



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,283	1.6%▲
Open Interest (OI)	1,37,16,000	5.0%▼
Change in OI (abs)	1,37,16,000	7,26,700▼
Premium / Discount (Abs)	94	61▼
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	51,860	0.8%▲
Open interest (OI)	25,65,075	2.1%▲
Change in OI (abs)	25,65,075	51,990▲
Premium / Discount (Abs)	255	124▼
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	13.74	0.8▼
Nifty ATM IV (%)	13.67	10.2▼
Bank Nifty ATM IV (%)	15.16	1.0▼
PCR (Nifty)	1.23	0.17▲
PCR (Bank Nifty)	1.03	0.10▲

\*The Long Ratio for the FII Index Futures now stands at 19.54%, a **jump** from 13.54% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IRB	6,03,62,250	21.4%	60.5	0.9%
EICHERMOT	44,87,525	21.4%	5332.3	8.7%
CANFINHOME	63,18,000	16.3%	734.3	0.2%
INDIANB	48,37,400	14.6%	526.75	1.0%
POLICYBZR	28,13,200	12.7%	2218.05	3.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PETRONET	3,34,80,000	19.8%	329.15	-5.7%
ANGELONE	21,22,800	8.6%	2967.7	-1.7%
ATGL	36,21,575	5.9%	723.15	-1.9%
CYIENT	9,97,500	5.4%	1809.15	-0.5%
PAYTM	1,29,63,600	4.9%	988.95	-0.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ITC	5,83,93,600	-17.9%	488.65	0.9%
APLAPOLLO	31,82,900	-7.5%	1592.7	0.1%
ICICIBANK	8,10,98,500	-6.5%	1297.3	0.4%
HDFCBANK	11,70,92,250	-5.9%	1799.85	0.5%
MUTHOOTFIN	35,09,000	-4.8%	2264.6	1.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LALPATHLAB	6,89,850	-1.5%	3020.25	-1.4%
MANAPPURAM	7,70,31,000	-1.3%	192.07	-0.5%
ABBOTINDIA	81,240	-0.6%	30137.7	-0.2%
CROMPTON	2,45,16,000	-0.3%	374.05	-0.9%
APOLLOTYRE	1,36,85,000	-0.1%	527.05	-0.1%

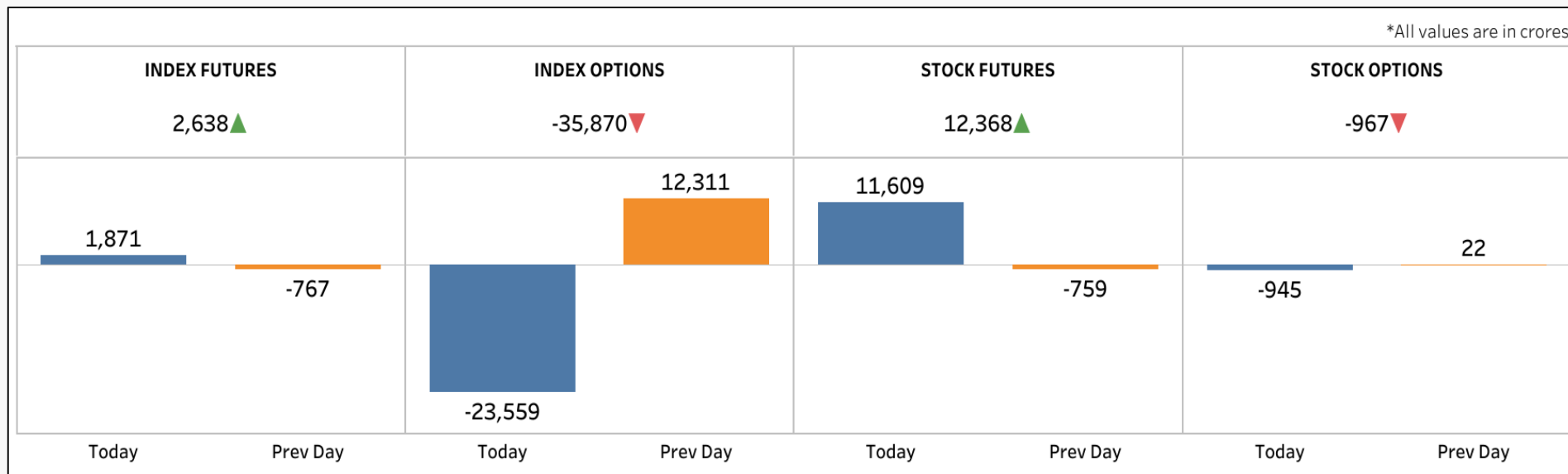
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

