



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,206	0.5%▲
Open Interest (OI)	1,73,41,155	3.8%▲
Change in OI (abs)	1,73,41,155	6,33,620▲
Premium / Discount (Abs)	87	14▼
<b>Inference</b>	<b>Long Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,195	0.08%▼
Open interest (OI)	22,33,410	4.8%▲
Change in OI (abs)	22,33,410	1,06,410▲
Premium / Discount (Abs)	332	57▼
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	18.3	0.16▼
Nifty ATM IV (%)	17.41	0.05▼
Bank Nifty ATM IV (%)	20.49	0.23▲
PCR (Nifty)	0.80	0.18▼
PCR (Bank Nifty)	0.87	0.03▼

The FII Long Ratio in Index Futures **jump** to **11.7%**, **up** from **11.3%** in the previous session.

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
DALBHARAT	26,85,150	15.2%	1988.2	3.7%
AMBUJACEM	7,06,79,850	13.0%	447.35	0.1%
BHEL	13,80,22,500	12.0%	379.75	7.1%
ADANIPOINTS	2,22,19,550	6.9%	1748	5.1%
ADANIENSOL	1,95,21,000	5.7%	1406.9	4.2%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
DMART	39,65,850	18.2%	4362.2	-5.5%
MAZDOCK	48,66,550	15.5%	2625.2	-4.3%
APLAPOLLO	57,90,050	12.0%	1884.3	-1.7%
SONACOMS	1,62,23,900	10.5%	577	-5.3%
RVNL	5,39,29,000	8.9%	293.3	-1.3%

### Short Covering (Open Interest Lower + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
HINDUNILVR	1,50,99,900	-5.1%	2320.2	2.7%
BLUESTARCO	28,28,475	-4.6%	1801.4	2.0%
BDL	33,47,100	-4.2%	1377.2	0.6%
NAM-INDIA	33,42,500	-3.7%	1021.6	0.7%
HAL	68,17,350	-2.5%	4580.2	5.0%

### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
KOTAKBANK	22,79,86,000	-5.8%	372.5	-3.5%
OIL	1,93,17,200	-2.5%	477.9	-2.8%
PERSISTENT	41,64,550	-1.6%	4808.2	-0.3%
NESTLEIND	1,46,09,000	-1.4%	1460.1	-0.1%
ABB	21,27,875	-1.3%	7263.5	-0.1%

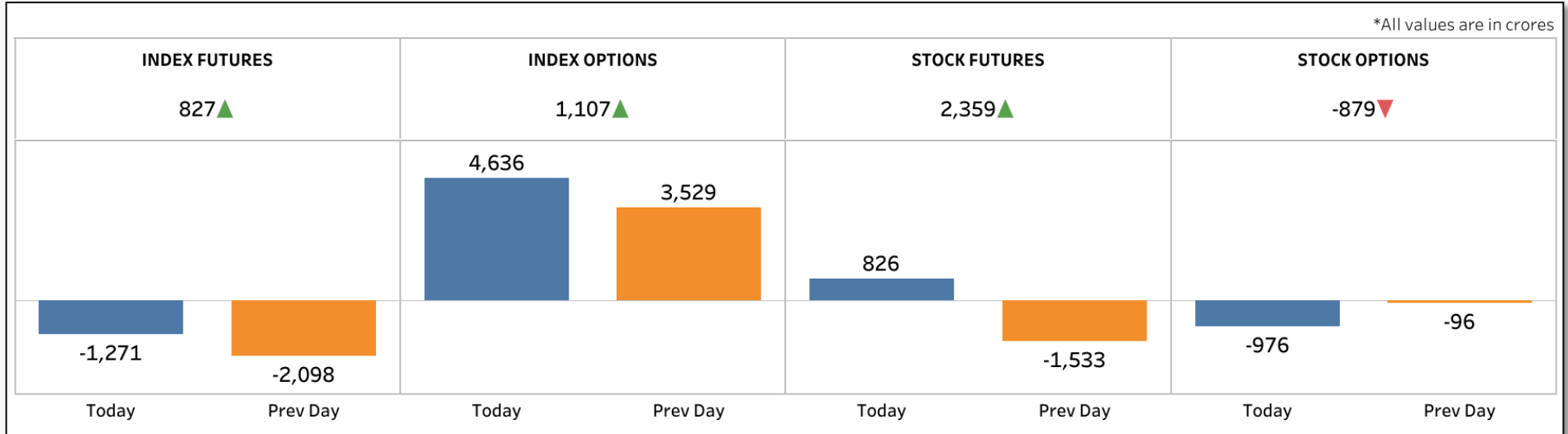
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

