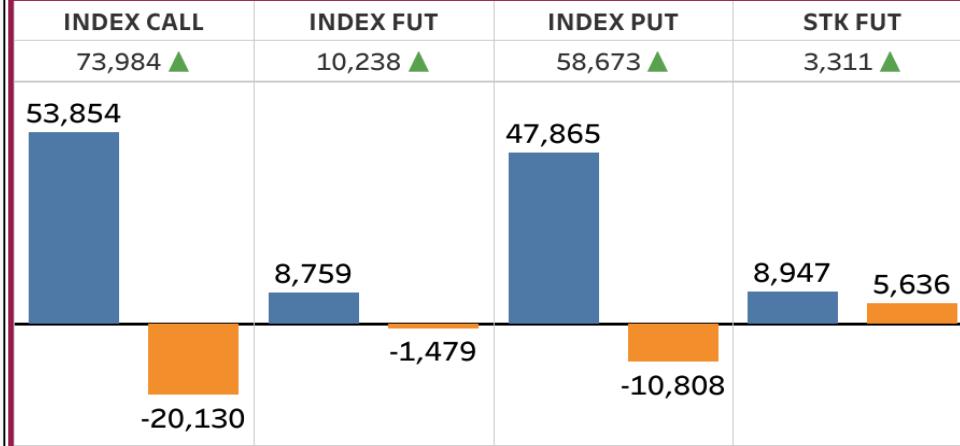
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KALYANKJIL	3,60,98,350	-3.9%	467.2	-2.8%
TATASTEEL	26,02,32,500	-2.0%	188.25	-0.8%
POLICYBZR	71,46,300	-2.0%	1622.8	-1.7%
FORTIS	1,10,22,825	-1.8%	899.6	-1.4%
HEROMOTOCO	54,59,250	-1.4%	5651	-0.5%

