



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,418	1.3% ▼
Open Interest (OI)	1,33,76,200	4.8% ▲
Change in OI (abs)	1,33,76,200	6,06,625 ▲
Premium / Discount (Abs)	82	11 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	53,016	1.3% ▼
Open interest (OI)	27,12,525	3.8% ▲
Change in OI (abs)	27,12,525	1,00,050 ▲
Premium / Discount (Abs)	181	65 ▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	14.48	0.5 ▲
Nifty ATM IV (%)	15.865	1.4 ▼
Bank Nifty ATM IV (%)	17.33	1.3 ▲
PCR (Nifty)	0.64	0.26 ▼
PCR (Bank Nifty)	0.69	0.22 ▼

*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 (%)
NYKAA	3,63,85,300	26.5%	177.04	1.0%
LODHA	20,93,400	21.0%	1487.65	1.3%
NCC	79,92,825	10.9%	314	1.3%
POLICYBZR	23,11,725	7.9%	2139.75	0.8%
SHREECEM	3,71,375	7.1%	28025.95	0.2%

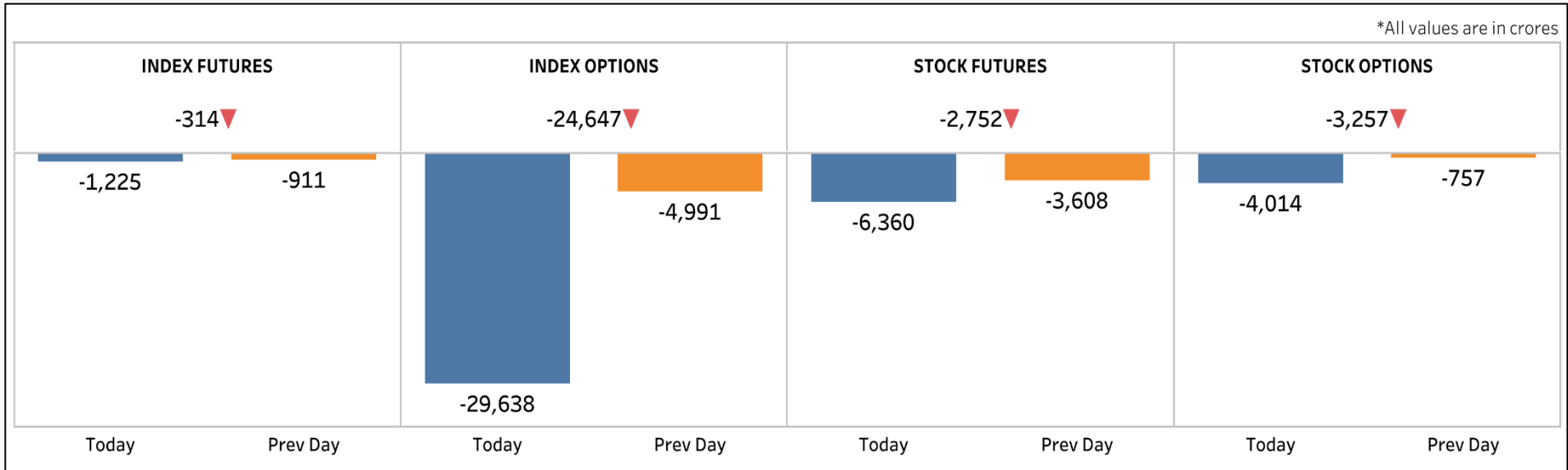
Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CHAMBLFERT	1,20,72,600	30.2%	530.05	-0.4%
POONAWALLA	1,41,63,600	23.2%	334.45	-2.7%
COROMANDEL	35,24,500	12.5%	1816.4	-0.5%
CANFINHOME	64,68,150	11.1%	782.25	-2.6%
CGPOWER	40,83,200	11.0%	773.4	-0.1%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DIXON	18,11,500	-6.6%	19007.05	0.8%
GODREJPROP	55,50,075	-5.6%	2995.8	0.5%
BSOFT	1,22,97,000	-3.4%	608.7	0.3%
NATIONALUM	6,81,26,250	-2.8%	226.91	2.5%
CDSL	49,45,150	-1.9%	1967.55	0.2%

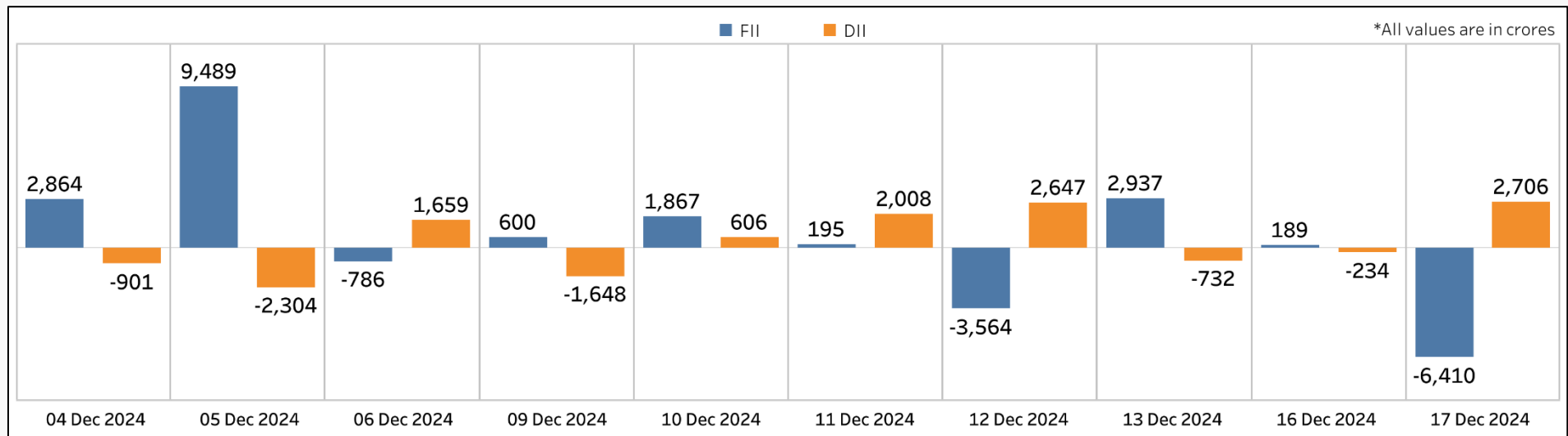
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KEI	2,51,250	-5.2%	4405.3	-1.9%
LTIM	21,31,650	-3.6%	6722.35	-0.3%
MUTHOOTFIN	41,38,475	-3.5%	2106.75	-0.7%
APOLLOTYRE	1,42,78,300	-3.4%	533.45	-1.6%
MFSL	39,66,400	-3.3%	1146.95	-0.4%

