



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,371	0.4%▼
Open Interest (OI)	1,48,05,850	0.1%▲
Change in OI (abs)	1,48,05,850	10,050▲
Premium / Discount (Abs)	30	19▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	52,260	0.7%▼
Open interest (OI)	24,62,295	41.1%▲
Change in OI (abs)	24,62,295	7,17,840▲
Premium / Discount (Abs)	453	308▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	15.51	1.0▲
Nifty ATM IV (%)	14.69	2.5▲
Bank Nifty ATM IV (%)	16.66	0.0▲
PCR (Nifty)	0.91	0.1▼
PCR (Bank Nifty)	0.93	0.4▼

*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 (%)
ABCAPITAL	6,56,20,800	14.3%	215.48	5.0%
SBICARD	2,31,57,600	9.4%	685.35	1.5%
SHREECEM	3,62,550	8.0%	25385.35	0.1%
SUNTV	59,04,000	7.0%	745	0.6%
BHARATFORG	1,06,52,500	6.8%	1419.75	2.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TORNTPHARM	28,54,000	23.7%	3146.45	-1.2%
VOLTAS	98,67,000	11.4%	1696.05	-4.4%
DIXON	18,71,600	11.3%	14199.8	-4.8%
ABB	18,80,875	10.6%	7430.1	-0.9%
M&M	2,63,89,650	9.6%	2712.6	-1.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BALRAMCHIN	21,85,600	-33.0%	661.1	2.8%
IDFCFIRSTB	51,17,92,500	-12.3%	68.93	1.8%
LTF	6,53,45,990	-9.8%	146.29	1.7%
MARUTI	38,77,600	-8.9%	11288.05	2.4%
CANFINHOME	45,98,100	-8.4%	887.2	2.6%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LTTS	11,80,000	-13.8%	5154.65	-0.9%
JKCEMENT	6,54,000	-9.2%	4336.15	-0.5%
INDIAMART	19,93,200	-8.3%	2558.9	-0.5%
NMDC	9,17,95,500	-6.7%	224.58	-0.7%
BOSCHLTD	2,94,300	-6.5%	36222.8	-0.8%

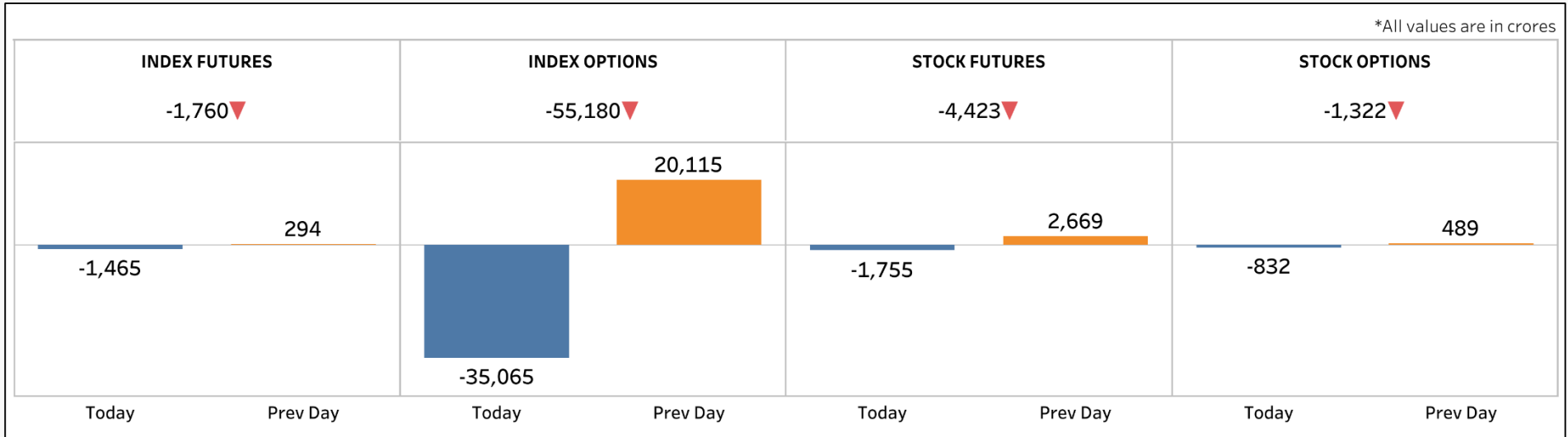
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Data by Participant

