



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,331	0.7%▲
Open Interest (OI)	1,80,81,675	2.3%▼
Change in OI (abs)	1,80,81,675	43,02,00▼
Premium / Discount (Abs)	92	3▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,340	0.4%▲
Open interest (OI)	26,74,140	2.3%▼
Change in OI (abs)	26,74,140	63,350▼
Premium / Discount (Abs)	192	34▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	10.27	0.13▼
Nifty ATM IV (%)	9.14	0.1▼
Bank Nifty ATM IV (%)	9.97	0.1▼
PCR (Nifty)	1.29	0.21▲
PCR (Bank Nifty)	1.09	0.05▲

The FII Long Ratio in Index Futures **jump** to 12.4 %, **up** from 11.8 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SUZLON	15,51,84,000	10.2%	59.24	1.6%
KEI	9,89,800	7.1%	4194.6	2.1%
NCC	1,90,70,100	6.5%	217.18	2.0%
HAVELLS	99,57,000	6.3%	1622.5	1.2%
CYIENT	33,89,800	5.5%	1278.4	4.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TORNTPOWER	37,58,250	9.8%	1266.5	-0.5%
AUBANK	2,25,20,000	8.4%	713.5	-0.5%
MAXHEALTH	1,46,35,950	7.7%	1164	-1.3%
KFINTECH	15,46,200	6.1%	1103.2	-0.1%
NUVAMA	2,89,350	6.1%	6411.5	-0.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HFCL	11,35,97,400	-8.4%	76.62	3.6%
NBCC	6,16,00,500	-3.8%	110.1	1.9%
UPL	4,45,41,560	-3.7%	704.35	2.0%
BOSCHLTD	2,79,375	-3.6%	40015	1.0%
CONCOR	2,22,12,500	-3.3%	566.45	1.3%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	46,92,500	-3.9%	2220.1	-1.7%
KPITTECH	32,52,000	-3.7%	1254	-0.3%
NESTLEIND	1,88,94,000	-2.1%	1206.2	-0.7%
RBLBANK	7,29,55,150	-1.9%	268.5	-1.6%
BAJFINANCE	9,07,42,500	-1.7%	1006.25	-0.6%

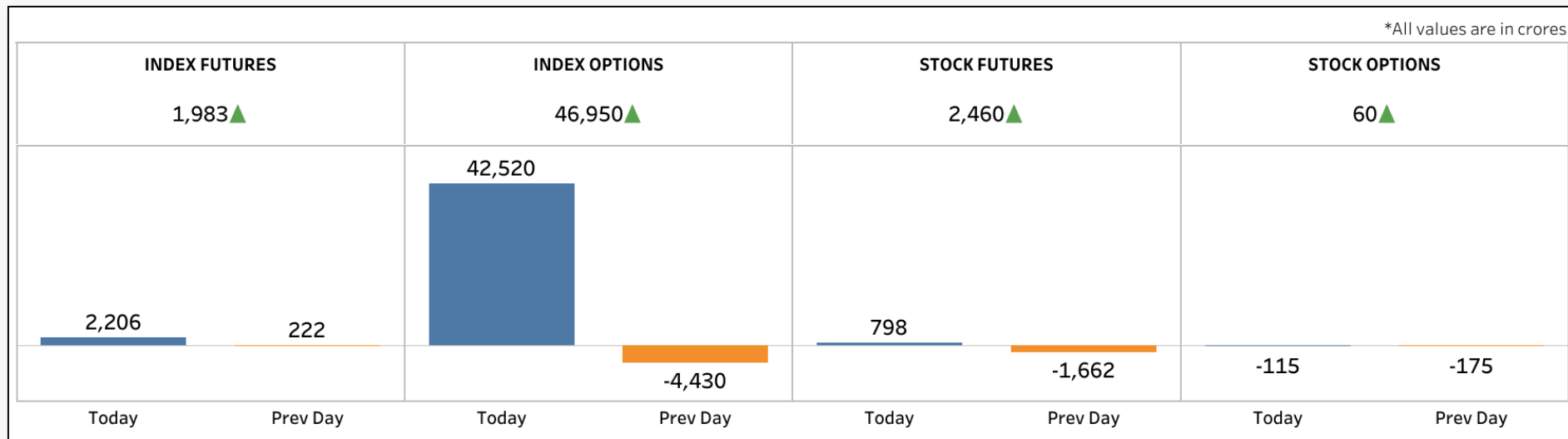
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