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

Daily Net Open Interest Change

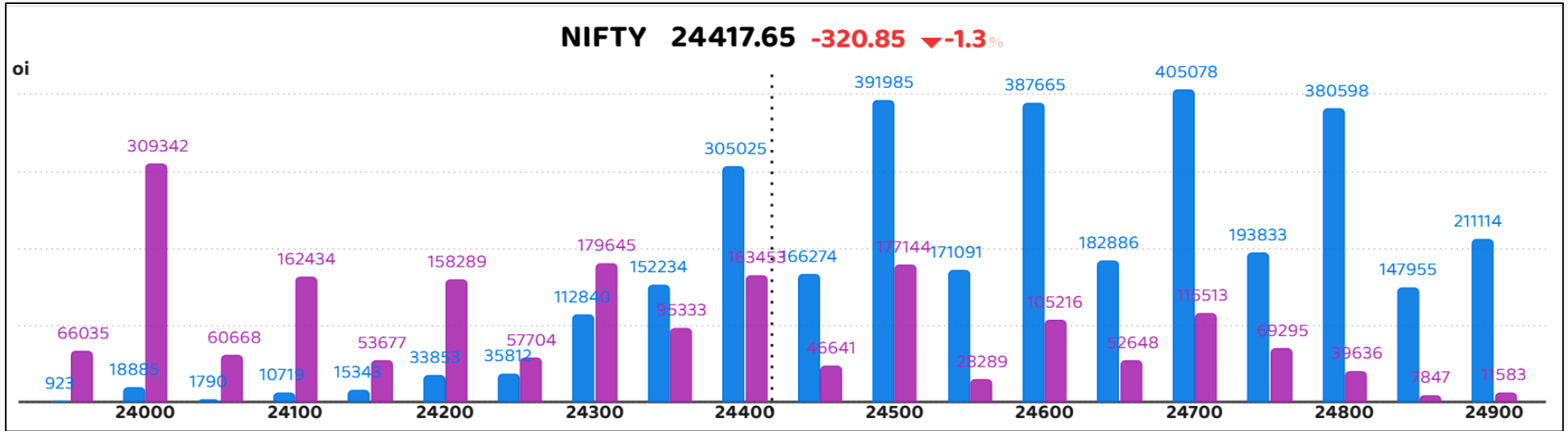


DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 24,700 call and the 24,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 54,000 call and the 52,000 put saw the most amount of open interest.