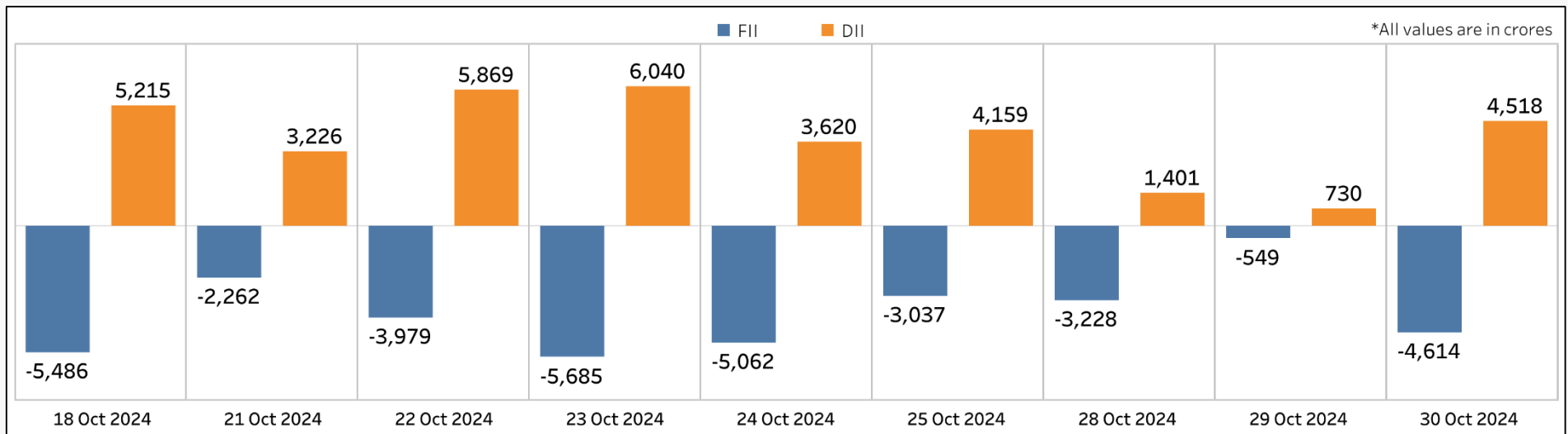
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-130,899 ▼	-33,014 ▼	-56,503 ▼	-29,269 ▼	0	8,041 ▲	-14,440 ▼	-29,964 ▼
2,887	2,391	11,320	22,238		12,072	9,266	9,984
-128,012	-30,623	-45,183	-7,031	0	4,031	-5,174	-19,980
Net O/S 520,309 Today Prev Day	Net O/S -122,024 Today Prev Day	Net O/S 861,702 Today Prev Day	Net O/S 931,772 Today Prev Day	Net O/S 2,078 Today Prev Day	Net O/S -41,503 Today Prev Day	Net O/S 175,749 Today Prev Day	Net O/S -3,381,243 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
420,249 ▲	32,435 ▲	-558,996 ▼	27,086 ▲	-289,350 ▼	-7,462 ▼	629,939 ▲	32,147 ▲
291,840	4,942	200,272	39,513	125,522	13,609	409,081	21,071
-128,409	-27,493	-358,724	12,427	-163,828	21,071	-220,858	-12,502
Net O/S -239,133 Today Prev Day	Net O/S 201,361 Today Prev Day	Net O/S -999,905 Today Prev Day	Net O/S 1,993,859 Today Prev Day	Net O/S -283,254 Today Prev Day	Net O/S -37,834 Today Prev Day	Net O/S -37,546 Today Prev Day	Net O/S 455,612 Today Prev Day
							-44,649

Daily Net Open Interest Change

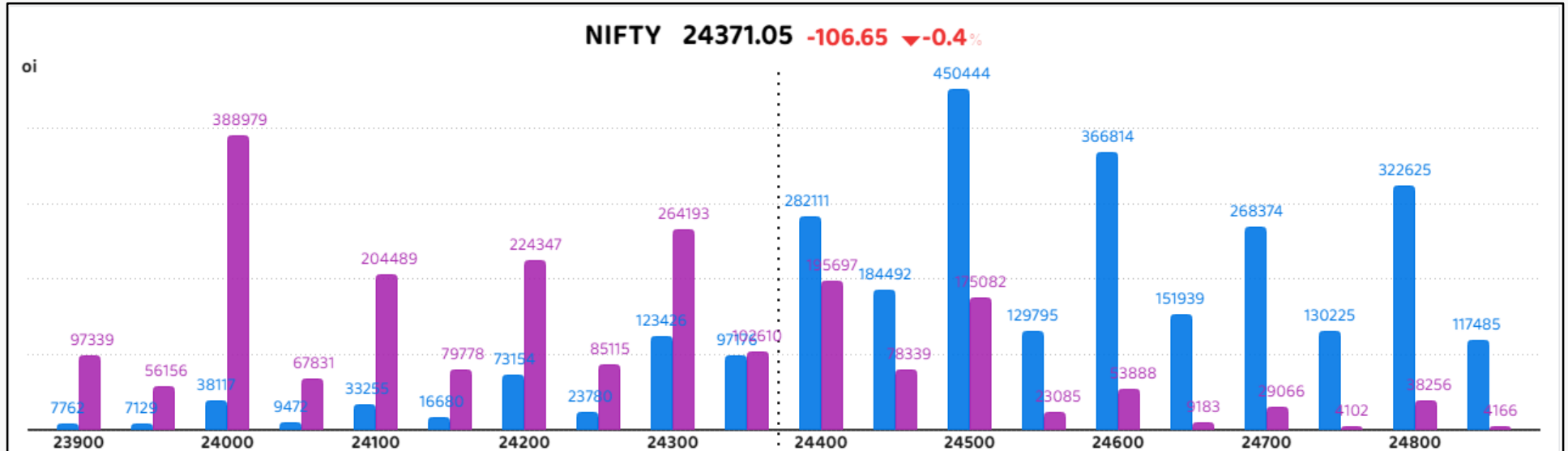


DII and FII Daily Cash Market Flows



Positioning Stack by Strike (Current Week Expiry)

Call ■ Put ■



For the Nifty, the 24,500 call and the 24,000 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.

