



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,049	0.3% ▼
Open Interest (OI)	1,58,57,900	0.9% ▲
Change in OI (abs)	1,58,57,900	1,43,175 ▲
Premium / Discount (Abs)	78	17 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	52,043	0.1% ▼
Open interest (OI)	33,98,460	0.3% ▼
Change in OI (abs)	33,98,460	8,370 ▼
Premium / Discount (Abs)	242	41 ▲
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	13.05	0.1 ▲
Nifty ATM IV (%)	11.29	0.3 ▼
Bank Nifty ATM IV (%)	14.06	0.3 ▲
PCR (Nifty)	0.74	0.0 ▼
PCR (Bank Nifty)	0.96	0.0 ▲

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

*On expiration days, the premium/discount will be the difference between the new front-month contract and the cash market level on the day

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HDFCAMC	38,65,500	11.3%	4850.05	6.3%
INDIAMART	25,24,800	6.3%	3058.6	0.1%
DEEPAKNTR	22,62,600	5.5%	2999.3	2.1%
GODREJPROP	40,38,075	4.7%	3243.75	2.5%
VOLTAS	74,80,200	4.4%	1889.15	3.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
COFORGE	21,99,000	13.1%	7243.75	-3.5%
ICICIGI	71,07,000	11.1%	2069.15	-1.8%
POWERGRID	10,67,07,600	9.4%	328.8	-0.8%
TRENT	37,06,400	6.1%	7820.9	-4.1%
ZYDUSLIFE	1,70,52,300	5.8%	1021.9	-3.8%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DIVISLAB	35,98,000	-8.3%	6141.75	0.1%
SIEMENS	20,32,950	-7.1%	7999.25	1.4%
CUMMINSIND	38,09,700	-6.3%	3811.55	3.4%
ABB	13,98,875	-5.2%	8799.05	1.3%
HDFCLIFE	2,31,71,500	-4.5%	728.2	1.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GLENMARK	46,92,925	-7.4%	1785.5	-1.5%
BALRAMCHIN	65,47,200	-7.2%	650.2	-2.7%
OFSS	8,18,600	-7.0%	11620.65	-1.8%
POLYCAB	25,00,500	-6.4%	7197.6	-4.2%
COLPAL	30,38,700	-3.5%	3502.2	-0.2%

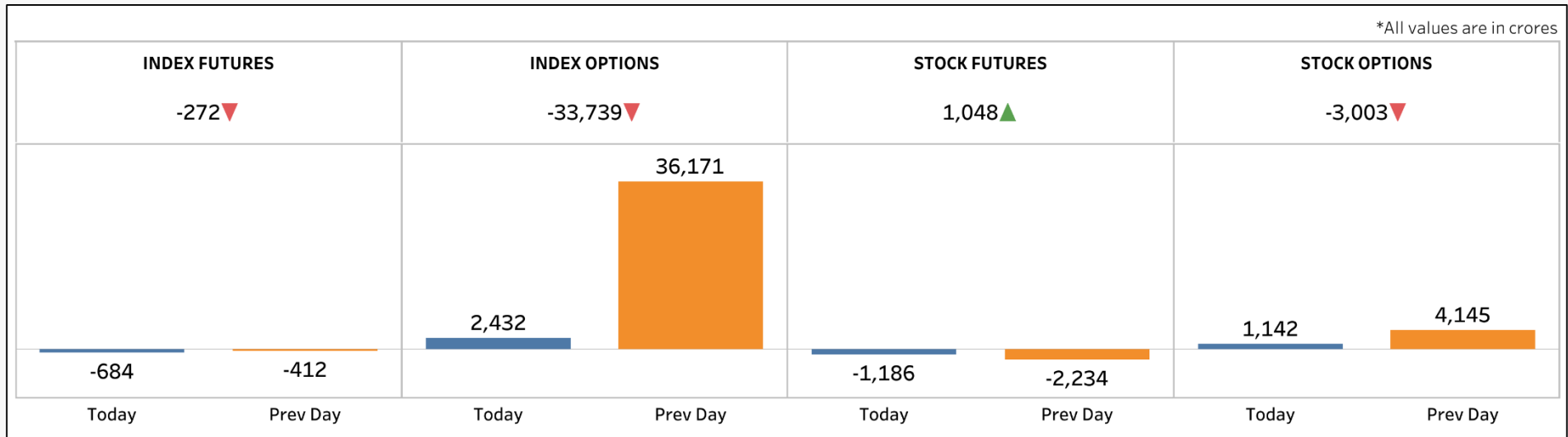
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Data by Participant