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

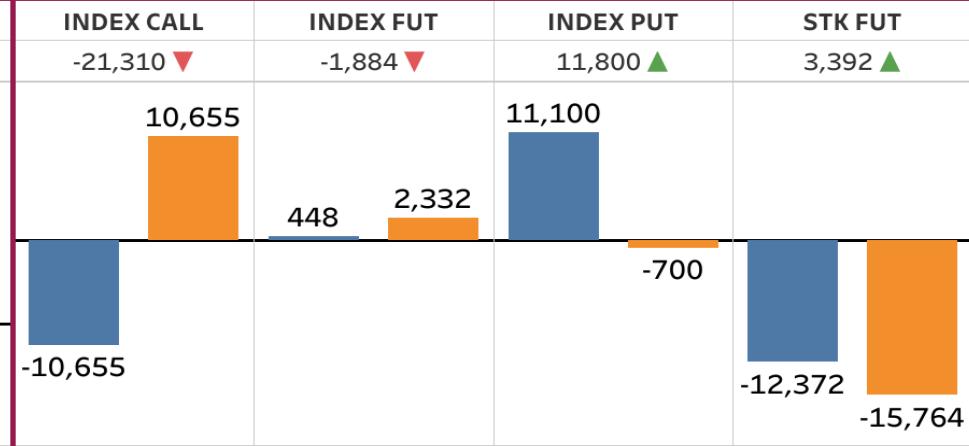
Open Interest Trends by Participant

▲ and ▼ indicate positive and negative absolute changes, respectively

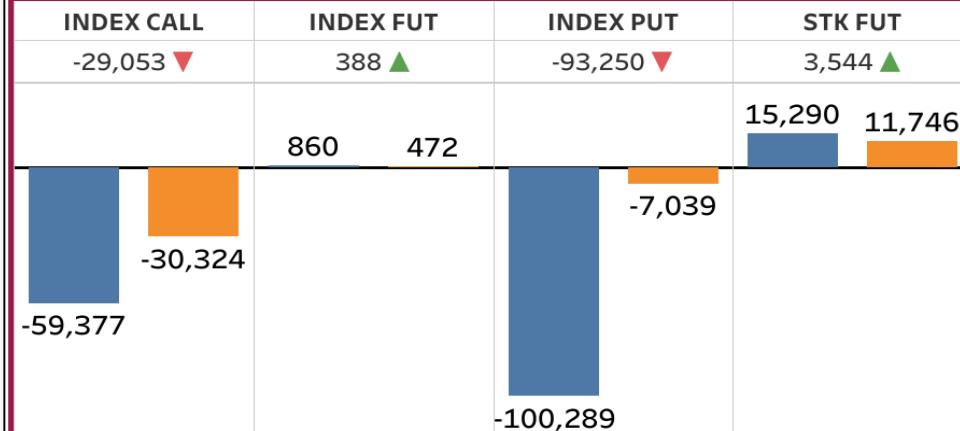
FII



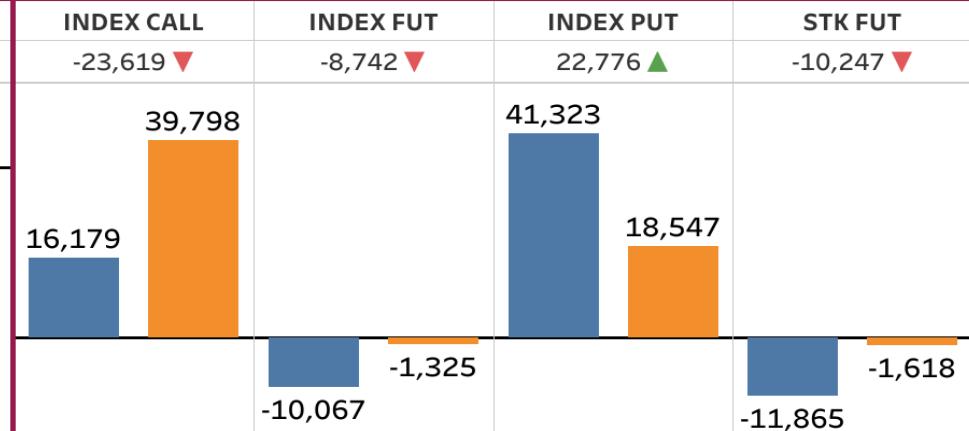
DII



Clients



Pro

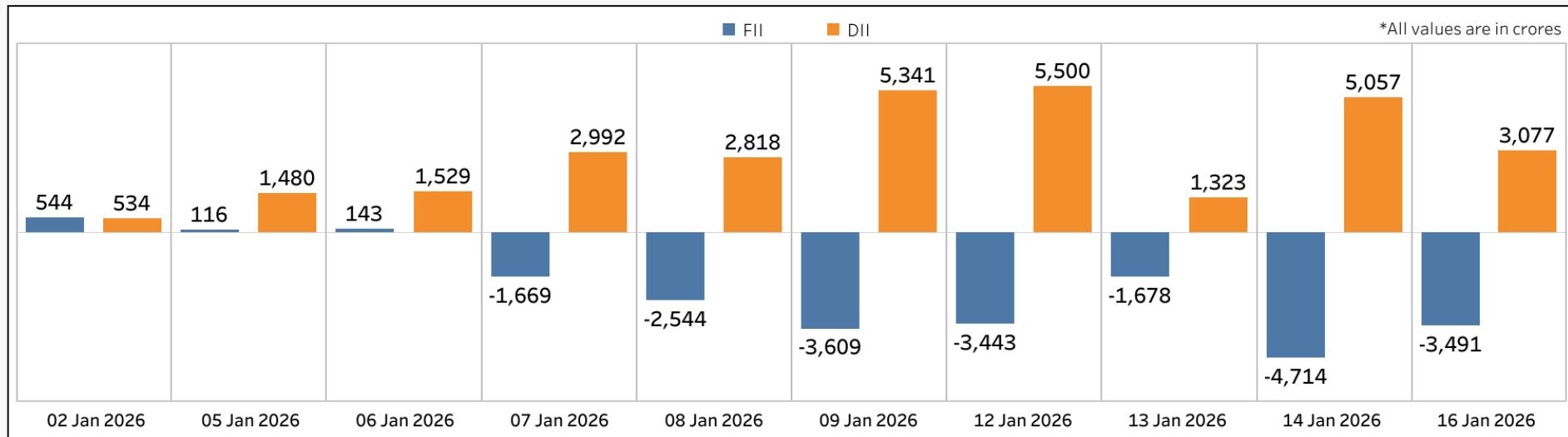