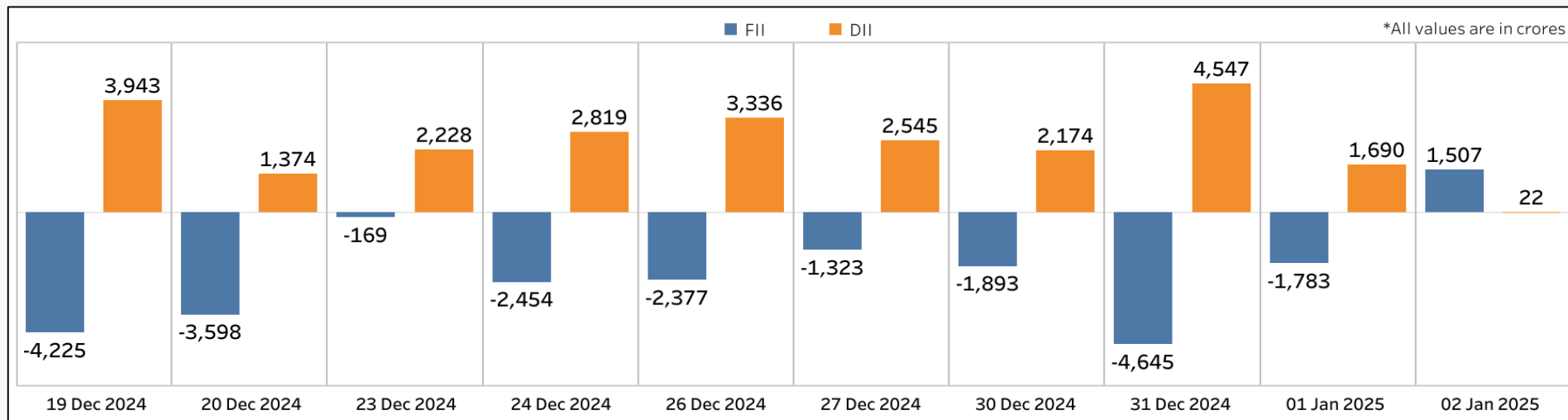
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-366,657 ▼	43,984 ▲	-294,595 ▼	181,661 ▲	0	3,088 ▲	20,000 ▲	-7,993 ▼
			170,654			20,000	
64,816	31,850						
-301,841	-12,134	-27,869	-11,007	0	3,375	0	801
		-322,464		0	287		8,794
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
463	-179,627	290,030	1,207,340	0	-3,011	197,277	-3,829,846
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
243,531 ▲	-55,296 ▼	256,537 ▲	-80,222 ▼	123,125 ▲	8,224 ▲	18,057 ▲	-93,446 ▼
		282,438		179,216			
122,625	16,206	25,901	11,480	56,091	3,865	20,025	1,968
	-39,090		-68,742				
					-4,359		-9,267
							-102,713
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-112,468	215,962	-540,210	2,272,681	112,005	-33,324	52,901	349,825
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