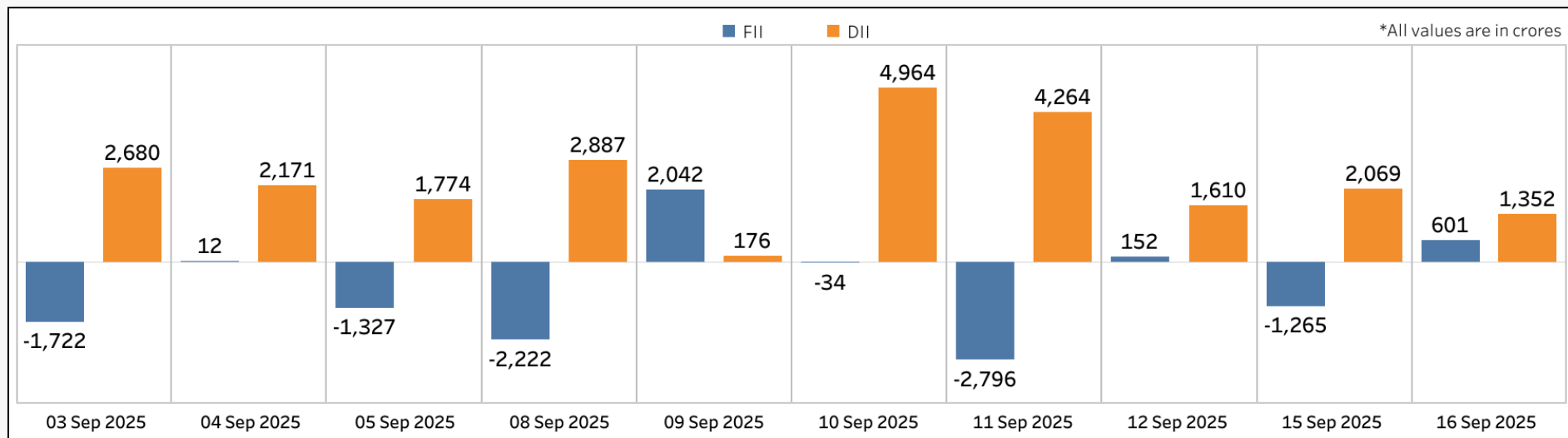
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
61,869 ▲	10,402 ▲	-37,474 ▼	34,900 ▲	0	4,081 ▲	0	21,327 ▲
26,202	11,595	11,150	9,986	0	2,381	0	3,026
-35,667	1,193	-26,324	-24,914	-1,700			-18,301
Net O/S -10,237 Today Prev Day	Net O/S -159,561 Today Prev Day	Net O/S 261,102 Today Prev Day	Net O/S 1,331,642 Today Prev Day	Net O/S 970 Today Prev Day	Net O/S 39,232 Today Prev Day	Net O/S 27,445 Today Prev Day	Net O/S -4,063,654 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-215,485 ▼	-8,661 ▼	236,001 ▲	-28,828 ▼	153,615 ▲	-5,822 ▼	-198,528 ▼	-27,399 ▼
153,306	2,052	115,856	20,013	35,977	-7,367	108,996	23,202
-62,179	-6,609	-120,145	-8,815	-117,638	-1,545	-89,532	-4,197
Net O/S -44,687 Today Prev Day	Net O/S 117,740 Today Prev Day	Net O/S -299,842 Today Prev Day	Net O/S 2,297,223 Today Prev Day	Net O/S 53,955 Today Prev Day	Net O/S 2,589 Today Prev Day	Net O/S 11,296 Today Prev Day	Net O/S 434,789 Today Prev Day