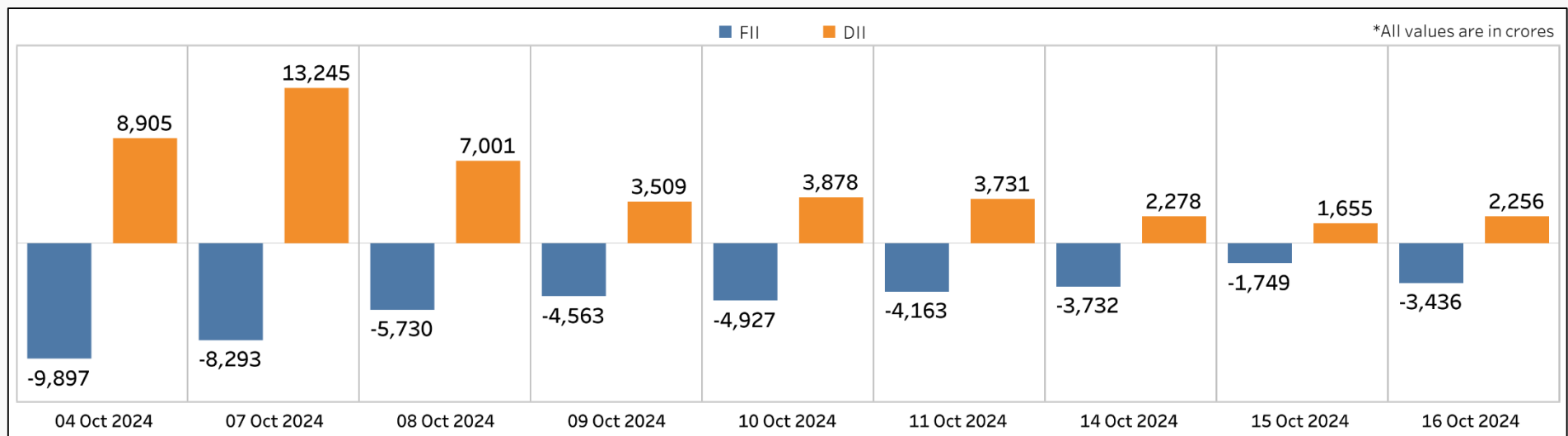
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
192,796 ▲	-2,953 ▼	283,730 ▲	18,574 ▲	0	-398 ▼	4,000 ▲	-20,130 ▼
172,540		319,400		0	-2,301	-4,000	-22,193
		35,670		0	-1,903		-2,063
-20,256	-10,435		-14,532				
	-7,482		-33,106				
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
654,060	-168,104	901,772	657,046	2,078	-71,254	160,418	-3,297,375
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
-234,431 ▼	4,219 ▲	-253,990 ▼	-3,960 ▼	41,635 ▲	-868 ▼	-33,740 ▼	5,516 ▲
132,815						89,134	
	7,130		20,405		5,606	55,394	16,320
	2,911		24,365		6,474		10,804
-101,616				-70,924			
		-374,794					
		-120,804					
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-322,339	200,565	-1,145,705	2,117,193	-333,799	38,793	83,515	523,136
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

Daily Net Open Interest Change

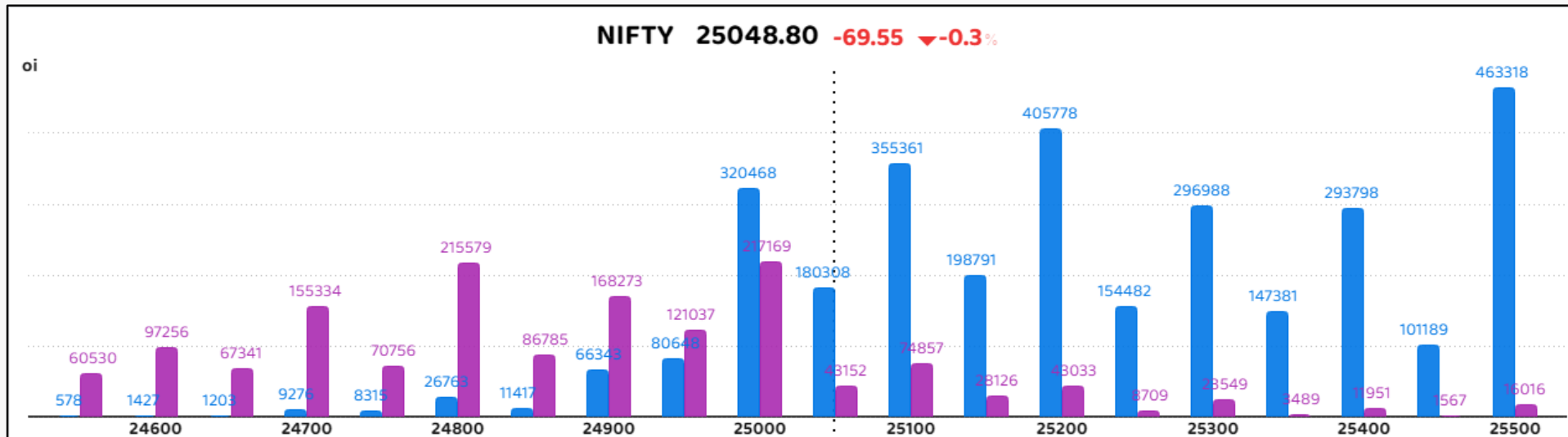


DII and FII Daily Cash Market Flows



Positioning Stack by Strike (Current Week 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 52,000 call and the 52,000 put saw the most amount of open interest.