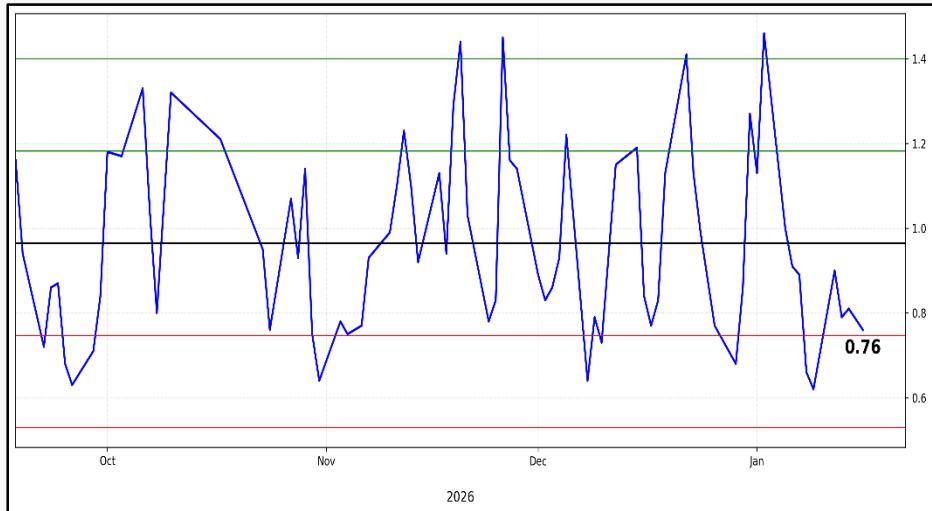
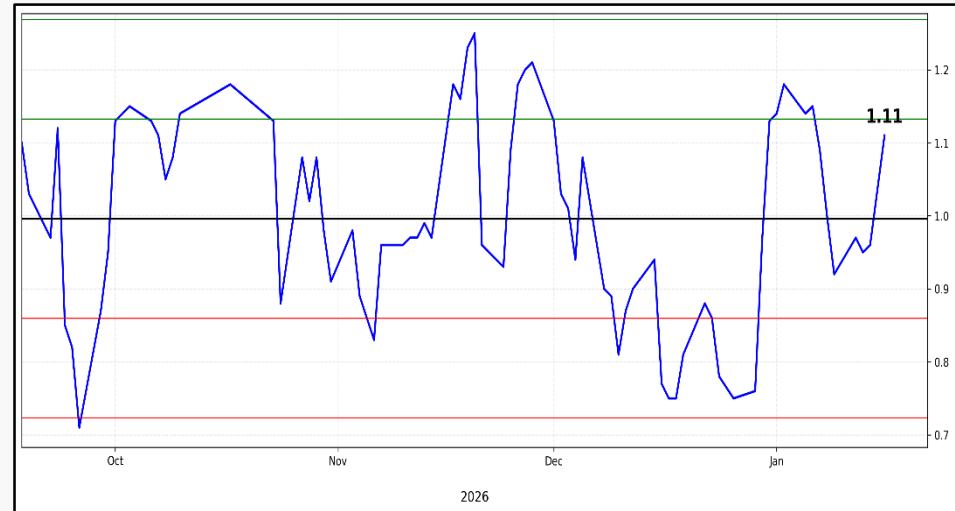
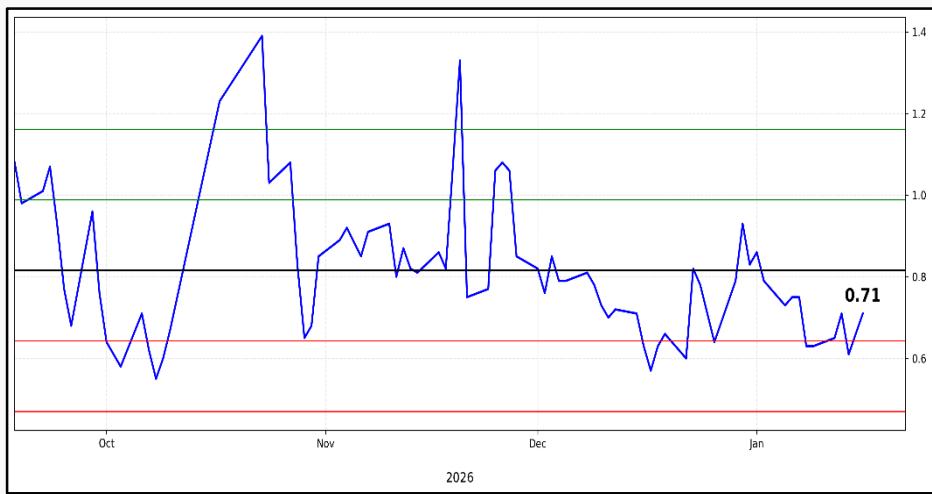
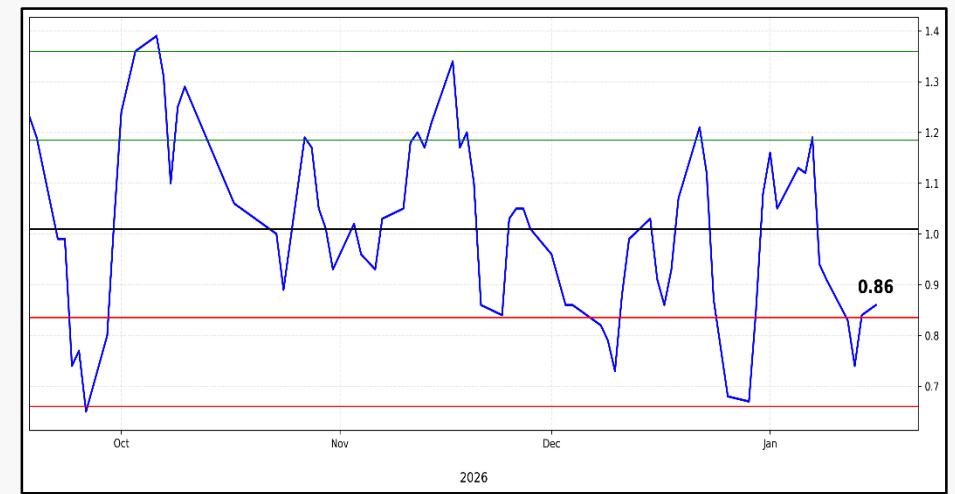
Daily Net Open Interest Change

INDEX FUTURES		INDEX OPTIONS		STOCK FUTURES		STOCK OPTIONS	
1,757▲		22,184▲		-107▼		-841▼	
1,525		17,173		285		18	
	-232				392		858
Today	Prev Day						