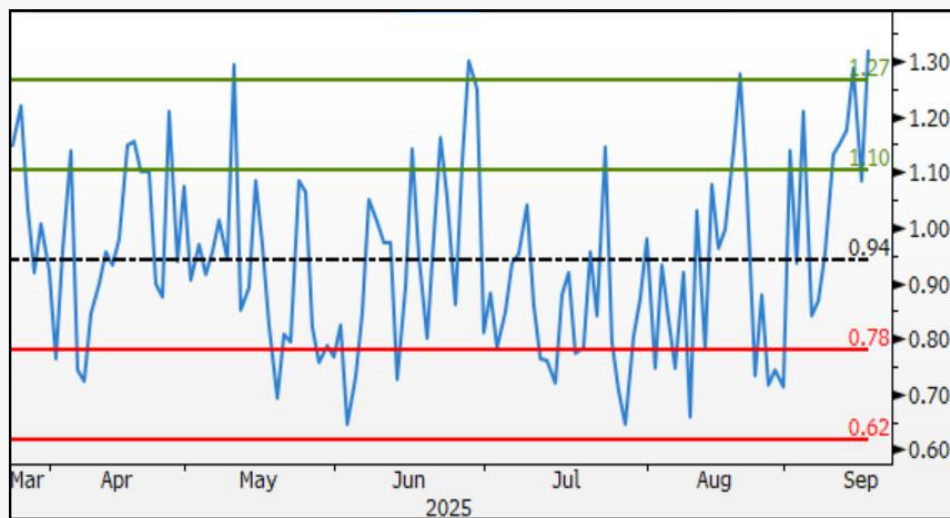
Daily Net Open Interest Change



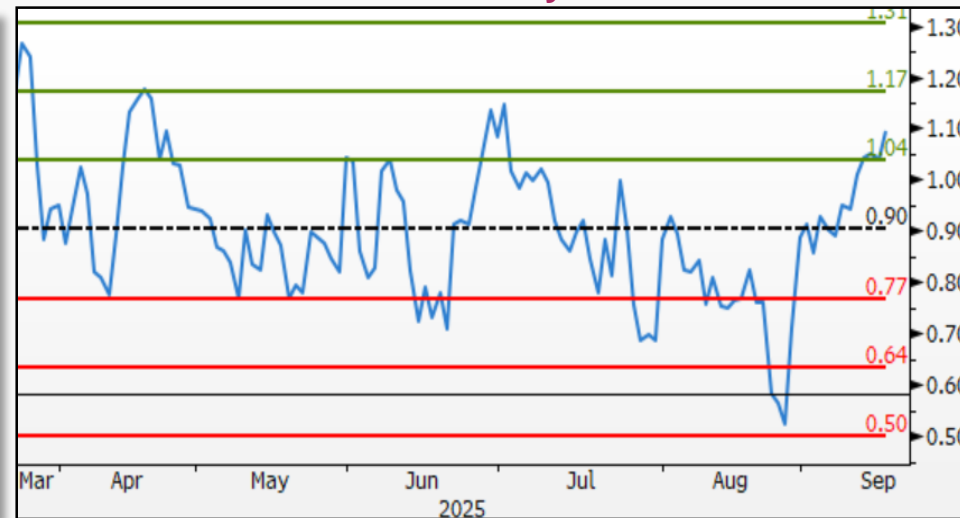
DII and FII Daily Cash Market Flows



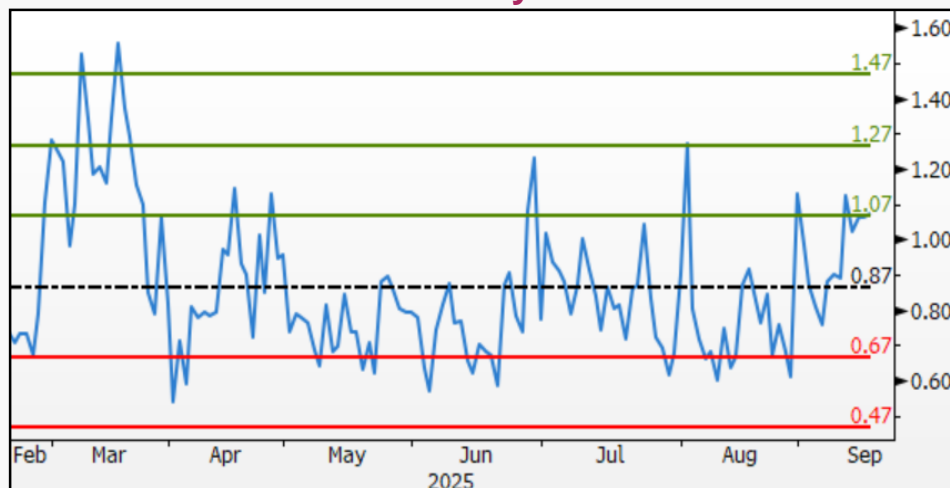
Nifty



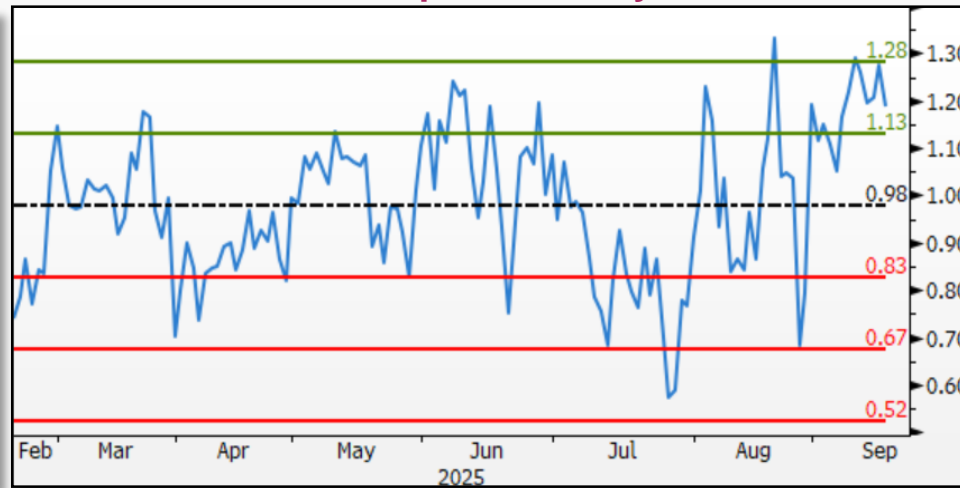