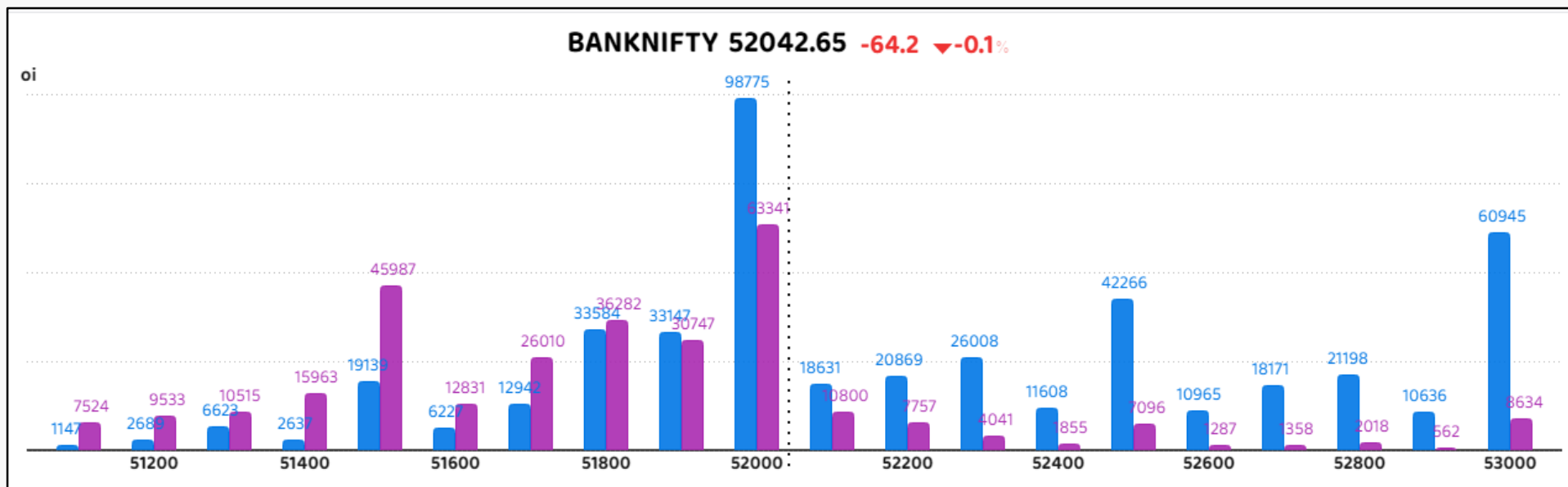
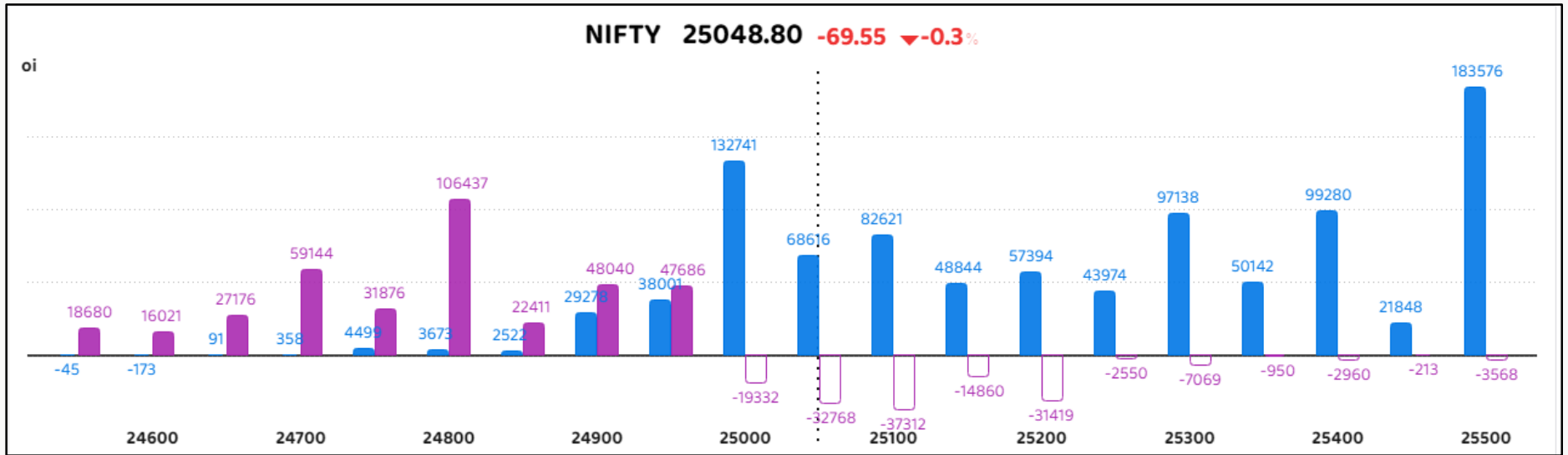


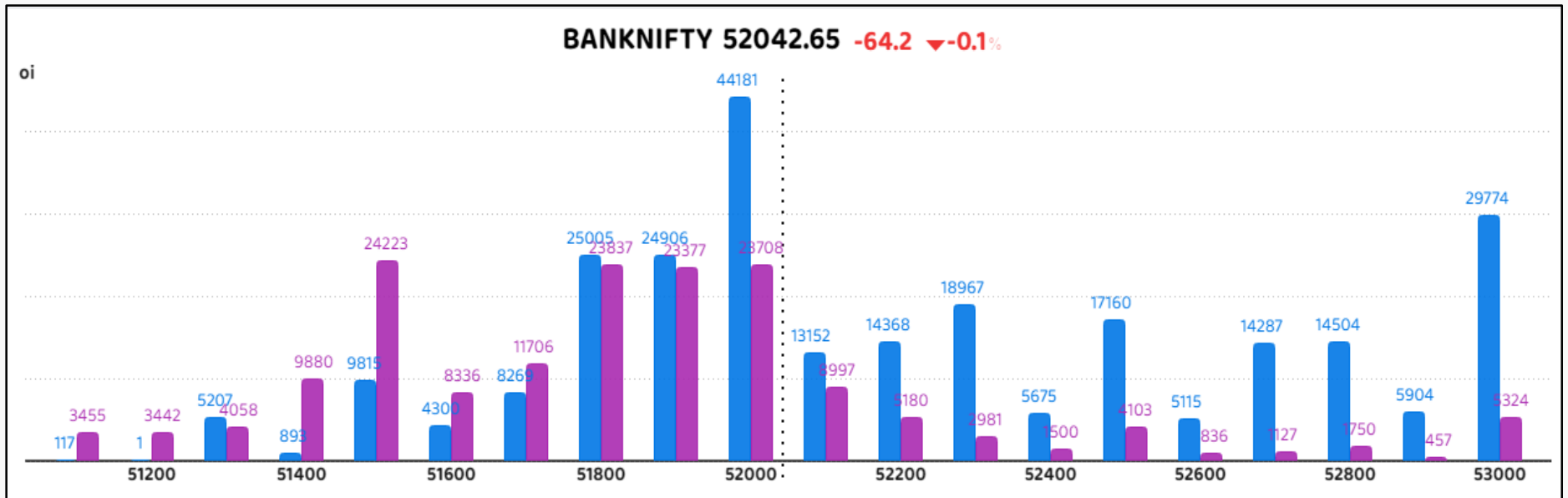
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Current Week Expiry)