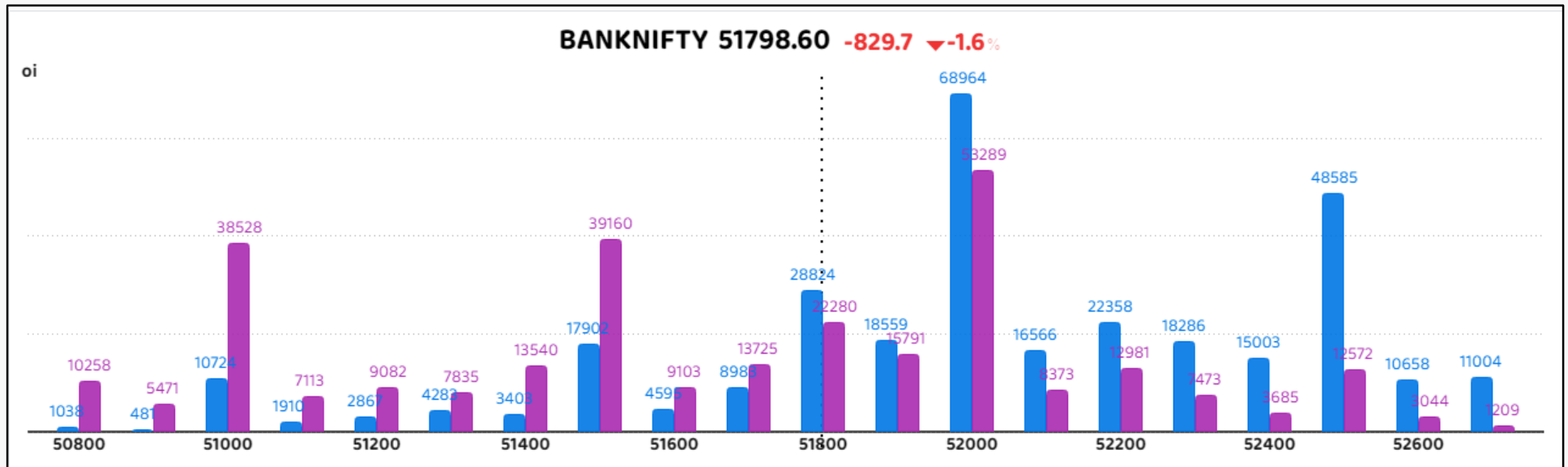
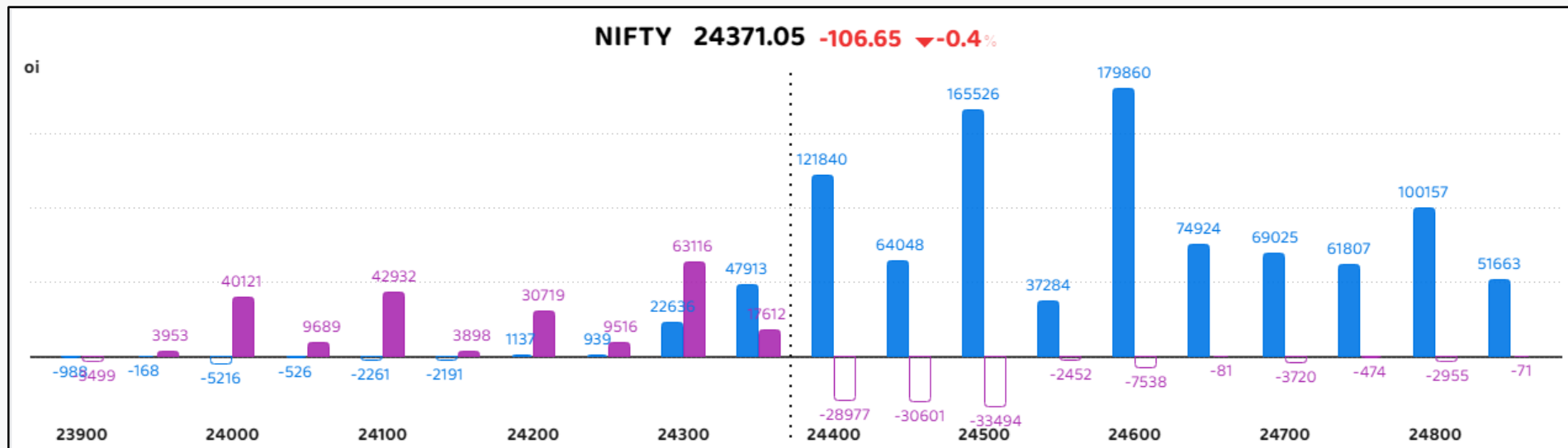


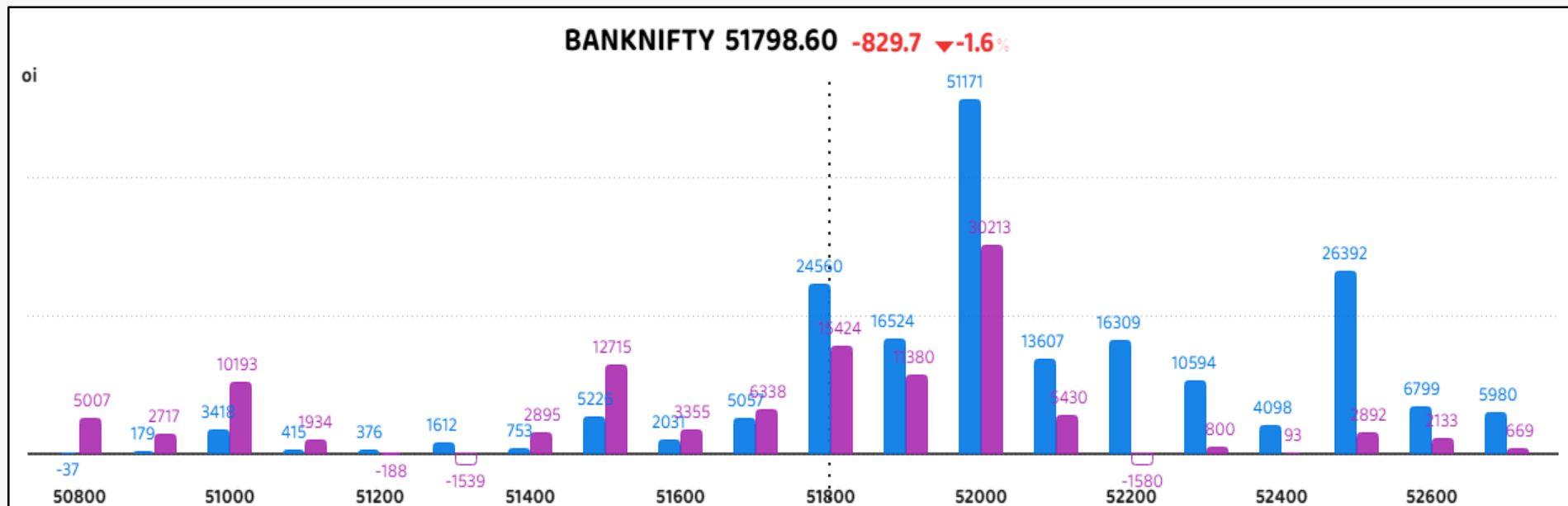
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Current Week Expiry)

