



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,368	0.7%▲
Open Interest (OI)	2,05,44,095	1.1%▼
Change in OI (abs)	2,05,44,095	2,36,080▼
Premium / Discount (Abs)	14	15▲
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	56,667	0.81%▲
Open interest (OI)	26,02,470	1.4%▼
Change in OI (abs)	26,02,470	36,600▼
Premium / Discount (Abs)	101	22▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	17.2	0.89▼
Nifty ATM IV (%)	16.58	1.17▼
Bank Nifty ATM IV (%)	20.46	1.02▼
PCR (Nifty)	1.09	0.11▲
PCR (Bank Nifty)	0.93	0.06▲

The FII Long Ratio in Index Futures **Jump** to **21%**, **Up** from **20%** in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GODFRYPHLP	12,98,275	53.1%	2184.2	2.4%
MOTILALOFS	28,64,400	38.1%	817.75	4.2%
NAM-INDIA	31,85,000	25.6%	1000.05	3.8%
COCHINSHIP	17,95,200	22.3%	1566.2	4.2%
PREMIERENE	1,31,71,525	20.4%	1006.65	0.3%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
FORCEMOT	1,31,550	9.6%	22371	-0.9%
KALYANKJIL	2,62,77,700	6.6%	427.95	-3.1%
HDFCLIFE	4,37,34,900	5.3%	616.3	-2.7%
HCLTECH	4,28,67,300	3.3%	1415.3	-0.3%
INDUSTOWER	7,30,04,800	3.2%	413.35	-0.3%

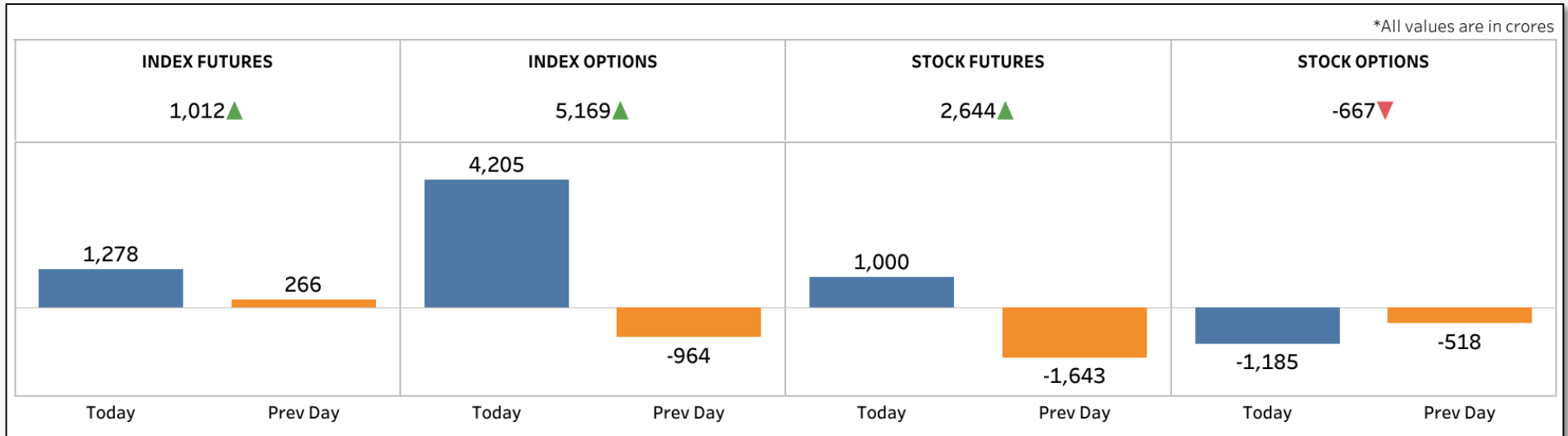
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POLICYBZR	80,51,400	-11.2%	1601.1	2.9%
COLPAL	58,42,575	-5.3%	2109.2	6.4%
POLYCAB	18,66,750	-4.3%	8162	3.0%
INOXWIND	10,00,10,625	-3.9%	97.82	2.2%
AMBER	12,76,000	-3.7%	7941.5	2.7%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LODHA	1,92,68,100	-3.5%	872.85	-0.3%
ETERNAL	19,50,71,850	-2.5%	252.59	-0.1%
SAMMAANCAP	9,83,71,100	-1.5%	154.51	-0.3%
MCX	1,31,20,625	-1.2%	2861.9	-0.4%
INDIANB	98,63,000	-1.1%	942.25	-0.1%

