



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,036	0.7%▼
Open Interest (OI)	1,97,39,400	2.8%▼
Change in OI (abs)	1,97,39,400	5,55,750▼
Premium / Discount (Abs)	40	3▼
Inference	Long Unwinding	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,687	0.4%▼
Open interest (OI)	21,75,665	0.2%▼
Change in OI (abs)	21,75,665	3,935▼
Premium / Discount (Abs)	115	5▲
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	18.54	0.52▲
Nifty ATM IV (%)	24.90	2.2▲
Bank Nifty ATM IV (%)	30.64	4.8▲
PCR (Nifty)	0.82	0.24▼
PCR (Bank Nifty)	0.86	0.03▼

The Long Ratio for FII Index Futures **slide** at 31.3%, **down** from 34.7% in the **last session..**

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ABFRL	3,74,21,800	9.8%	88.25	1.4%
COLPAL	59,48,475	8.1%	2496.7	0.3%
HFCL	8,30,18,400	7.9%	87.47	1.7%
HAL	91,32,900	7.2%	5041.6	0.6%
INOXWIND	2,79,34,950	6.6%	192.65	1.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDIGO	95,72,700	19.5%	5314	-2.0%
KPITTECH	31,06,400	6.9%	1335.1	-0.3%
NTPC	11,24,61,000	5.4%	339.15	-1.5%
CYIENT	33,16,300	5.2%	1346.5	-0.3%
COALINDIA	6,32,94,300	5.0%	400.65	-0.7%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ESCORTS	5,10,750	-33.8%	3531.4	0.8%
NBCC	3,90,75,000	-15.5%	115.38	0.7%
CHAMBLFERT	97,60,300	-11.6%	597.2	1.6%
LTF	7,40,37,966	-11.4%	173.01	0.7%
PEL	86,46,000	-8.3%	1098.15	1.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MRF	34,665	-18.8%	144055	-1.8%
IRFC	6,78,67,450	-13.2%	140.06	-0.4%
RAMCOCEM	45,91,700	-11.3%	973.05	-1.0%
CDSL	1,43,67,275	-10.3%	1468.8	-0.3%
APOLLOTYRE	32,41,900	-9.1%	495.7	-0.3%

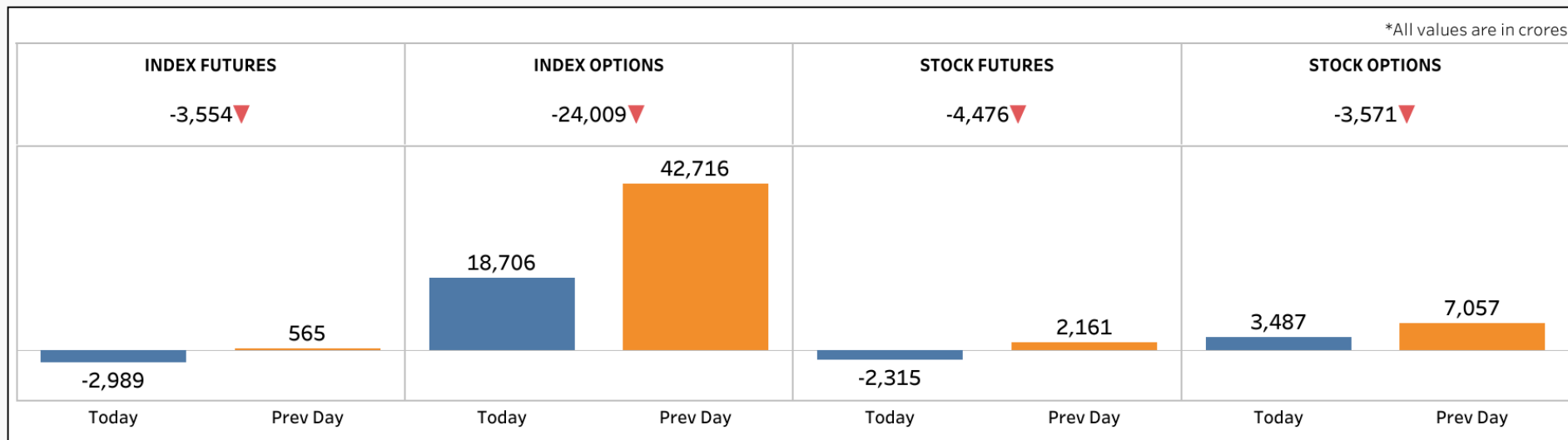
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