Call ■ Put ■

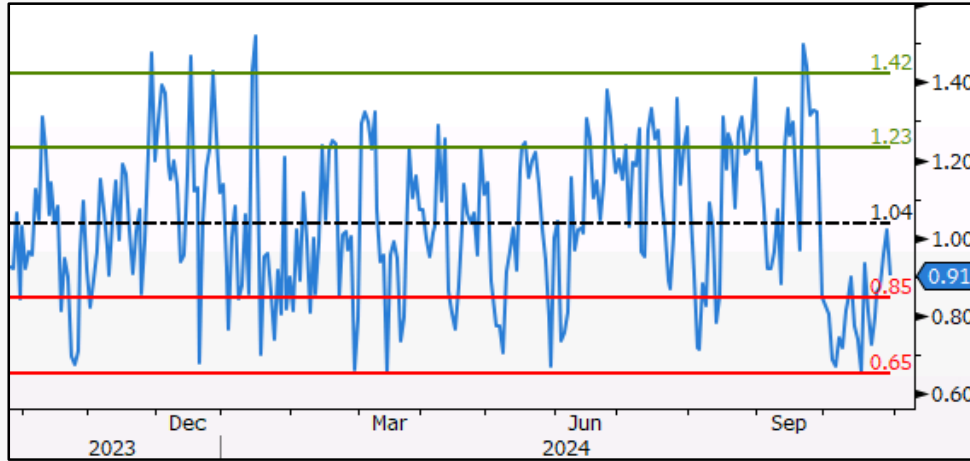


The largest open interest changes (contracts) were seen at the 24,600 call strike and 24,300 put strike.

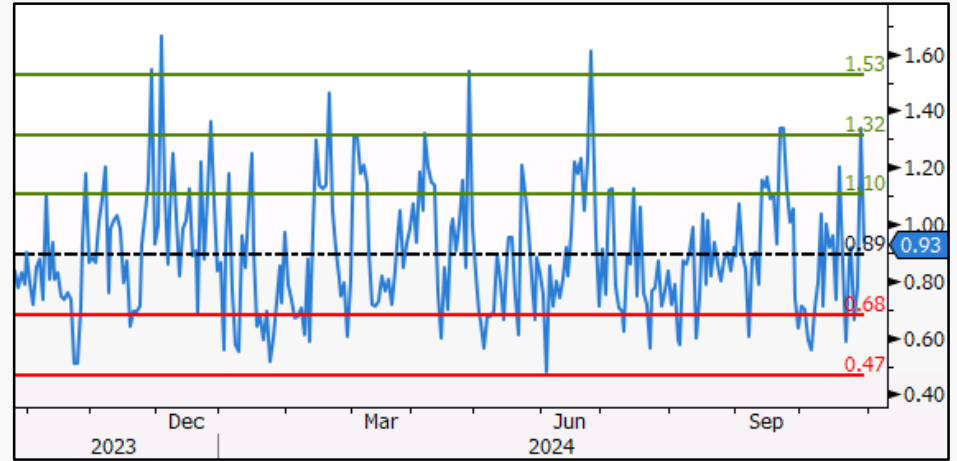


For the Bank Nifty, the biggest open interest changes were seen at the 52,000, Call Strike & 52,000 Put strike.