Bank Nifty



Fin Nifty

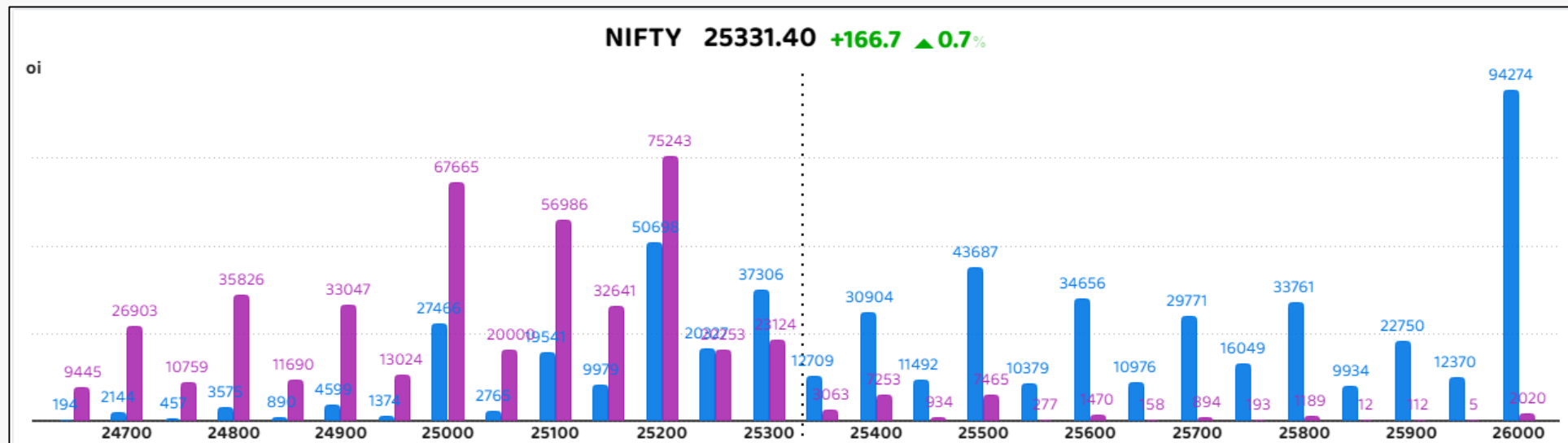


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,200 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 54,000 Put saw the most amount of open interest.