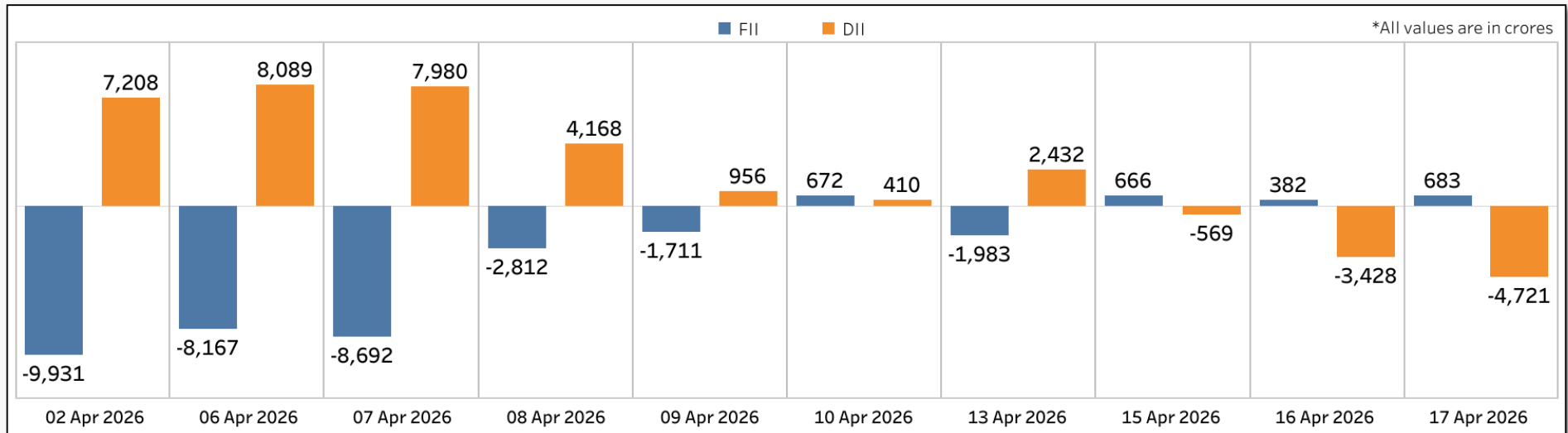
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