Call ■ Put ■

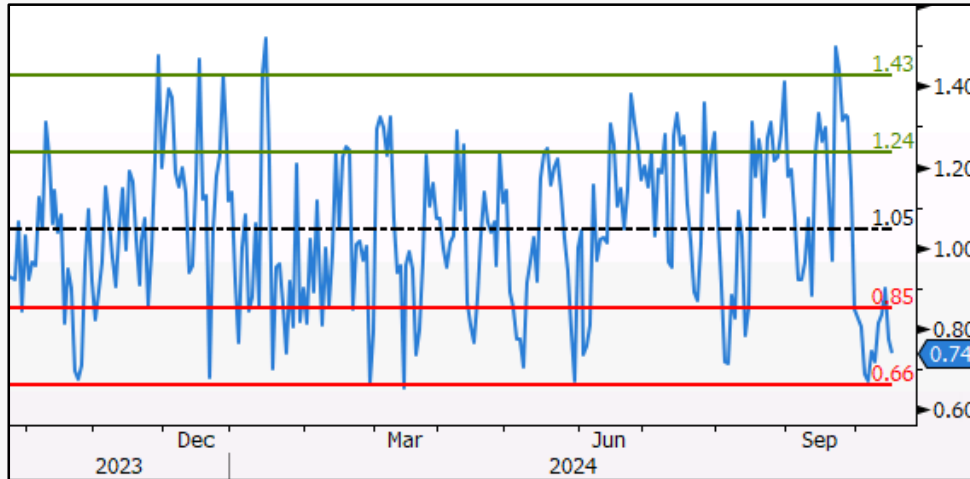


The largest open interest changes (contracts) were seen at the 25,500 call strike and 24,800 put strike.

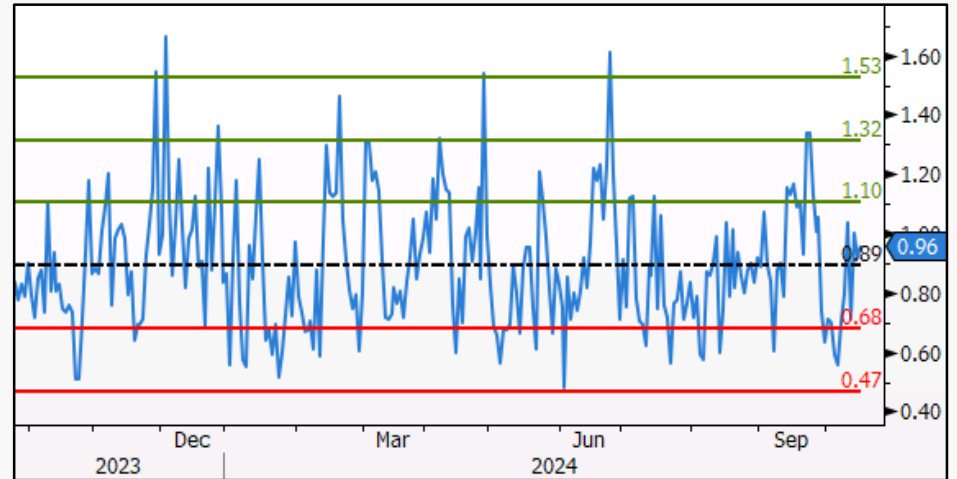


For the Bank Nifty, the biggest open interest changes were seen at the 52,000, Call Strike & 51,500 Put strike.