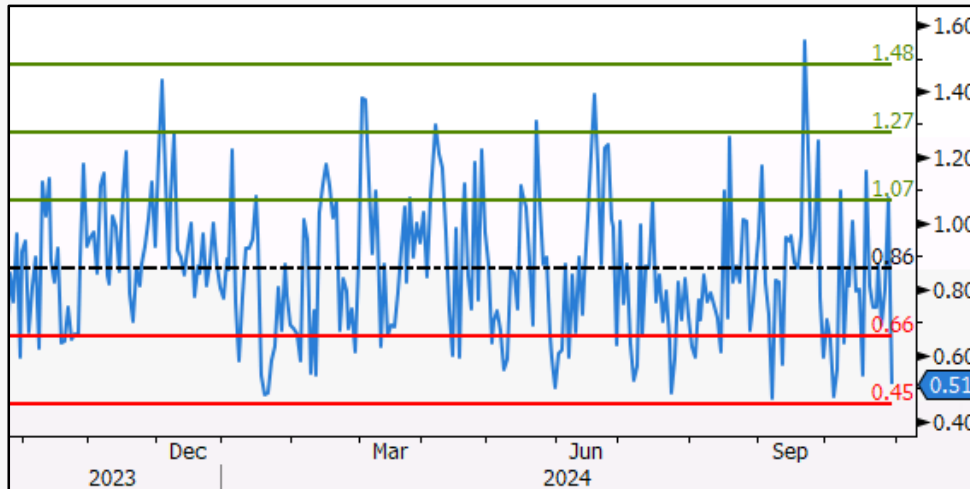
Nifty



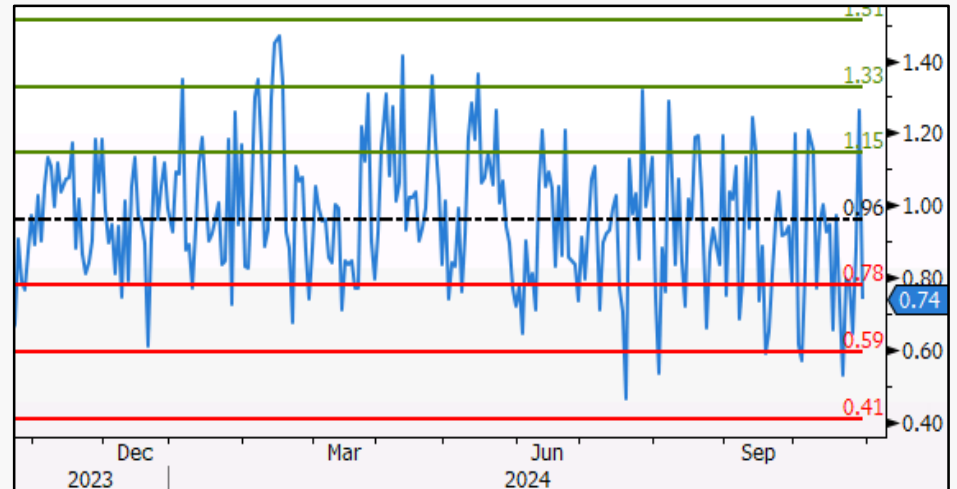
Bank Nifty



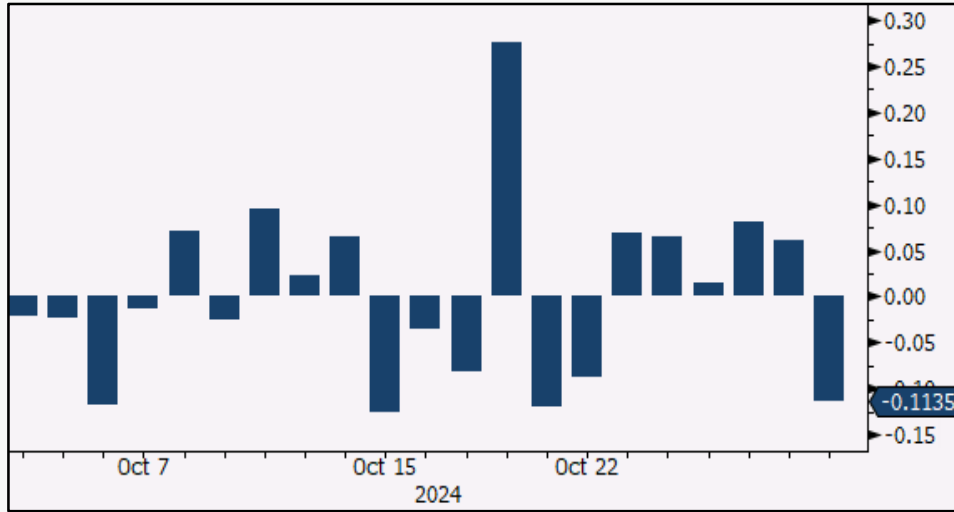
Fin Nifty



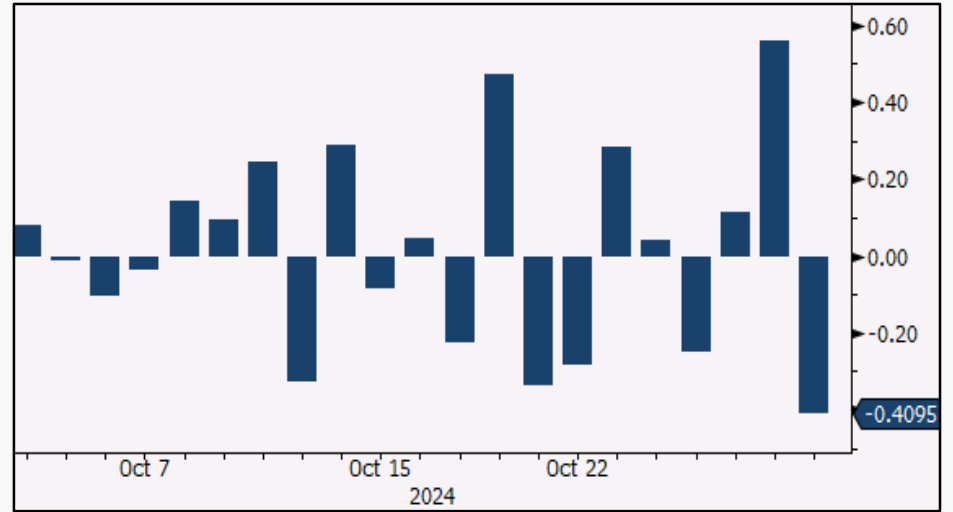
Midcap Nifty



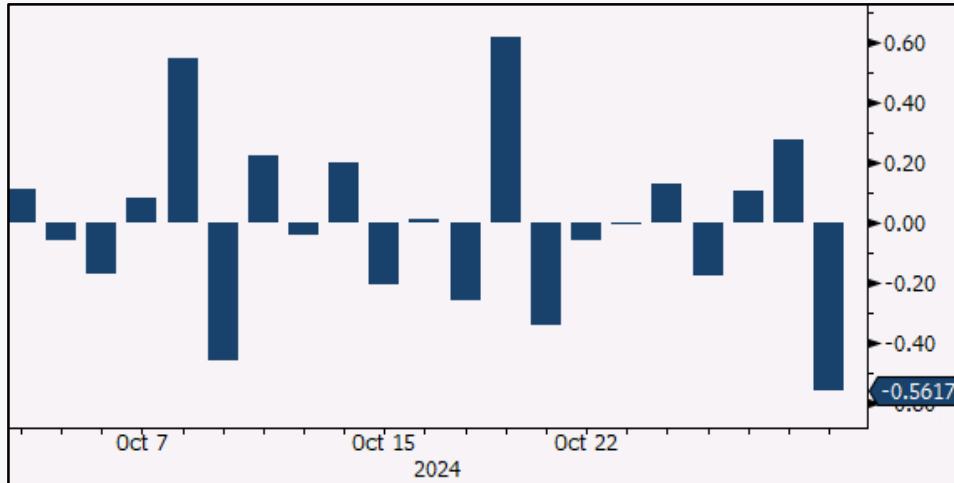
Nifty



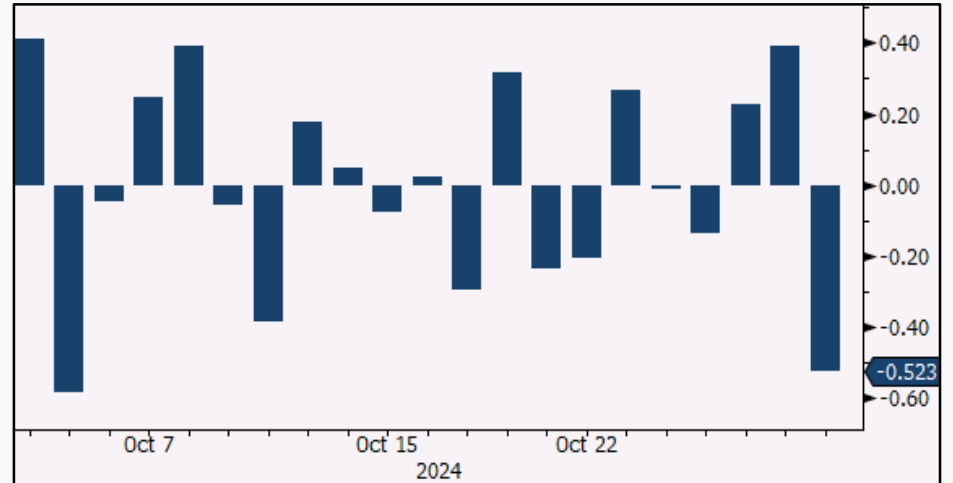
Bank Nifty



Fin Nifty



Midcap Nifty



Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LTF	146.5	1.8	66.4	66.4	22.6	100.0
TRENT	7252.5	-2.1	51.2	53.6	2.2	95.3
BALRAMCHIN	659.6	2.6	50.1	52.3	12.0	94.5
DIXON	14175.6	-5.1	48.0	51.3	1.8	93.3
TATAMOTORS	840.2	-0.3	39.3	41.8	19.8	88.9

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AMBUJACEM	579.7	0.8	24.8	70.4	19.1	11.1
ACC	2331.9	0.1	23.9	55.4	19.2	12.9
BANKBARODA	251.5	-1.2	30.2	66.9	24.5	13.4
HDFCLIFE	727.1	-2.1	23.7	80.5	14.9	13.4
ADANIPORTS	1396.2	1.7	26.4	85.8	16.7	14.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LTF	146.5	1.8	66.4	66.4	22.6	100.0
BALRAMCHIN	659.6	2.6	50.1	52.3	12.0	99.5
TRENT	7252.5	-2.1	51.2	53.6	2.2	99.1
PAGEIND	43256.4	-0.2	34.5	41.8	9.9	98.5
TITAN	3308.5	0.8	29.4	33.4	2.3	98.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
COLPAL	3091.2	-0.1	15.3	31.7	9.5	3.5
DALBHARAT	1840.3	2.4	22.2	41.8	14.5	6.6
ADANIENT	2969.3	4.2	29.8	84.3	2.4	8.2