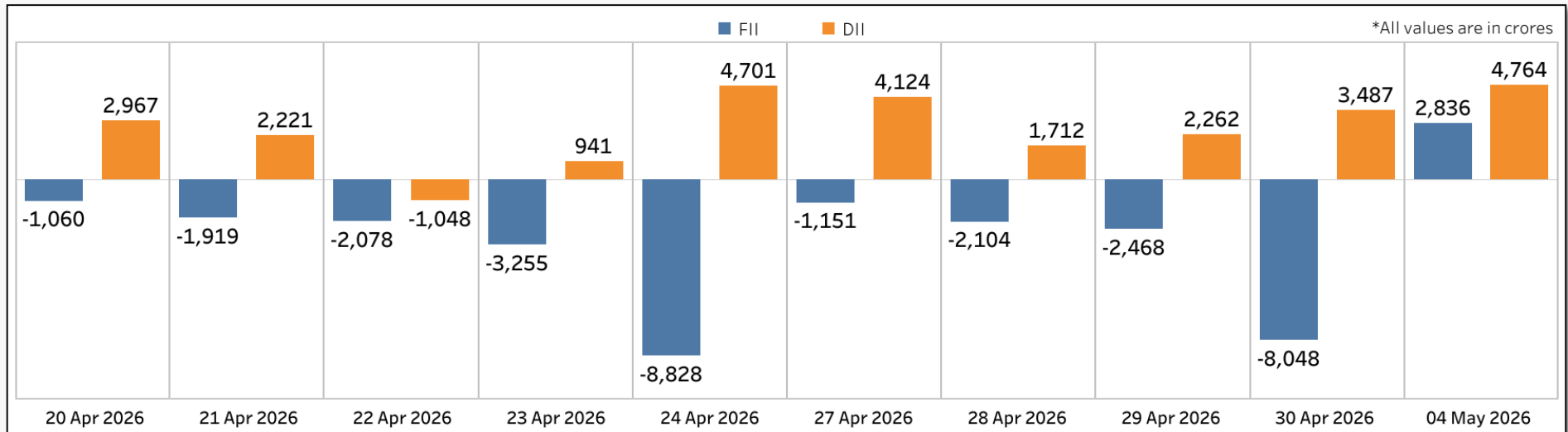
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
38,052 ▲	5,322 ▲	-34,347 ▼	37,130 ▲	1,957 ▲	7,236 ▲	-56 ▼	1,934 ▲
33,772		26,214	7,032	-1,016	201	9,250	9,306
-4,280	-8,096	-8,133		-2,973	-7,035		
	-13,418		-30,098				-37,257
							-39,191
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-186,566	-192,572	351,232	805,838	-59	38,608	68,128	-3,918,438
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	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
115,936 ▲	-4,232 ▼	226,273 ▲	-3,688 ▼	-155,947 ▼	-8,326 ▼	-191,871 ▼	-35,376 ▼
87,275		62,326	40,836			128,427	
	8,364		44,524	35,915	7,857		24,765
-28,661	12,596				-469		
		-163,947		-120,032		-63,444	-10,611
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
214,089	138,522	-655,036	2,660,942	-27,465	15,442	235,675	451,658
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