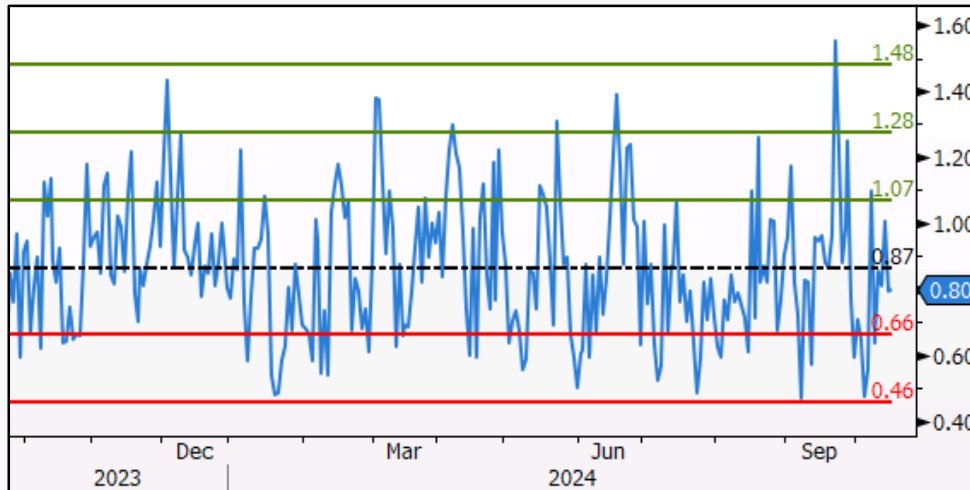
Nifty



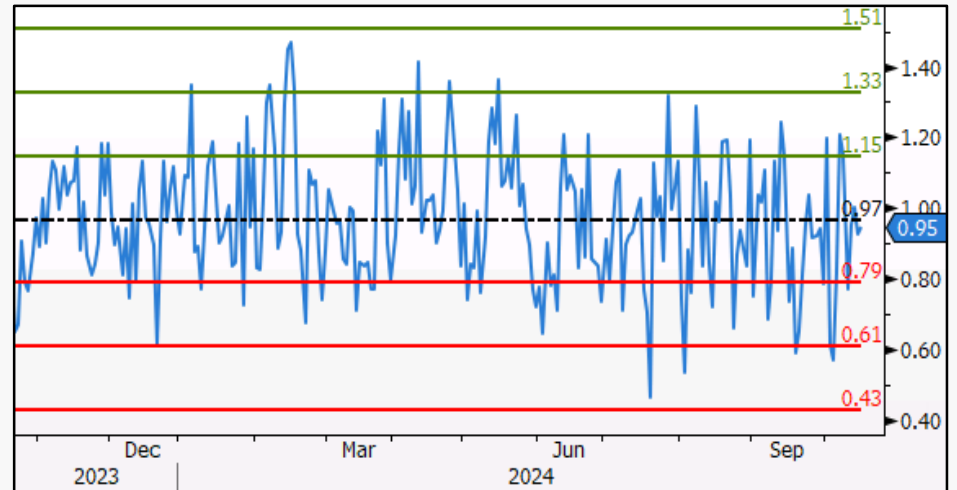
Bank Nifty



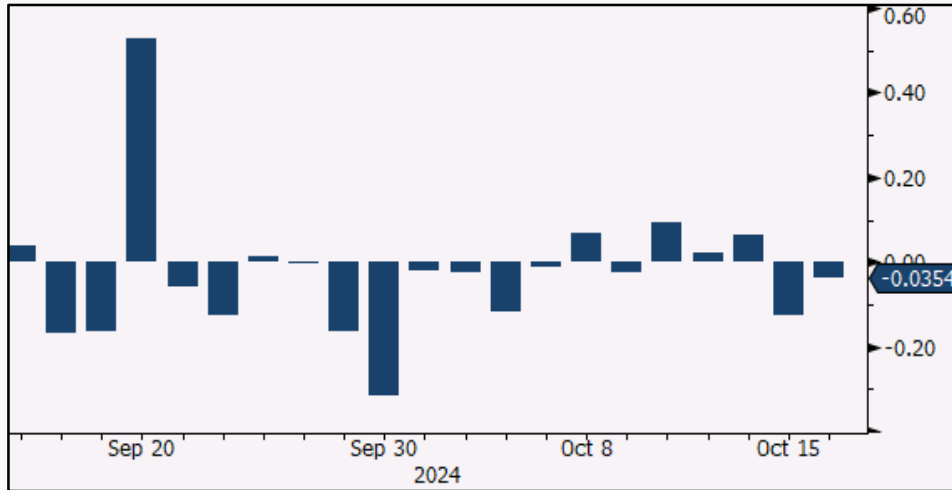
Fin Nifty



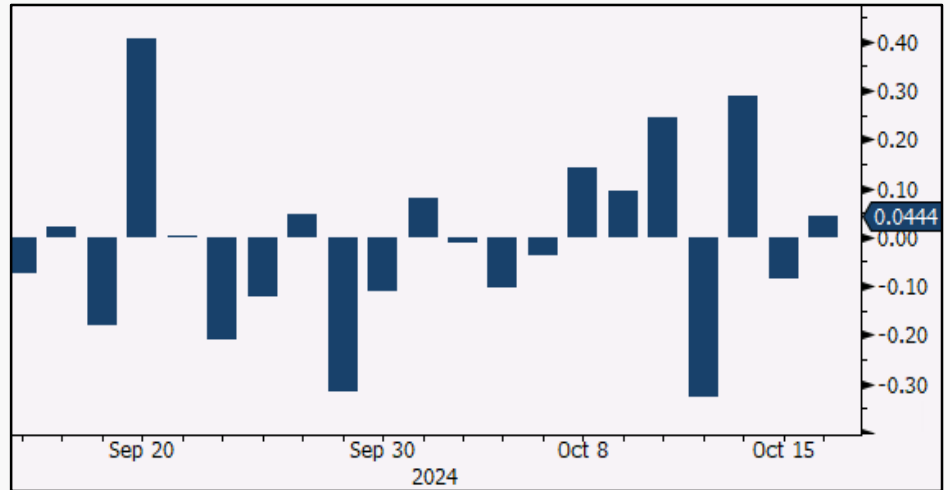
Midcap Nifty



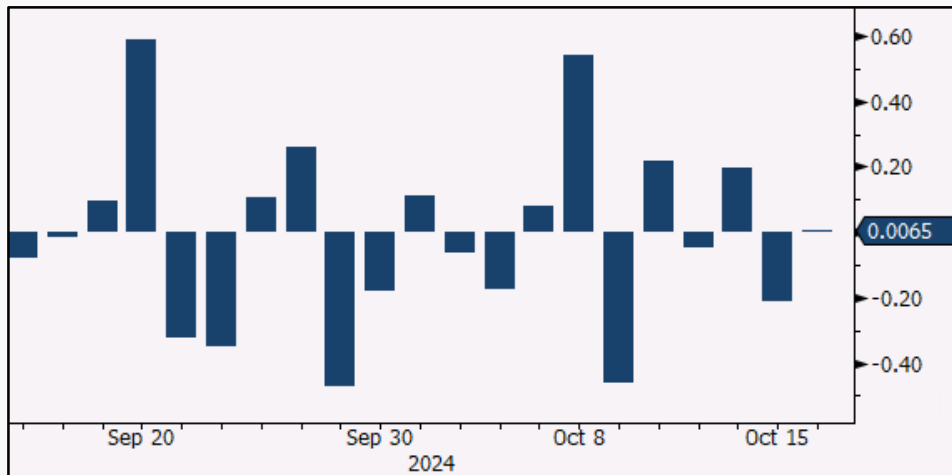
Nifty



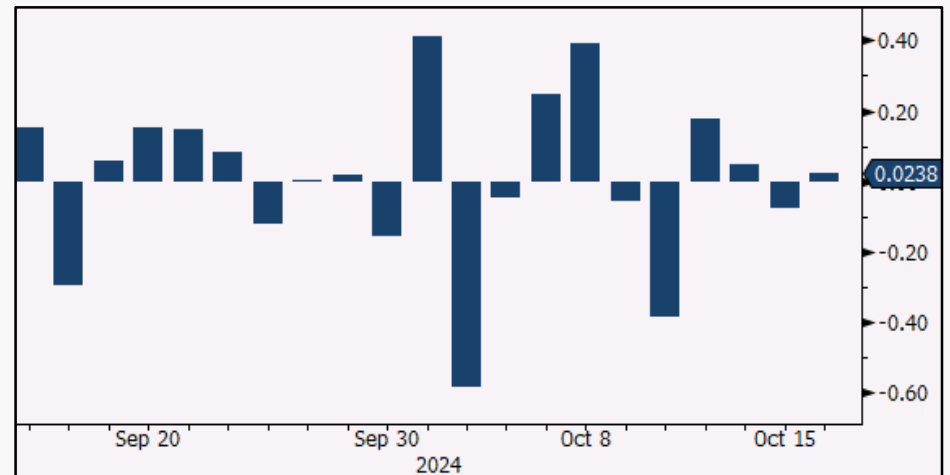
Bank Nifty



Fin Nifty



Midcap Nifty



Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
IDFCFIRSTB	72.2	-0.7	87.4	87.4	11.2	100.0
DIXON	15318.1	-0.6	38.5	51.3	1.8	74.1
TITAN	3471.0	-1.1	25.3	33.4	2.3	73.8
TRENT	7805.8	-3.9	40.0	53.6	2.2	73.5
RBLBANK	210.7	0.9	61.6	79.2	13.3	73.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AUROPHARMA	1482.1	0.1	22.9	48.9	22.9	0.0
LTF	166.8	-0.7	22.6	46.9	22.6	0.0
IDFC	108.0	-1.8	5.2	42.4	4.3	2.6
IRCTC	892.6	-0.3	24.1	59.6	22.3	4.8
GNFC	643.9	-0.3	7.5	53.0	4.8	5.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
IDFCFIRSTB	72.2	-0.7	87.4	87.4	11.2	100.0
RBLBANK	210.7	0.9	61.6	79.2	13.3	99.1
ALKEM	6094.3	-2.7	33.3	48.8	14.7	84.5
BHARTIARTL	1734.0	1.0	24.9	34.3	4.6	84.3
TRENT	7805.8	-3.9	40.0	53.6	2.2	83.7

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LTF	166.8	-0.7	22.6	46.9	22.6	0.0
AUROPHARMA	1482.1	0.1	22.9	48.9	22.9	0.0
GNFC	643.9	-0.3	7.5	53.0	4.8	0.5
IDFC	108.0	-1.8	5.2	42.4	4.3	0.5
JKCEMENT	4347.9	0.6	16.4	42.6	11.0	1.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