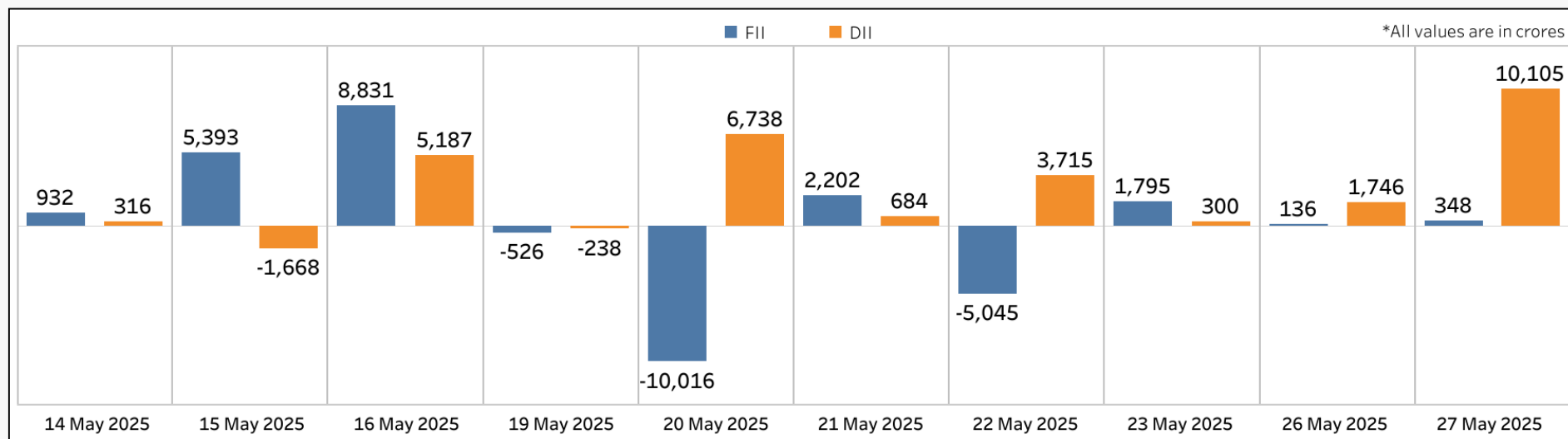
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-96,178 ▼	-18,992 ▼	-29,655 ▼	-46,692 ▼	0	29,673 ▲	2,733 ▲	-49,366 ▼
20,877	117,055	86,390	116,045	0	22,838	-293	8,059
	2,885		15,358		-6,835	-3,026	
	-16,107		-31,334				-41,307
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
382,262	-67,419	447,865	1,767,999	70	9,789	45,335	-3,890,323
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
49,457 ▲	8,124 ▲	-3,138 ▼	61,684 ▲	46,720 ▲	-18,805 ▼	30,060 ▲	34,374 ▲
	7,494		68,846	30,385		61,104	
	-630		7,162		4,580	31,044	
-51,262				-16,335	-14,225		3,795
-100,719		-147,200					-30,579
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-589,028	65,811	-620,662	1,861,633	206,696	-8,181	127,463	260,691
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