AMBUJACEM	579.7	0.8	24.8	70.4	19.1	10.6
ACC	2331.9	0.1	23.9	55.4	19.2	10.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
PIIND	4495.6	1.9	5638	1246	4.5
INDIAMART	2550.0	-0.1	1521	397	3.8
METROPOLIS	2140.6	1.0	4042	1138	3.6
IDEA	7.7	-3.5	19561	5465	3.6
BAJAJ-AUTO	9940.7	0.9	166846	48128	3.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
TORNTPHARM	3137.8	-2.4	8231	10435	1.3
ZYDUSLIFE	985.4	-1.7	6556	8385	1.3
JINDALSTEL	919.0	0.4	17961	23170	1.3
PETRONET	331.0	-1.0	3249	3451	1.1
BALKRISIND	2880.5	-0.7	2603	2795	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
MARICO	651.15	3.5	10409	10409	100.0
TORNTPHARM	3137.8	-2.4	3468	3684	94.1
DABUR	546.65	2.0	16936	18278	92.7
MCX	6390.35	-6.4	15350	17055	90.0
ABCAPITAL	215.37	5.3	8888	10128	87.8

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
DABUR	546.65	2.02	11728	11728	100.0
ABCAPITAL	215.37	5.31	5175	5175	100.0
CONCOR	835.45	3.27	7799	7807	99.9
LT	3408.35	0.81	33800	35113	96.3
DLF	826.4	-0.73	17819	19283	92.4

Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
ABCAPITAL	215.37	5.31	34676	43617	79.5
DABUR	546.65	2.02	51622	78954	65.4
MARUTI	11256.45	1.91	561032	989317	56.7
MARICO	651.15	3.50	66104	116945	56.5
MCX	6390.35	-6.37	58207	104162	55.9