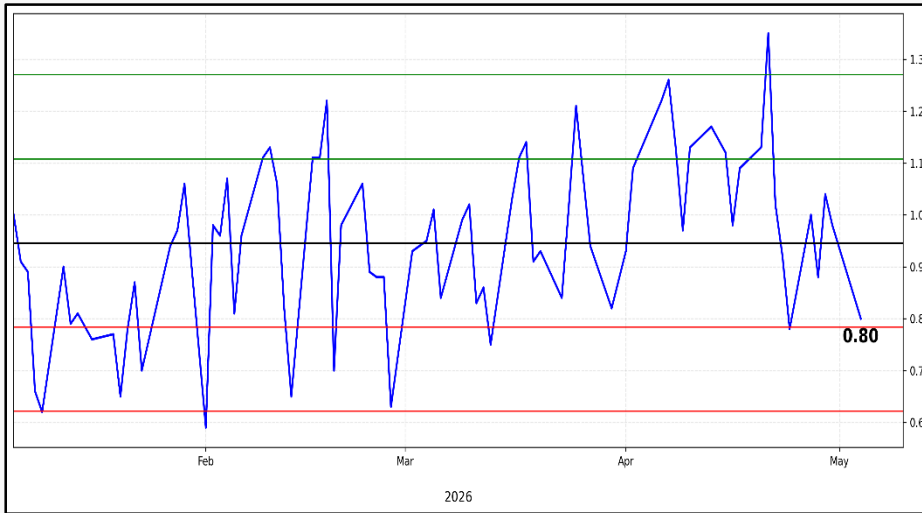
## Daily Net Open Interest Change



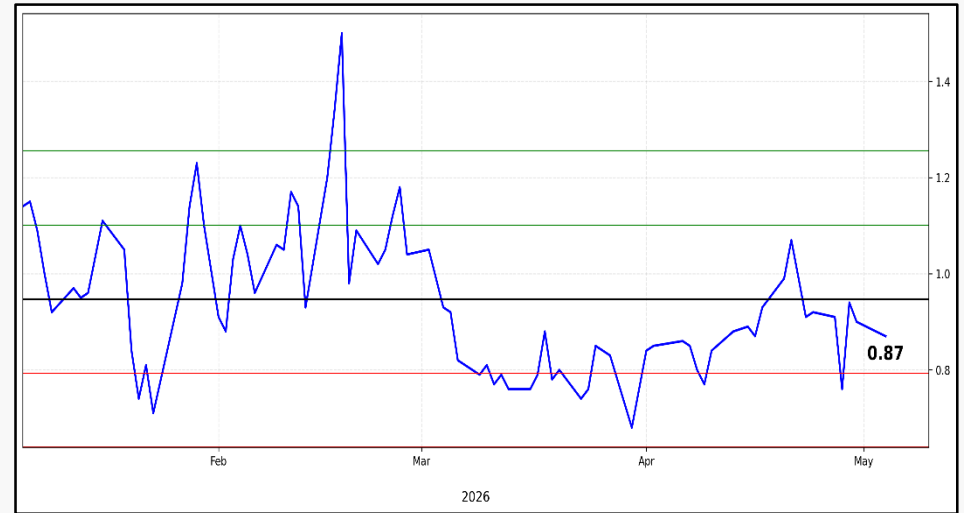
## DII and FII Daily Cash Market Flows



## Nifty



## Bank Nifty



## Fin Nifty



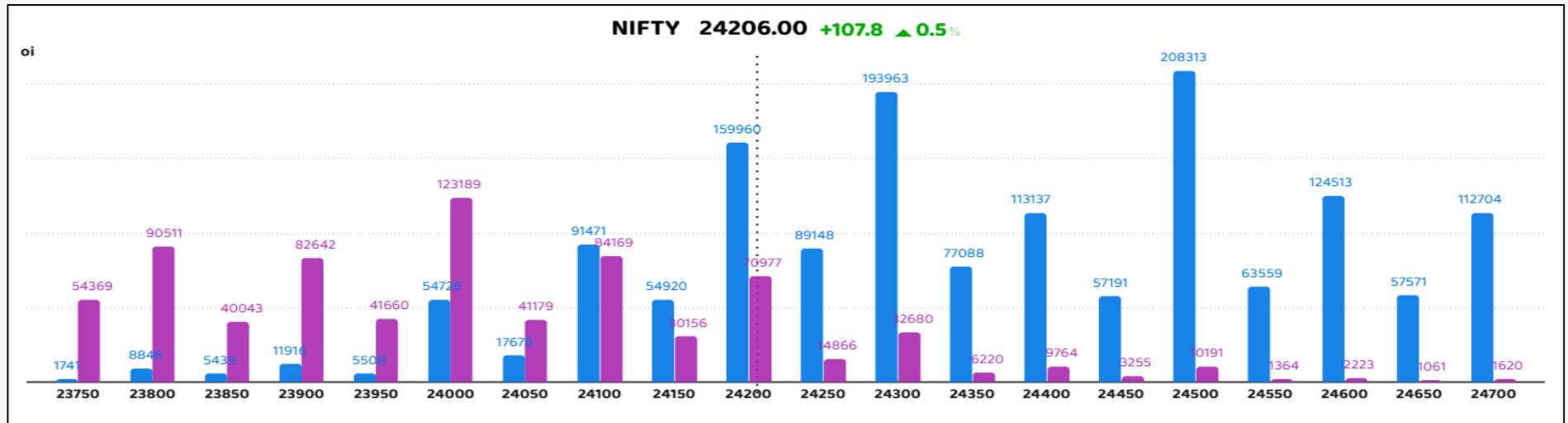