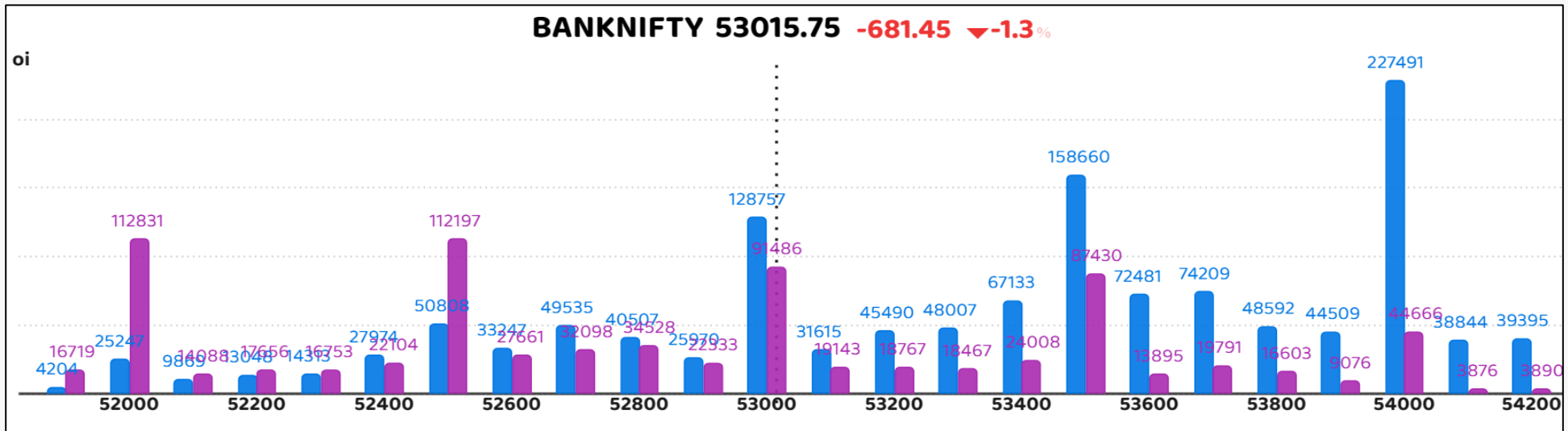
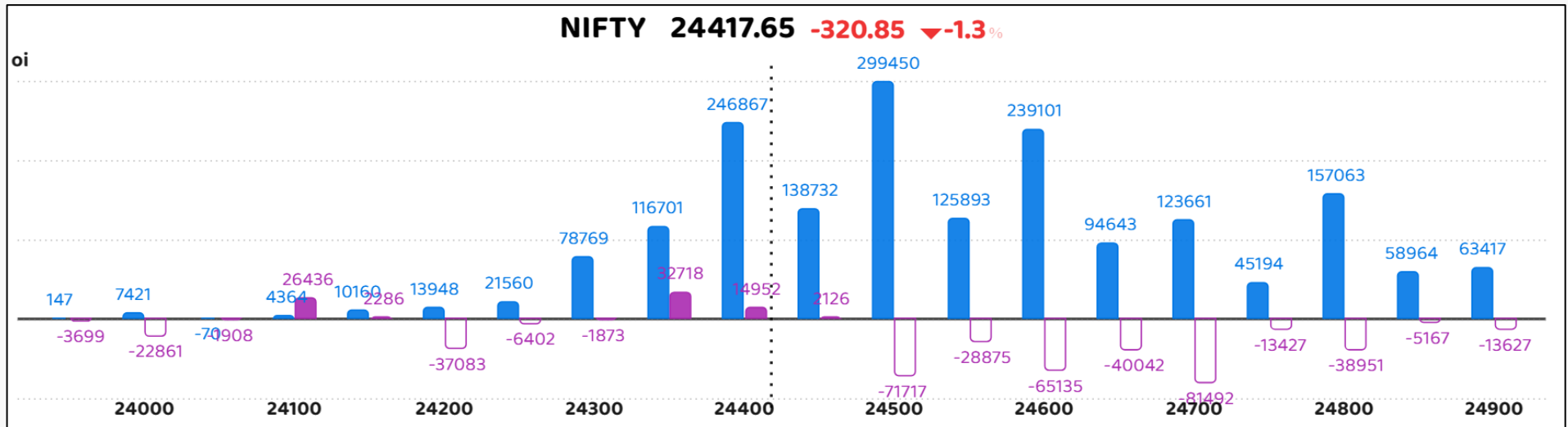


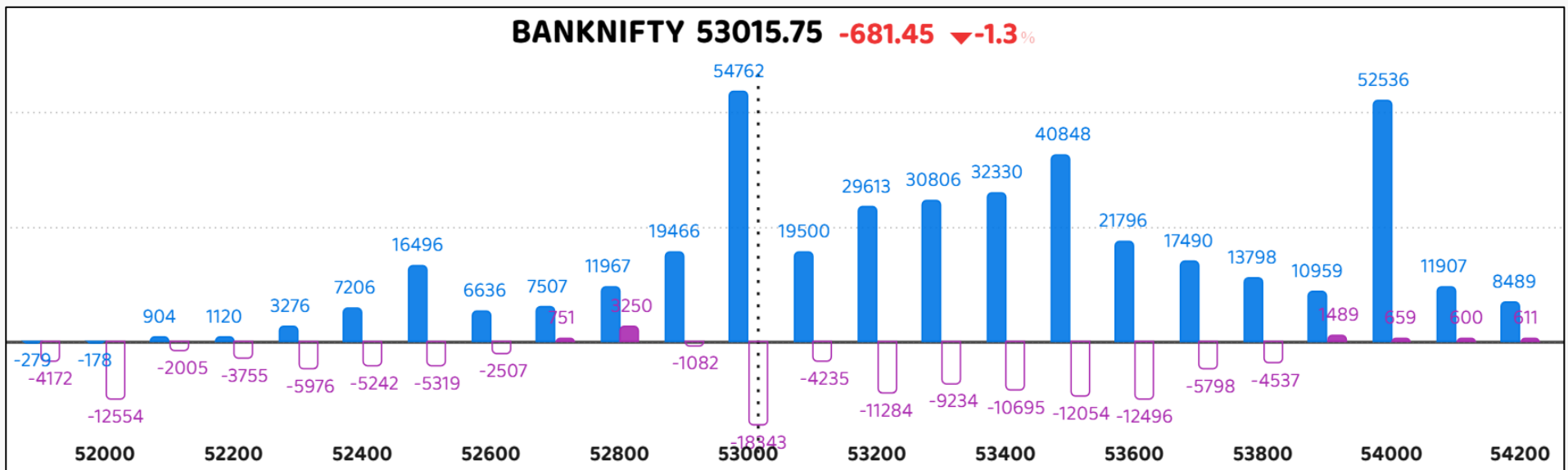
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■