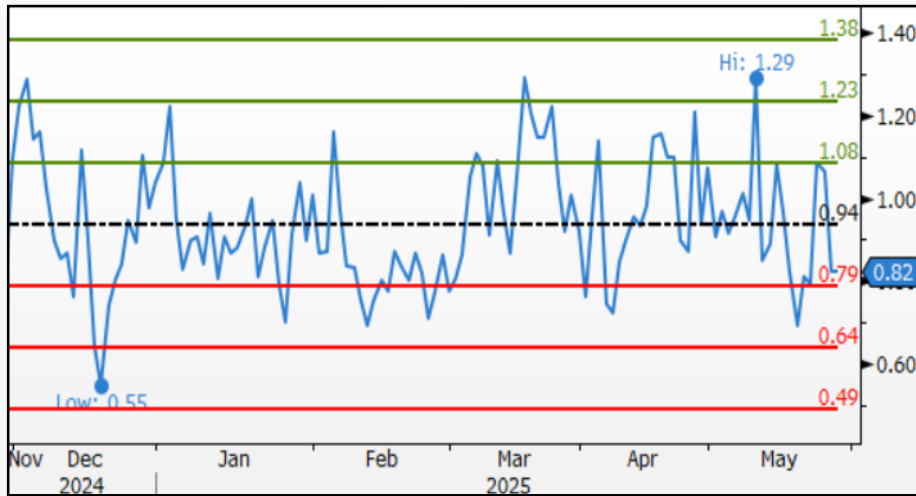
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