## Midcap Select Nifty



*On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation*

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

Call ■ Put ■



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

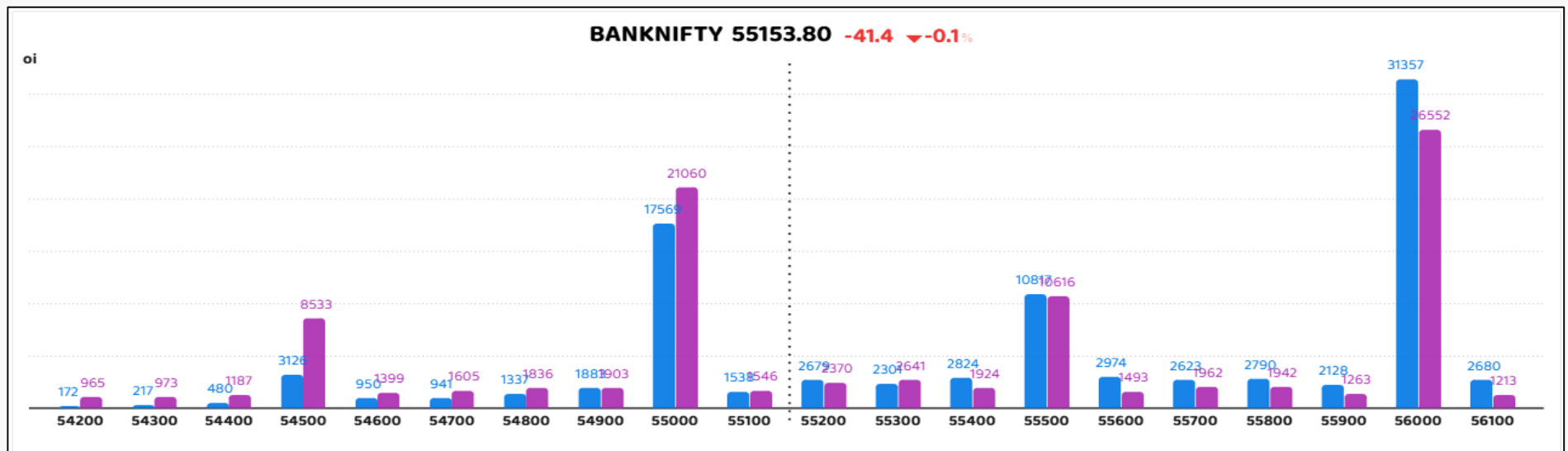
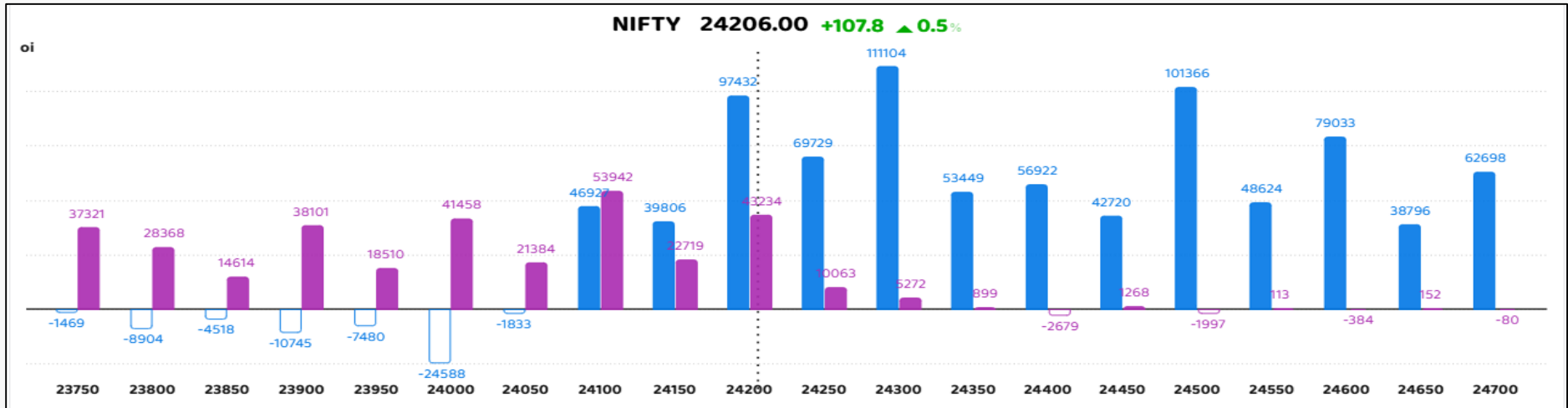