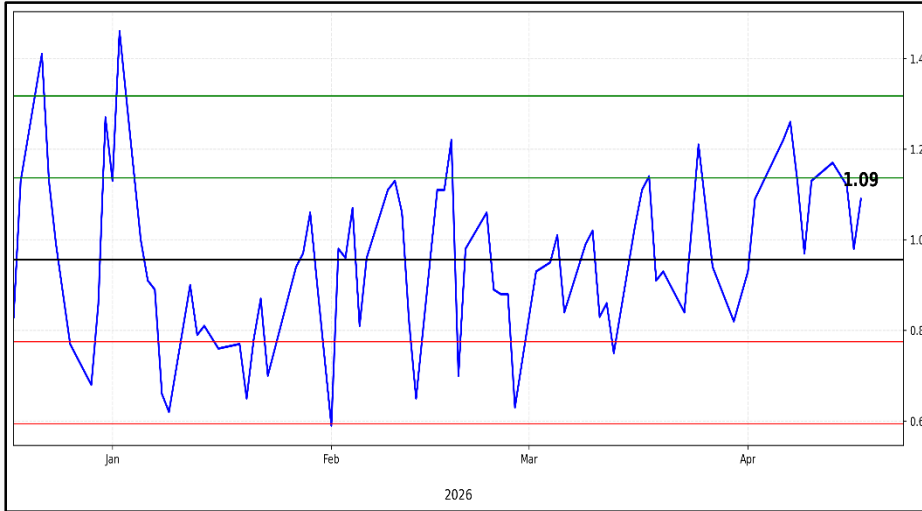
## Daily Net Open Interest Change



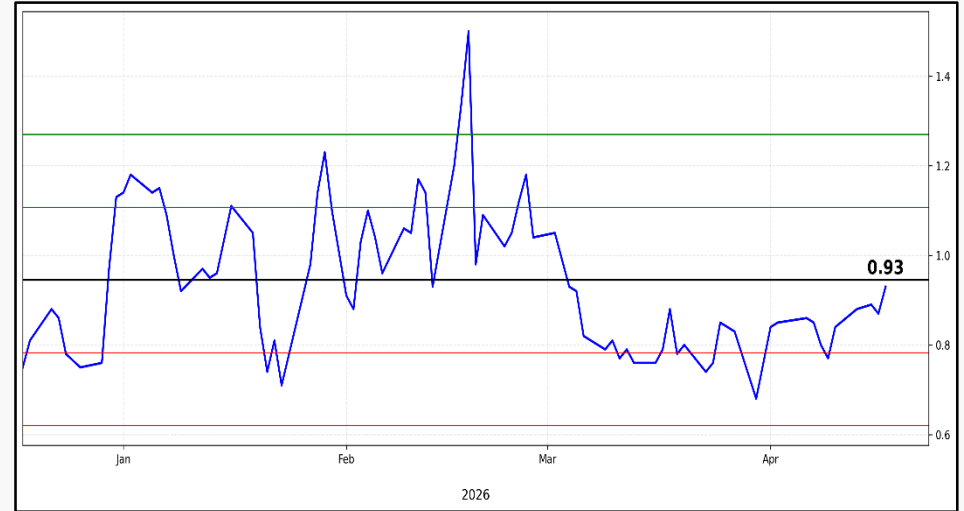
## DII and FII Daily Cash Market Flows



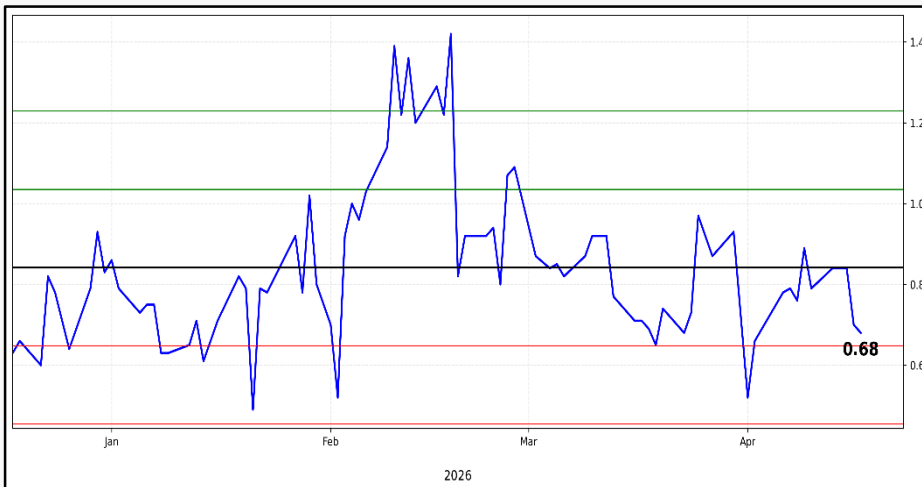
### Nifty



### Bank Nifty



### Fin Nifty



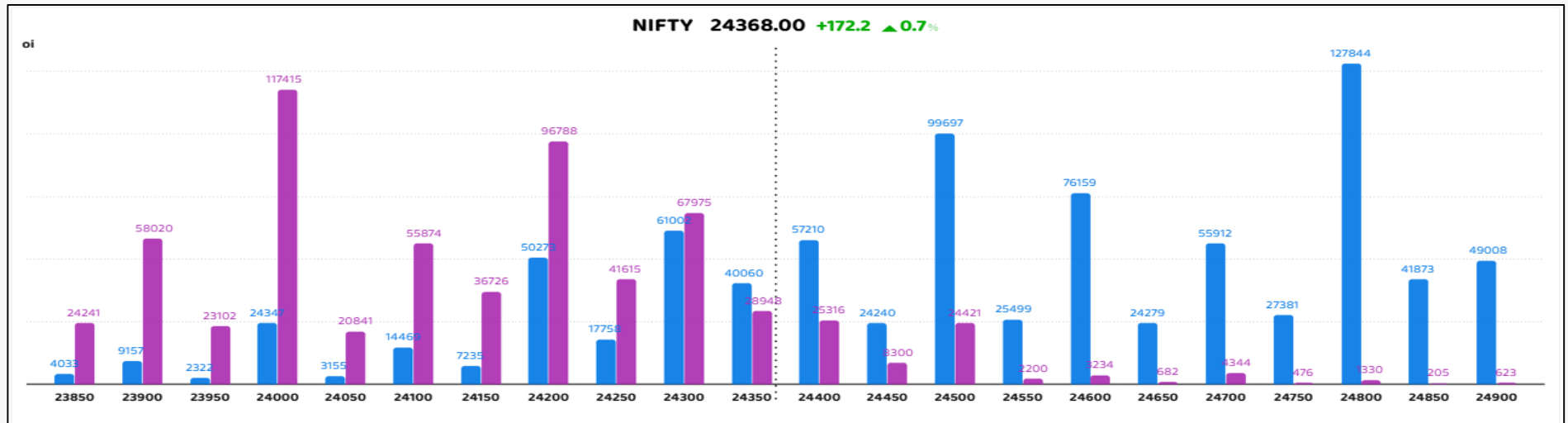