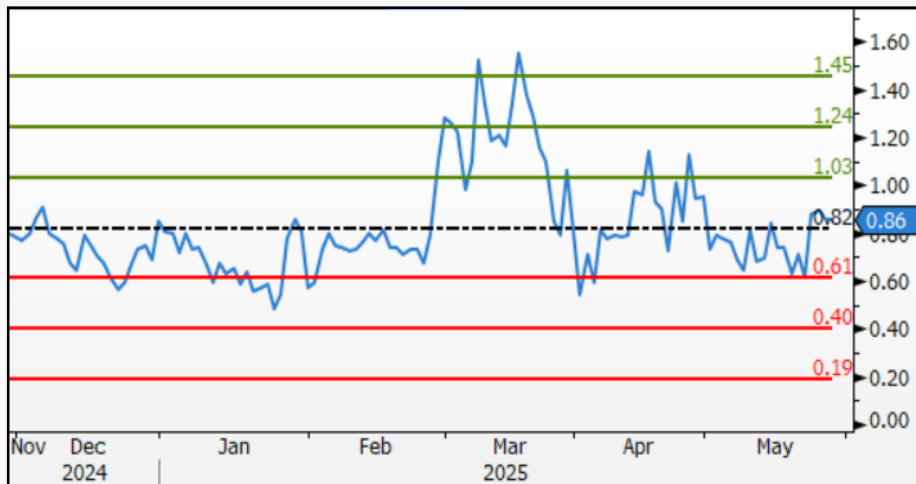
Nifty



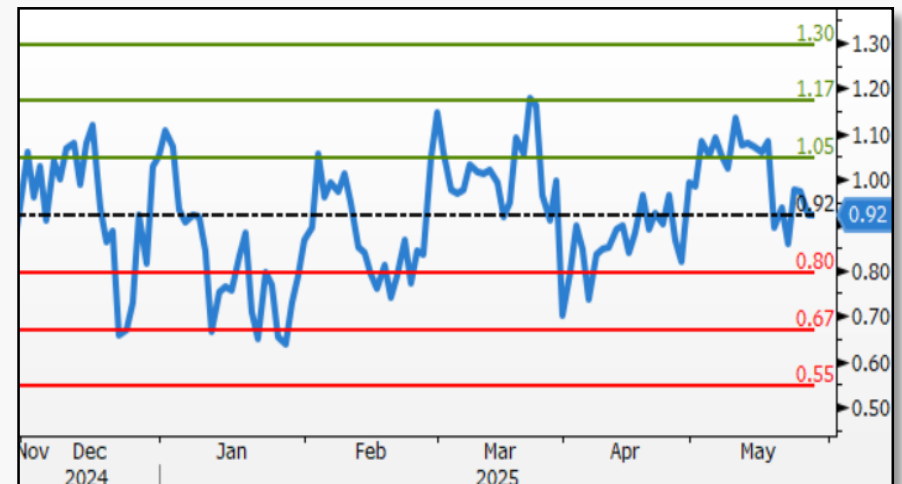
Bank Nifty



Fin Nifty

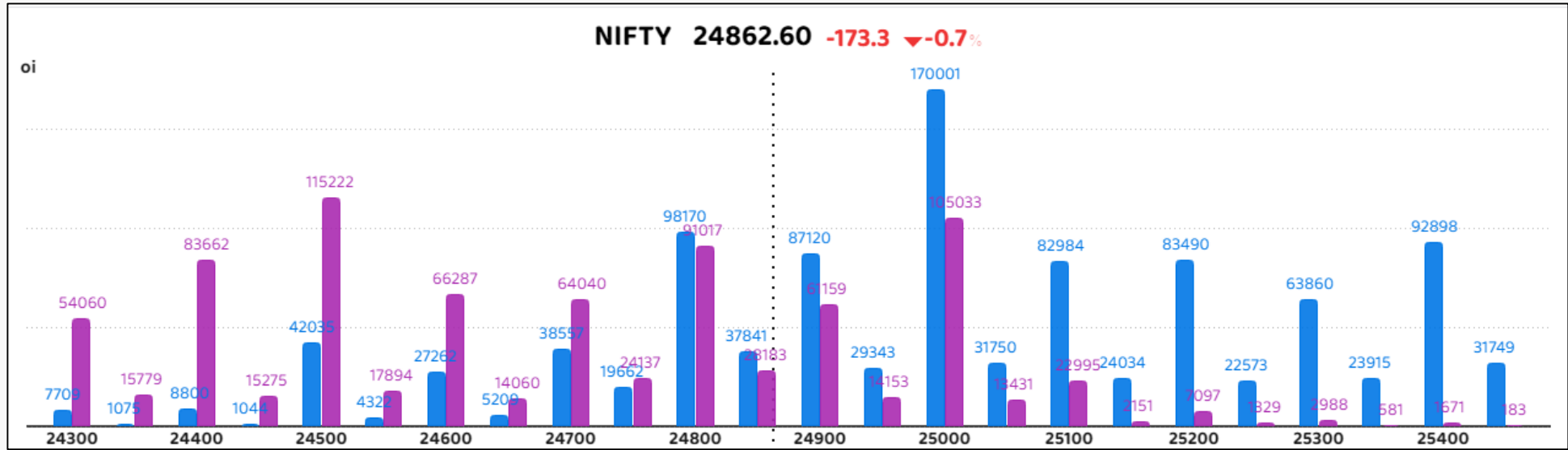


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.

