



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	23,103	1.3% ▼
Open Interest (OI)	1,94,18,200	6.4% ▲
Change in OI (abs)	1,94,18,200	11,68,075 ▲
Premium / Discount (Abs)	79	23 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	48,763	1.5% ▼
Open interest (OI)	36,45,600	7.5% ▲
Change in OI (abs)	36,45,600	2,53,200 ▲
Premium / Discount (Abs)	192	30 ▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	17.05	0.6 ▲
Nifty ATM IV (%)	18.88	2.6 ▲
Bank Nifty ATM IV (%)	20.78	1.9 ▲
PCR (Nifty)	0.77	0.26 ▼
PCR (Bank Nifty)	0.56	0.09 ▼

*The Long Ratio for the FII Index Futures stayed intact at 17.1%, as recorded in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
AARTIIND	2,03,65,000	16.9%	454.4	1.1%
DALBHARAT	28,77,600	9.6%	1771.95	1.9%
HCLTECH	1,85,18,850	4.3%	1797.8	0.2%
JSL	30,11,650	3.5%	632.1	0.6%
JSWSTEEL	3,35,18,475	2.3%	928.7	0.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DIXON	21,27,950	66.1%	15060.45	-14.2%
OBEROIRLTY	72,44,300	45.3%	1829	-8.5%
INDIAMART	16,07,700	23.6%	2220.9	-1.7%
CAMS	10,27,000	23.2%	4233.7	-4.4%
JIOFIN	7,74,69,150	21.4%	260.05	-6.0%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NAVINFLUOR	14,37,275	-11.7%	3795.95	0.4%
LTF	9,73,16,220	-7.1%	142.69	2.5%
MAXHEALTH	60,87,375	-5.4%	1079.05	1.3%
JKCEMENT	7,81,375	-4.4%	4558.7	1.0%
APOLLOHOSP	18,00,500	-3.7%	6918.65	1.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
APLAPOLLO	37,50,250	-14.1%	1587.4	-0.3%
ESCORTS	10,45,500	-10.0%	3563.15	-0.6%
INDIANB	36,66,050	-7.1%	523.6	-1.2%
KPITTECH	20,77,600	-7.0%	1311.75	-1.9%
BAJAJFINSV	1,45,41,000	-6.3%	1721.45	-0.9%

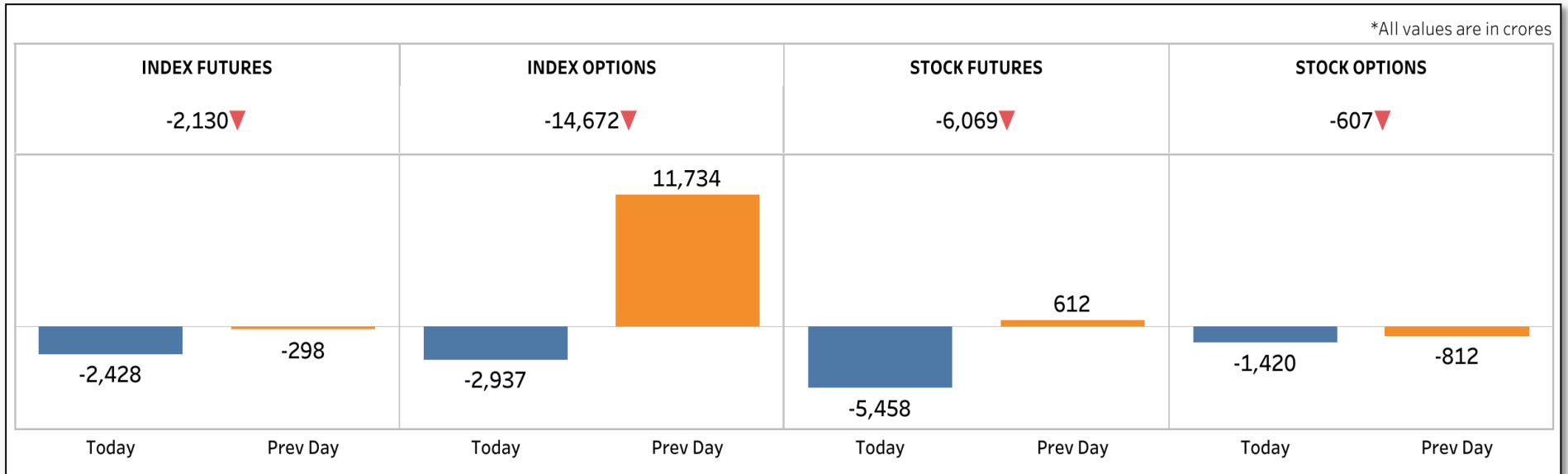
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Data by Participant