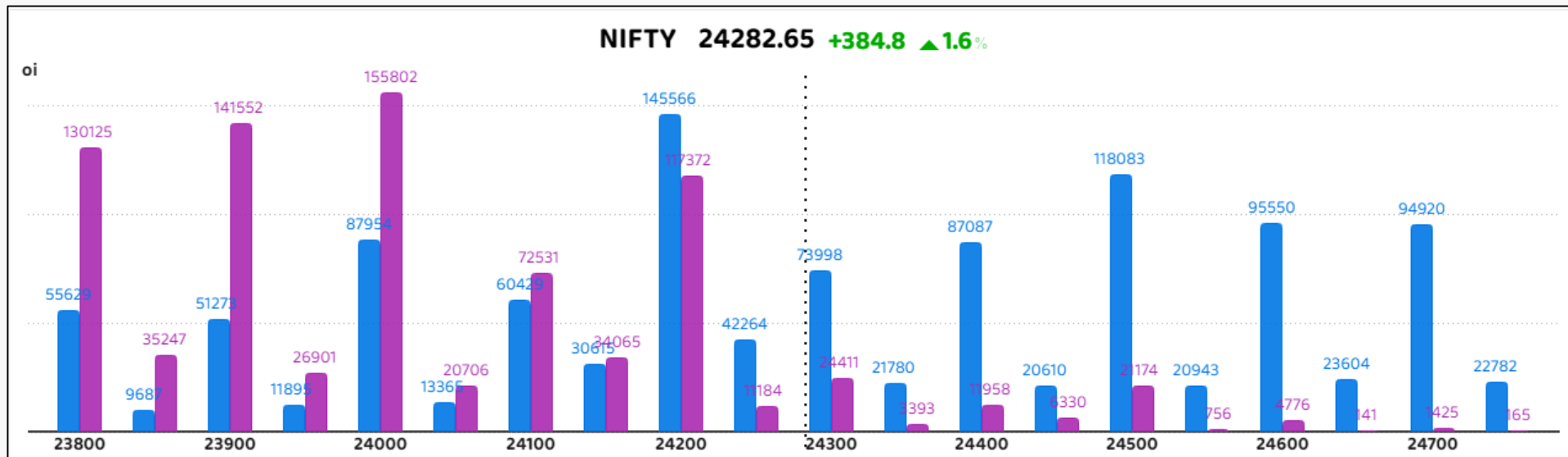


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 24200 Call and the 24000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 52000 Call and the 51000 Put saw the most amount of open interest.

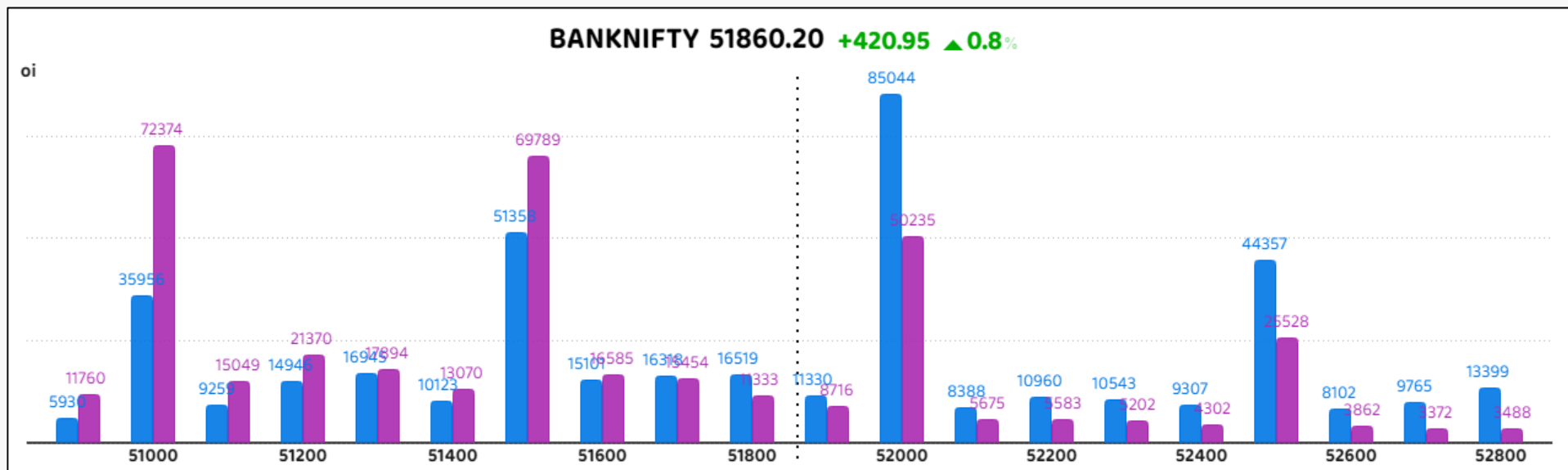
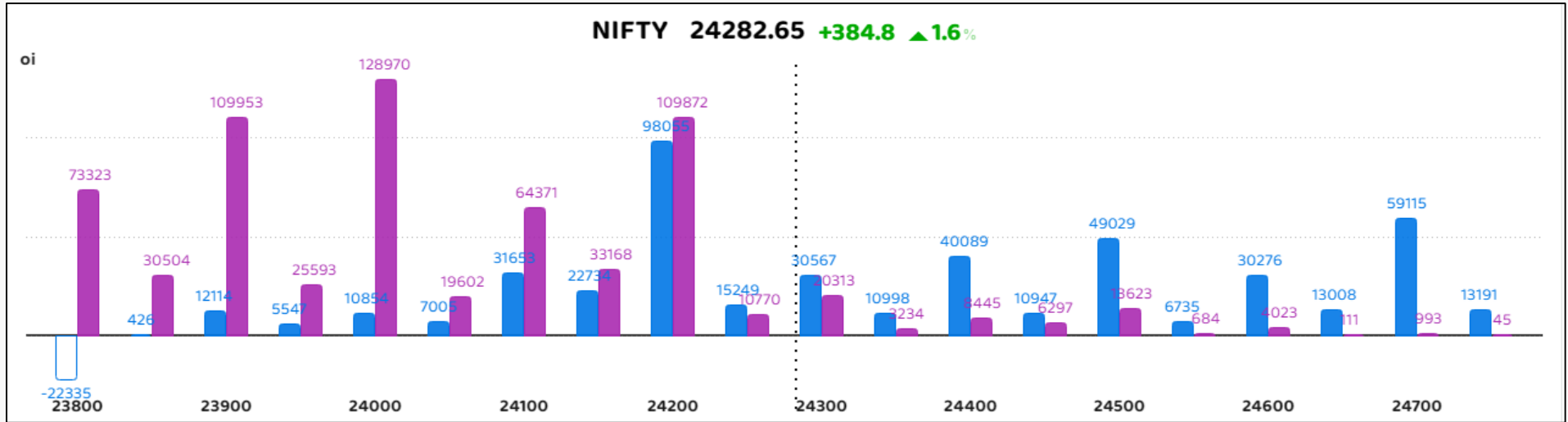