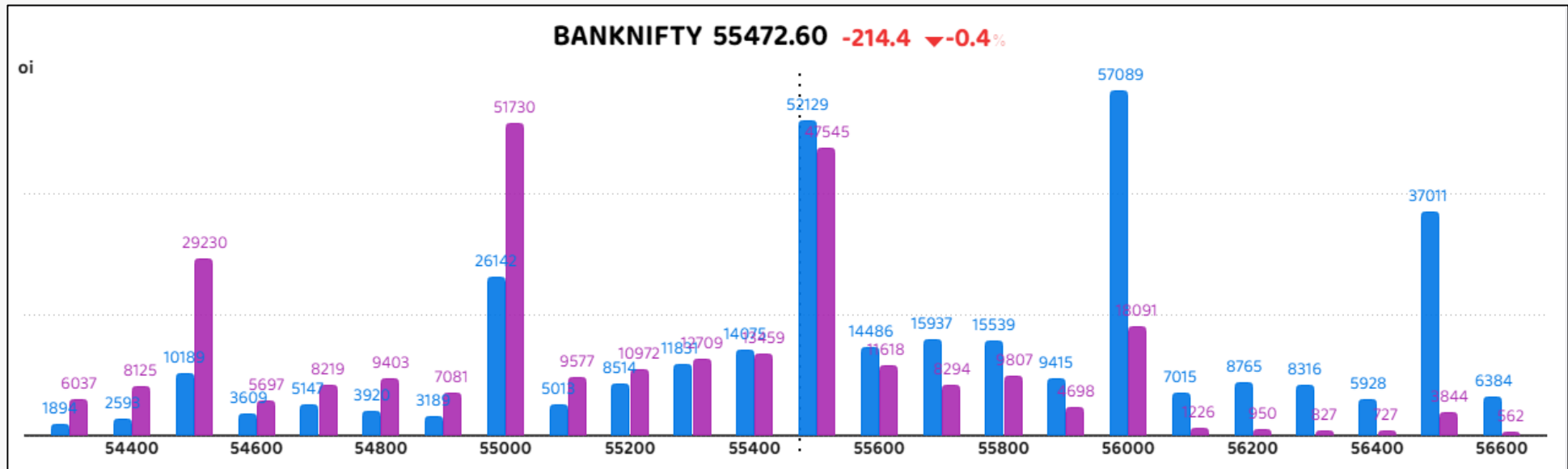
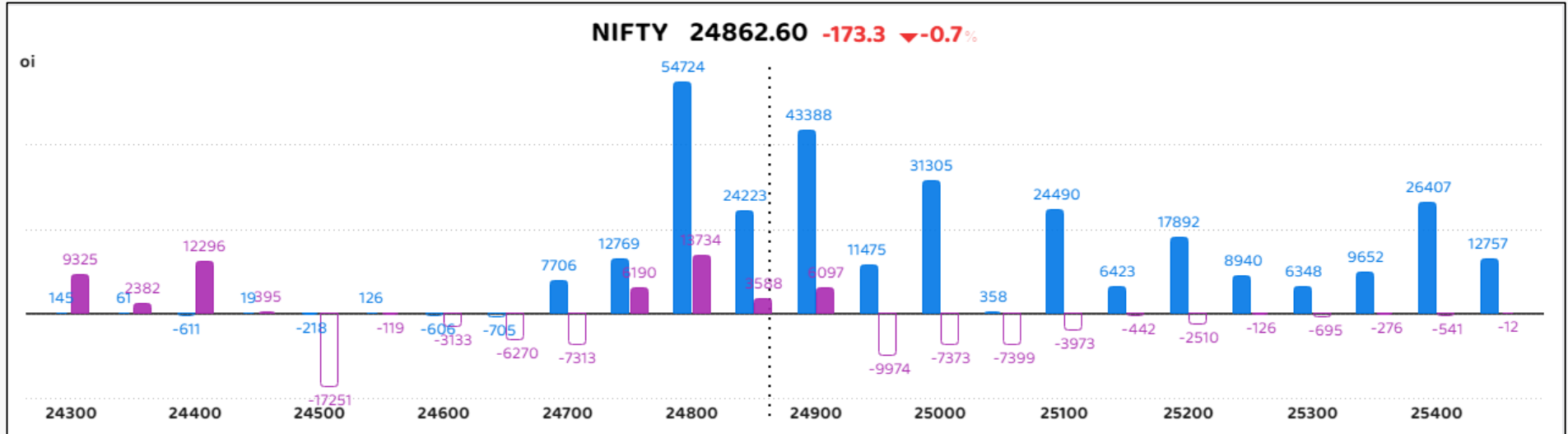