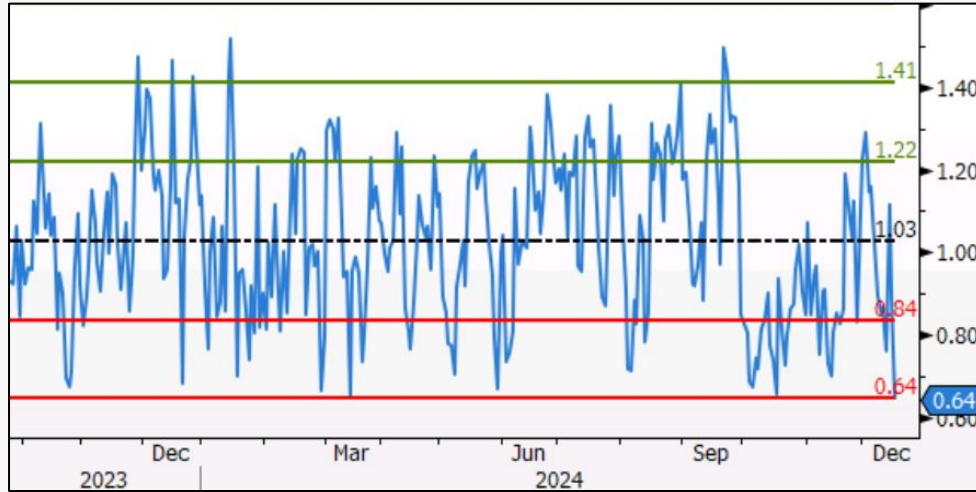


The largest open interest changes (contracts) were seen at the 24,500 call strike and 24,700 put strike.

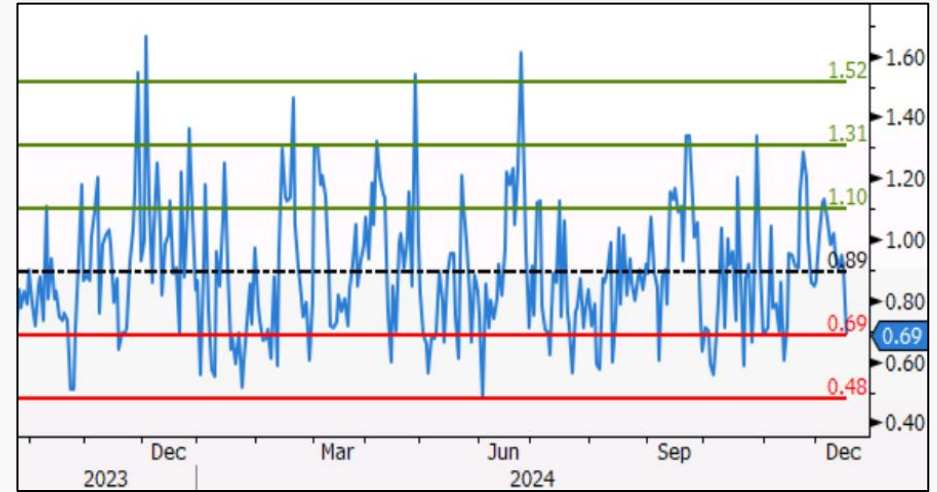


For the Bank Nifty, the biggest open interest changes were seen at the 53,000, Call Strike & 53,000 Put strike.