### Midcap Select Nifty



*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 57,000 Call and the 56,000 Put saw the most amount of open interest.

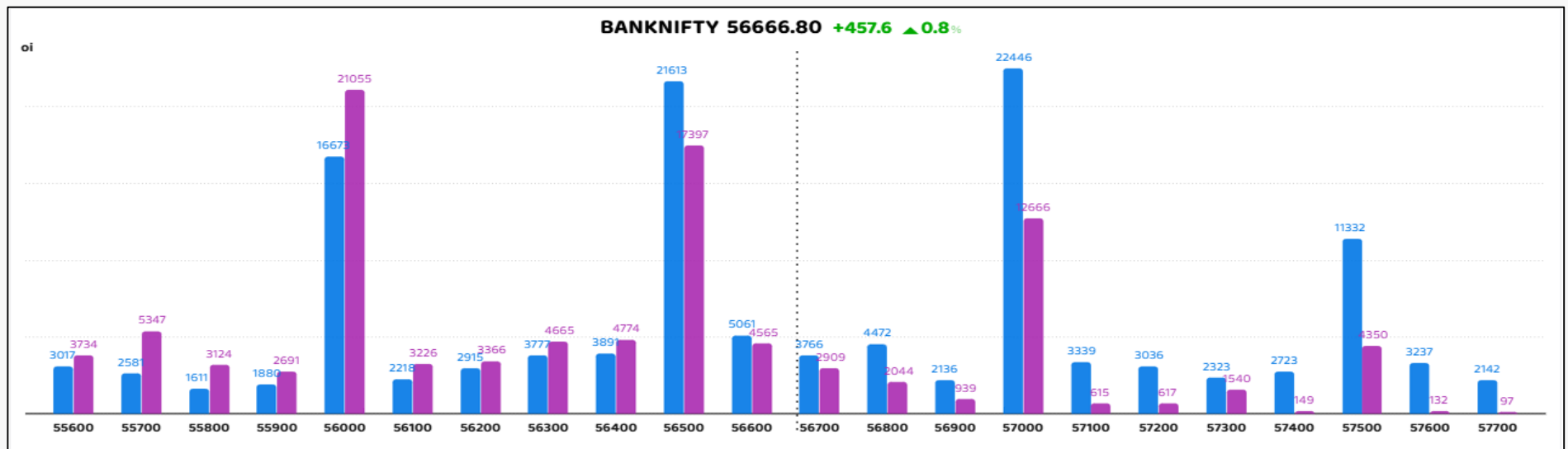
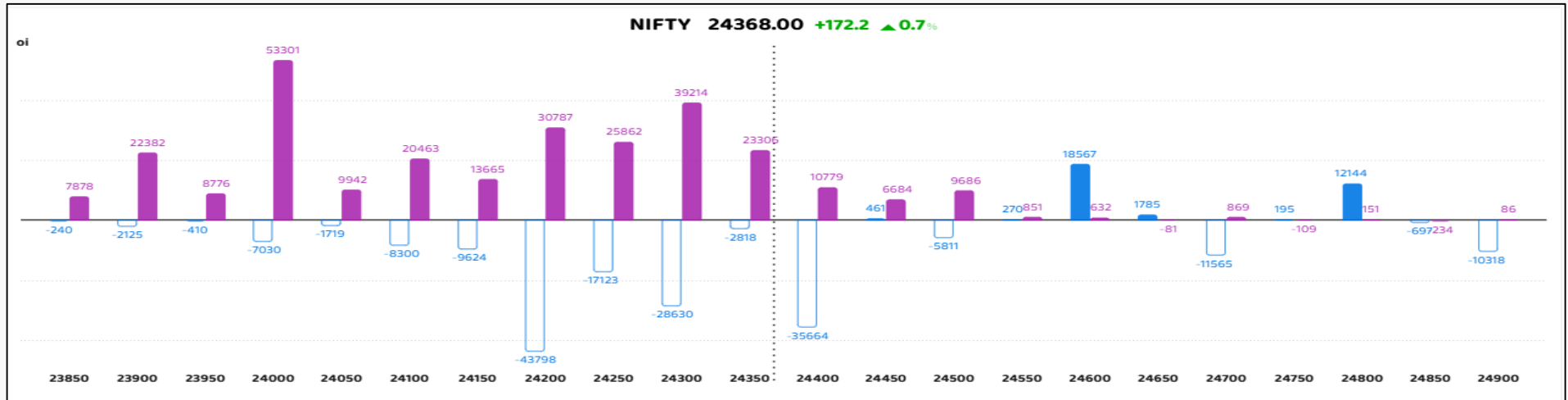