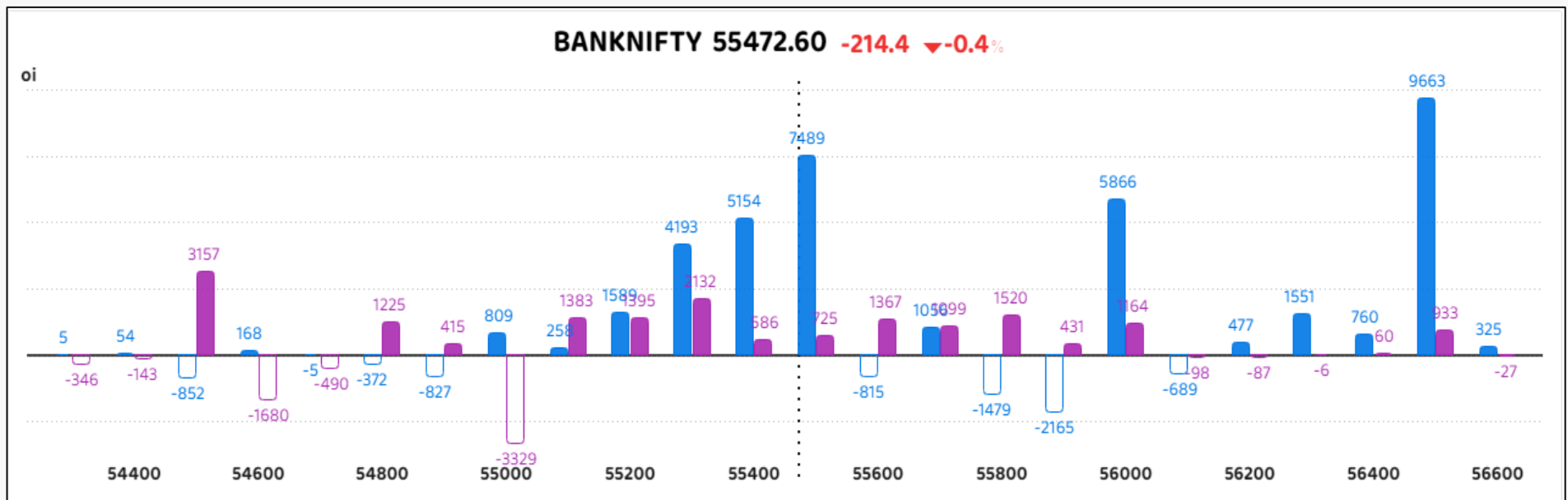
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,800 Call and the 24,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,500 Call & the 55,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DEEPAK NITRITE	2037.8	-0.4	64.2	64.2	21.4	100.0
BAJAJ AUTO LTD	8963	0.1	32.3	36.4	2.1	88.1
RAMCO CEMENT/THE	973.6	-0.9	37.2	43.6	0.5	85.2
DIXON TECHNOLOGI	15091	0.0	41.7	53.0	1.8	78.0
ASTRAL LTD	1527.4	1.2	32.5	42.9	2.9	74.1

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INDIAN RENEWABLE	175.24	1.0	43.7	69.2	42.7	3.8
INDIAN OIL CORP	143.41	-0.1	25.2	51.7	23.7	5.4
BANK OF BARODA	241.51	0.0	26.6	66.9	24.3	5.4
ADANI GREEN ENER	1013	0.1	46.9	74.3	45.1	6.2
ADANI PORTS AND	1404.2	0.3	28.1	99.7	23.2	6.5

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DEEPAK NITRITE	2037.8	-0.4	64.2	64.2	21.4	100.0
BAJAJ AUTO LTD	8963	0.1	32.3	36.4	2.1	96.3
BOSCH LTD	32485	0.0	30.7	34.9	3.3	95.2
RAMCO CEMENT/THE	973.6	-0.9	37.2	43.6	0.5	93.2
ADITYA BIRLA FAS	87.95	1.4	41.2	66.6	9.9	91.1

