



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,388	0.5%▼
Open Interest (OI)	1,15,97,375	32.9%▲
Change in OI (abs)	1,15,97,375	28,71,700▲
Premium / Discount (Abs)	183	153▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	51,954	0.6%▼
Open interest (OI)	28,33,440	15.1%▲
Change in OI (abs)	28,33,440	3,71,145▲
Premium / Discount (Abs)	479	27▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	15.55	0.0▲
Nifty ATM IV (%)	15.52	0.8▲
Bank Nifty ATM IV (%)	17.26	0.6▲
PCR (Nifty)	1.07	0.1▼
PCR (Bank Nifty)	0.69	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 (%)
LTF	6,60,28,676	1.0%	147.14	0.4%
CIPLA	1,44,11,800	1.0%	1560.25	9.4%
PAGEIND	2,63,715	0.5%	43240.65	0.3%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ABCAPITAL	7,12,63,800	8.6%	204.17	-5.8%
HAVELLS	97,14,000	3.1%	1650.5	-1.4%
SHRIRAMFIN	79,28,100	1.9%	3138.4	-1.6%
RECLTD	5,83,58,000	0.7%	522.4	-2.2%
INDHOTEL	2,13,04,000	0.7%	681.75	-1.1%

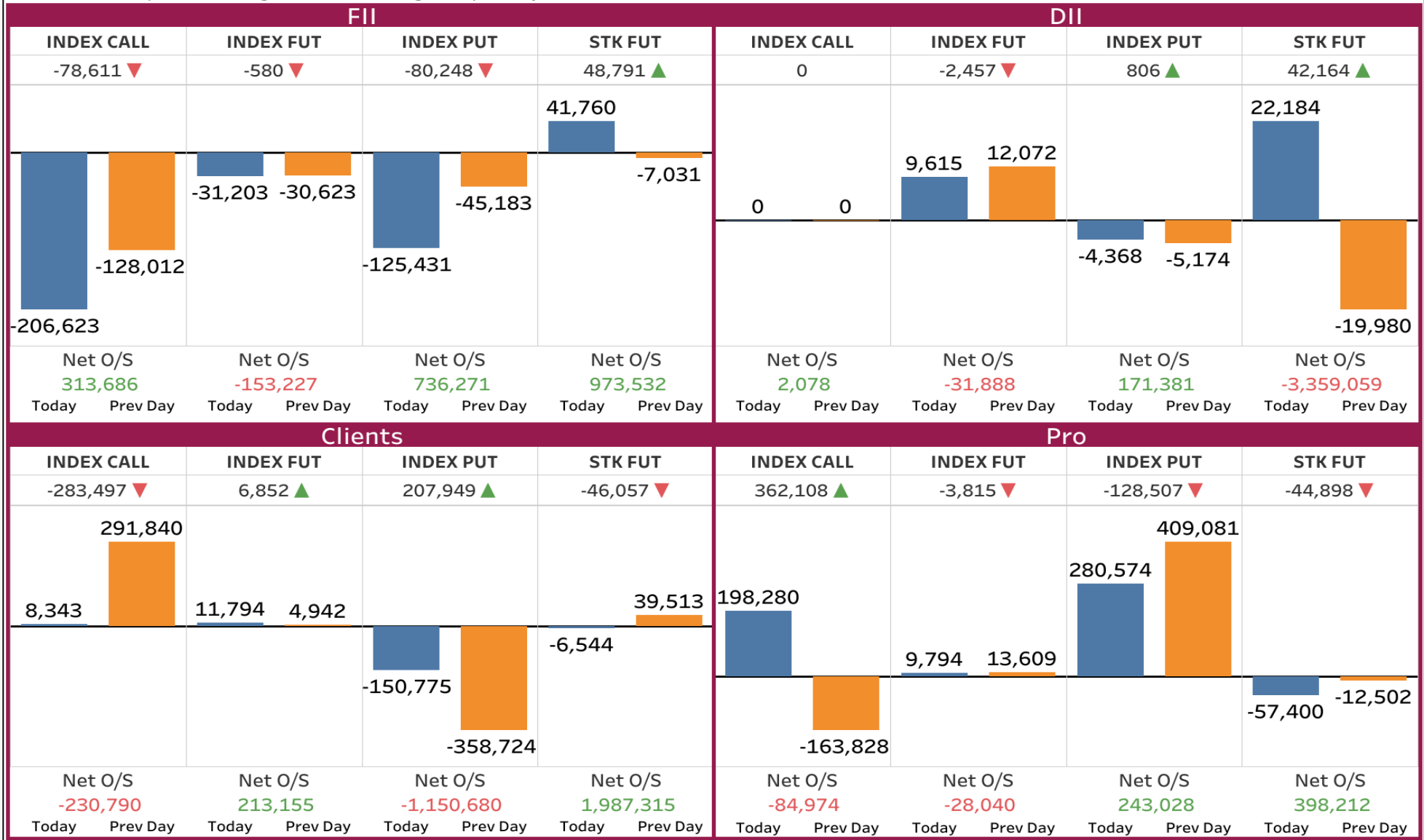
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MFSL	42,65,600	-28.9%	1286.85	1.9%
RAMCOCEM	71,97,800	-27.7%	890.85	0.2%
FEDERALBNK	6,39,60,000	-25.8%	204.79	0.2%
ONGC	11,39,81,175	-23.2%	266.85	1.4%
IEX	4,93,27,500	-22.1%	178.78	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDIAMART	8,05,200	-59.6%	2527.9	-1.8%
IDFCFIRSTB	28,37,85,000	-44.6%	66.11	-4.2%
RBLBANK	3,83,12,500	-42.7%	171.84	-3.4%
PNB	19,30,08,000	-34.6%	99.03	-1.9%
BERGEPAIN	85,11,360	-28.0%	537.55	-2.1%