*All values are in crores

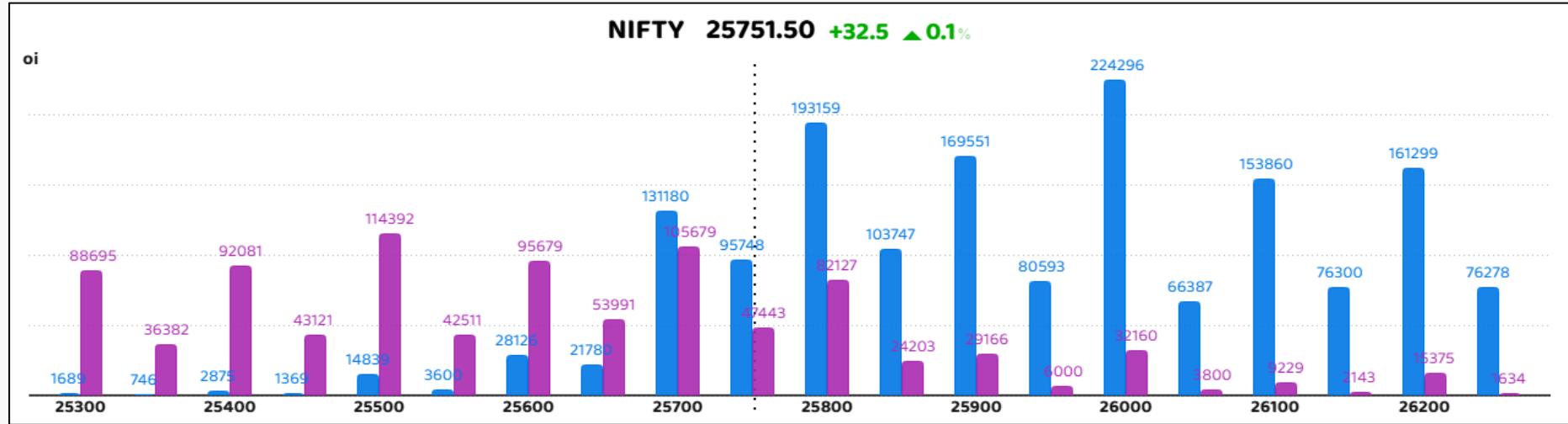
DII and FII Daily Cash Market Flows



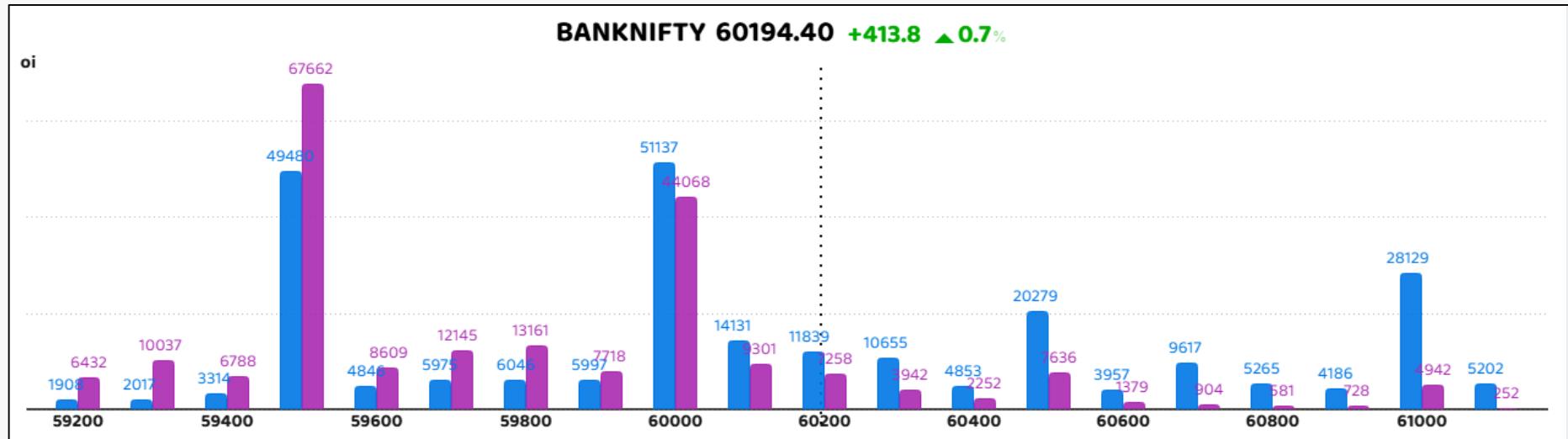
Nifty

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