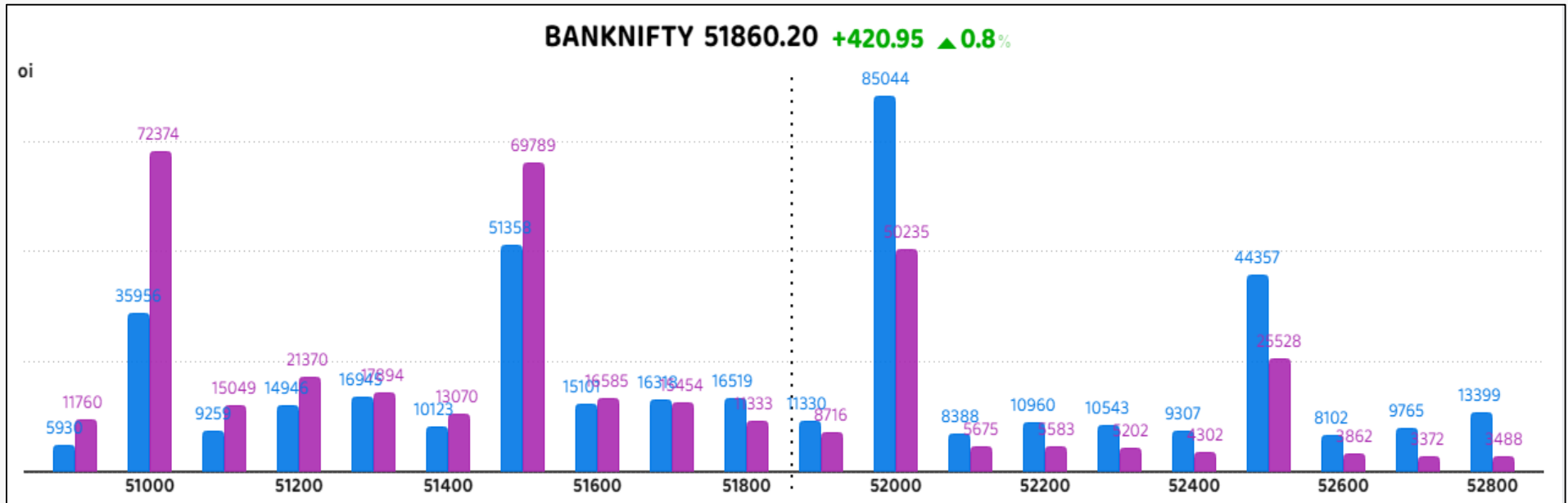
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24200 Call and the 24000 Put