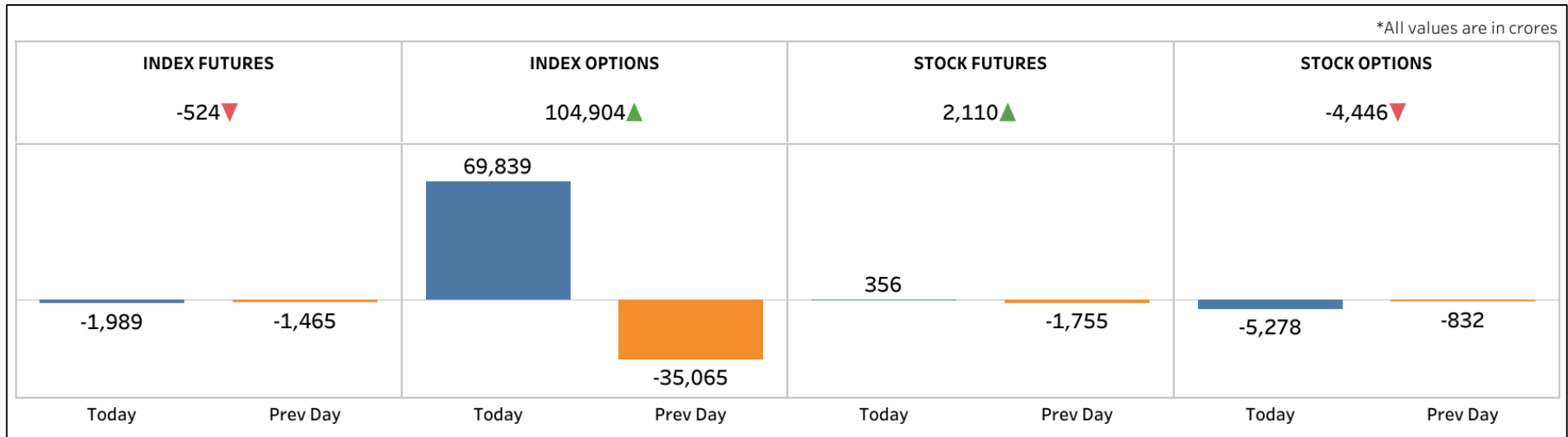
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Data by Participant

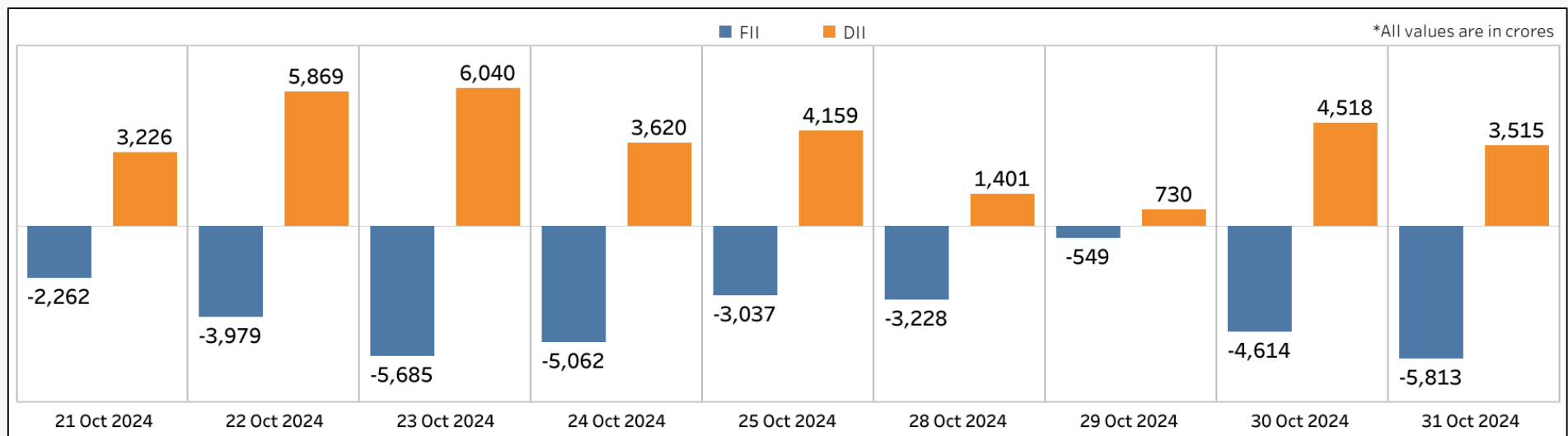
▲ and ▼ indicate positive and negative absolute changes, respectively