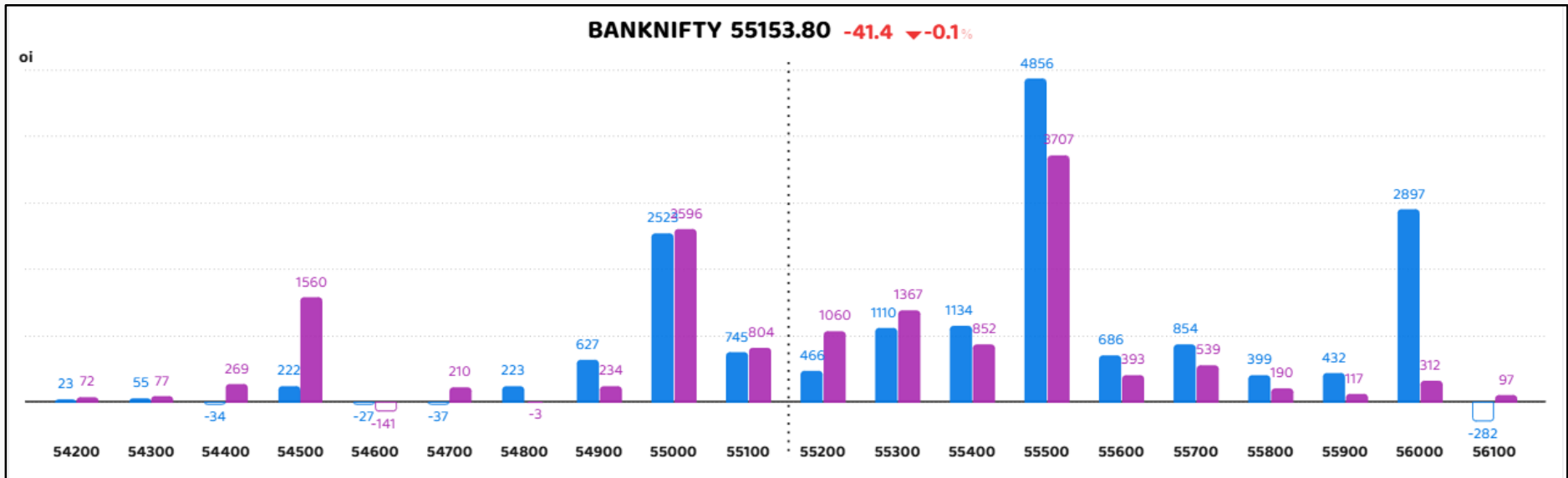
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,300 Call and the 24,100 Put