For the Bank Nifty, the biggest open interest changes were seen at the 52000 Call & the 51000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
KOTAK MAHINDRA	1837.15	2.7	20.3	28.7	1.9	68.5
DIXON TECHNOLOGI	18341.9	1.9	32.8	51.3	1.8	62.6
COLGATE PALMOLIV	2780.6	2.9	23.4	31.7	9.5	62.4
TITAN CO LTD	3388.95	4.2	21.6	33.5	2.3	62.0
BAJAJ AUTO LTD	9079.5	3.9	24.3	40.6	2.1	57.6

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ITC LTD	489.05	1.1	4.8	66.4	4.8	0.0
HINDALCO INDS	599	1.0	18.7	50.1	18.5	0.5
INDIAN RAILWAY C	794.5	0.7	22.2	59.6	21.9	0.7
INDIAN OIL CORP	137.96	0.7	24.0	51.9	23.7	1.0
JINDAL STEEL & P	941.7	0.4	25.2	55.4	24.8	1.5

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDUSIND BANK	991.35	2.3	27.1	60.4	12.4	65.3
INDRAPRASTHA GAS	425.7	3.8	35.8	55.4	20.3	65.1
KOTAK MAHINDRA	1837.15	2.7	20.3	28.7	1.9	55.2
COLGATE PALMOLIV	2780.6	2.9	23.4	31.7	9.5	54.7
TATA CONSULTANCY	4175.75	1.5	21.4	57.2	1.3	51.2

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ITC LTD	489.05	1.1	4.8	66.4	4.8	0.0
HINDALCO INDS	599	1.0	18.7	50.1	18.5	0.4
INDIAN RAILWAY C	794.5	0.7	22.2	59.6	21.9	0.9
BHARAT PETROL	296.9	0.5	25.9	69.0	24.9	0.9
INFO EDGE	8878.95	1.7	25.3	48.1	23.7	1.1



### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BALKRISHNA INDS	2891.8	0.6	4820	667	7.2
JK CEMENTS LTD	4745.35	3.6	4760	1012	4.7
VODAFONE IDEA LT	8.14	1.6	15746	3352	4.7
TORRENT PHARMA	3441.55	0.7	4104	908	4.5
UNITED BREWERIES	2136.65	2.1	4110	923	4.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ALKEM LABORATORI	5579.75	0.2	2278	2044	0.9
IDFC FIRST BANK	64.68	0.8	10359	8754	0.8
PETRONET LNG LTD	327.75	-5.7	77437	61723	0.8
JINDAL STEEL & P	941.7	0.4	5843	4435	0.8
FED BANK LTD	206.14	2.8	14045	10309	0.7

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
NO STOCK OPTION MET THIS CRITERIA IN THE PREVIOUS SESSION					

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
RBL BANK LTD	159.12	0.8	9089	10209	89.0
MANAPPURAM FINAN	190.84	-0.4	4999	5666	88.2
MARUTI SUZUKI IN	11841.3	5.6	43275	53706	80.6

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STOCK OPTION MET THIS CRITERIA IN THE MOST RECENT SESSION					

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest PV	PV Diff
PETRONET LNG	327.75	-5.7	61723	61723	100.0

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
EICHER MOTORS	5308.1	8.7	126426	17764	7.1
PETRONET LNG LTD	327.75	-5.7	77437	12113	6.4
BAJAJ FINSERV LT	1700.65	7.9	126428	23914	5.3
GRANULES INDIA	608.6	1.9	5073	1221	4.2
MARUTI SUZUKI IN	11841.3	5.6	409464	101123	4.0