Daily Net Open Interest Change

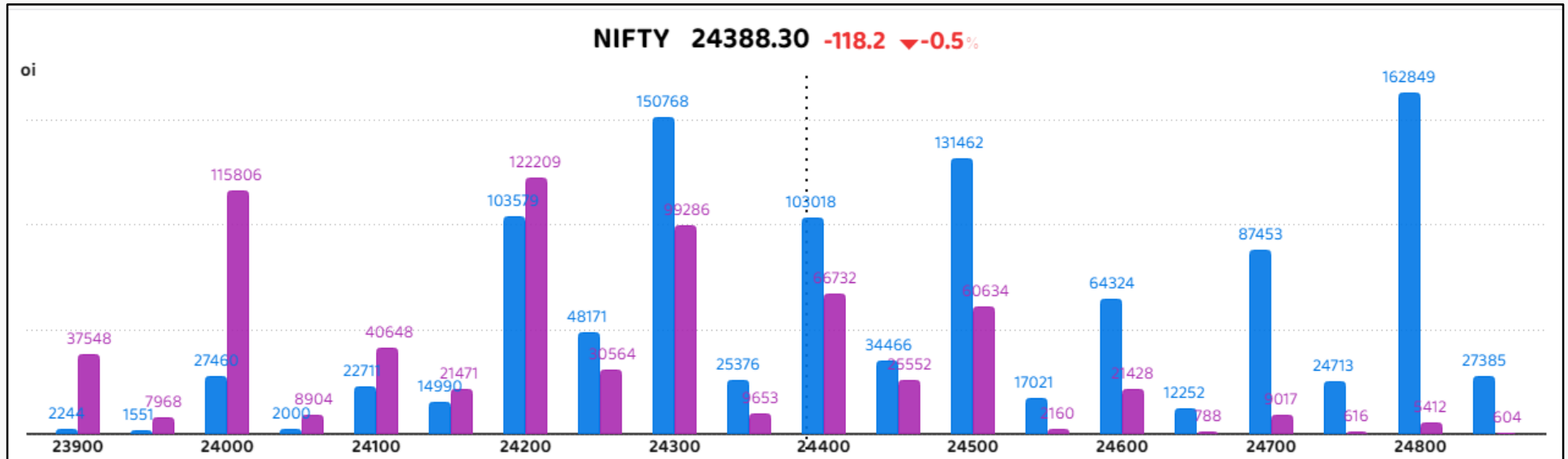


DII and FII Daily Cash Market Flows



Positioning Stack by Strike (Current Week Expiry)

Call ■ Put ■



For the Nifty, the 24,800 call and the 24,200 put had the highest call and put concentration (contracts). For the Bank Nifty, the 52,000 call and the 51,500 put saw the most amount of open interest.

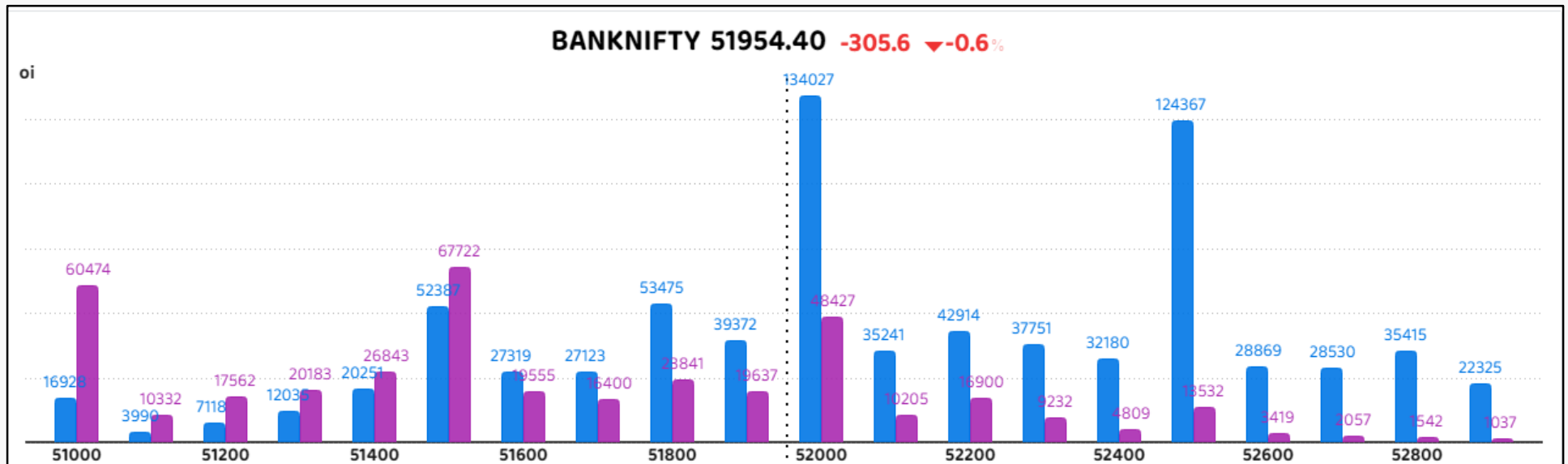
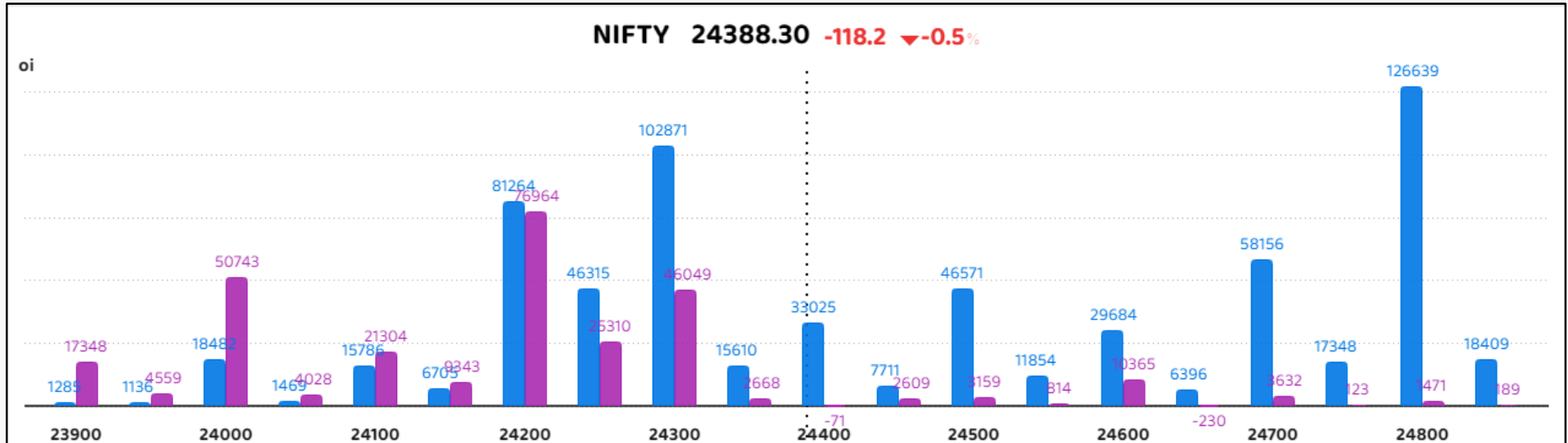