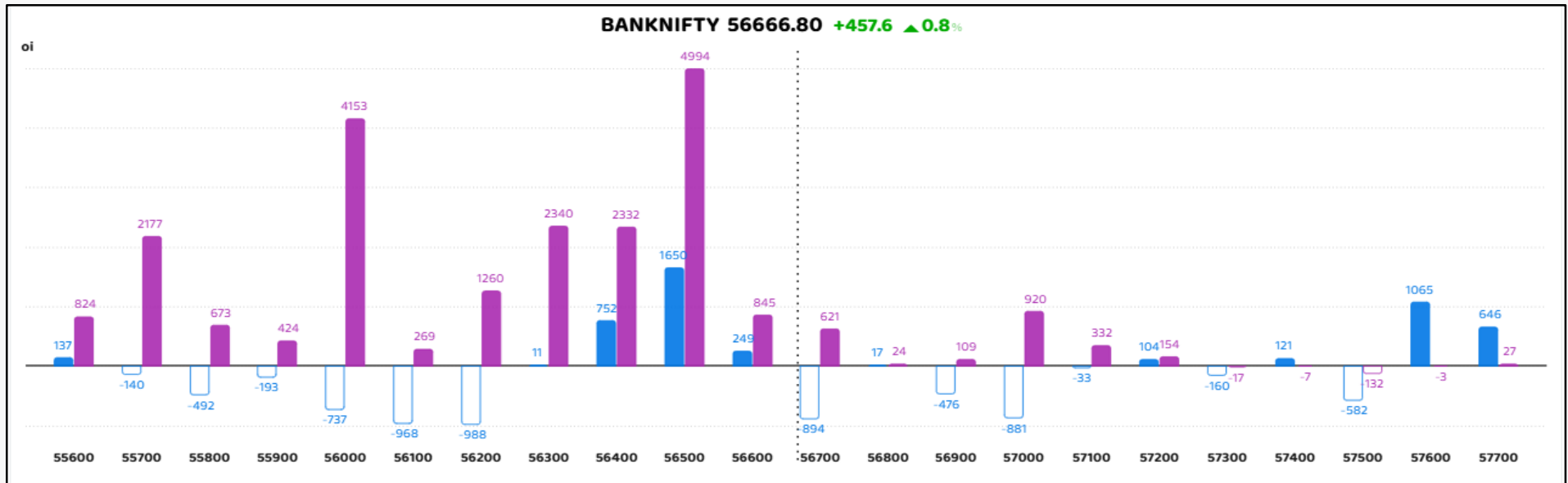
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,500 Call and the 24,000 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,500 Call & the 56,400 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASTRAL LTD	1605.0	1.7	49.9	49.9	18.8	100.0
BAJAJ AUTO LTD	9773.5	-0.5	35.9	36.6	18.6	95.9
SUN PHARMA INDU	1675.5	-1.0	26.9	28.5	14.1	88.7
GRASIM INDS LTD	2720.5	0.1	31.4	34.7	13.8	83.8
PAGE INDUSTRIES	37975.0	2.7	32.9	36.4	15.7	83.3