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PETRONET LNG LTD	327.75	-5.7	61723	7503	8.2
EICHER MOTORS	5308.1	8.7	66600	10574	6.3
BAJAJ FINSERV LT	1700.65	7.9	54732	13216	4.1
MARUTI SUZUKI IN	11841.3	5.6	188296	53691	3.5
TVS MOTOR CO LTD	2501.45	3.9	13717	5251	2.6

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PETRONET LNG LTD	327.75	-5.7	12826	7056	1.8
TATA CHEMICALS	1031.45	-0.7	12847	8950	1.4
EICHER MOTORS	5308.1	8.7	11653	8566	1.4
LUPIN LTD	2396.1	1.3	8699	6399	1.4
BAJAJ FINSERV LT	1700.65	7.9	16843	12623	1.3

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
EICHER MOTORS	5308.1	8.7	14192	5677	2.5
MARUTI SUZUKI IN	11841.3	5.6	43275	21499	2.0
ESCORTS KUBOTA L	3352.05	1.6	4609	2580	1.8
BAJAJ FINSERV LT	1700.65	7.9	13331	7564	1.8
PETRONET LNG LTD	327.75	-5.7	8821	5789	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	2800	1161300	7.8%	2598	2800	2747700	7.8%	INFY	2000	5296400	2.2%	1958	1900	1049200	-3.0%
ADANIPTS	1300	1223600	6.0%	1226	1200	832800	-2.1%	ITC	500	17988800	2.2%	489	480	11256000	-1.9%
APOLLOHOSP	7400	85000	-0.3%	7422	7200	116250	-3.0%	JSWSTEEL	1000	830250	9.6%	913	900	605475	-1.4%
ASIANPAINT	2500	850400	6.7%	2343	2200	585400	-6.1%	KOTAKBANK	1900	1514400	3.4%	1837	1800	1012000	-2.0%
AXISBANK	1200	2908750	10.4%	1087	1100	1450000	1.2%	LT	4000	613800	7.7%	3714	3600	505800	-3.1%
BAJAJ-AUTO	10000	199275	10.1%	9080	9000	101625	-0.9%	LTIM	6000	158850	4.3%	5753	5500	78900	-4.4%
BAJAJFINSV	1700	1473500	0.0%	1701	1600	835000	-5.9%	M&M	3500	445550	9.0%	3211	3000	499975	-6.6%
BAJFINANCE	7500	501125	1.5%	7389	7000	374125	-5.3%	MARUTI	12000	579700	1.3%	11841	11000	279700	-7.1%
BHARTIARTL	1640	2679000	1.9%	1610	1600	720100	-0.6%	NESTLEIND	2300	385800	4.5%	2200	2200	486200	0.0%
BPCL	330	5290200	11.1%	297	260	1816200	-12.4%	NTPC	345	6321000	2.1%	338	330	2128500	-2.4%
BRITANNIA	4850	224300	1.3%	4788	4800	83900	0.3%	ONGC	250	6117650	1.6%	246	240	2650725	-2.5%
CIPLA	1540	689650	0.1%	1538	1500	299650	-2.5%	POWERGRID	330	3504600	4.7%	315	310	1501200	-1.6%
COALINDIA	400	2635500	1.8%	393	400	1797600	1.8%	RELIANCE	1300	10727500	4.7%	1242	1200	4184500	-3.4%
DIVISLAB	6200	90600	0.9%	6145	5800	69800	-5.6%	SBLIFE	1440	571125	1.2%	1422	1200	190875	-15.6%
DRREDDY	1400	888750	1.8%	1375	1350	367500	-1.8%	SBIN	850	10021500	6.1%	801	800	5371500	-0.1%
EICHERMOT	5600	258825	5.5%	5308	5000	285425	-5.8%	SUNPHARMA	1920	1314600	2.2%	1878	1880	352450	0.1%
GRASIM	2500	287750	-1.7%	2544	2400	242000	-5.7%	TATACONSUM	1000	453720	7.6%	930	900	441864	-3.2%
HCLTECH	2000	1295700	1.4%	1972	1900	529900	-3.7%	TATAMOTORS	800	7830900	4.6%	765	750	3071750	-2.0%
HDFCBANK	1820	3186150	1.5%	1794	1800	2420550	0.3%	TATASTEEL	150	20773500	8.6%	138	135	12952500	-2.3%
HDFCLIFE	640	2206600	3.2%	620	630	840400	1.6%	TCS	4200	873600	0.6%	4176	4000	476700	-4.2%
HEROMOTOCO	4500	354300	4.4%	4312	4200	179550	-2.6%	TECHM	1760	1634400	1.9%	1727	1700	463200	-1.6%
HINDALCO	640	2445800	6.8%	599	600	2163000	0.2%	TITAN	3400	493850	0.3%	3389	3100	258825	-8.5%
HINDUNILVR	2400	914400	1.3%	2370	2100	402900	-11.4%	ULTRACEMCO	12000	87750	1.7%	11798	11500	48450	-2.5%
ICICIBANK	1300	2190300	0.7%	1291	1300	1752100	0.7%	UPL	500	833325	-1.9%	509	500	825195	-1.9%
INDUSINDBK	1000	2482500	0.9%	991	1000	952000	0.9%	WIPRO	310	3756000	2.0%	304	270	2517000	-11.1%