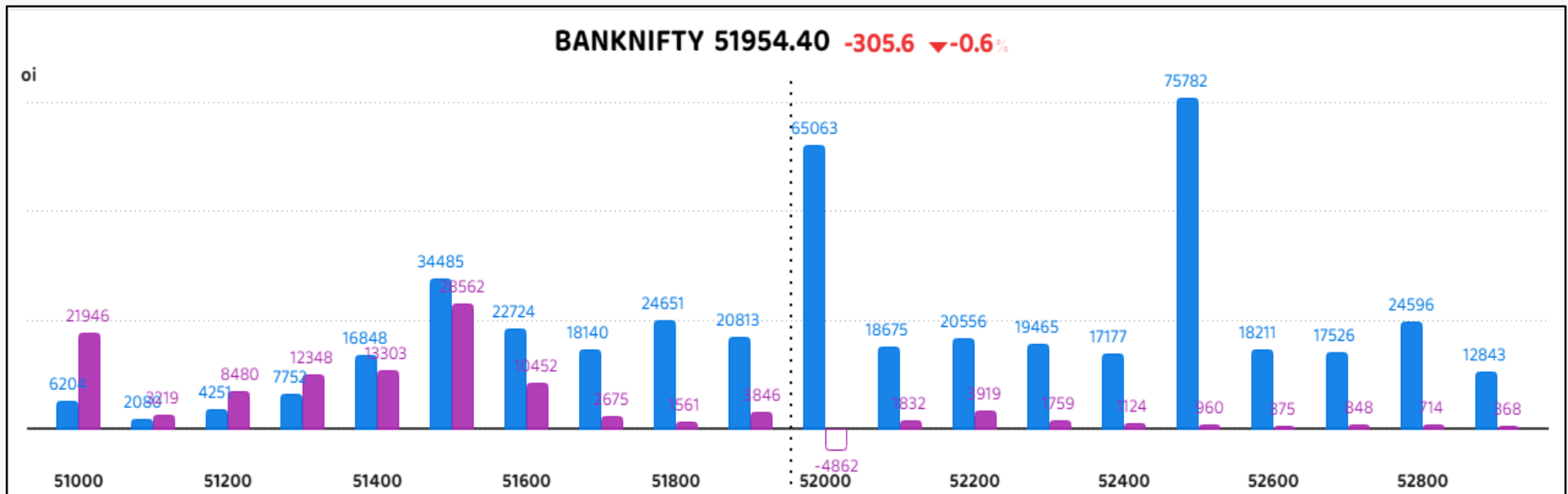
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Current Week Expiry)

Call ■ Put ■

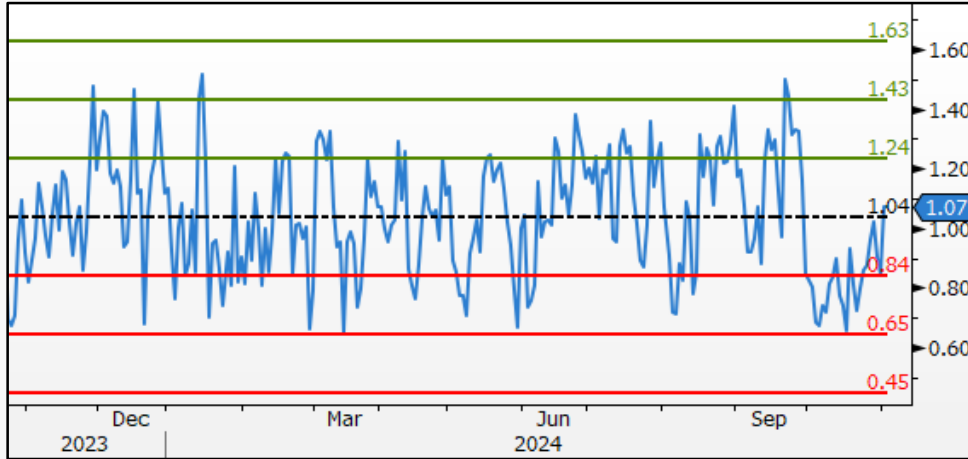


The largest open interest changes (contracts) were seen at the 24,800 call strike and 24,200 put strike.