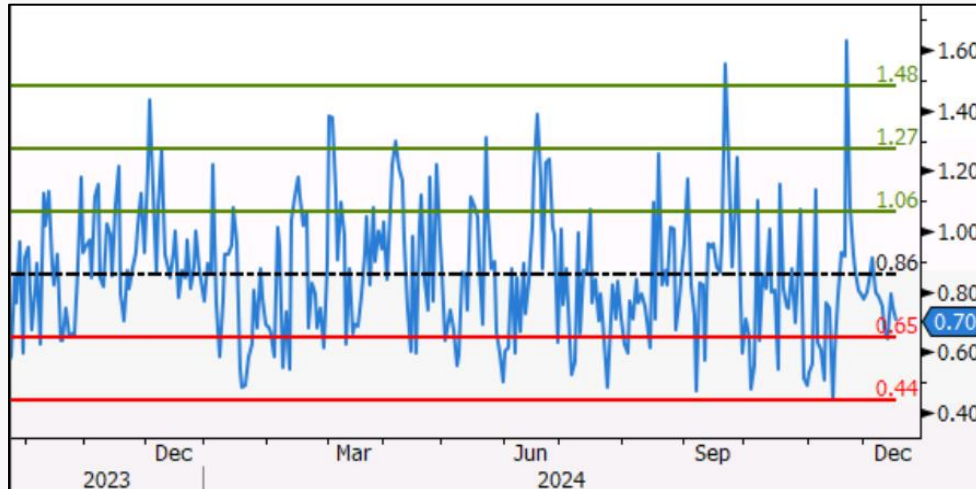
Nifty



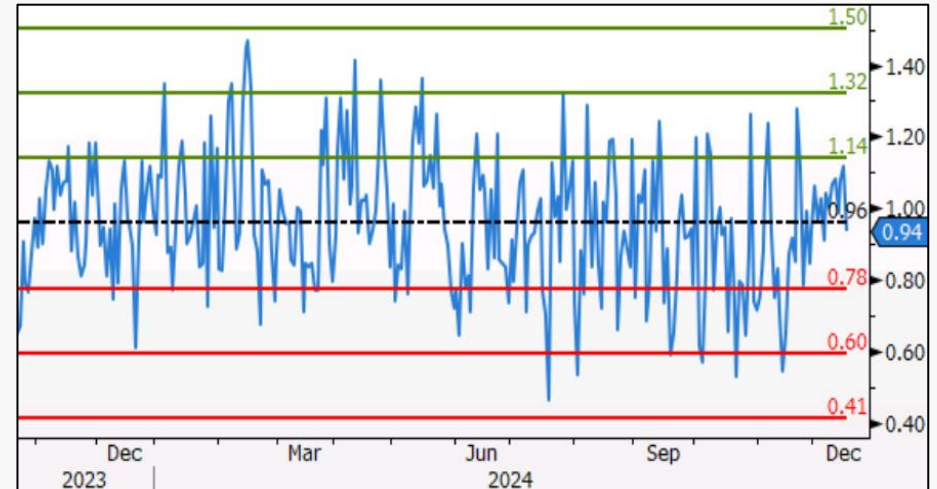
Bank Nifty



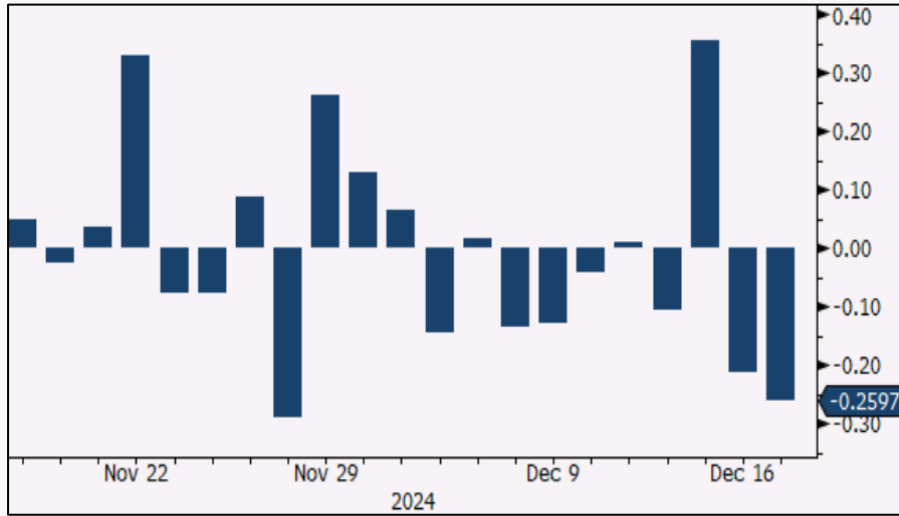
Fin Nifty



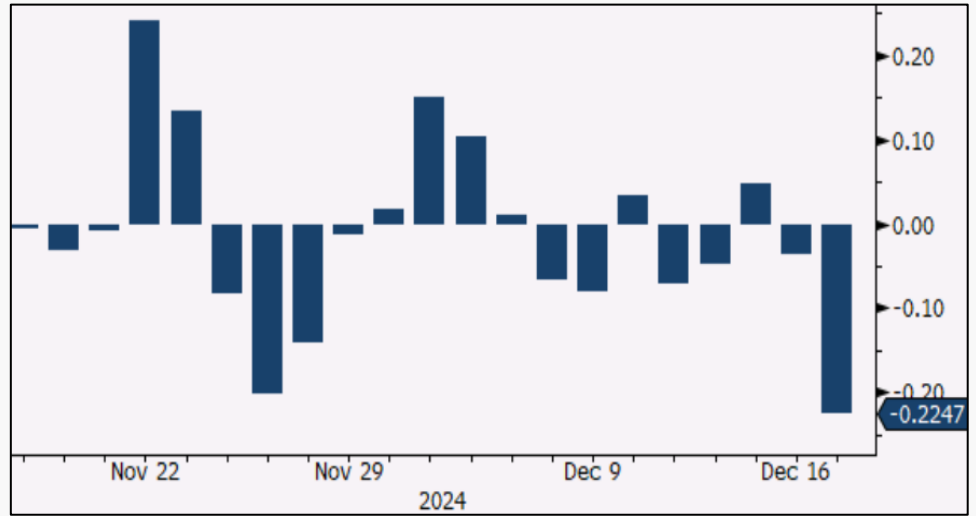
Midcap Nifty



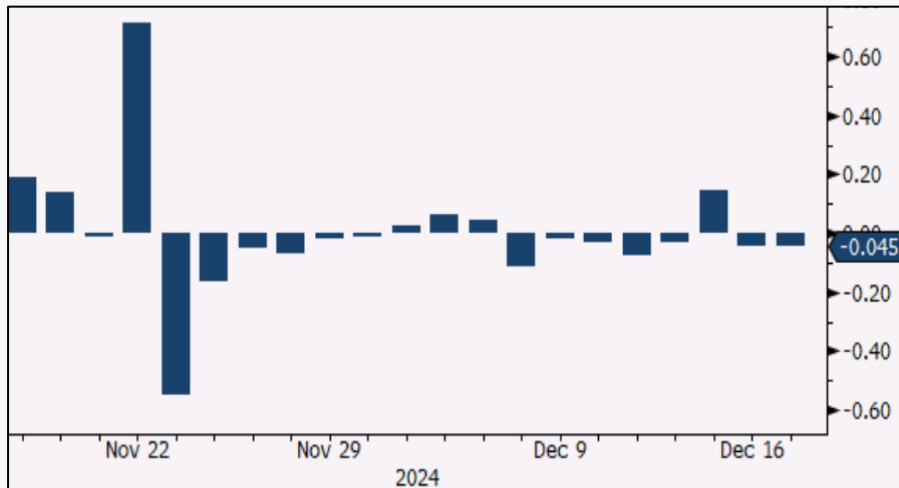
Nifty



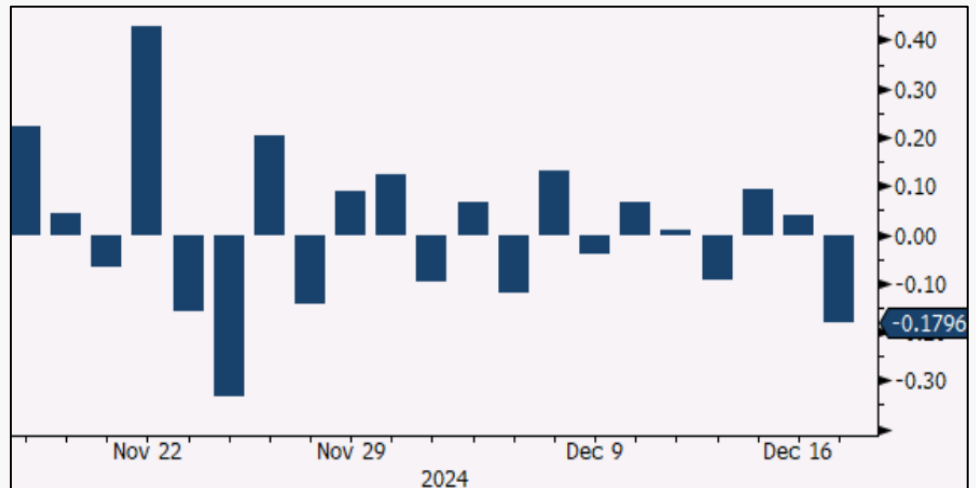
Bank Nifty



Fin Nifty



Midcap Nifty



Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
RBL BANK LTD	167.05	-3.2	71.4	79.2	13.3	88.1
MANAPPURAM FINAN	181.44	-1.9	62.1	80.2	2.7	76.6
DIXON TECHNOLOGI	18940.15	0.6	37.4	51.3	1.8	71.8
PIDILITE INDS	3081.35	-3.5	27.7	33.7	13.3	70.6
MARUTI SUZUKI IN	11108.55	-1.5	22.9	33.7	0.4	67.7

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN PETRO	407.1	0.0	17.1	58.2	17.1	0.0
COFORGE LTD	9402.95	1.3	26.0	46.6	26.0	0.0
REC LTD	550.55	-1.7	28.7	86.9	27.7	1.8
BANK OF BARODA	255.99	-1.2	25.4	66.9	24.5	2.0
EICHER MOTORS	4742.65	-2.0	21.1	40.3	20.6	2.5

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RBL BANK LTD	167.05	-3.2	71.4	79.2	13.3	99.4
MANAPPURAM FINAN	181.44	-1.9	62.1	80.2	2.7	99.2
PIDILITE INDS	3081.35	-3.5	27.7	33.7	13.3	93.6
BRITANNIA INDS	4776.75	-1.4	23.7	30.9	14.1	80.5
TATA CONSUMER PR	904.9	-1.7	25.0	32.3	13.6	76.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN PETRO	407.1	0.0	17.1	58.2	17.1	0.0
COFORGE LTD	9402.95	1.3	26.0	46.6	26.0	0.0
