



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,844	0.8%▼
Open Interest (OI)	1,58,03,800	0.3%▼
Change in OI (abs)	1,58,03,800	54,100▼
Premium / Discount (Abs)	94	16▲
Inference	Long Unwinding	

Bank Nifty Futures

	Value	Change
Most recent settlement	51,492	1.1%▼
Open interest (OI)	35,25,230	3.7%▲
Change in OI (abs)	35,25,230	1,24,770▲
Premium / Discount (Abs)	203	39▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	13.39	0.3▲
Nifty ATM IV (%)	12.05	0.8▲
Bank Nifty ATM IV (%)	14.49	0.4▲
PCR (Nifty)	0.66	0.1▼
PCR (Bank Nifty)	0.73	0.2▼

**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 (%)
INFY	5,19,42,000	7.5%	1959.95	2.8%
TECHM	1,58,65,800	5.5%	1692.45	2.1%
TCS	1,82,92,400	3.7%	4117.95	0.4%
ZYDUSLIFE	1,66,62,600	-2.3%	1024.95	0.3%
LT	1,75,97,100	2.3%	3585.55	1.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BAJAJ-AUTO	35,40,525	45.6%	10146.65	-13.1%
DEEPAKNTR	26,20,500	15.8%	2858.9	-4.7%
INDIAMART	27,77,100	10.0%	3052.7	-0.2%
NESTLEIND	78,34,400	9.3%	2385	-3.4%
HEROMOTOCO	49,57,350	7.6%	5237.15	-3.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NATIONALUM	7,75,98,750	-8.0%	225.51	3.3%
SBIN	9,95,09,250	-4.1%	814.5	0.7%
HINDALCO	3,80,14,200	-2.7%	735.75	0.1%
ZYDUSLIFE	1,66,62,600	-2.3%	1024.95	0.3%
POWERGRID	10,44,50,400	-2.1%	331.6	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LALPATHLAB	8,76,600	-7.7%	3330.2	-0.2%
RECLTD	5,40,28,000	-6.4%	543.3	-1.8%
SIEMENS	19,08,150	-6.1%	7748.15	-3.1%
DIVISLAB	33,82,800	-6.0%	6084.8	-0.9%
HDFCLIFE	2,18,04,200	-5.9%	726.95	-0.2%

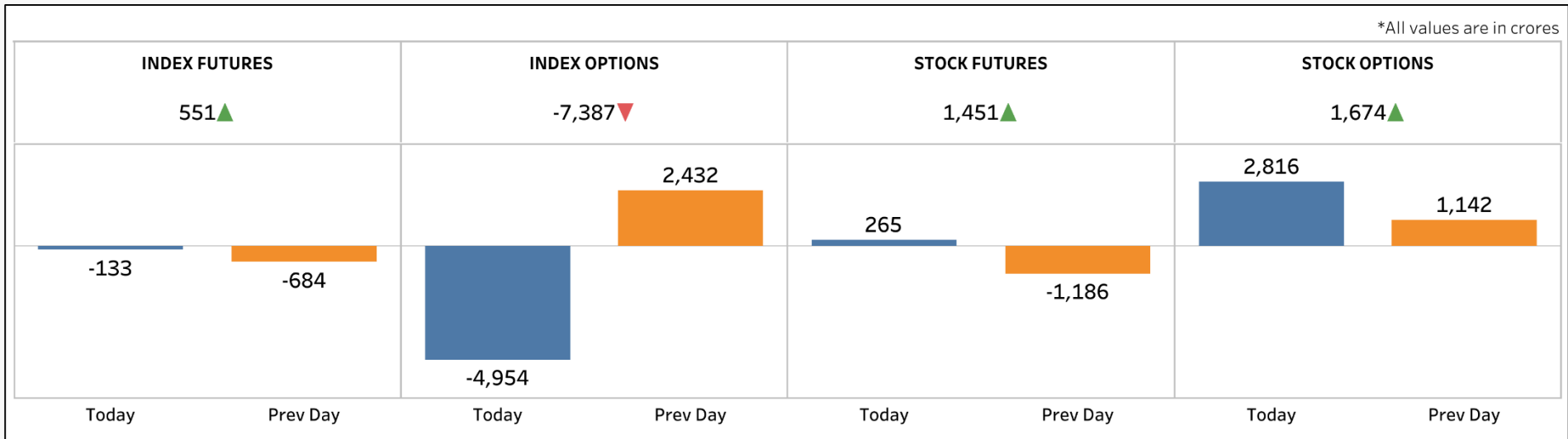
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Data by Participant