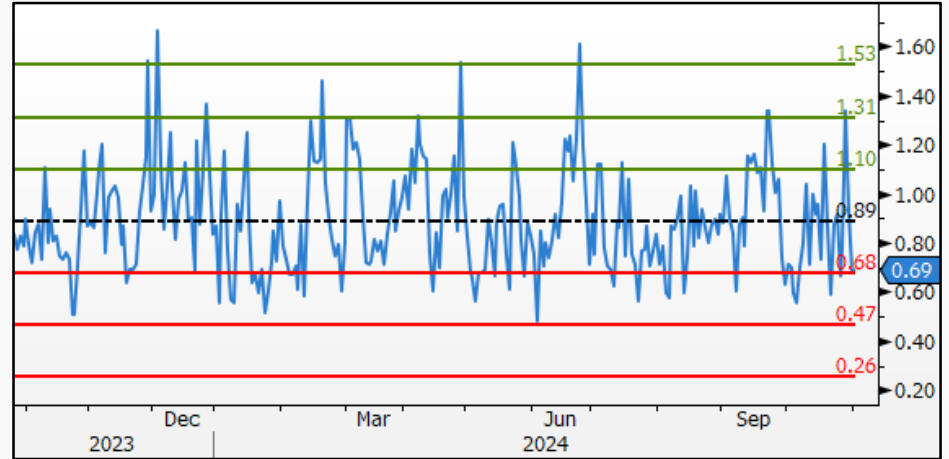


For the Bank Nifty, the biggest open interest changes were seen at the 52,500, Call Strike & 51,500 Put strike.