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

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
VEDANTA LTD	294.7	8.5	46.2	46.2	9.2	99.9
POLYCAB INDIA LT	8344.5	2.9	36.6	44.0	2.8	82.0
COLGATE PALMOLIV	2172.9	3.7	29.4	33.8	9.7	81.6
APOLLO HOSPITALS	7737.5	1.3	26.5	29.7	13.5	80.5
BHARAT FORGE CO	1845.8	-1.9	38.9	43.7	22.2	77.8

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	160.8	-0.8	37.6	734.8	18.5	2.7
ADITYA BIRLA CAP	345.9	0.1	36.0	658.6	8.2	4.3
PERSISTENT SYS	4788.1	-0.3	26.6	61.7	24.7	5.2
CHOLAMANDALAM IN	1639.5	4.9	32.3	186.8	19.6	7.6
HINDALCO INDS	1042.7	0.5	31.4	254.2	12.3	7.9

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
VEDANTA LTD	294.7	8.5	46.2	46.2	9.2	100.0
TORRENT POWER LT	1724.0	-0.7	46.0	47.5	21.8	99.6
PIRAMAL PHARMA L	160.3	-1.0	50.5	58.0	24.9	99.0
CROM GREAVES CON	278.0	2.1	45.9	61.9	20.7	98.9
MANAPPURAM FINAN	305.2	3.7	47.1	63.6	5.0	98.3

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
PERSISTENT SYS	4788.1	-0.3	26.6	61.7	24.7	3.4
VODAFONE IDEA LT	10.5	2.9	46.8	212.9	10.0	10.5
NTPC LTD	400.1	0.2	18.9	60.3	14.9	33.8
SUPREME INDS LTD	3620.1	-0.1	31.0	45.0	17.6	37.0
ANGEL ONE LTD	307.7	-0.3	38.2	75.8	26.9	37.9

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
IDEA	10.5	2.9	42,380.0	10,218.0	4.1
PIIND	3,047.5	-0.2	4,221.0	1,018.0	4.1
KPITTECH	768.6	1.3	10,031.0	2,553.0	3.9
TATACONSUM	1,160.4	1.4	6,090.0	1,565.0	3.9
WAAREEENER	3,136.5	0.6	43,699.0	11,866.0	3.7

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
POLYCAB	8,344.5	2.9	12,328.0	14,969.0	1.2
HINDPETRO	373.8	-0.2	3,775.0	3,592.0	1.0
IDFCFIRSTB	69.6	-0.1	7,226.0	6,521.0	0.9
CDSL	1,238.3	-2.6	27,082.0	23,892.0	0.9
PAYTM	1,115.8	1.8	5,431.0	4,667.0	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
WAAREEENER	3,136.5	0.6	25,698.0	23,050.0	100.0
POWERINDIA	33,730.0	0.5	9,436.0	8,345.0	100.0
KFINTECH	864.0	-3.5	10,544.0	8,519.0	100.0
KOTAKBANK	371.6	-3.0	24,491.0	25,313.0	96.8
TATASTEEL	212.2	0.4	29,195.0	30,237.0	96.6

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
BANDHANBNK	206.8	3.5	9,516.0	9,048.0	100.0
KFINTECH	864.0	-3.5	4,938.0	4,389.0	100.0
INDUSTOWER	400.2	-2.4	12,533.0	10,438.0	100.0
BAJAJ-AUTO	10,132.0	1.4	15,165.0	16,161.0	93.8
FEDERALBNK	289.2	0.8	7,846.0	8,478.0	92.5