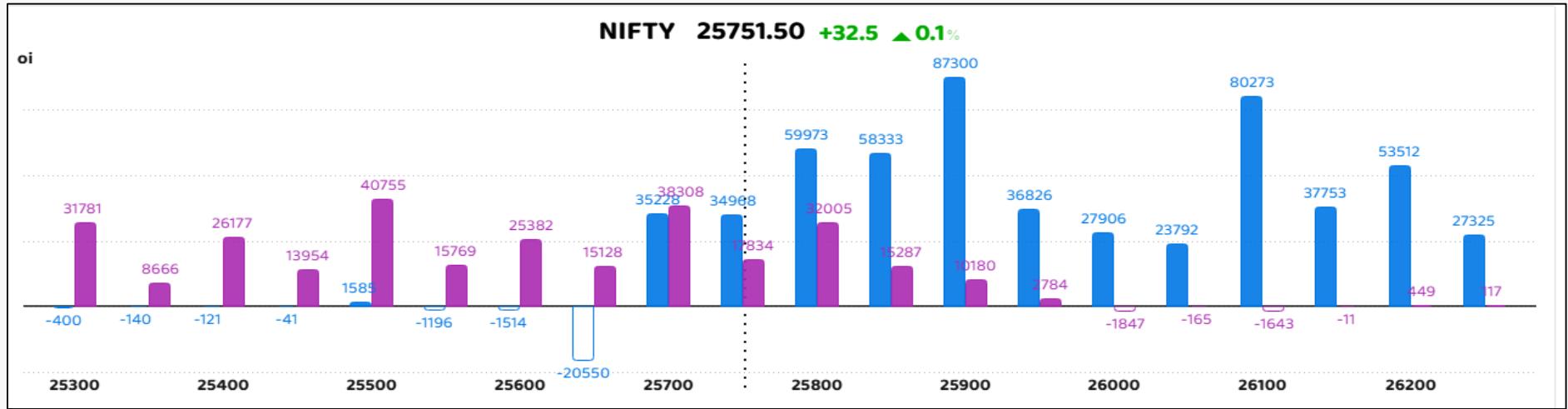
Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

 Call  Put 


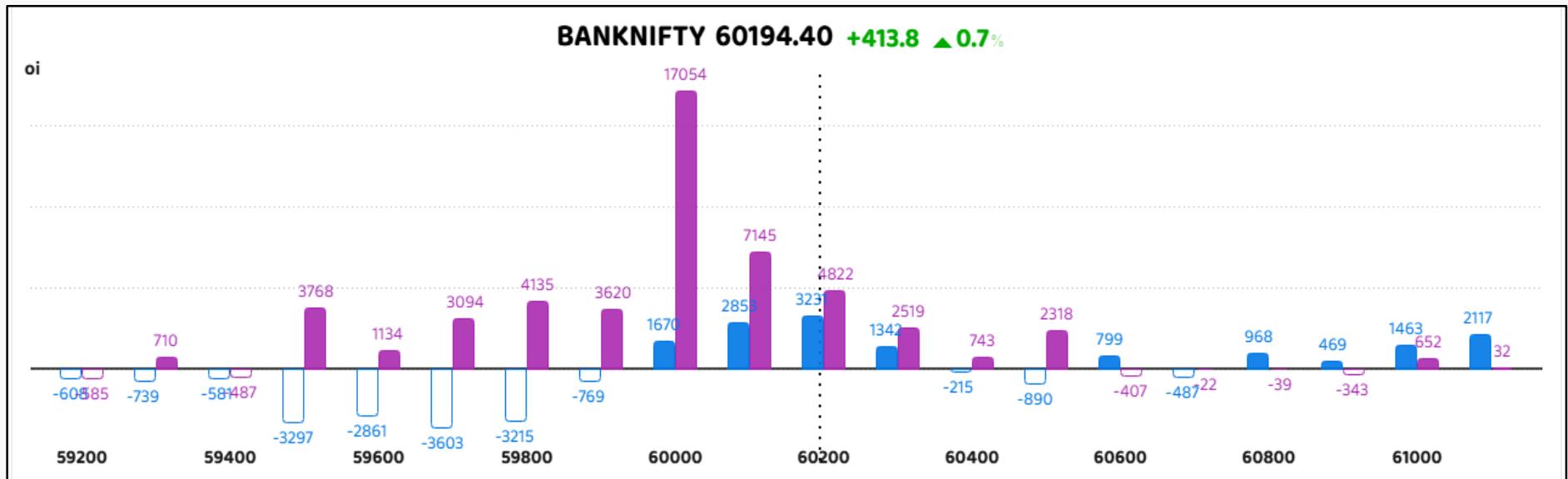
For Nifty, the 26,000 Call and 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.