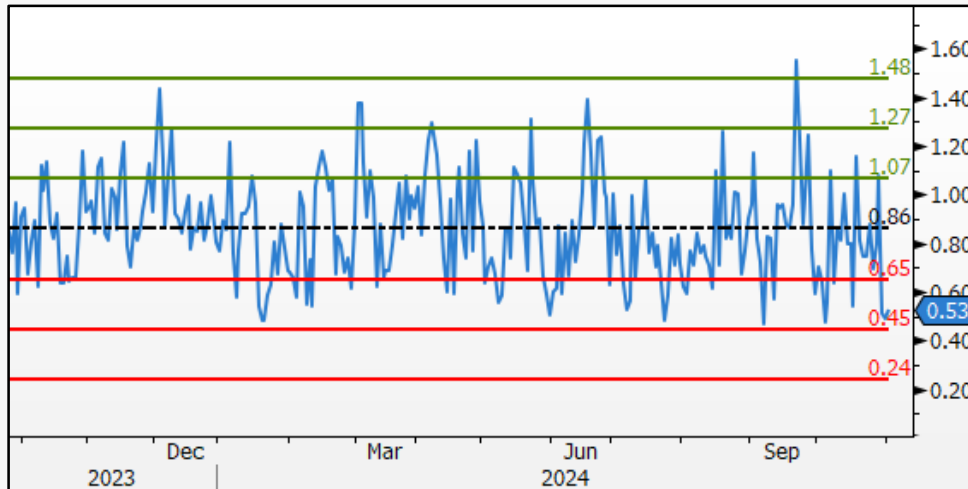
Nifty



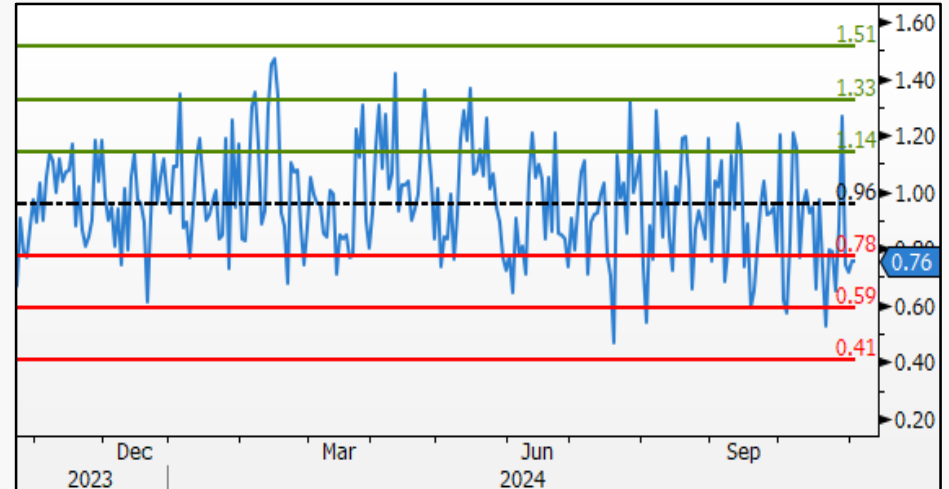
Bank Nifty



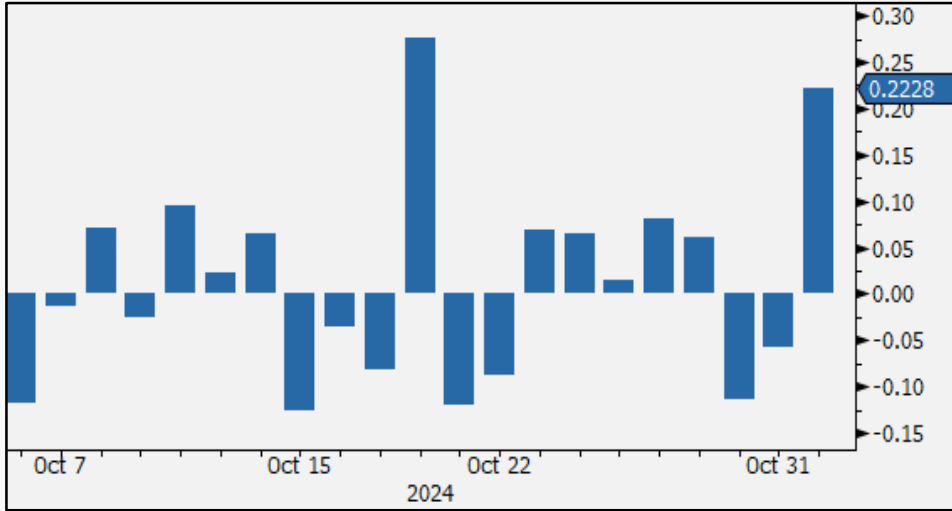
Fin Nifty



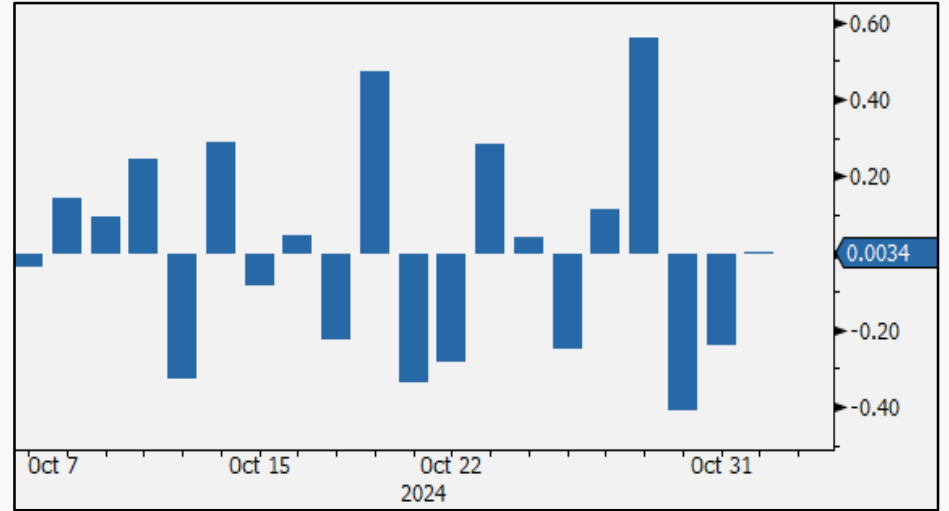
Midcap Nifty



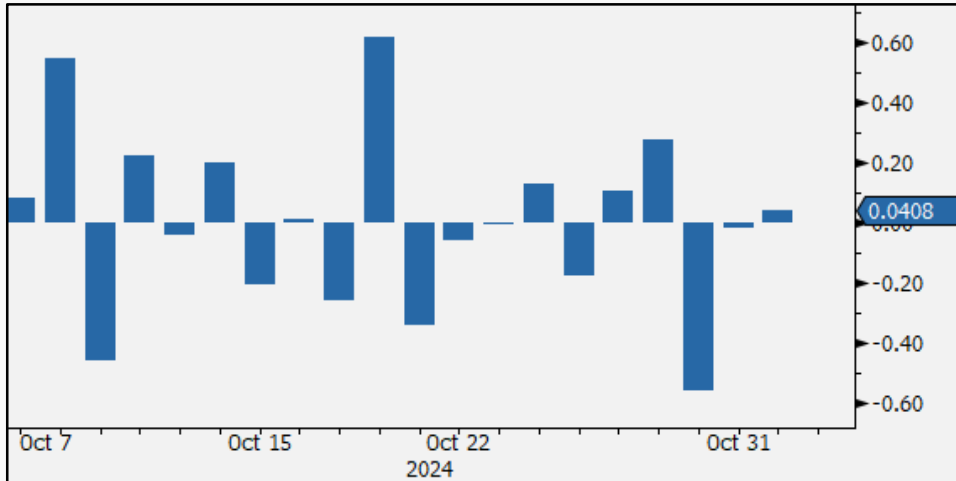
Nifty



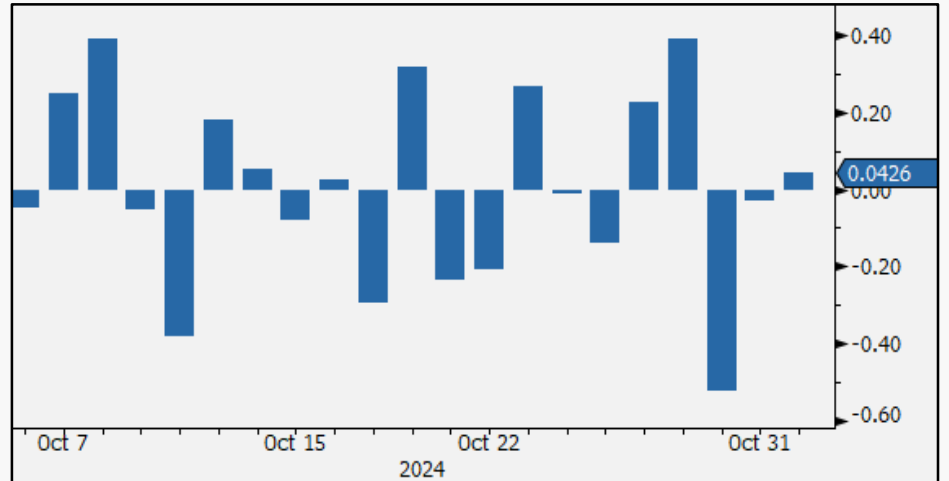
Bank Nifty



Fin Nifty



Midcap Nifty



Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TITAN CO LTD	3293.7	0.8	33.5	33.5	2.3	100
ABBOTT INDIA LTD	29295.5	1.1	32.4	32.6	6.5	98.9
TATA MOTORS LTD	843.45	1.1	41.0	41.8	19.8	96.2
BALRAMPUR CHINI	628.5	0.1	50.1	52.3	12.0	94.5
TRENT LTD	7149	0.3	48.5	53.6	2.2	90.1