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

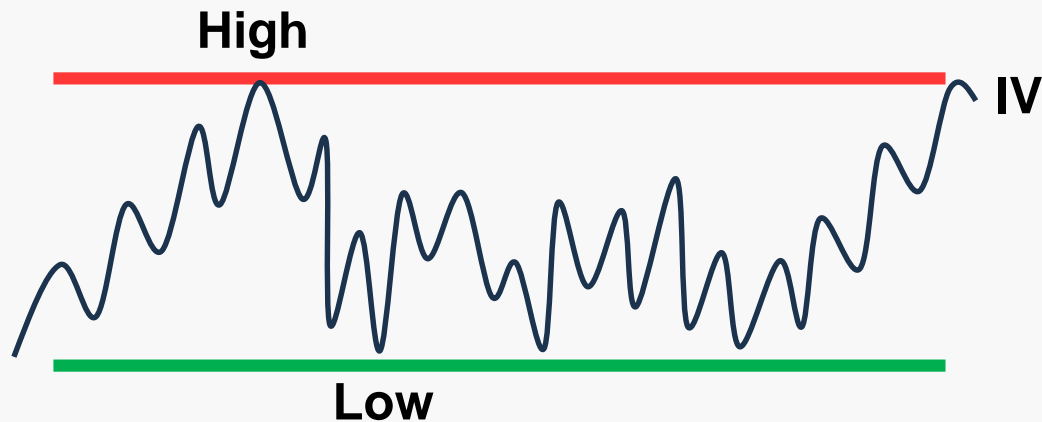
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

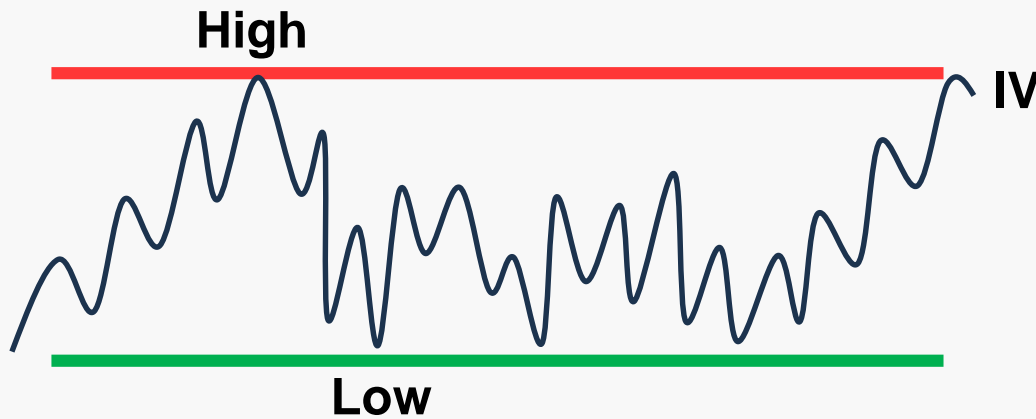


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



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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#### Registration Details:

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Compliance Officer Details: Name – Mr. Maneesh Mathew, 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: 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.

In case of any grievances please call us at 022-40508080 or write to us [helpdesk@axisdirect.in](mailto:helpdesk@axisdirect.in).

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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