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

 Call  Put 


The largest open interest changes (contracts) were seen at the 25,900 Call and the 25,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,700 Call & the 60,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	10,732.0	-3.3	45.8	53.1	9.2	83.4
HDFC BANK LTD	931.1	0.6	22.4	28.0	1.5	79.1
RELIANCE INDUSTR	1,457.9	-0.1	25.9	34.1	1.4	75.0
BHARAT HEAVY ELE	265.4	-0.8	42.2	54.7	5.2	74.7
MARUTI SUZUKI IN	15,859.0	-1.8	24.3	29.0	11.3	73.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NTPC LTD	346.4	-0.8	20.0	116.6	14.9	5.0
HDFC LIFE INSURA	732.6	-1.4	20.5	68.4	16.6	7.4
ADANI PORTS AND	1,421.9	-0.6	26.4	99.7	19.0	9.1
GAIL INDIA LTD	164.2	-0.6	27.2	91.4	19.4	10.9
JSW STEEL LTD	1,187.3	0.5	25.1	55.5	20.1	14.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	335.2	-0.9	63.1	63.1	21.0	100.0
FSN E-COMMERCE V	252.9	-0.8	50.7	51.1	22.8	99.9
HINDUSTAN ZINC	637.8	-2.5	48.9	54.2	21.8	98.1
RELIANCE INDUSTR	1,457.9	-0.1	25.9	34.1	1.4	97.6
INDIAN ENERGY EX	139.3	-0.1	49.0	76.3	8.0	97.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA CONSULTANCY	3,206.7	0.4	16.6	36.2	1.6	3.6
IIFL FINANCE LTD	633.7	-0.3	30.5	73.1	6.4	6.9
INFOSYS LTD	1,689.8	5.6	19.9	60.8	2.3	9.3
PHOENIX MILLS	1,859.0	-0.5	25.6	64.3	15.0	12.5
ANGEL ONE LTD	2,752.2	9.0	35.6	72.7	22.1	14.4

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SUZLON	48.4	-1.1	14,352	2,321	6.2
KPITTECH	1,187.2	0.7	13,579	3,006	4.5
NBCC	103.7	-1.4	10,307	2,354	4.4
APLAPOLLO	1,940.7	0.3	7,309	1,692	4.3
MAZDOCK	2,447.0	-1.0	27,041	6,281	4.3

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
CIPLA	1,397.5	-2.6	37,142	43,637	1.2
MANKIND	2,175.4	-3.1	5,760	6,303	1.1
APOLLOHOSP	7,235.5	-0.5	20,185	20,511	1.0
PHOENIXLTD	1,859.0	-0.5	2,468	2,226	0.9
OIL	448.6	-2.0	13,137	11,222	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
3600ONE	1,197.7	4.2	6,998	6,998	100.0
BHEL	265.4	-0.8	32,495	32,495	100.0
ICICIBANK	1,410.8	-0.5	85,412	85,412	100.0
IRCTC	627.6	0.0	36,360	36,360	100.0
LTF	296.4	0.2	19,777	19,777	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
3600ONE	1,197.7	4.2	3,631	3,631	100.0
ANGELONE	2,752.2	9.0	16,251	16,251	100.0
INOXWIND	113.6	-0.8	8,420	8,420	100.0
MANKIND	2,175.4	-3.1	3,730	3,730	100.0
GODREJPROP	1,889.0	0.9	11,802	11,875	99.4

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
360ONE	1,197.7	4.2	54,240	54,240	100.0
ANGELONE	2,752.2	9.0	2,07,761	2,07,761	100.0
FEDERALBNK	270.2	9.5	1,43,935	1,43,935	100.0
INFY	1,689.8	5.6	4,57,741	6,51,978	70.2
JIOFIN	278.8	-2.9	78,871	1,13,601	69.4

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
360ONE	1,197.7	4.2	20,896	20,896	100.0
FEDERALBNK	270.2	9.5	73,292	73,292	100.0
INFY	1,689.8	5.6	2,57,137	3,64,212	70.6
JIOFIN	278.8	-2.9	32,287	49,288	65.5
ANGELONE	2,752.2	9.0	89,935	1,40,890	63.8

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
POLYCARB	7,121.5	-2.8	19,145	6,229	3.1
360ONE	1,197.7	4.2	6,998	2,947	2.4
BOSCHLTD	36,835.0	-1.7	16,283	6,935	2.3
MARUTI	15,859.0	-1.8	64,755	31,291	2.1
HDFCBANK	931.1	0.6	1,70,577	85,146	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
POLYCARB	7,121.5	-2.8	10,285	5,070	2.0
ANGELONE	2,752.2	9.0	16,251	8,074	2.0
360ONE	1,197.7	4.2	3,631	1,873	1.9
FEDERALBNK	270.2	9.5	11,927	6,419	1.9
UNIONBANK	176.2	-1.7	10,918	5,929	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
FEDERALBNK	270.2	9.5	1,43,935	10,161	14.2
ANGELONE	2,752.2	9.0	2,07,761	22,959	9.0
TECHM	1,670.5	5.2	87,325	10,712	8.2
3600ONE	1,197.7	4.2	54,240	7,531	7.2
OFSS	7,959.5	5.7	70,264	10,323	6.8

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
FEDERALBNK	270.2	9.5	73,292	6,351	11.5
ANGELONE	2,752.2	9.0	89,935	12,021	7.5
HDFCLIFE	732.6	-1.4	30,438	4,545	6.7
TECHM	1,670.5	5.2	33,775	5,483	6.2
INFY	1,689.8	5.6	2,57,137	52,651	4.9

Call and put volume refers to the number of contracts that have been traded in the most recently concluded session
 Only looks at stocks with volumes more than 1000 contracts