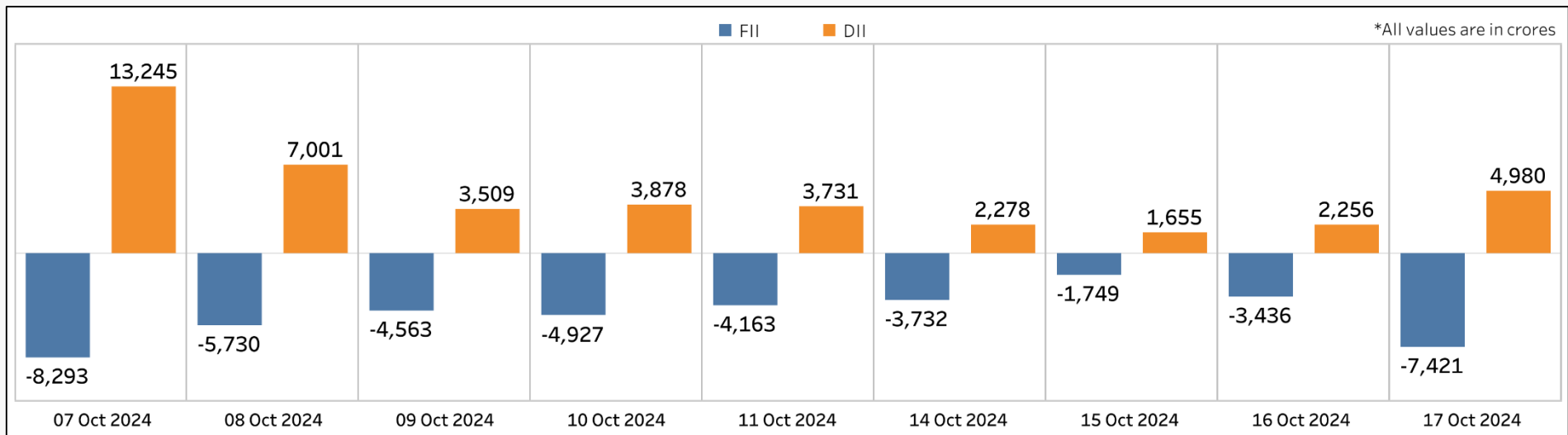
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-489,095 ▼	8,719 ▲	-552,470 ▼	20,670 ▲	0	2,479 ▲	16,000 ▲	13,974 ▲
172,540		319,400	6,138	0	178	16,000	
-316,555	-1,716	-233,070	-14,532	0	-2,301	0	-8,219
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
337,505	-169,820	668,702	663,184	2,078	-71,076	176,418	-3,305,594
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
373,623 ▲	6,083 ▲	469,819 ▲	-28,549 ▼	115,472 ▲	-17,281 ▼	66,651 ▲	-6,095 ▼
272,007	13,213	95,025	20,405	44,548	5,606	122,045	10,225
-101,616	7,130	-374,794	-8,144	-70,924	-11,675	55,394	16,320
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-50,332	213,778	-1,050,680	2,109,049	-289,251	27,118	205,560	533,361
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

Daily Net Open Interest Change

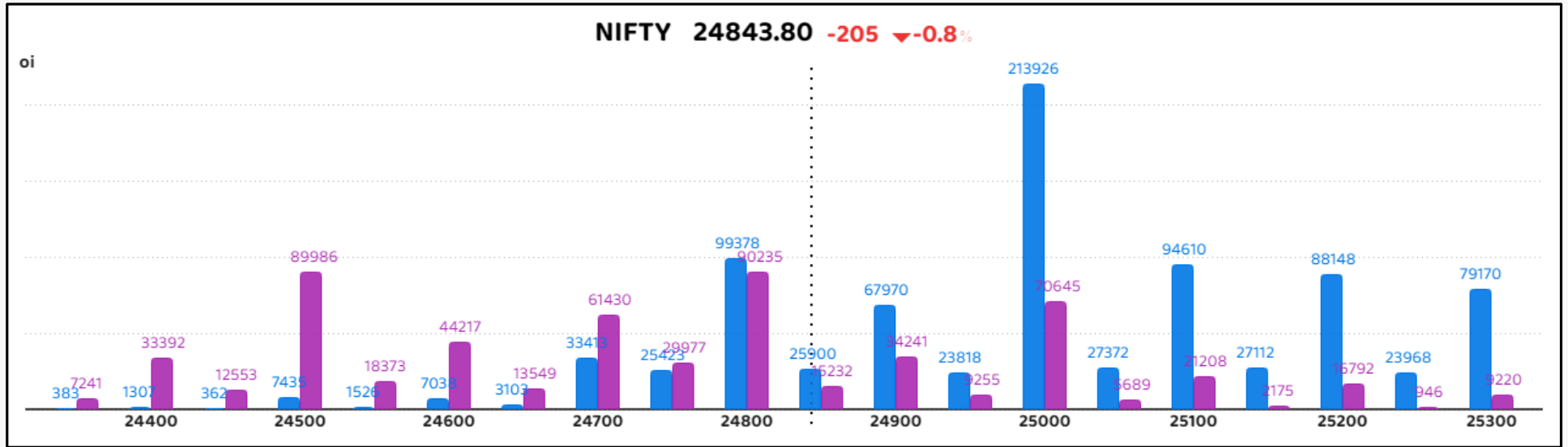


DII and FII Daily Cash Market Flows



Positioning Stack by Strike (Current Week Expiry)

Call ■ Put ■



For the Nifty, the 25,000 call and the 24,800 put had the highest call and put concentration (contracts). For the Bank Nifty, the 52,000 call and the 51,000 put saw the most amount of open interest.