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
AMBUJACEM	445.4	0.3	74,938.0	26,436.0	100.0
BHEL	377.0	7.0	125,380.0	91,446.0	100.0
ABCAPITAL	345.9	0.1	28,719.0	17,315.0	100.0
INDUSTOWER	400.2	-2.4	47,196.0	45,143.0	100.0
IDEA	10.5	2.9	42,380.0	31,139.0	100.0

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ABCAPITAL	345.9	0.1	13,498.0	9,516.0	100.0
BHEL	377.0	7.0	82,747.0	52,805.0	100.0
CDSL	1,238.3	-2.6	23,892.0	20,111.0	100.0
ADANI PORTS	1,742.6	5.2	45,497.0	45,283.0	100.0
INDUSTOWER	400.2	-2.4	22,541.0	19,184.0	100.0

**Call Open Interest to 20-day Average**

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
KFINTECH	864.0	-3.5	10,544.0	3,346.2	3.2
WAAREEENER	3,136.5	0.6	25,698.0	11,062.2	2.3
FEDERALBNK	289.2	0.8	14,500.0	6,962.8	2.1
POWERINDIA	33,730.0	0.5	9,436.0	4,957.4	1.9
AMBUJACEM	445.4	0.3	18,094.0	9,959.6	1.8

**Put Open Interest to 20-day Average**

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
KFINTECH	864.0	-3.5	4,938.0	2,015.2	2.5
INDUSTOWER	400.2	-2.4	12,533.0	6,926.4	1.8
WAAREEENER	3,136.5	0.6	12,817.0	7,205.9	1.8
BANDHANBNK	206.8	3.5	9,516.0	5,404.6	1.8
ADANIENSOL	1,398.4	4.2	6,290.0	4,173.2	1.5

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
AMBUJACEM	445.4	0.3	74,938.0	10,946.0	6.8
ABCAPITAL	345.9	0.1	28,719.0	5,621.2	5.1
KOTAKBANK	371.6	-3.0	78,609.0	16,934.3	4.6
GODREJPROP	1,899.8	3.5	60,102.0	13,820.5	4.3
LAURUSLABS	1,166.4	5.9	31,203.0	7,207.6	4.3

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
AMBUJACEM	445.4	0.3	34,157.0	5,078.4	6.7
BHEL	377.0	7.0	82,747.0	18,319.2	4.5
ABCAPITAL	345.9	0.1	13,498.0	3,219.8	4.2
EXIDEIND	359.0	-0.4	16,927.0	4,307.2	3.9
KOTAKBANK	371.6	-3.0	37,448.0	11,105.0	3.4