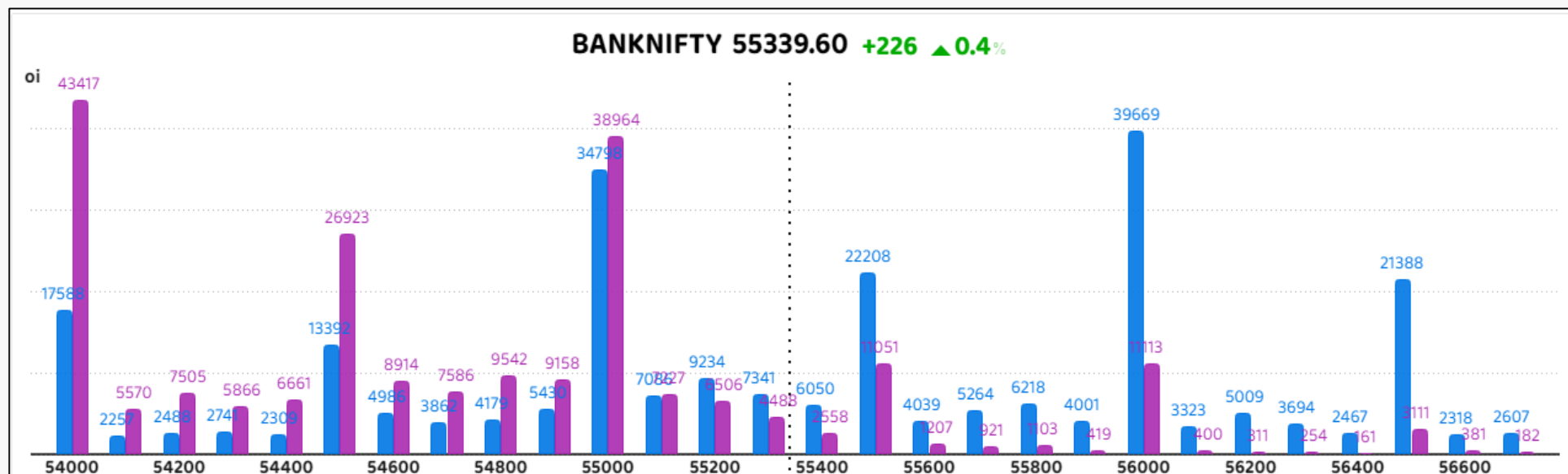
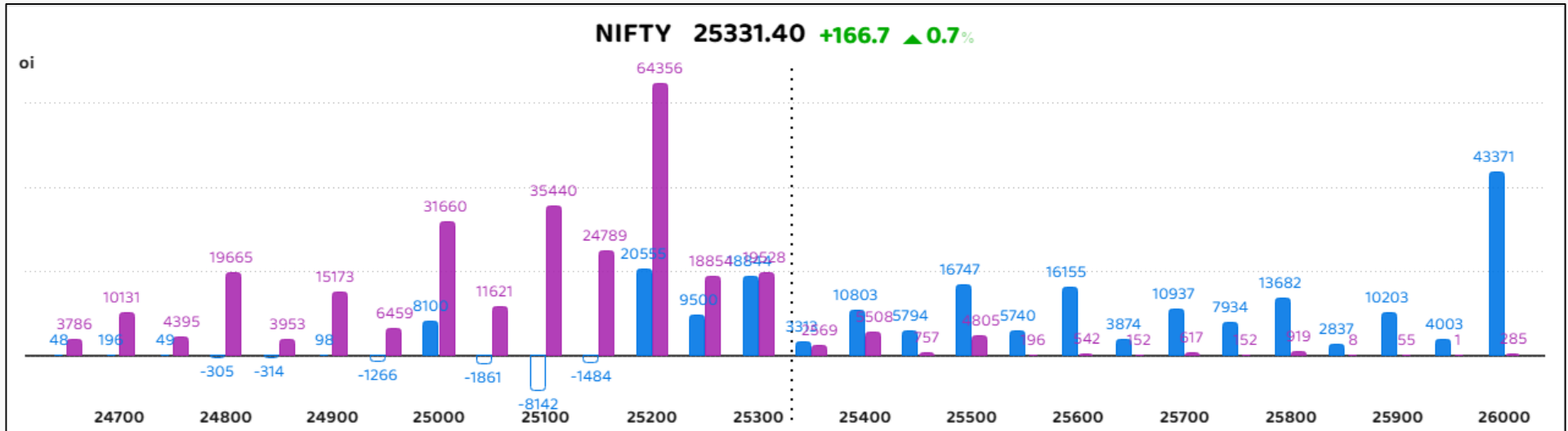