IPCA LABS LTD	1558.15	-0.5	16.2	49.3	14.4	0.7
NAVIN FLUORINE I	3466.5	-1.3	22.5	46.3	16.8	0.7
REC LTD	550.55	-1.7	28.7	86.9	27.7	1.1

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
IPCA LABS LTD	1558.15	-0.5	7191	1203	6.0
VODAFONE IDEA LT	7.81	-2.3	10053	1944	5.2
INFO EDGE	8853.85	0.5	54278	15555	3.5
GUJARAT NARM VLY	612.8	-1.1	11668	3411	3.4
CHAMBAL FERTILIS	529.6	-0.4	29834	8855	3.4

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
APOLLO TYRES LTD	532.85	-1.3	5136	6376	1.2
SIEMENS LTD	7790.65	-2.2	18973	20609	1.1
LTIMINDTREE LTD	6696.95	-0.6	9683	10351	1.1
SHRIRAM FINANCE	2976.9	-5.1	68540	71918	1.0
GRASIM INDS LTD	2599.7	-3.2	16956	17780	1.0

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
ULTRATECH CEMENT	11774.95	-1.4	29206	29206	100
COAL INDIA LTD	402.9	-1.8	40817	40817	100
SBI LIFE INSURAN	1409.7	-0.8	21449	21449	100
GODREJ CONSUMER	1089.3	-2.1	17757	17757	100
CIPLA LTD	1450.85	0.2	30237	30237	100

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
COAL INDIA LTD	402.9	-1.8	25673	25673	100.0
SHRIRAM FINANCE	2976.9	-5.1	11424	11424	100.0
DIXON TECHNOLOGI	18940.15	0.6	62865	62865	100.0
OBEROI REALTY	2315.55	2.8	10288	10288	100.0
COROMANDEL INTER	1817.15	-0.1	5188	5188	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Volume	Highest CV	Call Diff
NO STOCK OPTION MET THIS CRITERIA IN THE PREVIOUS SESSION					