GNFC	643.9	-0.3	156	21	7.4
NAVINFLUOR	3461.3	3.0	16015	2182	7.3
SAIL	129.9	-0.8	398	74	5.4
CHAMBLFERT	501.6	-0.5	175	33	5.3
IDEA	9.3	1.9	14652	2771	5.3

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
GUJGASLTD	586.3	0.1	4575	5729	1.3
PERSISTENT	5543.9	-1.5	6600	8230	1.2
IPCALAB	1655.7	-2.8	5416	6466	1.2
SRF	2306.1	-1.9	14205	15623	1.1
NATIONALUM	217.3	-0.8	363	364	1.0

Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
RELIANCE	2708.15	0.7	342530	342530	100.0
M&MFIN	290	1.3	13083	13083	100.0
OBEROIRLTY	2030.6	0.1	6712	6712	100.0
TRENT	7805.8	-3.9	19622	19622	100.0
BAJAJ-AUTO	11616.95	0.8	40150	40150	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
GODREJPROP	3227.85	2.58	9074	9074	100.0
HDFCAMC	4827.9	5.99	13683	14176	96.5
PFC	479.2	0.51	20503	21435	95.7
EXIDEIND	512.3	-1.89	9257	9708	95.4
ABCAPITAL	226.05	0.09	4770	5050	94.5

Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
HDFCAMC	4827.9	5.99	190222	199647	95.3
HDFCLIFE	726.8	1.76	66901	119222	56.1
RELIANCE	2708.15	0.75	434006	774461	56.0
SIEMENS	7986.3	1.48	61897	119437	51.8
CUMMINSIND	3798.4	3.53	36429	78120	46.6

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
HDFCAMC	4827.9	5.99	95507	123022	77.6
IPCALAB	1655.65	-2.79	6466	12055	53.6
HDFCLIFE	726.8	1.76	26995	53582	50.4
PVRINOX	1626.85	0.38	23797	49707	47.9
ZYDUSLIFE	1020.1	-3.60	18713	40128	46.6

Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Diff
HDFCAMC	4827.9	6.0	190222	23947	7.9
VOLTAS	1881.3	3.9	74076	13900	5.3
DEEPAKNTR	2999.5	2.3	42040	11032	3.8
CUMMINSIND	3798.4	3.5	36429	10670	3.4
SIEMENS	7986.3	1.5	61897	18696	3.3

Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Diff
HDFCAMC	4827.9	6.0	95507	11117	8.6
VOLTAS	1881.3	3.9	30719	8191	3.8
ZYDUSLIFE	1020.1	-3.6	18713	5637	3.3
SRF	2306.1	-1.9	15623	4890	3.2
PVRINOX	1626.9	0.4	23797	7617	3.1

Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20 D Call OI Diff
HDFCAMC	4827.9	6.0	13205	6021	2.2
SHREECEM	24439.6	-1.1	5253	2604	2.0
CIPLA	1562.2	-0.6	16544	8411	2.0
OBEROIRLTY	2030.6	0.1	6712	3465	1.9
ATUL	7890.4	0.7	4866	2537	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20 D Put OI Diff
HDFCAMC	4827.9	6.0	13683	3391	4.0
ATUL	7890.4	0.7	2517	1265	2.0
LALPATHLAB	3329.9	-1.8	2184	1131	1.9
HAVELLS	1939.3	0.2	7562	4048	1.9
PAGEIND	46593.2	0.7	3506	1904	1.8

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	3200	1980600	3.7%	3086	3100	1100100	0.5%	INFY	1960	6274000	2.1%	1920	1900	1907600	-1.0%
ADANIPTS	1500	2157200	6.9%	1404	1400	976800	-0.3%	ITC	520	12577600	5.4%	493	500	4697600	1.4%
APOLLOHOSP	7000	172500	-1.0%	7071	7000	108250	-1.0%	JSWSTEEL	1050	1281150	6.1%	989	1000	714825	1.1%
ASIANPAINT	3400	1081000	10.3%	3082	3000	624800	-2.7%	KOTAKBANK	1900	2488800	1.3%	1876	1800	1002000	-4.1%
AXISBANK	1300	3031250	12.7%	1153	1150	1625625	-0.3%	LT	3800	2149200	7.6%	3533	3550	852750	0.5%
BAJAJ-AUTO	12000	405750	3.3%	11617	11500	223050	-1.0%	LTIM	6500	226650	2.2%	6359	5500	148650	-13.5%
BAJAJFINSV	2000	1892500	7.4%	1862	1900	360000	2.0%	M&M	3200	1611050	4.3%	3068	2900	702800	-5.5%
BAJFINANCE	8000	757750	15.0%	6956	7000	713375	0.6%	MARUTI	13000	665750	5.0%	12384	12000	141950	-3.1%
BHARTIARTL	1740	2512750	0.3%	1734	1700	990850	-2.0%	NESTLEIND	2520	362000	2.3%	2462	2400	284200	-2.5%
BPCL	380	9930600	8.3%	351	340	3067200	-3.1%	NTPC	450	15103500	6.1%	424	400	2557500	-5.7%
BRITANNIA	6200	176600	1.8%	6090	6000	137600	-1.5%	ONGC	300	24364725	5.1%	285	280	5191725	-1.9%
CIPLA	1700	1953900	8.8%	1562	1500	573950	-4.0%	POWERGRID	360	9212400	10.0%	327	330	5378400	0.9%
COALINDIA	500	4458300	0.9%	496	500	2862300	0.9%	RELIANCE	3000	12977000	10.8%	2708	2700	4115250	-0.3%
DIVISLAB	6300	288000	2.9%	6124	5800	273800	-5.3%	SBILIFE	1900	807375	9.6%	1734	1700	207750	-1.9%
DRREDDY	7000	338750	4.3%	6711	6200	140875	-7.6%	SBIN	800	7998000	-0.7%	805	800	5748000	-0.7%
EICHERMOT	4800	538125	2.6%	4678	4500	171675	-3.8%	SUNPHARMA	1960	2936850	3.2%	1899	1900	458850	0.1%
GRASIM	2800	412750	1.3%	2764	2600	139750	-5.9%	TATACONSUM	1200	1451904	7.7%	1114	1200	583224	7.7%
HCLTECH	1900	2234400	1.9%	1865	1800	859250	-3.5%	TATAMOTORS	1000	14876950	10.2%	907	900	4382400	-0.8%
HDFCBANK	1800	8629500	5.9%	1700	1600	2720300	-5.9%	TATASTEEL	170	57739000	9.5%	155	160	21890000	3.1%
HDFCLIFE	750	6332700	3.2%	727	700	1667600	-3.7%	TCS	4300	2679075	5.0%	4095	4000	838250	-2.3%
HEROMOTOCO	6000	925650	11.1%	5398	5500	360300	1.9%	TECHM	1700	2151000	2.4%	1660	1600	1042200	-3.6%
HINDALCO	780	3812200	6.4%	733	750	1685600	2.3%	TITAN	3800	1007650	9.5%	3471	3500	335825	0.8%
HINDUNILVR	3000	1176000	7.9%	2781	2700	578100	-2.9%	ULTRACEMCO	12000	188900	6.0%	11322	11000	77600	-2.8%
ICICIBANK	1300	3409700	4.6%	1243	1200	1820700	-3.5%	UPL	620	2173600	9.0%	569	600	748800	5.5%
INDUSINDBK	1500	2368000	11.4%	1346	1400	1318500	4.0%	WIPRO	550	5788500	3.4%	532	530	2610000	-0.4%