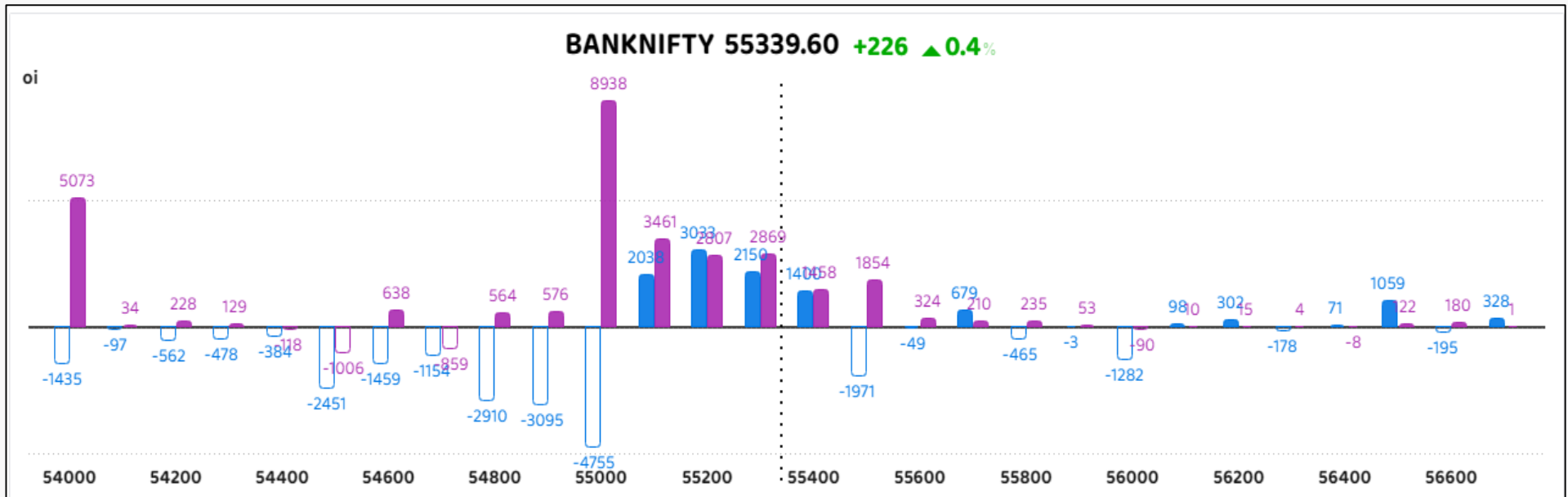
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,000 Call & the 55,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SHREE CEMENT	29575	1.0	25.7	31.9	7.9	74.3
BOSCH LTD	39920	1.2	24.9	36.2	2.1	66.8
BAJAJ AUTO LTD	9072.5	0.5	23.9	36.4	2.1	63.6
ASTRAL LTD	1476.8	1.3	26.5	40.4	2.9	63.0
ETERNAL LTD	327.3	1.2	32.3	53.0	1.7	59.7

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ICICI BANK LTD	1421.6	0.2	3.6	46.1	3.6	0.0
DLF LTD	786.75	1.4	9.2	50.8	9.2	0.0
EICHER MOTORS	6927.5	1.9	16.1	36.9	16.1	0.0
KALYAN JEWELLERS	508.55	0.8	25.4	87.1	25.4	0.0
NTPC LTD	335.05	1.2	17.6	116.6	16.7	0.9