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AMBUJA CEMENTS	582.45	0.3	24.4	70.4	19.1	10.3
ACC LTD	2327.85	0.3	23.3	55.4	19.2	11.3
BANK OF BARODA	253.7	1.1	30.3	66.9	24.5	13.7
ADANI PORTS AND	1394.4	1.3	26.8	85.8	16.7	14.7
HDFC LIFE INSURA	723.7	0.5	25.0	80.5	14.9	15.3

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TITAN CO LTD	3293.7	0.8	33.5	33.5	2.3	100.0
ABBOTT INDIA LTD	29295.5	1.1	32.4	32.6	6.5	99.6
BALRAMPUR CHINI	628.5	0.1	50.1	52.3	12.0	99.4
BOSCH LTD	35182.15	0.2	34.9	39.2	3.3	99.1
MAHINDRA & MAHIN	2817.65	3.3	38.3	58.8	0.8	98.8

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
AMBUJA CEMENTS	582.45	0.3	24.4	70.4	19.1	7.1
ADANI ENTERPRISE	2949.5	0.1	29.7	84.3	2.4	7.6
ACC LTD	2327.85	0.3	23.3	55.4	19.2	7.9
SRF LTD	2252.3	0.4	22.8	40.8	16.0	9.6
PETRONET LNG LTD	335.9	0.9	23.7	61.3	14.1	14.8

Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
OIL & NATURAL GA	271.75	2.1	6001	1174	5.1
SAMVARDHANA MOTH	182.23	0.7	2003	516	3.9
MAHINDRA & MAHIN	2817.65	3.3	40878	12725	3.2
REC LTD	526.8	0.8	3768	1252	3.0
TATA MOTORS LTD	843.45	1.1	11088	3936	2.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
COFORGE LTD	7624.1	-0.9	2075	2621	1.3
BANDHAN BANK LTD	182.21	0.8	1611	1958	1.2
BIRLASOFT LTD	550.1	1.3	706	614	0.9
WIPRO LTD	551.8	-0.1	1805	1396	0.8
ICICI BANK LTD	1292.25	0.0	6301	4645	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
ADITYA BIRLA CAP	203.23	1.4	11384	11384	100.0
MCX INDIA LTD	6515.9	-0.4	15901	17055	93.2
DIXON TECHNOLOGI	14061.6	0.5	28938	44442	65.1
CIPLA LTD	1551.75	0.5	16506	27284	60.5
TRENT LTD	7128.35	0.3	12508	21846	57.3

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
CIPLA LTD	1559.55	0.5	17055	17055	100.0
ADITYA BIRLA CAP	206.13	1.4	6912	6912	100.0
MCX INDIA LTD	6489.35	-0.4	8890	10972	81.0
CUMMINS INDIA	3499.75	0.0	4341	6299	68.9
MAHINDRA & MAHIN	2817.65	3.3	18665	29115	64.1

Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20 D Call OI Diff
ADITYA BIRLA CAP	206.13	1.4	11384	6835	1.7
MCX INDIA LTD	6489.35	-0.4	15901	10356	1.5
VOLTAS LTD	1642.85	-0.4	10988	7613	1.4
DIXON TECHNOLOGI	14129.75	0.5	28938	21149	1.4
CIPLA LTD	1559.55	0.5	16506	13361	1.2

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20 D Put OI Diff
CIPLA LTD	1559.55	0.5	17055	6964	2.4
ADITYA BIRLA CAP	206.13	1.4	6912	4622	1.5
HINDUSTAN AERONA	4288	1.0	19634	13898	1.4
REC LTD	526.8	0.8	16400	11818	1.4
COAL INDIA LTD	454.15	0.5	13119	10360	1.3