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	2300	1894170	6.6%	2157	2200	1129086	2.0%	JIOFIN	300	15923600	7.6%	279	290	6074750	4.0%
ADANIPORTS	1500	2137025	5.5%	1422	1420	781375	-0.1%	JSWSTEEL	1200	962550	1.1%	1187	1100	1272375	-7.4%
APOLLOHOSP	7400	172625	2.3%	7236	7000	123750	-3.3%	KOTAKBANK	440	9560000	5.2%	418	420	3090000	0.4%
ASIANPAINT	2860	595750	3.7%	2757	2800	435250	1.6%	LT	4000	991900	3.7%	3856	3900	512575	1.1%
AXISBANK	1300	9017500	0.4%	1294	1300	2001875	0.4%	M&M	3800	784800	3.9%	3658	3600	334800	-1.6%
BAJAJ-AUTO	10000	245550	5.4%	9489	9500	98400	0.1%	MARUTI	17000	370300	7.2%	15859	16500	94100	4.0%
BAJAJFINSV	2080	985000	3.9%	2003	2000	537250	-0.1%	MAXHEALTH	1100	607425	6.1%	1037	1040	318150	0.3%
BAJFINANCE	1000	5505750	5.2%	950	1000	2038500	5.2%	NESTLEIND	1340	617000	1.8%	1316	1300	507000	-1.2%
BEL	420	11217600	2.4%	410	400	4966125	-2.5%	NTPC	355	8632500	2.5%	346	340	3216000	-1.8%
BHARTIARTL	2100	2693725	4.1%	2016	2000	1305775	-0.8%	ONGC	240	12174750	-2.9%	247	240	7580250	-2.9%
CIPLA	1500	882000	7.3%	1398	1400	664500	0.2%	POWERGRID	270	7942000	4.9%	257	260	2903200	1.0%
COALINDIA	440	6465150	2.1%	431	410	2971350	-4.9%	RELIANCE	1600	15805000	9.7%	1458	1500	3048000	2.9%
DRREDDY	1260	1609375	7.2%	1176	1200	494375	2.1%	SBILIFE	2140	2306250	2.8%	2081	2100	532500	0.9%
EICHERMOT	7800	233200	6.6%	7315	7000	190700	-4.3%	SBIN	1050	5788500	0.7%	1042	1000	4745250	-4.1%
ETERNAL	300	14736725	4.3%	288	280	6811825	-2.7%	SHIRIRAMFIN	1000	1901625	0.5%	995	980	945450	-1.6%
GRASIM	2900	255750	3.2%	2810	2740	273750	-2.5%	SUNPHARMA	1800	1999900	7.9%	1669	1700	613550	1.9%
HCLTECH	1680	1477350	-1.1%	1698	1600	743050	-5.8%	TATACONSUM	1220	969100	2.6%	1189	1080	1039500	-9.2%
HDFCBANK	1000	12731400	7.4%	931	900	6273850	-3.3%	TMPV	400	6708800	13.1%	354	350	3662400	-1.0%
HDFCLIFE	780	2421100	6.5%	733	730	949300	-0.3%	TATASTEEL	200	19640500	6.3%	188	180	13970000	-4.4%
HINDALCO	950	2083900	1.6%	935	900	1372700	-3.7%	TCS	3300	2780400	2.9%	3207	3200	855225	-0.2%
HINDUNILVR	2440	1092300	3.4%	2360	2300	450600	-2.6%	TECHM	1700	1002000	1.8%	1671	1600	594000	-4.2%
ICICIBANK	1450	10555300	2.8%	1411	1400	4285400	-0.8%	TITAN	4300	686000	2.5%	4197	4000	513275	-4.7%
INDIGO	5100	743400	7.6%	4740	4800	345750	1.3%	TRENT	4200	1216700	7.7%	3900	4100	315100	5.1%
INFY	1700	6550400	0.6%	1690	1680	3208400	-0.6%	ULTRACEMCO	12200	106000	-1.4%	12378	11500	81750	-7.1%
ITC	350	38268800	6.3%	329	350	11896000	6.3%	WIPRO	270	7359000	1.0%	267	250	4086000	-6.5%