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
WIPRO LTD	254.01	1.1	38.6	93.6	19.1	96.2
SHREE CEMENT	29575	1.0	25.7	31.9	7.9	79.2
HAVELLS INDIA	1614.8	1.2	27.7	35.6	17.8	70.4
TATA ELXSI LTD	5707	0.4	32.0	51.9	20.0	66.1
NCC LTD	216.1	1.9	41.1	53.4	26.0	61.2

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ICICI BANK LTD	1421.6	0.2	3.6	46.1	3.6	0.0
DLF LTD	786.75	1.4	9.2	50.8	9.2	0.0
EICHER MOTORS	6927.5	1.9	16.1	36.9	16.1	0.0
KALYAN JEWELLERS	508.55	0.8	25.4	87.1	25.4	0.0
INFOSYS LTD	1511.3	0.2	5.1	60.8	3.3	0.5

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SHREE CEMENT	29575	1.0	17441	2862	6.1
OBEROI REALTY	1643	0.2	11141	1876	5.9
CYIENT LTD	1272.2	4.1	32519	5564	5.8
VOLTAS LTD	1414.6	-0.1	25268	4582	5.5
PAGE INDUSTRIES	45335	2.2	16107	3276	4.9

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
NESTLE INDIA LTD	1204.2	-0.7	5833	4822	0.8
NMDC LTD	75.44	-0.1	5337	4175	0.8
GLENMARK PHARMA	2077	-1.1	8309	6252	0.8
ITC LTD	413.1	0.1	15217	11323	0.7
L&T FINANCE LTD	241.03	1.7	9370	6714	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
NUVAMA WEALTH	6378.5	-0.5	5449	5512	98.9
MAX HEALTHCARE	1158.7	-1.4	8491	8698	97.6
CG POWER	792.2	0.1	11201	11565	96.9
PIRAMAL PHARMA	205.63	1.0	3881	4042	96.0
RAIL VIKAS NIGAM	354.9	2.2	12809	13524	94.7

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAZAGON DOCK	2946	0.7	11023	11023	100.0
RAIL VIKAS NIGAM	354.9	2.2	7087	7087	100.0
SONA BLW	432.55	-0.3	4656	4656	100.0
PIRAMAL PHARMA	205.63	1.0	2517	2517	100.0
NUVAMA WEALTH	6378.5	-0.5	3297	3297	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NHPC LTD	88.61	2.3	17578	21233	82.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
THERE IS NO STOCK OPTION THAT HAS MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ORACLE FINANCIAL	9142.5	1.9	26107	9897	2.6
TRENT LTD	5147.5	0.3	65878	32923	2.0
NUVAMA WEALTH	6378.5	-0.5	5449	2734	2.0
TATA CHEMICALS	982.55	0.7	11135	5723	1.9
HAVELLS INDIA	1614.8	1.2	8577	4430	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ORACLE FINANCIAL	9142.5	1.9	12894	5584	2.3
SAMVARDHANA	109.89	1.9	10023	4915	2.0
NHPC LTD	88.61	2.3	3416	1830	1.9
NUVAMA WEALTH	6378.5	-0.5	3297	1818	1.8
CYIENT LTD	1272.2	4.1	2890	1638	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
NCC LTD	216.14	1.9	22305	3156	7.1
CHOLAMANDALAM	1583.1	4.3	47969	7083	6.8
GMR AIRPORTS LTD	92.84	4.1	47232	7787	6.1
NHPC LTD	88.61	2.3	17578	3325	5.3
TATA CHEMICALS	982.55	0.7	35677	7548	4.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
GMR AIRPORTS LTD	92.84	4.1	17259	2904	5.9
NCC LTD	216.14	1.9	7321	1236	5.9
TATA CHEMICALS	982.55	0.7	10405	2178	4.8
CHOLAMANDALAM	1583.1	4.3	16092	4263	3.8
KOTAK MAHINDRA	2021.7	2.6	70183	18710	3.8