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
DABUR	546.65	2.02	29134	30600	95.2
MCX	6390.35	-6.37	50635	53559	94.5
ABCAPITAL	215.37	5.31	13636	14602	93.4
VOLTAS	1697.9	-4.11	55390	81695	67.8
SBICARD	684	-0.18	35565	58632	60.7

Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Diff
MARICO	651.2	3.5	66104	9864	6.7
VOLTAS	1697.9	-4.1	89185	18358	4.9
ABCAPITAL	215.4	5.3	34676	7294	4.8
CONCOR	835.5	3.3	45218	11741	3.9
DABUR	546.7	2.0	51622	14517	3.6

Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Diff
MARICO	651.2	3.5	32511	5734	5.7
VOLTAS	1697.9	-4.1	55390	10896	5.1
DABUR	546.7	2.0	29134	7695	3.8
HINDCOPPER	291.7	0.4	4234	1140	3.7
MCX	6390.4	-6.4	50635	13634	3.7

Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20 D Call OI Diff
INDUSINDBK	1056.4	1.8	67644	37369	1.8
MARICO	651.2	3.5	10409	6271	1.7
VOLTAS	1697.9	-4.1	11154	7078	1.6
MCX	6390.4	-6.4	15350	10013	1.5
AUBANK	609.4	-1.9	13466	8965	1.5

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20 D Put OI Diff
TORNTPHARM	3137.8	-2.4	2516	1495	1.7
MARICO	651.2	3.5	5994	3607	1.7
MARUTI	11256.5	1.9	48927	29465	1.7
INDUSINDBK	1056.4	1.8	37943	23218	1.6
AUBANK	609.4	-1.9	7642	5045	1.5

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

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

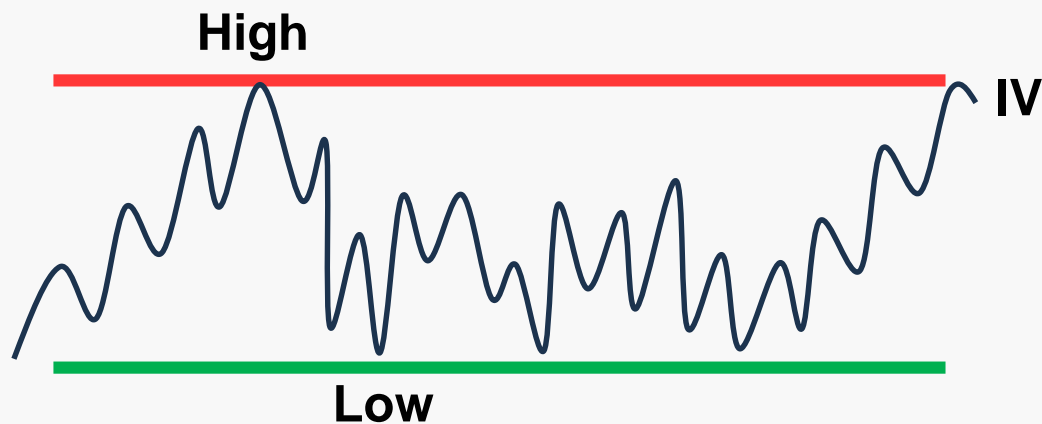
Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	3200	1000200	7.8%	2969	3200	570000	7.8%	INFY	1960	5658800	8.8%	1802	1900	681200	5.4%
ADANIPTS	1500	1239200	7.4%	1396	1300	437200	-6.9%	ITC	520	9441600	5.8%	492	460	4392000	-6.4%
APOLLOHOSP	7000	181375	0.3%	6983	6900	92625	-1.2%	JSWSTEEL	1050	854550	9.7%	957	930	454275	-2.9%
ASIANPAINT	3200	491600	6.8%	2997	3100	184000	3.4%	KOTAKBANK	1900	2152400	9.5%	1735	1800	418400	3.8%
AXISBANK	1200	2681250	2.5%	1170	1140	983125	-2.6%	LT	3800	912300	11.5%	3408	3400	535050	-0.2%
BAJAJ-AUTO	10500	498300	5.6%	9941	9800	117000	-1.4%	LTIM	6400	159750	10.4%	5795	6000	139050	3.5%
BAJAJFINSV	1900	880500	8.4%	1752	1700	256500	-3.0%	M&M	3200	1009750	18.2%	2708	2700	333550	-0.3%
BAJFINANCE	8000	468875	15.0%	6955	6500	182750	-6.5%	MARUTI	13000	363500	15.5%	11256	11000	146450	-2.3%
BHARTIARTL	1700	2204000	4.1%	1633	1600	902025	-2.0%	NESTLEIND	2520	333600	10.7%	2276	2600	213200	14.2%
BPCL	380	4242600	22.1%	311	310	1931400	-0.4%	NTPC	460	10141500	12.6%	409	400	2368500	-2.1%
BRITANNIA	6300	89400	8.9%	5783	5600	48200	-3.2%	ONGC	300	19494475	14.7%	262	300	2311925	14.7%
CIPLA	1500	737750	5.8%	1418	1400	340600	-1.3%	POWERGRID	350	4820400	9.9%	318	320	1594800	0.5%
COALINDIA	525	2618700	16.9%	449	500	1327200	11.3%	RELIANCE	1500	11658500	11.6%	1344	1350	2622000	0.5%
DIVISLAB	6000	180600	1.9%	5887	5700	144200	-3.2%	SBLIFE	1680	625875	3.4%	1624	1600	177375	-1.5%
DRREDDY	1360	2101875	8.8%	1250	1240	433750	-0.8%	SBIN	900	2943000	9.4%	822	800	2976750	-2.7%
EICHERMOT	5000	206150	2.7%	4869	4600	152250	-5.5%	SUNPHARMA	1960	2813650	5.8%	1852	1960	251650	5.8%
GRASIM	2800	254500	4.8%	2673	2700	101250	1.0%	TATACONSUM	1200	689928	17.3%	1023	1000	370728	-2.2%
HCLTECH	1900	1273300	3.3%	1839	1800	875700	-2.1%	TATAMOTORS	1000	9376950	19.0%	840	920	1851850	9.5%
HDFCBANK	1800	5808550	3.8%	1735	1700	2100450	-2.0%	TATASTEEL	170	34435500	14.1%	149	165	13447500	10.8%
HDFCLIFE	750	4906000	3.2%	727	740	686400	1.8%	TCS	4300	1031625	5.3%	4085	4200	309400	2.8%
HEROMOTOCO	6000	609150	22.2%	4909	5500	226650	12.0%	TECHM	1700	978000	0.9%	1685	1600	430800	-5.0%
HINDALCO	800	2510200	16.2%	688	680	989800	-1.2%	TITAN	3800	504175	14.9%	3308	3600	240625	8.8%
HINDUNILVR	3000	773700	17.4%	2555	2500	272400	-2.2%	ULTRACEMCO	12000	143500	7.1%	11205	10700	68500	-4.5%
ICICIBANK	1350	1691200	2.9%	1312	1290	1579900	-1.7%	UPL	620	1245400	13.5%	546	530	449800	-3.0%
INDUSINDBK	1460	1483500	38.2%	1056	1000	956000	-5.3%	WIPRO	570	2268000	0.8%	565	550	2839500	-2.7%