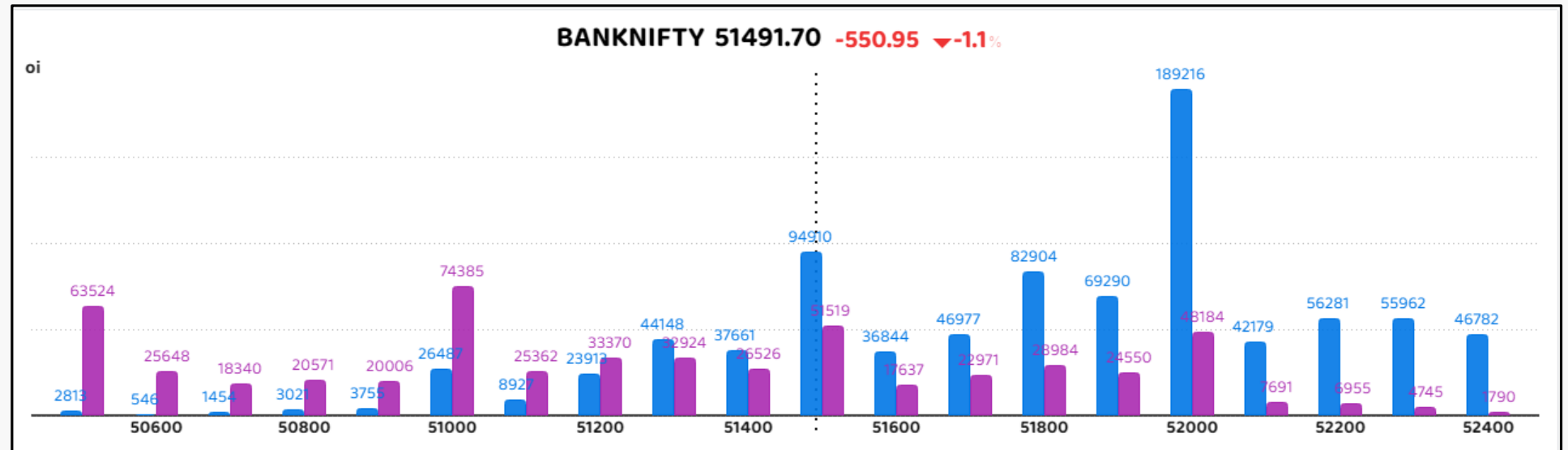
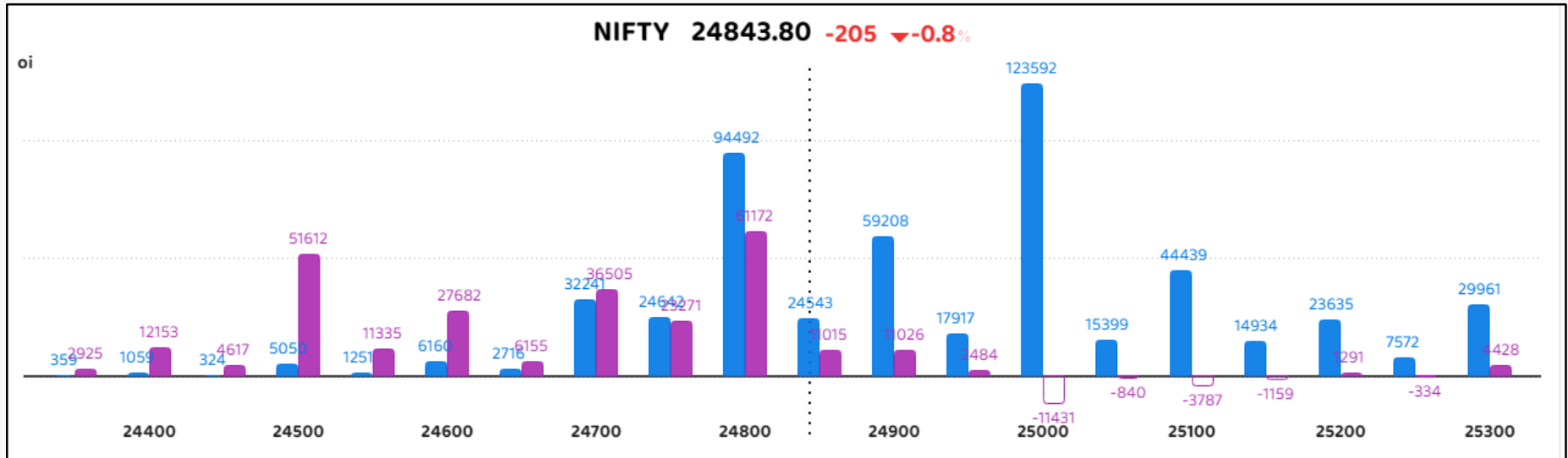


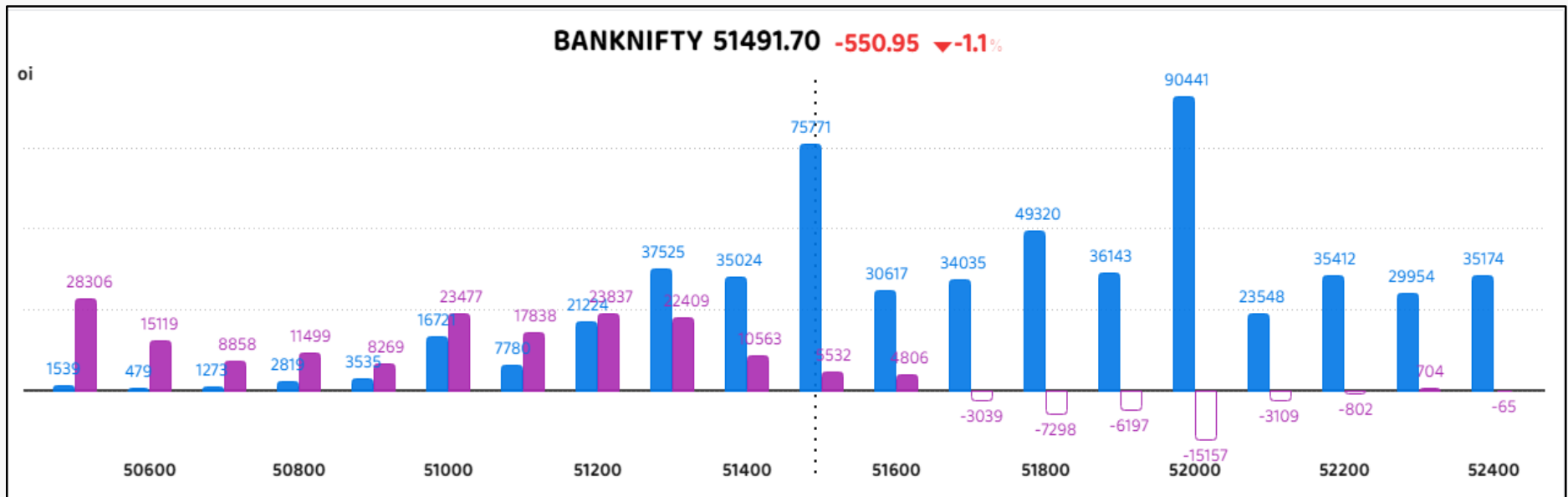
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Current Week Expiry)