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	174.8	-1.1	40.2	734.8	18.5	3.0
ADITYA BIRLA CAP	340.4	0.7	37.9	658.6	8.2	4.6
HINDALCO INDS	1039.0	-0.1	35.0	254.2	12.3	9.4
CHOLAMANDALAM IN	1579.0	0.6	37.1	186.8	19.6	10.4
REC LTD	373.3	2.5	33.2	244.9	8.0	10.6

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ASTRAL LTD	1605.0	1.7	49.9	49.9	18.8	100.0
BAJAJ AUTO LTD	9773.5	-0.5	35.9	36.6	18.6	99.7
SUN PHARMA INDU	1675.5	-1.0	26.9	28.5	14.1	98.6
GRASIM INDS LTD	2720.5	0.1	31.4	34.7	13.8	98.2
STEEL AUTHORITY	173.3	1.2	74.6	91.3	0.6	98.1

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
PI INDUSTRIES	3139.7	0.9	21.3	57.8	12.5	5.4
SHREE CEMENT	25290.0	0.7	19.1	36.4	7.9	14.1
NYKAA	269.7	2.7	28.6	50.7	22.8	15.8
VODAFONE IDEA LT	9.6	0.8	49.3	212.9	10.0	18.6
TORRENT POWER LT	1565.0	2.9	27.9	47.5	21.8	20.6

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
YESBANK	20.2	1.3	40,621.0	8,380.0	4.8
PATANJALI	468.4	0.7	13,867.0	2,963.0	4.7
DELHIVERY	463.0	0.7	14,960.0	3,242.0	4.6
ABCAPITAL	340.4	0.7	17,315.0	4,098.0	4.2
BIOCON	358.1	2.1	24,031.0	5,688.0	4.2

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
BOSCHLTD	37,505.0	0.2	7,087.0	26,649.0	3.8
SOLARINDS	15,089.0	0.7	6,266.0	16,971.0	2.7
PGEL	561.4	0.7	10,647.0	10,761.0	1.0
MOTHERSON	125.0	1.8	4,404.0	4,444.0	1.0
TITAN	4,525.9	1.4	76,545.0	70,987.0	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
360ONE	1,113.2	3.4	3,561.0	3,425.0	100.0
HDFCAMC	2,792.4	4.9	8,448.0	8,206.0	100.0
HDFCLIFE	616.4	-2.4	18,079.0	15,078.0	100.0
DELHIVERY	463.0	0.7	6,957.0	5,830.0	100.0
WIPRO	204.3	-2.8	56,751.0	45,920.0	100.0

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
360ONE	1,113.2	3.4	4,364.0	3,726.0	100.0
ANGELONE	322.5	10.2	15,904.0	9,546.0	100.0
ASHOKLEY	174.8	-1.1	13,620.0	13,493.0	100.0
DABUR	442.8	3.6	6,697.0	6,337.0	100.0
DMART	4,628.5	4.5	12,529.0	10,564.0	100.0

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ABCAPITAL	340.4	0.7	17,315.0	17,184.0	100.0
ANGELONE	322.5	10.2	169,662.0	71,069.0	100.0
CAMS	750.2	1.6	9,081.0	8,157.0	100.0
COLPAL	2,106.0	6.5	123,675.0	54,560.0	100.0
DABUR	442.8	3.6	30,654.0	27,037.0	100.0

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ANGELONE	322.5	10.2	82,149.0	66,391.0	100.0
DMART	4,628.5	4.5	29,060.0	26,906.0	100.0
BOSCHLTD	37,505.0	0.2	26,649.0	20,736.0	100.0
HDFCLIFE	616.4	-2.4	37,570.0	18,937.0	100.0
SUZLON	52.9	5.4	32,436.0	28,704.0	100.0

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
INDUSTOWER	412.2	-0.2	14,923.0	6,966.8	2.1
WIPRO	204.3	-2.8	56,751.0	26,915.0	2.1
DELHIVERY	463.0	0.7	6,957.0	3,443.5	2.0
ICICIPRULI	562.0	0.7	7,803.0	3,965.6	2.0
KALYANKJIL	426.8	-3.1	11,904.0	6,358.9	1.9