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
M&M FIN SERVICES	258.2	0.7	23.4	50.0	11.5	0.7
BHARTI AIRTEL	1843.8	-0.2	19.1	34.3	4.6	5.2
YES BANK LTD	21.13	0.7	32.4	55.3	29.4	6.0
INDIAN OIL CORP	143.41	-0.1	25.2	51.7	23.7	6.8
UPL LTD	630.35	-0.3	24.8	42.7	2.9	8.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
YES BANK LTD	21.13	0.7	8792	1440	6.1
SJVN LTD	102.73	0.7	4656	1106	4.2
ADANI TOTAL GAS	674.3	0.7	6703	1593	4.2
TORRENT PHARMA	3175.7	-0.4	4933	1203	4.1
TATA TECHNOLOGIE	773.05	1.3	24370	6047	4.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
IIFL FINANCE LTD	417.35	0.2	4024	11764	2.9
APL APOLLO TUBES	1843.5	0.3	4182	10202	2.4
PIDILITE INDS	3027.6	-0.6	4578	6559	1.4
MRF LTD	143985	-1.8	7378	8876	1.2
MAX FINANCIAL SE	1484.1	0.5	3659	4390	1.2

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
INTERGLOBE AVIAT	5313.5	-2.0	31901	31901	100.0
SOLAR INDUSTRIES	15890	0.0	12687	12687	100.0
VODAFONE IDEA LT	6.96	0.4	46498	47601	97.7
VARUN BEVERAGES	485.55	0.6	29089	30164	96.4
SUN PHARMA INDU	1683.4	0.4	46873	49320	95.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
INDIAN RAILWAY F	139.65	-0.4	11784	11784	100.0
INTERGLOBE AVIAT	5313.5	-2.0	26138	26138	100.0
TATA TECHNOLOGIE	773.05	1.3	8155	8155	100.0
ASTRAL LTD	1527.4	1.2	9349	9349	100.0
JIO FINANCIAL SE	291.4	3.4	24348	24348	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
JIO FINANCIAL SE	291.4	3.4	101483	101483	100.0
SUPREME INDS LTD	4200.4	4.1	29472	33557	87.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
IIFL FINANCE LTD	417.35	0.2	11764	11764	100.0
JIO FINANCIAL SE	291.4	3.4	40283	49288	81.7

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SOLAR INDUSTRIES	15890	0.0	12687	3778	3.4
BALKRISHNA INDS	2478.6	-0.5	7828	2707	2.9
INTERGLOBE AVIAT	5313.5	-2.0	31901	15465	2.1
ASHOK LEYLAND	239.62	-0.1	20705	10120	2.0
RAMCO CEMENT/THE	973.6	-0.9	3823	1937	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SOLAR INDUSTRIES	15890	0.0	12263	3412	3.6
BALKRISHNA INDS	2478.6	-0.5	5382	1916	2.8
MAX FINANCIAL SE	1484.1	0.5	4292	2276	1.9
ASTRAL LTD	1527.4	1.2	9349	5102	1.8
SUPREME INDS LTD	4200.4	4.1	2805	1534	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
AUROBINDO PHARMA	1191.2	0.9	47297	10765	4.4
DEEPAK NITRITE	2037.8	-0.4	18182	4355	4.2
INTERGLOBE AVIAT	5313.5	-2.0	117177	34171	3.4
INFO EDGE	1452.5	-1.4	45442	13447	3.4
BALKRISHNA INDS	2478.6	-0.5	17879	6368	2.8

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ULTRATECH CEMENT	11421	-2.3	76881	17648	4.4
AUROBINDO PHARMA	1191.2	0.9	25245	7007	3.6
DEEPAK NITRITE	2037.8	-0.4	4862	1468	3.3
INTERGLOBE AVIAT	5313.5	-2.0	82163	25859	3.2
INFO EDGE	1452.5	-1.4	23201	7372	3.1