Call ■ Put ■

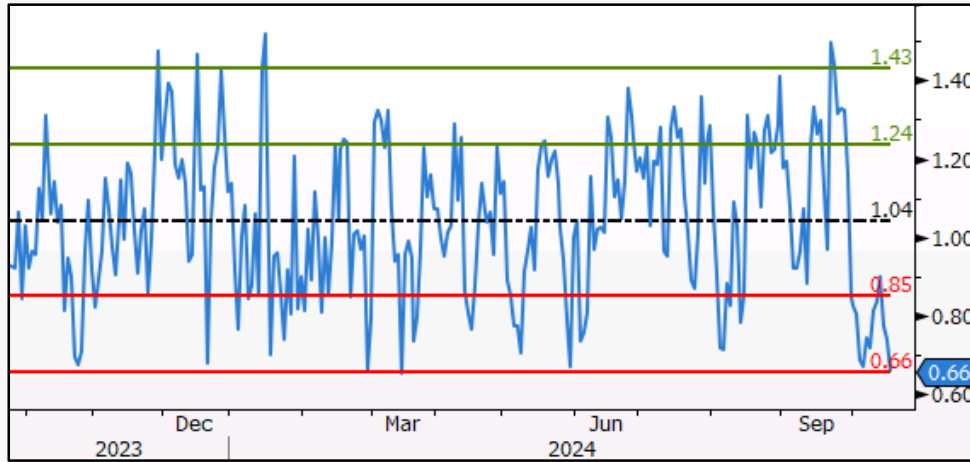


The largest open interest changes (contracts) were seen at the 25,000 call strike and 24,800 put strike.

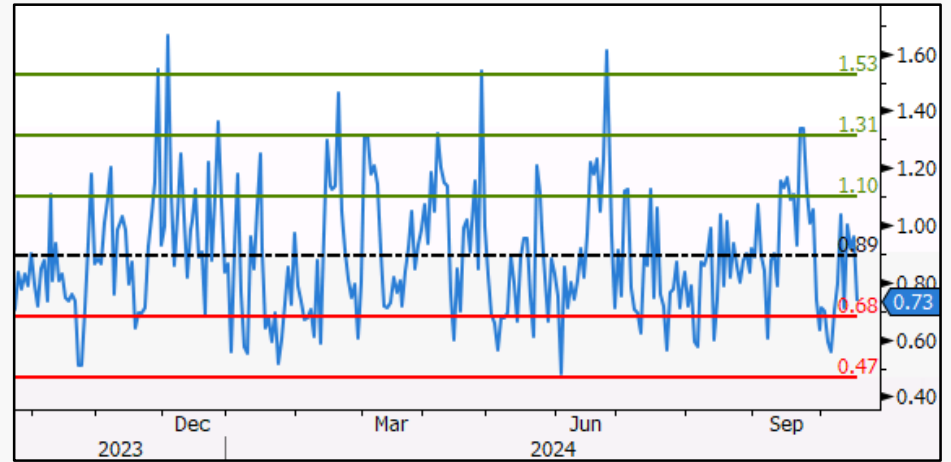


For the Bank Nifty, the biggest open interest changes were seen at the 52,000, Call Strike & 50,500 Put strike.