*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*

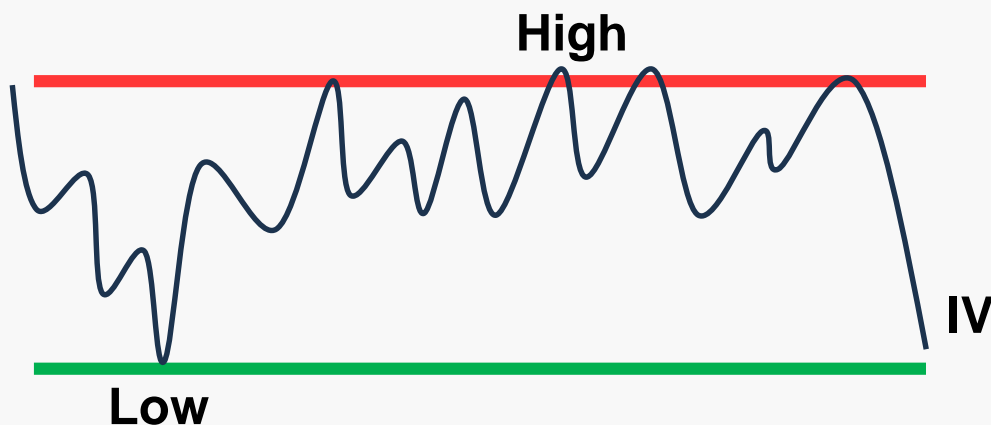
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

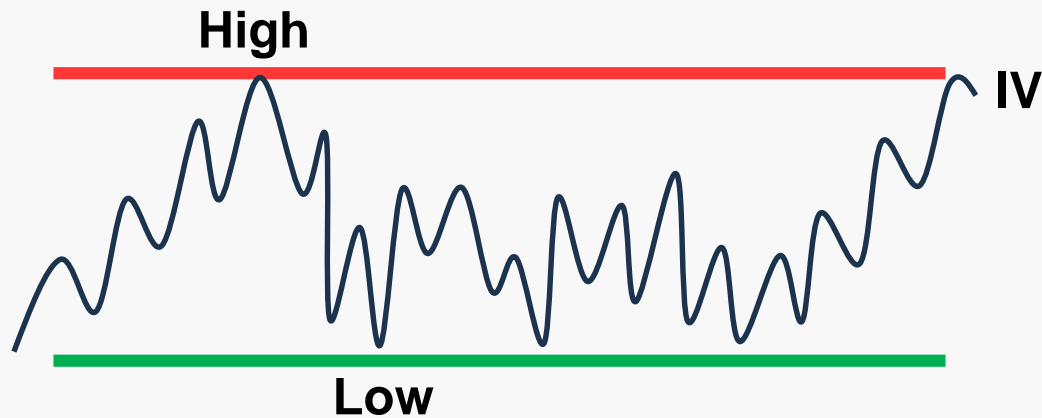


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

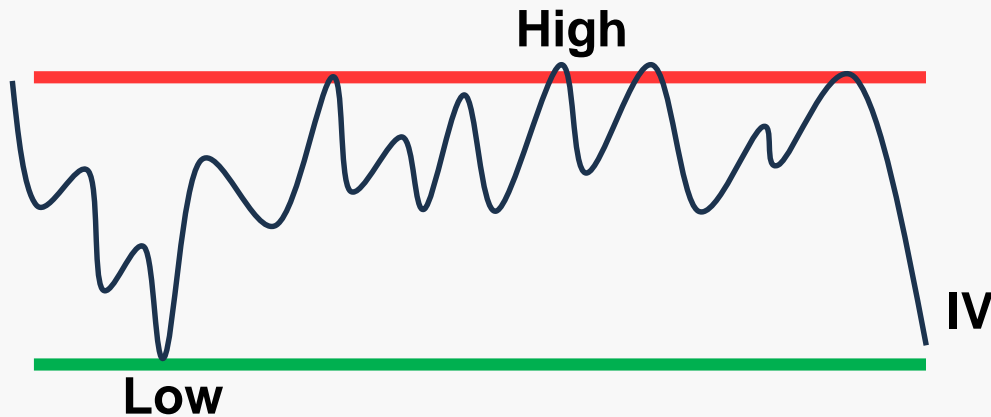


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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