## 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
ADANIANT	2500	1594749	0.6%	2486	2400	737583	-3.4%	JIOFIN	250	9830050	-1.1%	253	250	5651750	-1.1%
ADANIPTS	1800	1081100	3.3%	1743	1600	1188925	-8.2%	JSWSTEEL	1300	710100	2.6%	1267	1240	426600	-2.1%
APOLLOHOSP	7800	128250	0.8%	7738	7000	76875	-9.5%	KOTAKBANK	400	8238000	7.6%	372	360	4984000	-3.1%
ASIANPAINT	2500	739000	2.1%	2448	2400	502500	-2.0%	LT	4200	672350	2.4%	4101	3800	629825	-7.3%
AXISBANK	1400	2028125	9.8%	1275	1200	1270000	-5.9%	M&M	3200	916600	3.0%	3107	3100	689600	-0.2%
BAJAJ-AUTO	11000	172800	8.6%	10132	9000	169650	-11.2%	MARUTI	14000	270900	3.1%	13580	13000	122950	-4.3%
BAJAJFINSV	1800	428500	1.7%	1770	1780	325250	0.5%	MAXHEALTH	1100	472500	8.7%	1012	1000	393750	-1.1%
BAJFINANCE	1000	2515500	5.2%	950	900	1935750	-5.3%	NESTLEIND	1480	562500	1.6%	1457	1400	570000	-3.9%
BEL	450	4601325	3.8%	434	430	2559300	-0.8%	NTPC	410	5157000	2.5%	400	400	2515500	0.0%
BHARTIARTL	1900	2011625	4.0%	1827	1860	718200	1.8%	ONGC	310	7195500	5.8%	293	280	3789000	-4.4%
CIPLA	1360	527250	1.9%	1335	1250	539250	-6.4%	POWERGRID	320	3562500	0.3%	319	320	2053900	0.3%
COALINDIA	500	3901500	4.2%	480	450	2490750	-6.2%	RELIANCE	1500	5073000	2.5%	1463	1400	2871000	-4.3%
DRREDDY	1400	1845625	8.8%	1287	1200	503125	-6.8%	SBILIFE	1860	558375	2.2%	1820	1700	268500	-6.6%
EICHERMOT	7400	118800	1.0%	7329	6800	99100	-7.2%	SBIN	1100	5232750	3.0%	1068	1100	3406500	3.0%
ETERNAL	260	16582150	3.2%	252	240	5383500	-4.7%	SHRIRAMFIN	1100	3510375	14.5%	960	900	1074150	-6.3%
GRASIM	2800	202750	-2.0%	2856	2800	172000	-2.0%	SUNPHARMA	1860	1495550	2.0%	1824	1700	769300	-6.8%
HCLTECH	1300	4665850	8.3%	1201	1200	2051700	0.0%	TATACONSUM	1200	387200	3.4%	1160	1100	257950	-5.2%
HDFCBANK	800	12970100	2.6%	779	800	3899500	2.6%	TMPV	360	3768000	4.9%	343	300	1629600	-12.5%
HDFCLIFE	600	1918400	2.0%	588	560	1084600	-4.8%	TATASTEEL	210	16604500	-1.1%	212	210	11049500	-1.1%
HINDALCO	1070	838600	2.6%	1043	1000	603400	-4.1%	TCS	2600	1654625	6.9%	2431	3120	672175	28.3%
HINDUNILVR	2400	1081500	3.9%	2309	2300	479100	-0.4%	TECHM	1500	969600	1.9%	1472	1300	520800	-11.7%
ICICIBANK	1300	4893000	2.3%	1271	1300	2618000	2.3%	TITAN	4500	359975	3.1%	4363	4200	179725	-3.7%
INDIGO	4600	587250	7.9%	4262	4200	276750	-1.5%	TRENT	4500	716500	8.2%	4159	4000	136000	-3.8%
INFY	1300	5011200	11.3%	1168	1160	1641200	-0.7%	ULTRACEMCO	13000	215000	10.6%	11758	12000	62450	2.1%
ITC	320	13200000	2.9%	311	290	4652800	-6.8%	WIPRO	210	19236000	4.6%	201	200	9573000	-0.4%

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**

*\*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 (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](http://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

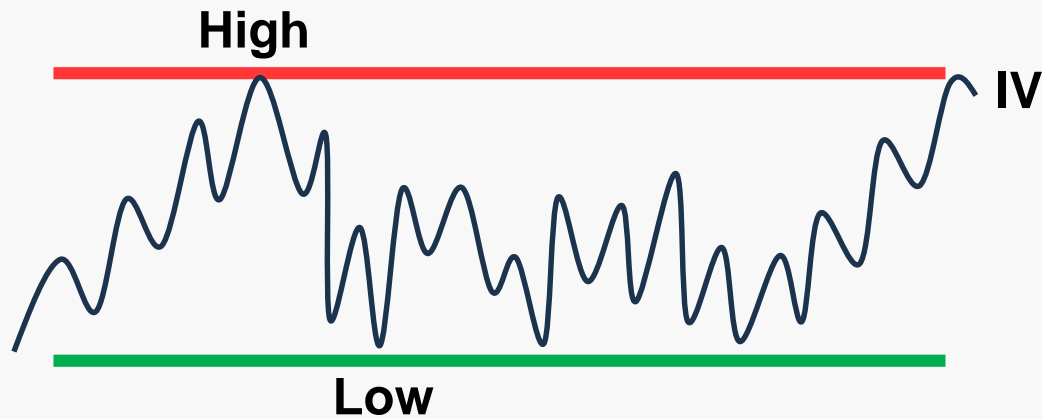


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



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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