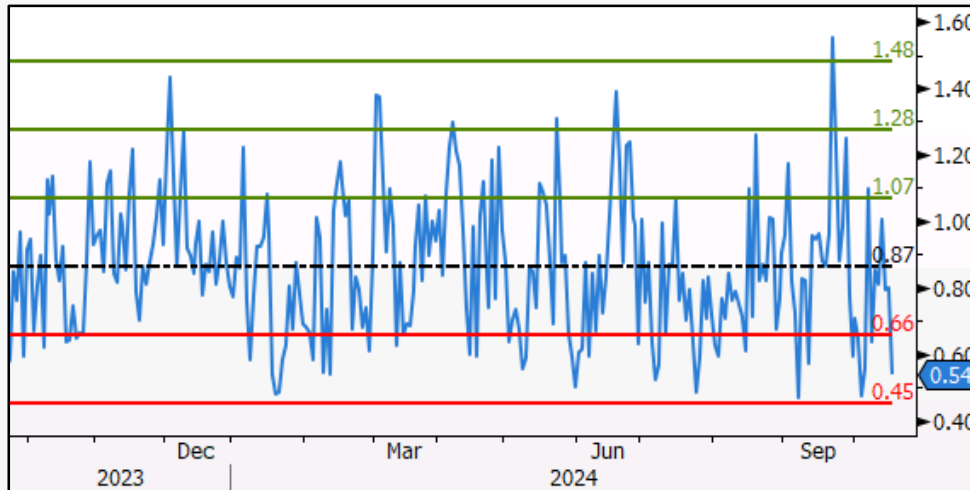
Nifty



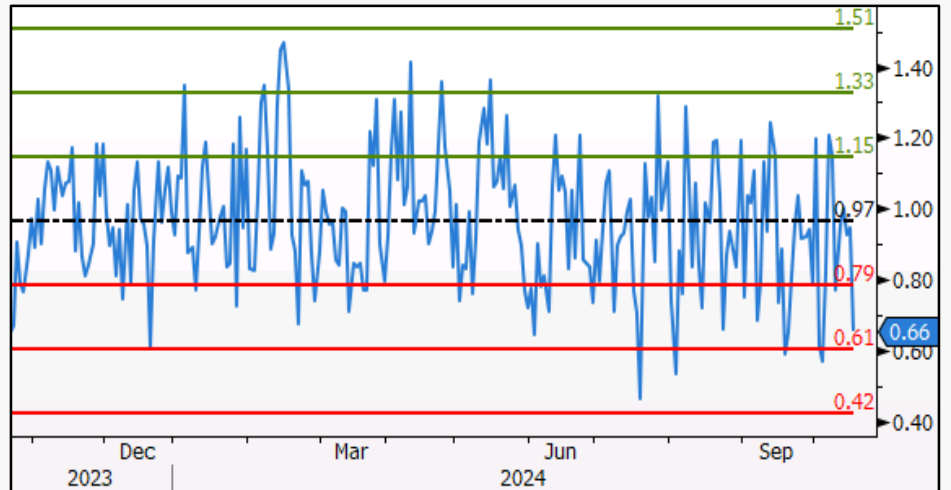
Bank Nifty



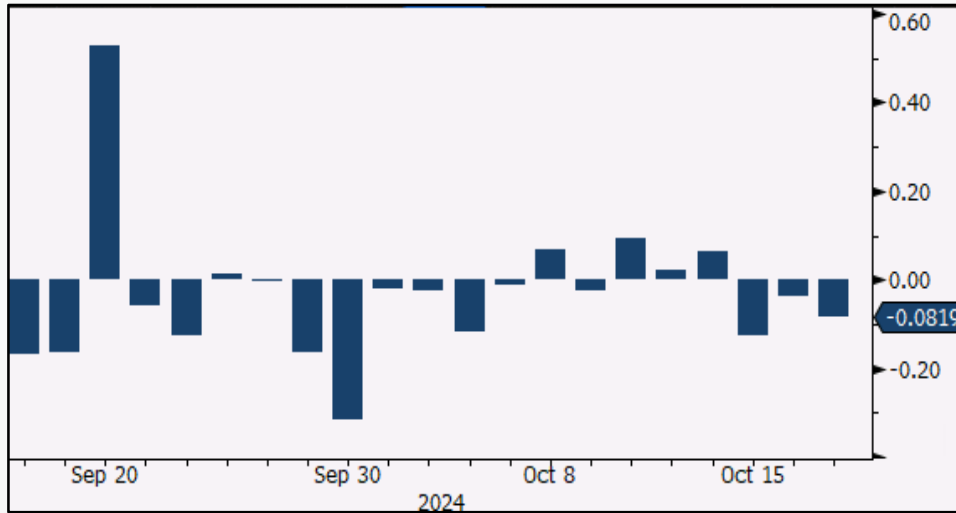
Fin Nifty



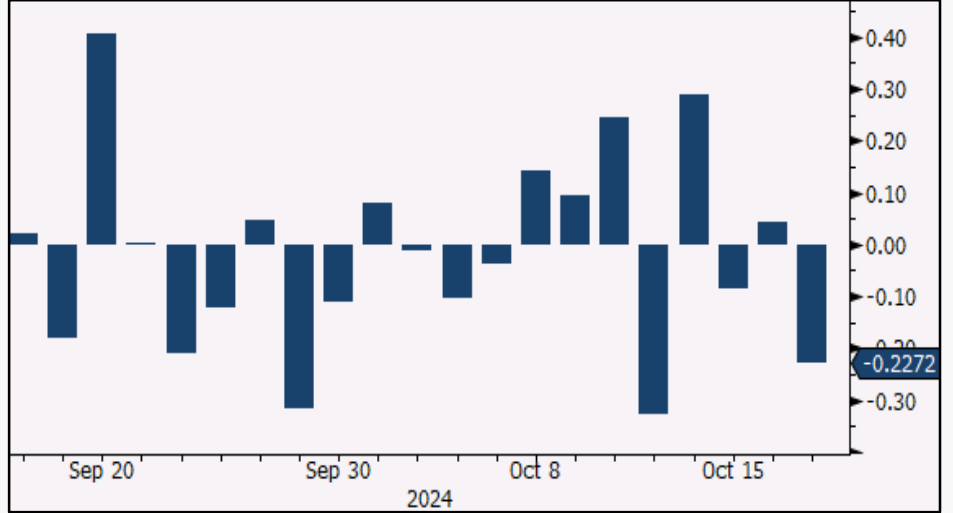
Midcap Nifty



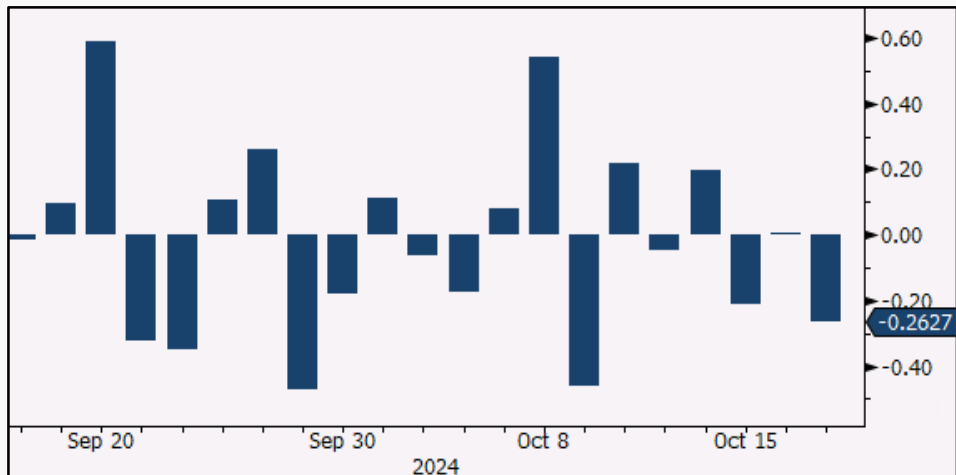
Nifty



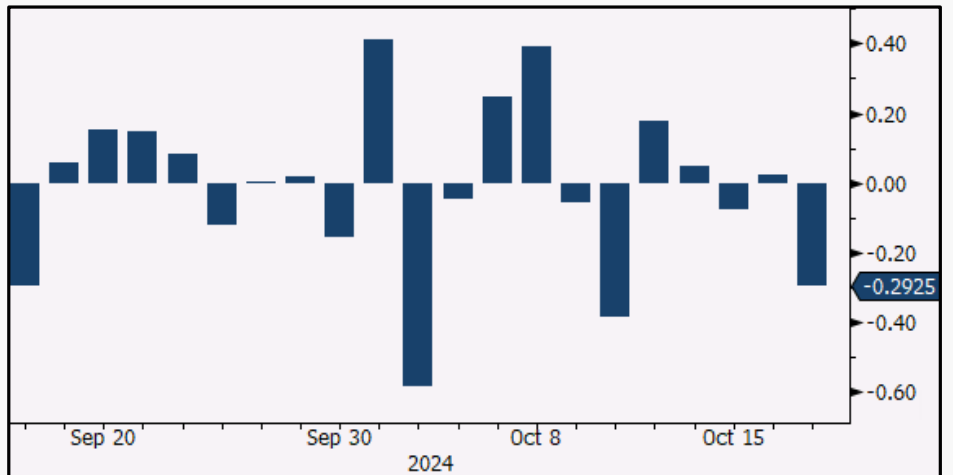
Bank Nifty



Fin Nifty



Midcap Nifty



Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SAIL	127.8	-1.6	64.4	70.4	0.5	91.4
TITAN	3403.4	-1.9	28.2	33.4	2.3	83.0
RBLBANK	202.5	-3.9	63.7	79.2	13.3	76.4
DIXON	15130.9	-1.2	39.5	51.3	1.8	76.0
PNB	102.5	-2.5	63.5	79.9	12.3	75.7

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LTF	166.4	-0.3	23.5	46.9	22.6	3.3
BANKBARODA	242.0	-0.9	26.9	66.9	24.5	5.6
IRCTC	871.8	-2.3	25.7	59.6	22.3	9.0
HDFCLIFE	726.1	-0.1	20.9	80.5	14.9	9.2
AUROPHARMA	1468.7	-0.9	25.8	48.9	22.9	10.9

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SAIL	127.8	-1.6	64.4	70.4	0.5	99.7
RBLBANK	202.5	-3.9	63.7	79.2	13.3	99.2
PNB	102.5	-2.5	63.5	79.9	12.3	99.0
PAGEIND	45463.8	-2.4	31.4	41.8	9.9	97.2
TITAN	3403.4	-1.9	28.2	33.4	2.3	91.6

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LTF	166.4	-0.3	23.5	46.9	22.6	0.5
HINDCOPPER	317.2	-1.5	22.3	91.5	11.1	2.3
METROPOLIS	2187.8	-1.8	27.2	54.6	23.4	4.2
MANAPPURAM	177.3	-1.5	31.6	80.2	2.7	6.3
HDFCLIFE	726.1	-0.1	20.9	80.5	14.9	8.3

Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