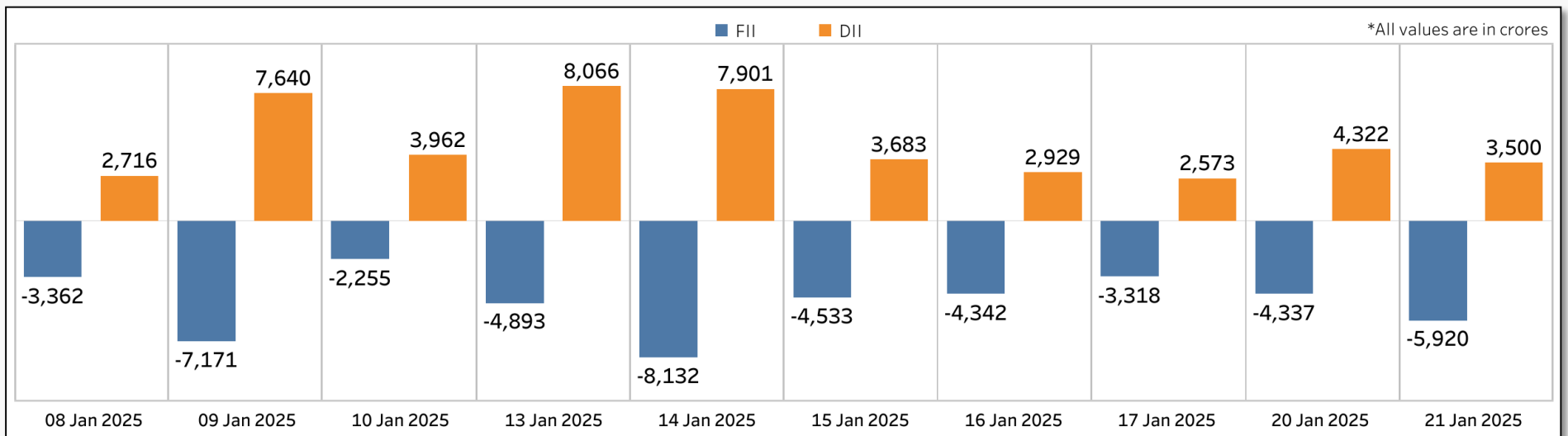
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-70,387 ▼	-10,537 ▼	-23,400 ▼	-82,392 ▼	0	1,446 ▲	-14,000 ▼	-171,138 ▼
53,263		12,289	421				83,610
-17,124	-16,838	-11,111	-81,971	0	2,206	-15,000	-87,528
	-6,301			0	760	-1,000	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
83,355	-327,258	368,921	1,110,073	70	26,729	144,275	-3,833,214
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
411,577 ▲	-5,312 ▼	-281,806 ▼	17,864 ▲	-341,190 ▼	14,403 ▲	319,204 ▲	235,666 ▲
226,663		115,207	27,464	131,651		192,708	142,035
	2,863		9,600	17,081	2,678		
-184,914	-2,449	-166,599		-209,539		-126,496	-93,631
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
310,565	311,101	-587,866	2,270,400	-393,990	-10,572	74,667	452,741
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