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

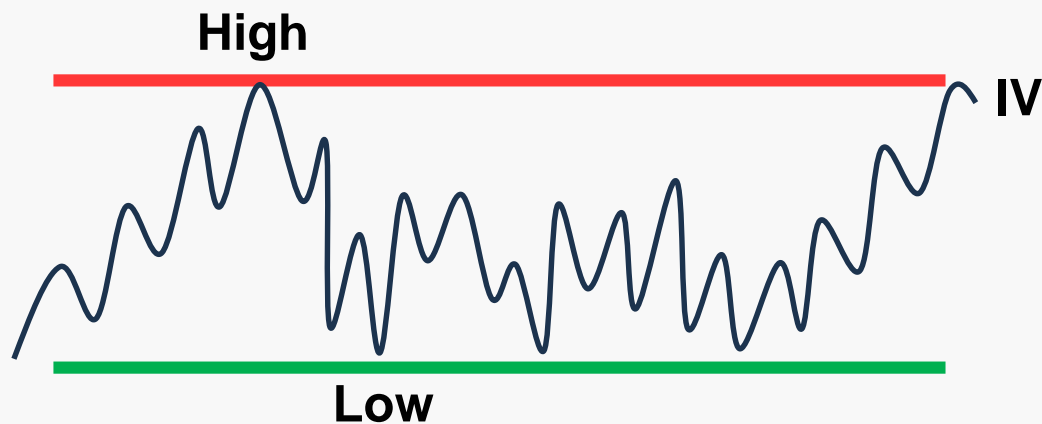
If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

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

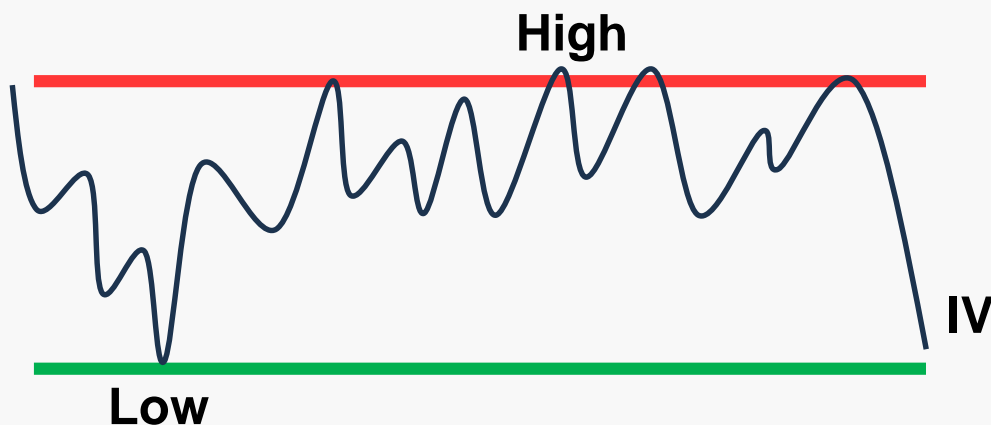
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating 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**

- **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

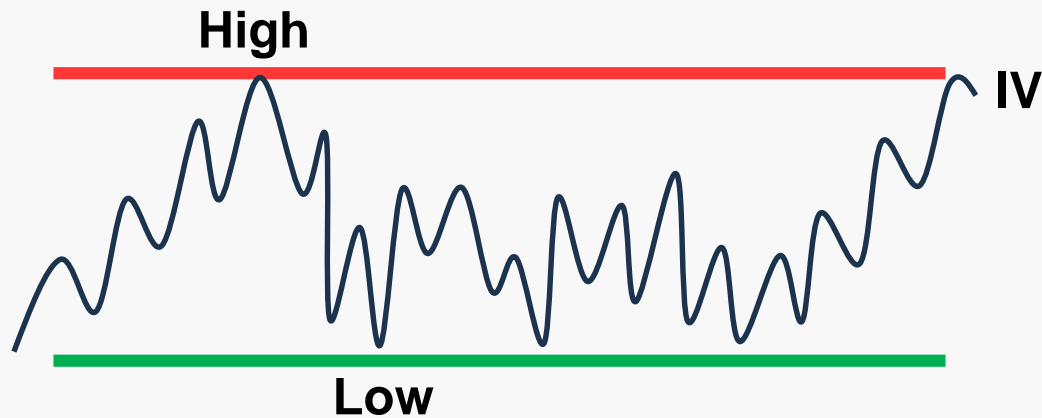


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

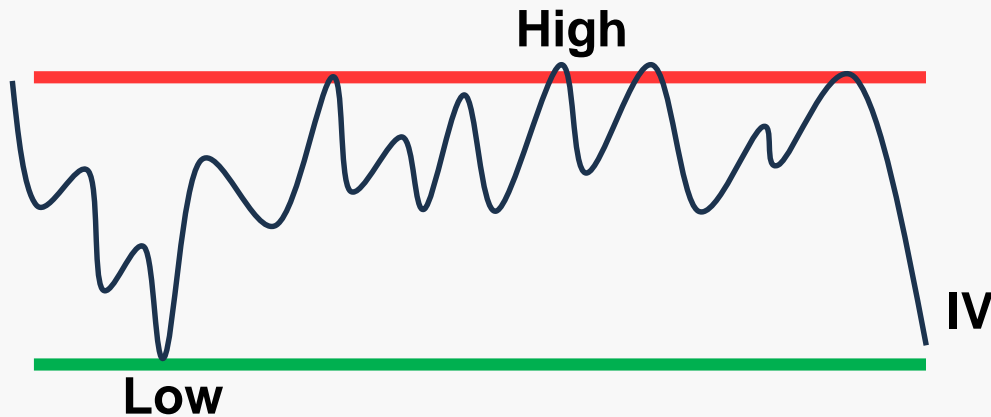


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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