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

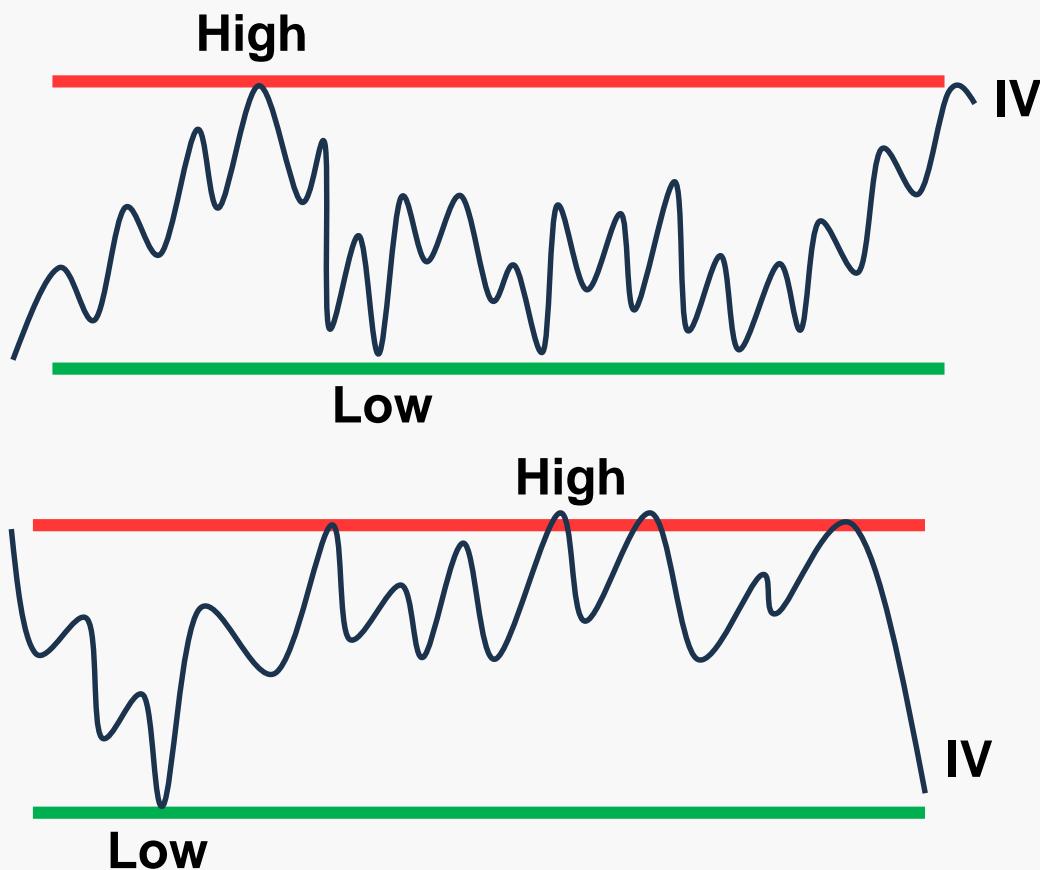
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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

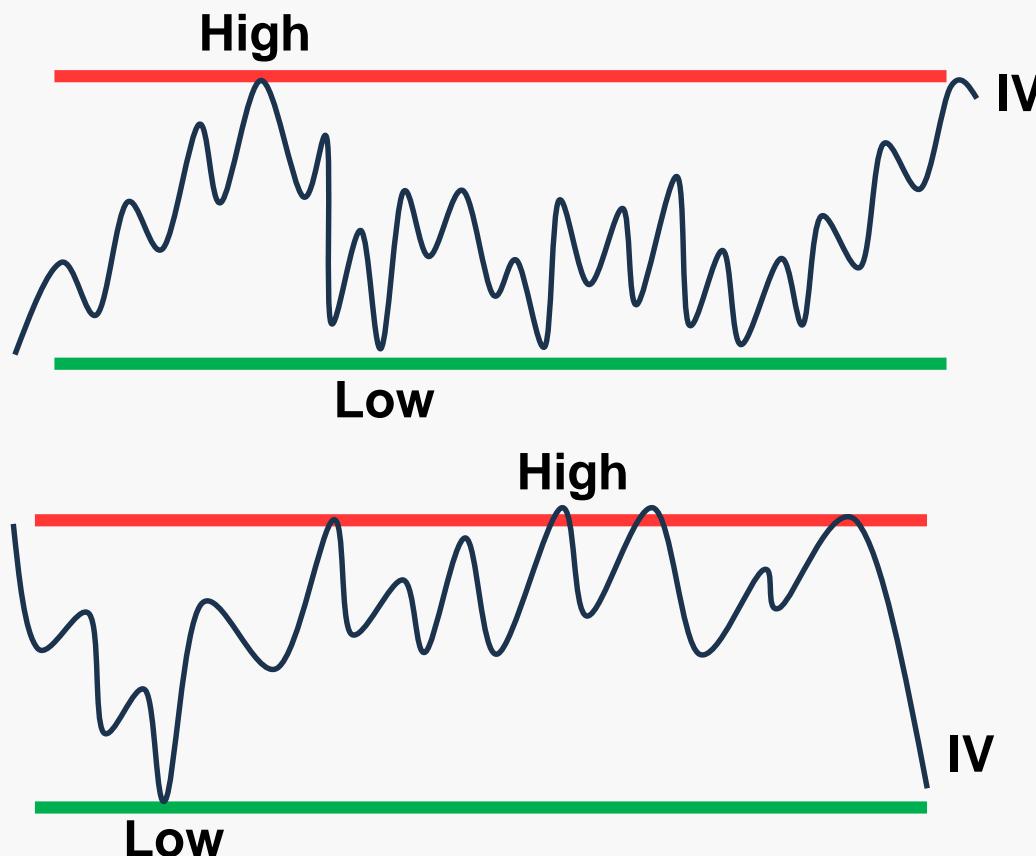
- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions 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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