HINDCOPPER	317.2	-1.5	161	7	23.0
MANAPPURAM	177.3	-1.5	315	15	21.0
GNFC	639.2	-0.7	243	14	17.4
IDEA	9.1	-2.6	16999	2755	6.2
SAIL	127.8	-1.6	494	86	5.7

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
SHREECEM	24245.1	-0.8	2670	4552	1.7
APOLLOHOSP	6989.3	-1.2	9728	12920	1.3
IRCTC	871.8	-2.3	20858	26140	1.3
GAIL	222.0	-4.2	19433	24210	1.2
BALKRISIND	2970.8	-1.9	3091	3457	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
RELIANCE	2712.85	0.2	342979	342979	100.0
M&MFIN	282.15	-2.7	13178	13178	100.0
OBEROIRLTY	1903.7	-6.2	8689	8689	100.0
TRENT	7719.65	-1.1	19955	19955	100.0
BAJAJ-AUTO	10119.45	-12.9	125132	125132	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
TITAN	3403.35	-1.95	25953	25953	100.0
BAJAJ-AUTO	10119.45	-12.89	41137	41137	100.0
GODREJPROP	3084.2	-4.45	8684	9074	95.7
NMDC	224.02	-3.19	9040	9463	95.5
HAVELLS	1805.55	-6.90	8841	9388	94.2

Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
BAJAJ-AUTO	10119.45	-12.89	567378	567378	100.0
MPHASIS	3080.2	5.80	137346	137346	100.0
LTTS	5242.5	-2.14	44019	77462	56.8
HAVELLS	1805.55	-6.90	64118	116201	55.2
HEROMOTOCO	5217.45	-3.35	131634	280187	47.0

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
BAJAJ-AUTO	10119.45	-12.89	421811	421811	100.0
MPHASIS	3080.2	5.80	56545	56545	100.0
HAVELLS	1805.55	-6.90	71617	71617	100.0
TVSMOTOR	2679.25	-3.42	32871	43462	75.6
LTTS	5242.5	-2.14	25409	35304	72.0

Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Diff
BAJAJ-AUTO	10119.5	-12.9	567378	80130	7.1
MPHASIS	3080.2	5.8	137346	21284	6.5
HAVELLS	1805.6	-6.9	64118	13147	4.9
LTTS	5242.5	-2.1	44019	11578	3.8
NESTLEIND	2378.7	-3.4	65600	21236	3.1

Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Diff
HAVELLS	1805.6	-6.9	71617	8505	8.4
BAJAJ-AUTO	10119.5	-12.9	421811	52476	8.0
MPHASIS	3080.2	5.8	56545	9515	5.9
NESTLEIND	2378.7	-3.4	62941	12182	5.2
LTTS	5242.5	-2.1	25409	5438	4.7

Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20 D Call OI Diff
BAJAJ-AUTO	10119.5	-12.9	125132	28036	4.5
HAVELLS	1805.6	-6.9	13421	5649	2.4
NESTLEIND	2378.7	-3.4	22958	9842	2.3
OBEROIRLTY	1903.7	-6.2	8689	3739	2.3
SHREECEM	24245.1	-0.8	5500	2694	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20 D Put OI Diff
HDFCAMC	4728.7	-2.1	9092	3732	2.4
BAJAJ-AUTO	10119.5	-12.9	41137	17718	2.3
HAVELLS	1805.6	-6.9	8841	4259	2.1
NESTLEIND	2378.7	-3.4	12205	6256	2.0
MPHASIS	3080.2	5.8	7957	4208	1.9

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	1849500	6.2%	3014	3200	987900	6.2%	INFY	1960	6151200	-0.4%	1968	1900	2888400	-3.5%
ADANIPTS	1500	2152000	7.6%	1395	1400	938800	0.4%	ITC	520	12246400	6.4%	489	500	4507200	2.3%
APOLLOHOSP	7200	169250	3.0%	6989	7000	186250	0.2%	JSWSTEEL	1050	1140075	7.2%	980	1000	689850	2.1%
ASIANPAINT	3400	1060600	11.3%	3056	3000	586400	-1.8%	KOTAKBANK	1900	2627200	1.9%	1864	1800	930800	-3.4%
AXISBANK	1200	3005625	6.0%	1132	1100	3675000	-2.8%	LT	3800	1888500	6.4%	3570	3550	855150	-0.6%
BAJAJ-AUTO	11000	1039125	8.7%	10119	10000	423975	-1.2%	LTIM	6500	210750	1.7%	6394	5500	123150	-14.0%
BAJAJFINSV	2000	1906500	10.1%	1816	1900	334000	4.6%	M&M	3200	1810200	7.9%	2965	3000	729750	1.2%
BAJFINANCE	8000	741625	16.0%	6900	7000	714125	1.5%	MARUTI	13000	717700	7.1%	12144	12000	163550	-1.2%
BHARTIARTL	1740	2482350	2.3%	1701	1700	863075	-0.1%	NESTLEIND	2500	611200	5.1%	2379	2400	281600	0.9%
BPCL	380	9824400	10.9%	343	330	2912400	-3.7%	NTPC	450	15636000	7.7%	418	400	2553000	-4.2%
BRITANNIA	6200	171200	3.5%	5989	6000	145400	0.2%	ONGC	300	23916200	6.5%	282	280	4496800	-0.6%
CIPLA	1700	1907100	9.1%	1559	1500	537550	-3.8%	POWERGRID	360	8928000	8.7%	331	330	5605200	-0.3%
COALINDIA	500	4733400	2.1%	490	500	2807700	2.1%	RELIANCE	3000	12551000	10.6%	2713	2700	3981750	-0.5%
DIVISLAB	6300	283200	3.7%	6077	5500	256600	-9.5%	SBILIFE	1900	824250	11.6%	1702	1700	216750	-0.1%
DRREDDY	6800	341250	1.4%	6704	6500	145375	-3.0%	SBIN	900	9876750	11.0%	811	800	5355000	-1.4%
EICHERMOT	5000	465500	8.1%	4624	4500	190925	-2.7%	SUNPHARMA	1960	2871750	3.7%	1890	1900	416150	0.6%
GRASIM	2800	541500	3.5%	2706	2700	131500	-0.2%	TATACONSUM	1200	1440504	10.1%	1090	1200	571824	10.1%
HCLTECH	1900	1955100	1.7%	1868	1800	795200	-3.6%	TATAMOTORS	1000	14360500	12.2%	892	900	4371400	0.9%
HDFCBANK	1800	8726300	7.6%	1673	1600	2512400	-4.4%	TATASTEEL	170	58701500	11.5%	152	160	20960500	5.0%
HDFCLIFE	750	5615500	3.3%	726	700	1391500	-3.6%	TCS	4300	2404850	4.6%	4109	4100	786625	-0.2%
HEROMOTOCO	6000	977550	15.0%	5217	5200	414150	-0.3%	TECHM	1700	2401200	0.1%	1699	1600	807000	-5.8%
HINDALCO	750	3777200	2.1%	735	700	1897000	-4.7%	TITAN	3800	1023750	11.7%	3403	3300	678825	-3.0%
HINDUNILVR	3000	1204200	9.5%	2739	2700	608400	-1.4%	ULTRACEMCO	12000	203300	8.9%	11017	11000	95200	-0.2%
ICICIBANK	1300	3431400	5.6%	1231	1200	1659000	-2.5%	UPL	620	2165800	12.0%	554	550	774800	-0.7%
INDUSINDBK	1500	2320000	11.3%	1347	1400	1286000	3.9%	WIPRO	550	6237000	4.0%	529	530	3796500	0.2%