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	2400	1464900	0.0%	2399	2400	918900	0.0%	ITC	420	7763200	1.7%	413	410	4681600	-0.8%
ADANIPTS	1400	1190825	-0.6%	1408	1400	1348050	-0.6%	JIOFIN	320	9933450	1.4%	315	310	5010200	-1.7%
APOLLOHOSP	7900	193250	0.6%	7853	7800	74500	-0.7%	JSWSTEEL	1200	1152225	7.6%	1115	1000	600075	-10.3%
ASIANPAINT	2600	1619000	4.8%	2481	2500	387250	0.8%	KOTAKBANK	2000	1446400	-1.1%	2022	2000	1220000	-1.1%
AXISBANK	1120	2656875	-0.1%	1121	1100	1973750	-1.9%	LT	3600	1376200	-1.8%	3668	3600	824600	-1.8%
BAJAJ-AUTO	9500	385875	4.7%	9073	9000	142725	-0.8%	M&M	3600	1093400	-0.2%	3608	3200	643600	-11.3%
BAJAJFINSV	2100	1201000	0.9%	2080	2000	861500	-3.9%	MARUTI	16000	397000	2.7%	15573	15000	525700	-3.7%
BAJFINANCE	1020	2166750	1.7%	1003	1000	1946250	-0.3%	NESTLEIND	1220	807000	1.3%	1204	1200	440000	-0.3%
BEL	400	9641550	-0.7%	403	400	6375450	-0.7%	NTPC	340	8838000	1.5%	335	320	2674500	-4.5%
BHARTIARTL	1920	1625925	-1.0%	1940	1900	1147600	-2.0%	ONGC	240	14620500	2.1%	235	235	3181500	0.0%
CIPLA	1600	1701375	2.6%	1559	1600	282000	2.6%	POWERGRID	290	4130600	0.6%	288	275	1824000	-4.6%
COALINDIA	400	5972400	1.1%	396	390	2282850	-1.5%	RELIANCE	1400	10412500	-0.4%	1405	1400	5095500	-0.4%
DRREDDY	1300	4136875	-0.8%	1310	1300	1029375	-0.8%	SBILIFE	1900	507375	4.5%	1819	1800	252750	-1.0%
EICHERMOT	7000	376950	1.0%	6928	6500	358575	-6.2%	SBIN	830	4915500	-0.2%	832	800	4575000	-3.8%
ETERNAL	330	13242925	0.8%	327	320	8131025	-2.2%	SHRIRAMFIN	640	1290300	3.5%	618	600	1032900	-2.9%
GRASIM	3000	301500	5.5%	2843	2800	193000	-1.5%	SUNPHARMA	1620	1416450	0.6%	1611	1400	610750	-13.1%
HCLTECH	1500	1239350	1.1%	1483	1400	430500	-5.6%	TATACONSUM	1100	911350	0.7%	1092	970	409750	-11.2%
HDFCBANK	1000	9617300	3.4%	967	970	4426400	0.3%	TATAMOTORS	750	8076000	5.2%	713	700	3970400	-1.9%
HDFCLIFE	800	3092100	3.3%	774	760	807400	-1.9%	TATASTEEL	175	16791500	1.7%	172	160	22330000	-7.0%
HEROMOTOCO	5500	496050	3.5%	5316	5000	279750	-5.9%	TCS	3200	1991850	1.7%	3146	3100	954450	-1.5%
HINDALCO	760	1933400	0.5%	756	700	1664600	-7.4%	TECHM	1580	1604400	3.2%	1532	1480	1447200	-3.4%
HINDUNILVR	2800	2427600	8.5%	2581	2600	492900	0.7%	TITAN	3700	649250	4.0%	3557	3600	327950	1.2%
ICICIBANK	1430	2894500	0.6%	1422	1400	2052400	-1.5%	TRENT	5500	983000	6.8%	5148	5200	346100	1.0%
INDUSINDBK	800	2023000	7.8%	742	750	1183700	1.0%	ULTRACEMCO	13000	184950	3.4%	12578	12500	51200	-0.6%
INFY	1540	5561200	1.9%	1511	1500	3158000	-0.7%	WIPRO	260	10488000	2.4%	254	250	5724000	-1.6%

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**

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

- **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 (DII), 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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