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
360ONE	1,113.2	3.4	4,364.0	1,316.4	3.3
ANGELONE	322.5	10.2	15,904.0	4,880.0	3.3
HDFCAMC	2,792.4	4.9	8,185.0	3,409.0	2.4
SUZLON	52.9	5.4	19,108.0	8,505.8	2.2
SIEMENS	3,707.8	4.0	7,607.0	3,768.5	2.0

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
COLPAL	2,106.0	6.5	123,675.0	10,860.4	11.4
ANGELONE	322.5	10.2	169,662.0	14,961.4	11.3
HDFCAMC	2,792.4	4.9	68,670.0	8,626.0	8.0
PIDILITIND	1,393.4	4.7	16,941.0	2,824.4	6.0
KALYANKJIL	426.8	-3.1	64,026.0	11,345.2	5.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ANGELONE	322.5	10.2	82,149.0	7,436.2	11.0
COLPAL	2,106.0	6.5	46,502.0	4,721.9	9.8
KALYANKJIL	426.8	-3.1	46,998.0	6,027.1	7.8
HDFCAMC	2,792.4	4.9	30,382.0	4,768.6	6.4
HDFCLIFE	616.4	-2.4	37,570.0	6,625.6	5.7

## 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	2200	1114563	-0.8%	2218	2200	532716	-0.8%	JIOFIN	250	10384650	2.5%	244	240	6699850	-1.6%
ADANIPTS	1500	1140950	-4.7%	1573	1500	983725	-4.7%	JSWSTEEL	1300	662850	4.8%	1240	1100	898425	-11.3%
APOLLOHOSP	7700	127000	0.0%	7699	6700	76375	-13.0%	KOTAKBANK	370	4016000	-3.5%	384	335	3226000	-12.7%
ASIANPAINT	2500	469750	1.5%	2464	1900	437500	-22.9%	LT	4000	815675	-2.3%	4096	4000	874125	-2.3%
AXISBANK	1400	1958125	3.0%	1359	1300	1327500	-4.3%	M&M	3300	809000	3.1%	3200	3100	278600	-3.1%
BAJAJ-AUTO	10000	144300	2.3%	9774	8000	116250	-18.1%	MARUTI	14000	204950	4.1%	13453	13000	112100	-3.4%
BAJAJFINSV	1760	346000	-4.3%	1839	1620	341000	-11.9%	MAXHEALTH	1020	627375	1.2%	1008	960	255150	-4.7%
BAJFINANCE	920	2162250	1.3%	908	800	1742250	-11.9%	NESTLEIND	1300	651500	1.1%	1286	1200	379500	-6.7%
BEL	500	5501925	8.0%	463	400	2619150	-13.6%	NTPC	395	8361000	0.4%	394	380	4044000	-3.5%
BHARTIARTL	1900	2437225	2.9%	1847	1800	959500	-2.5%	ONGC	290	14285250	2.1%	284	270	4736250	-4.9%
CIPLA	1300	566250	4.8%	1241	1160	513375	-6.5%	POWERGRID	315	6579700	-1.0%	318	300	2941200	-5.7%
COALINDIA	500	4360500	14.0%	439	400	3001050	-8.8%	RELIANCE	1400	8862000	2.6%	1365	1300	4191000	-4.8%
DRREDDY	1260	858750	2.0%	1236	1200	1000625	-2.9%	SBILIFE	2000	1239000	1.5%	1971	1960	429375	-0.6%
EICHERMOT	8000	327100	11.3%	7190	7100	130500	-1.2%	SBIN	1100	4470000	1.8%	1080	1000	3592500	-7.4%
ETERNAL	250	7532050	-1.0%	253	230	4299525	-9.0%	SHRIRAMFIN	1100	1527900	6.1%	1037	1000	1013925	-3.6%
GRASIM	2800	421750	2.9%	2721	2600	124000	-4.4%	SUNPHARMA	1800	1113700	7.4%	1676	1600	608300	-4.5%
HCLTECH	1440	974400	-0.2%	1442	1400	682500	-2.9%	TATACONSUM	1150	252450	3.3%	1113	930	442750	-16.5%
HDFCBANK	800	9897250	0.0%	800	800	4600200	0.0%	TMPV	360	6714400	0.0%	360	300	3288000	-16.7%
HDFCLIFE	600	2432100	-2.7%	616	600	1527900	-2.7%	TATASTEEL	195	24024000	-8.1%	212	200	8657000	-5.7%
HINDALCO	900	2686600	-13.4%	1039	900	1270500	-13.4%	TCS	2600	2659475	0.7%	2582	2400	1255975	-7.0%
HINDUNILVR	2260	1331700	0.9%	2241	1900	446700	-15.2%	TECHM	1500	711600	-0.8%	1511	1320	487200	-12.7%
ICICIBANK	1400	3633700	4.0%	1347	1300	3333400	-3.5%	TITAN	4500	319025	-0.6%	4526	4200	357525	-7.2%
INDIGO	4700	733350	1.3%	4638	4400	316800	-5.1%	TRENT	4200	336600	2.2%	4108	3800	222100	-7.5%
INFY	1350	3044400	2.4%	1319	1280	2482000	-2.9%	ULTRACEMCO	11800	138200	-0.7%	11886	11500	34400	-3.2%
ITC	300	20950400	-2.2%	307	300	4955200	-2.2%	WIPRO	210	32814000	2.8%	204	200	11439000	-2.1%