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Volume	Highest PV	Put Diff
SHRIRAM FINANCE	2976.9	-5.1	71918	71918	100.0
COROMANDEL INTER	1817.15	-0.1	18594	18594	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ATUL LTD	7333.25	-0.1	3517	1437	2.4
GODREJ CONSUMER	1089.3	-2.1	17757	7577	2.3
SHRIRAM FINANCE	2976.9	-5.1	24613	11066	2.2
SYNGENE INTERNAT	860.2	0.1	6836	3359	2.0
JK CEMENTS LTD	4669.55	-1.9	3792	1976	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
COROMANDEL INTER	1817.15	-0.1	5188	1746	3.0
OBEROI REALTY	2315.55	2.8	10288	4329	2.4
PAGE INDUSTRIES	49212.85	0.0	3643	1915	1.9
UNITED SPIRITS	1563.3	2.9	5047	2679	1.9
ATUL LTD	7333.25	-0.1	1039	563	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
UNITED SPIRITS	1563.3	2.9	65521	12643	5.2
PVR INOX LTD	1494.6	1.4	79478	15549	5.1
COROMANDEL INTER	1817.15	-0.1	33847	7276	4.7
OBEROI REALTY	2315.55	2.8	88886	24241	3.7
CIPLA LTD	1450.85	0.2	105090	28875	3.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
COROMANDEL INTER	1817.15	-0.1	18594	3108	6.0
SHRIRAM FINANCE	2976.9	-5.1	71918	16789	4.3
PIDILITE INDS	3081.35	-3.5	9625	2377	4.0
PVR INOX LTD	1494.6	1.4	26505	6621	4.0
UNITED SPIRITS	1563.3	2.9	22797	6183	3.7

Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

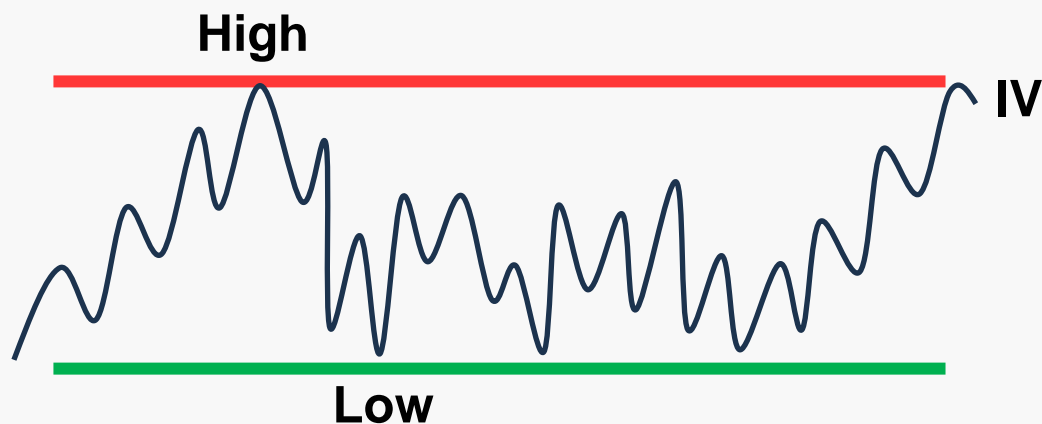
Stock Name	CE Strike	CE OI	% Away	CMP	PE Strike	PE OI	% Away	Stock Name	CE Strike	CE OI	% Away	CMP	PE Strike	PE OI	% Away
ADANIENT	3000	1718400	20.6%	2488	3000	2088000	20.6%	INFY	2000	2976800	1.2%	1977	1900	1891200	-3.9%
ADANIPTS	1300	3460400	5.5%	1232	1200	1846000	-2.6%	ITC	480	9500800	2.2%	470	460	3492800	-2.0%
APOLLOHOSP	7500	126125	3.9%	7219	7000	139500	-3.0%	JSWSTEEL	1000	1975725	3.4%	967	1000	738450	3.4%
ASIANPAINT	2500	2418800	6.1%	2356	2400	585200	1.9%	KOTAKBANK	1900	2380800	6.5%	1784	1800	1122800	0.9%
AXISBANK	1200	5936250	5.6%	1136	1140	1655625	0.3%	LT	4000	1245600	5.1%	3807	3700	432450	-2.8%
BAJAJ-AUTO	10000	471825	12.4%	8895	9000	184200	1.2%	LTIM	6800	134250	1.5%	6697	6700	93450	0.0%
BAJAJFINSV	1700	2500500	3.5%	1643	1600	381500	-2.6%	M&M	3100	1105650	1.9%	3041	3000	447300	-1.4%
BAJFINANCE	7200	528750	0.7%	7153	6800	463500	-4.9%	MARUTI	11500	442150	3.5%	11108	11200	124750	0.8%
BHARTIARTL	1700	3138800	5.2%	1615	1600	1100100	-0.9%	NESTLEIND	2300	592200	4.4%	2203	2200	277800	-0.1%
BPCL	310	6969600	5.8%	293	290	2422800	-1.0%	NTPC	370	17001000	6.0%	349	350	3493500	0.3%
BRITANNIA	5000	501100	4.7%	4777	4800	129900	0.5%	ONGC	264	11888800	6.7%	247	250	2544850	1.1%
CIPLA	1500	2009800	3.4%	1451	1480	395525	2.0%	POWERGRID	350	7705800	6.1%	330	320	2014200	-3.0%
COALINDIA	420	7122150	4.2%	403	400	3026100	-0.7%	RELIANCE	1300	19423000	4.4%	1245	1300	7324000	4.4%
DIVSLAB	6200	350700	6.0%	5847	6000	136200	2.6%	SBILIFE	1500	1753500	6.4%	1410	1400	435000	-0.7%
DRREDDY	1300	568125	4.2%	1248	1200	455000	-3.8%	SBIN	900	8066250	5.8%	851	800	4963500	-5.9%
EICHERMOT	5000	383425	5.4%	4743	4500	182875	-5.1%	SHRIRAMFIN	3200	745200	7.5%	2977	3000	185850	0.8%
GRASIM	2700	428750	3.9%	2600	2600	252500	0.0%	SUNPHARMA	1820	3584700	1.7%	1789	1800	302400	0.6%
HCLTECH	1960	1033550	0.5%	1951	1920	674800	-1.6%	TATACONSUM	950	2407224	5.0%	905	940	531696	3.9%
HDFCBANK	1900	6557650	3.6%	1833	1800	3478750	-1.8%	TATAMOTORS	800	14225200	2.6%	780	800	4038100	2.6%
HDFCLIFE	650	3590400	3.7%	627	640	1216600	2.1%	TATASTEEL	150	36921500	3.0%	146	140	15526500	-3.9%
HEROMOTOCO	4700	993150	6.5%	4415	4600	315000	4.2%	TCS	4500	1269800	4.0%	4328	4200	590625	-3.0%
HINDALCO	700	4713800	9.5%	639	660	1787800	3.2%	TECHM	1800	1411200	1.7%	1771	1600	575400	-9.6%
HINDUNILVR	2500	1841100	5.8%	2363	2300	500400	-2.7%	TITAN	3500	685125	2.8%	3406	3300	345625	-3.1%
ICICIBANK	1340	5178600	0.5%	1334	1300	2795100	-2.5%	ULTRACEMCO	12000	184250	1.9%	11775	11000	142150	-6.6%
INDUSINDBK	1000	5844000	2.5%	976	1000	2442000	2.5%	WIPRO	310	8247000	0.4%	309	300	4170000	-2.9%