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

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

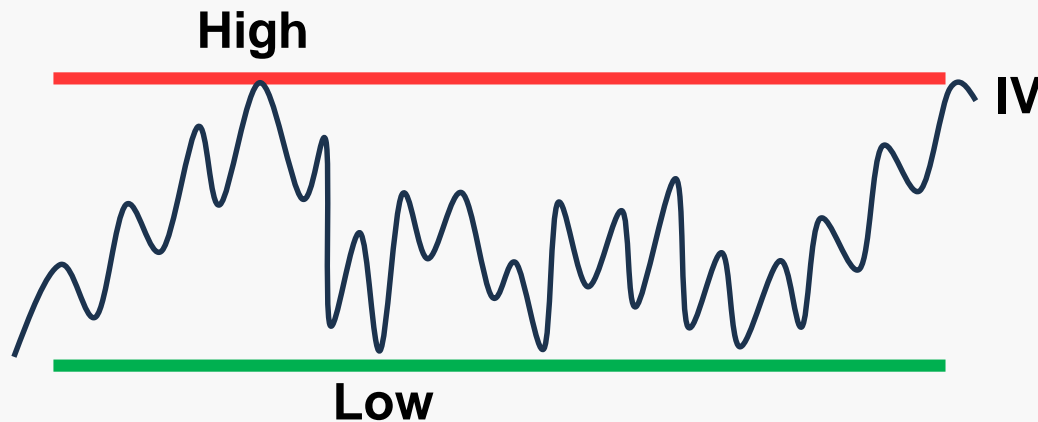
Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	3000	1318800	1.8%	2947	3000	1767600	1.8%	INFY	1900	1308800	8.1%	1757	1800	706800	2.4%
ADANIPTS	1400	1068800	1.7%	1376	1400	509600	1.7%	ITC	500	5179200	2.3%	489	500	2129600	2.3%
APOLLOHOSP	7000	47250	-0.3%	7023	7000	33250	-0.3%	JSWSTEEL	1000	419175	3.8%	964	900	306450	-6.6%
ASIANPAINT	3200	303200	9.0%	2936	3000	326600	2.2%	KOTAKBANK	1800	1064000	4.0%	1731	1800	755200	4.0%
AXISBANK	1200	1754375	3.5%	1160	1200	1178750	3.5%	LT	3600	811950	-0.6%	3622	3600	724200	-0.6%
BAJAJ-AUTO	11000	342600	11.8%	9836	10000	109950	1.7%	LTIM	6000	66000	5.1%	5711	5500	37200	-3.7%
BAJAJFINSV	1800	343000	2.8%	1751	1700	230500	-2.9%	M&M	2750	795200	0.8%	2729	2700	617050	-1.0%
BAJFINANCE	7500	285500	8.9%	6890	7000	244625	1.6%	MARUTI	12000	334050	8.3%	11076	11000	162750	-0.7%
BHARTIARTL	1700	1269200	5.4%	1613	1600	1112450	-0.8%	NESTLEIND	2400	371800	6.1%	2263	2400	243800	6.1%
BPCL	320	2174400	3.0%	311	300	1130400	-3.5%	NTPC	420	3106500	2.9%	408	400	1624500	-2.0%
BRITANNIA	5800	76400	1.3%	5727	5500	35600	-4.0%	ONGC	300	4310075	12.7%	266	300	2489025	12.7%
CIPLA	1600	929500	3.1%	1552	1500	1114100	-3.3%	POWERGRID	330	2509200	2.9%	321	320	2228400	-0.2%
COALINDIA	500	3231900	10.6%	452	500	1501500	10.6%	RELIANCE	1400	8864000	5.1%	1332	1350	5501000	1.3%
DIVISLAB	6000	103600	1.9%	5890	5000	155600	-15.1%	SBLIFE	1800	395250	11.0%	1622	1600	152625	-1.4%
DRREDDY	1300	409375	2.0%	1274	1200	208125	-5.8%	SBIN	800	5460750	-2.5%	820	800	3024000	-2.5%
EICHERMOT	5000	195475	2.2%	4895	4800	106400	-1.9%	SUNPHARMA	1900	854350	2.8%	1849	1800	292600	-2.6%
GRASIM	2800	102250	3.9%	2696	2600	200000	-3.6%	TATACONSUM	1100	979032	9.7%	1003	1000	225720	-0.3%
HCLTECH	1900	369250	7.6%	1766	1700	252350	-3.7%	TATAMOTORS	900	4033700	7.9%	834	850	2168100	1.9%
HDFCBANK	1800	2873750	3.7%	1736	1700	1706100	-2.1%	TATASTEEL	160	14685000	7.7%	149	150	10263000	1.0%
HDFCLIFE	800	937200	11.1%	720	700	338800	-2.8%	TCS	4200	675675	5.8%	3968	4000	561225	0.8%
HEROMOTOCO	5200	230850	4.2%	4990	5000	148800	0.2%	TECHM	1800	906000	11.9%	1609	1600	446400	-0.5%
HINDALCO	700	1121400	2.0%	686	700	855400	2.0%	TITAN	3300	258125	1.0%	3267	3000	386925	-8.2%
HINDUNILVR	2800	646800	10.7%	2528	2600	303600	2.8%	ULTRACEMCO	11500	74300	3.9%	11066	11000	46000	-0.6%
ICICIBANK	1350	1740900	4.5%	1292	1200	1271900	-7.1%	UPL	600	911300	8.4%	554	600	517400	8.4%
INDUSINDBK	1200	2868500	13.7%	1056	1000	1707000	-5.3%	WIPRO	600	1893000	8.7%	552	500	1380000	-9.4%

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

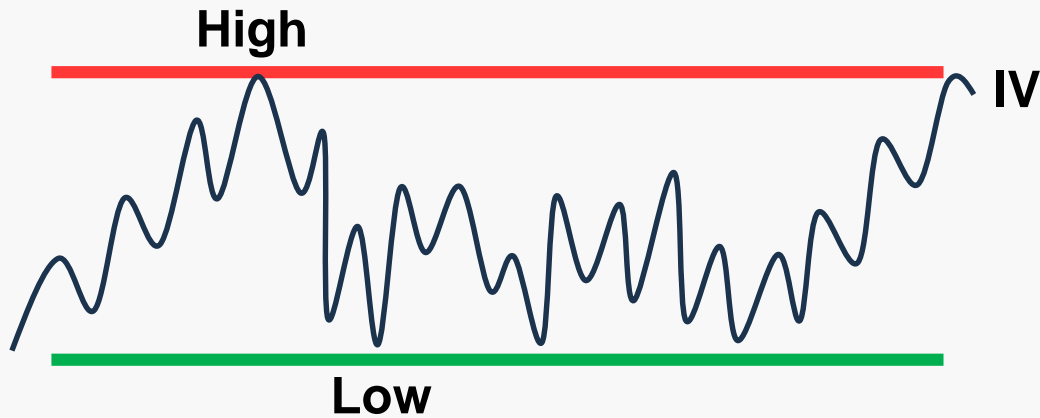


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



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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Compliance Officer Details: Name – Mr. Maneesh Mathew, Tel No. – 022-68555574, Email id – compliance.officer@axisdirect.in;

Registered Office Address – Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai – 400070.

Administrative office address: Aurum Q Parc, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

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