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	2600	1365900	2.4%	2540	2400	609900	-5.5%	ITC	440	10075200	1.4%	434	425	3681600	-2.1%
ADANIPTS	1400	1550800	-0.3%	1404	1400	982800	-0.3%	JIOFIN	300	4811400	3.0%	291	250	3303300	-14.2%
APOLLOHOSP	7200	227750	1.8%	7074	7000	103125	-1.0%	JSWSTEEL	1050	1248075	3.6%	1014	1000	1023300	-1.4%
ASIANPAINT	2500	738000	7.4%	2328	2300	456600	-1.2%	KOTAKBANK	2200	1380400	5.9%	2077	2100	480800	1.1%
AXISBANK	1220	3136250	2.0%	1196	1200	1866875	0.4%	LT	3500	838350	-3.8%	3640	3600	645750	-1.1%
BAJAJ-AUTO	9000	144150	0.4%	8963	8600	95550	-4.0%	M&M	3200	976500	5.3%	3040	2900	359625	-4.6%
BAJAJFINSV	2100	3443500	3.5%	2030	2000	523000	-1.5%	MARUTI	13000	421100	4.7%	12414	12000	223300	-3.3%
BAJFINANCE	10000	512750	9.0%	9171	9000	352875	-1.9%	NESTLEIND	2500	430800	1.6%	2461	2400	118600	-2.5%
BEL	390	11625150	1.2%	385	350	7655100	-9.2%	NTPC	350	14002500	3.4%	339	345	4233000	1.9%
BHARTIARTL	1900	3294125	3.0%	1844	1800	1545175	-2.4%	ONGC	250	11652025	2.2%	245	240	4774000	-1.9%
CIPLA	1600	1335100	8.1%	1481	1300	430950	-12.2%	POWERGRID	330	4176000	12.0%	295	300	1315800	1.9%
COALINDIA	410	4143300	2.5%	400	400	2495850	0.0%	RELIANCE	1450	7771500	2.0%	1422	1300	3392000	-8.6%
DRREDDY	1240	1574375	-0.3%	1243	1150	650625	-7.5%	SBILIFE	1780	1646250	-1.3%	1803	1780	682500	-1.3%
EICHERMOT	5700	228375	5.8%	5390	4500	136150	-16.5%	SBIN	820	10859250	3.3%	794	800	4082250	0.8%
ETERNAL	240	12686000	6.8%	225	230	5886000	2.3%	SHRIRAMFIN	700	2173500	5.8%	662	600	1308750	-9.4%
GRASIM	2740	392500	4.8%	2614	2340	126000	-10.5%	SUNPHARMA	1700	2474150	1.0%	1683	1600	774200	-5.0%
HCLTECH	1700	1394050	2.9%	1652	1580	820400	-4.4%	TATACONSUM	1300	754224	14.2%	1138	1100	491568	-3.4%
HDFCBANK	1980	4643100	2.8%	1926	1920	1999800	-0.3%	TATAMOTORS	740	6168250	3.3%	716	700	3359950	-2.3%
HDFCLIFE	760	1849100	-2.0%	776	720	2022900	-7.2%	TATASTEEL	165	17853000	2.1%	162	155	12875500	-4.1%
HEROMOTOCO	4500	377850	3.7%	4338	3900	203400	-10.1%	TCS	3600	963550	2.9%	3499	3400	421400	-2.8%
HINDALCO	700	3560200	6.1%	659	650	1234800	-1.4%	TECHM	1600	851400	0.5%	1592	1580	489000	-0.8%
HINDUNILVR	2400	1007400	0.8%	2380	2400	402900	0.8%	TITAN	3500	250600	-2.5%	3589	3500	258125	-2.5%
ICICIBANK	1460	4214700	0.9%	1446	1400	1579200	-3.2%	TRENT	6000	387600	7.7%	5573	5100	239600	-8.5%
INDUSINDBK	850	2882500	3.6%	821	770	2566000	-6.2%	ULTRACEMCO	12500	198550	9.4%	11421	10000	89100	-12.4%
INFY	1600	3099600	1.9%	1570	1500	1108800	-4.5%	WIPRO	300	9798000	20.8%	248	250	2880000	0.7%

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**

**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 (DIIIs), 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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