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

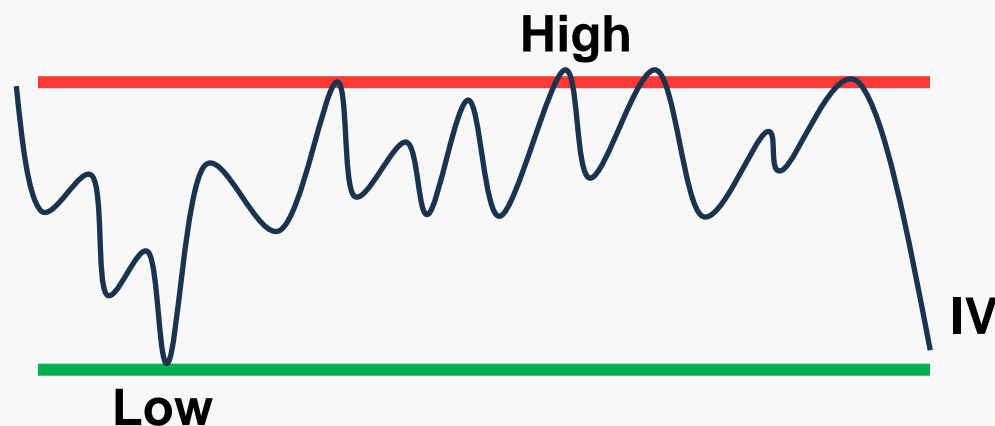
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

- **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

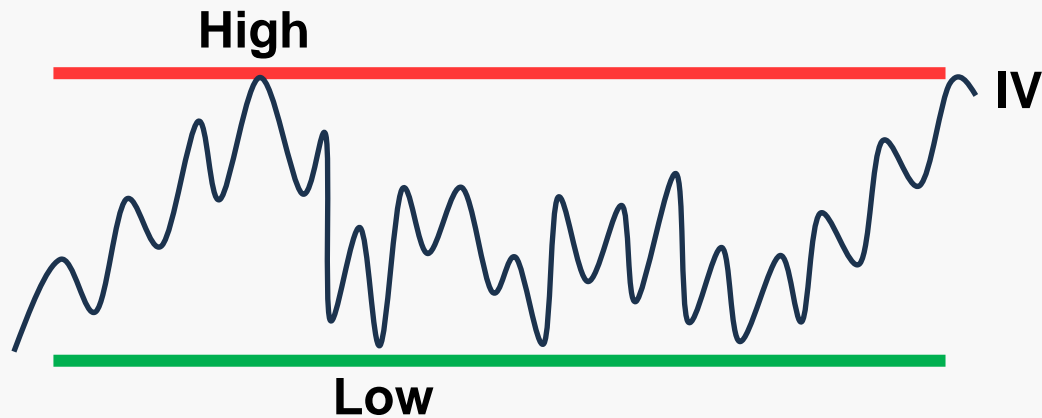


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

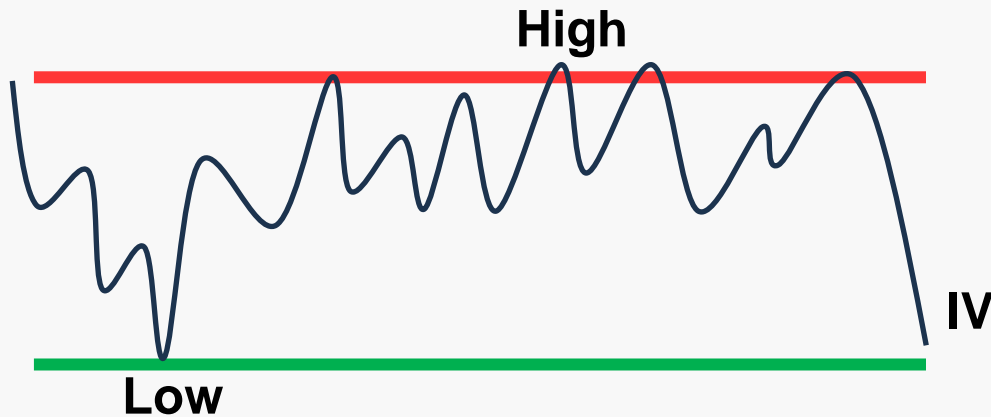


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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