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

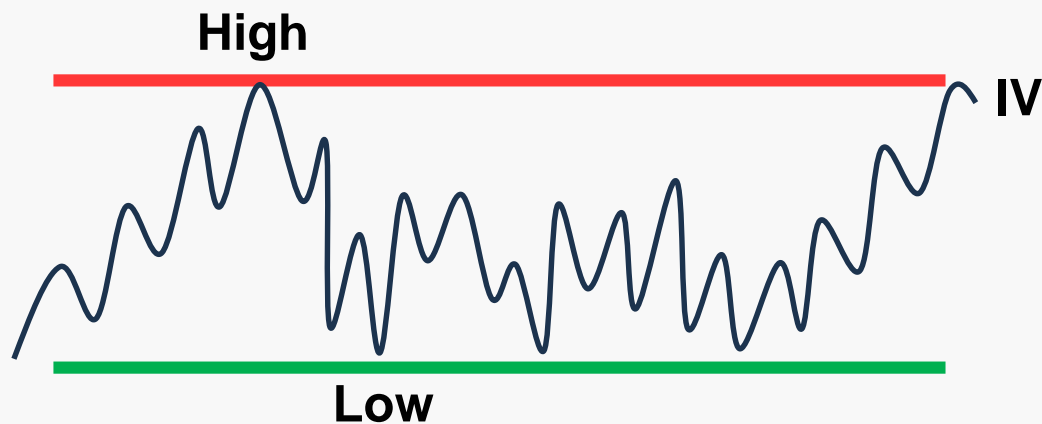
If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

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

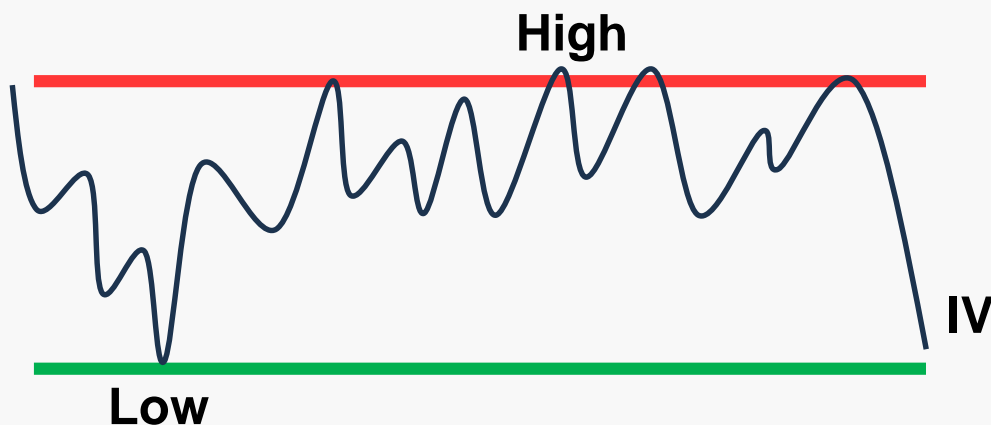
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

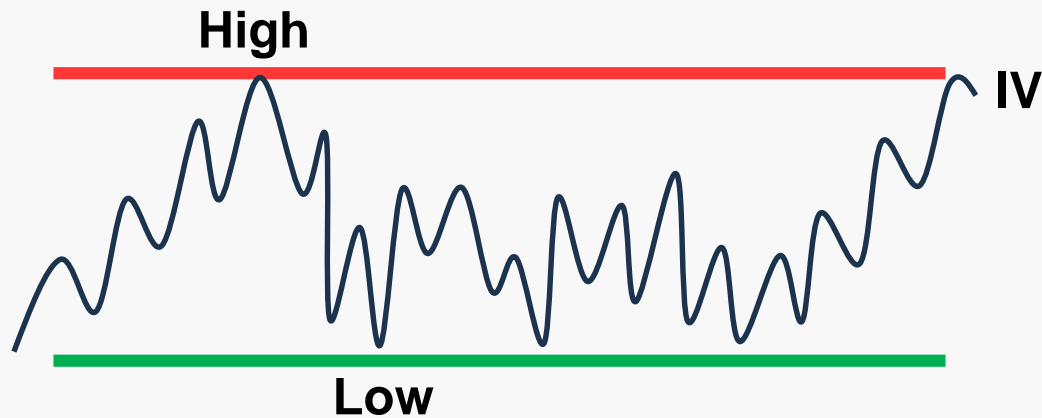


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

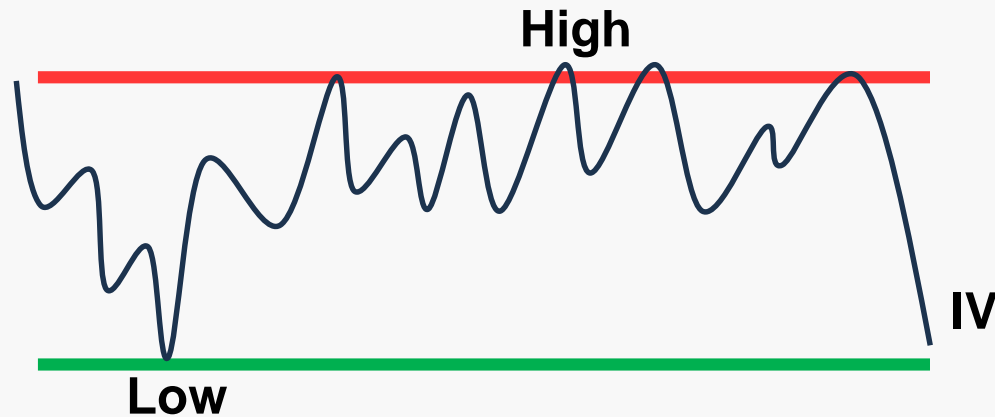


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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