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

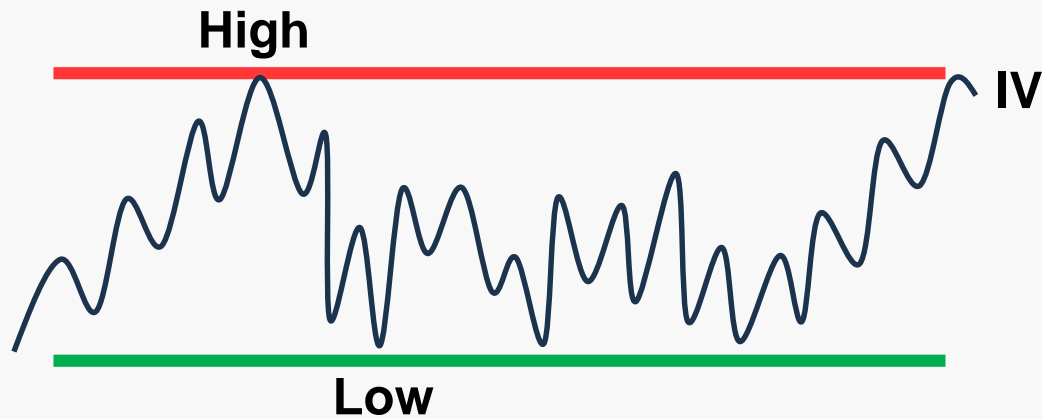


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

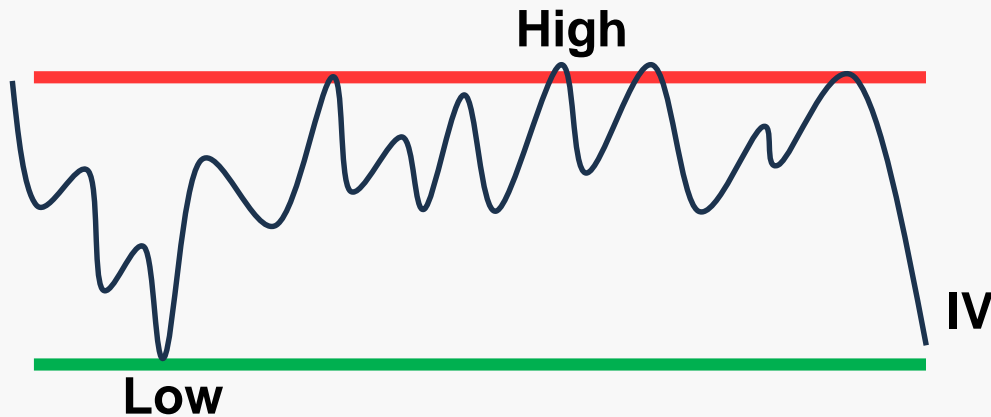


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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Compliance Officer Details: Name – Mr Rajiv Kejriwal, Tel No. – 022-68555574, Email id – [compliance.officer@axisdirect.in](mailto: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: Axis Securities Limited, 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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Sr. No	Name	Designation	E-mail
1	Rajesh Palviya	SVP Research (Head Technical & Derivatives)	rajesh.palviya@axissecurities.in
2	Hemang Gor	Derivative Analyst	hemang.gor@axissecurities.in
3	Rahil Vora	Derivative Analyst	rahil.vora@axissecurities.in