Daily Net Open Interest Change

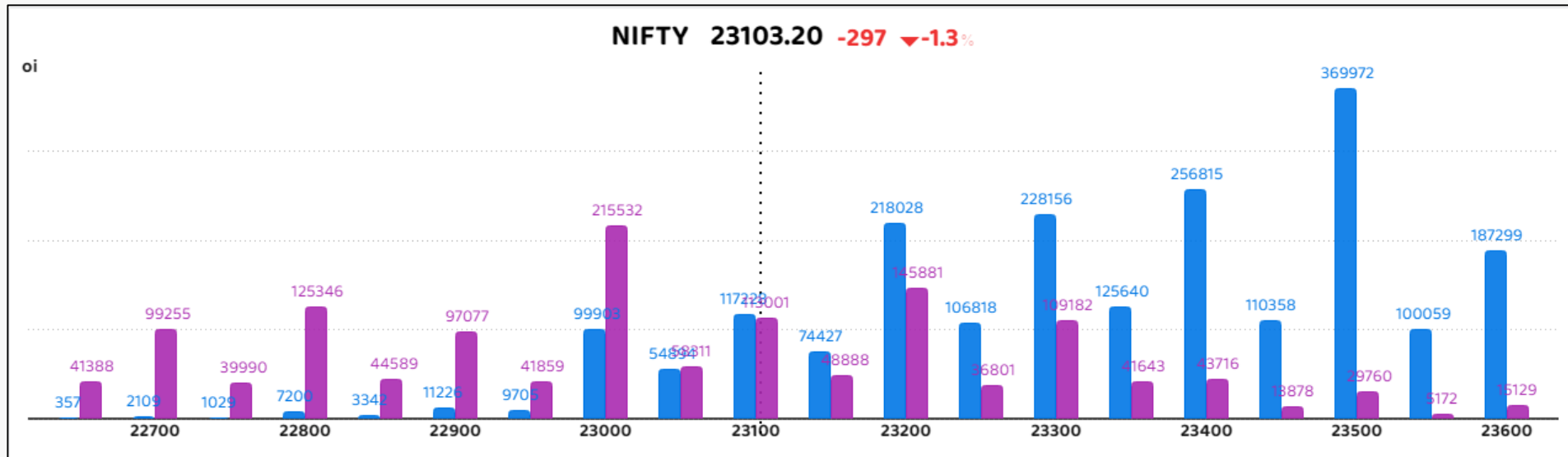


DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 235600 Call and the 23000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 49000 Call and the 48000 Put saw the most amount of open interest.

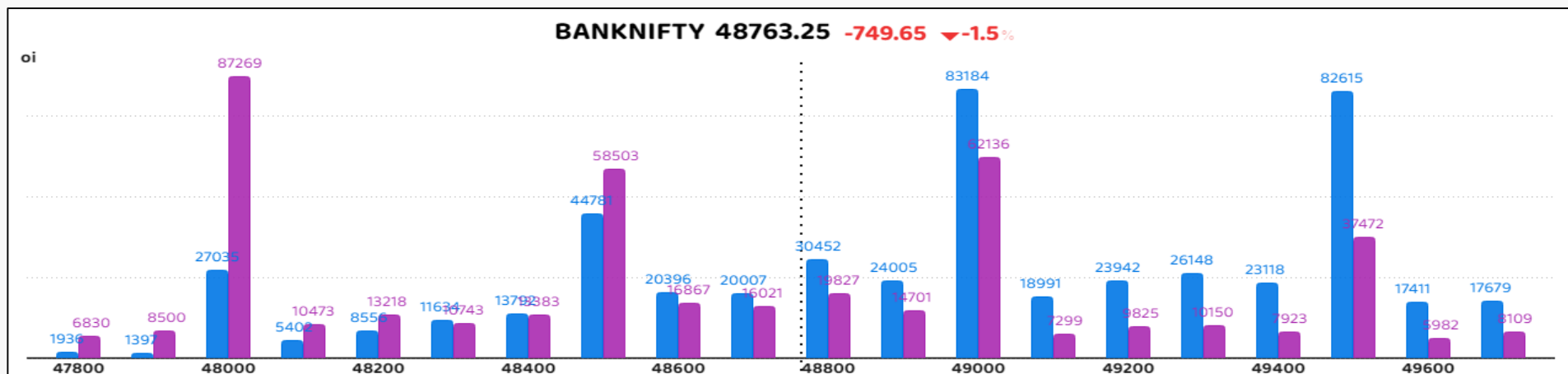
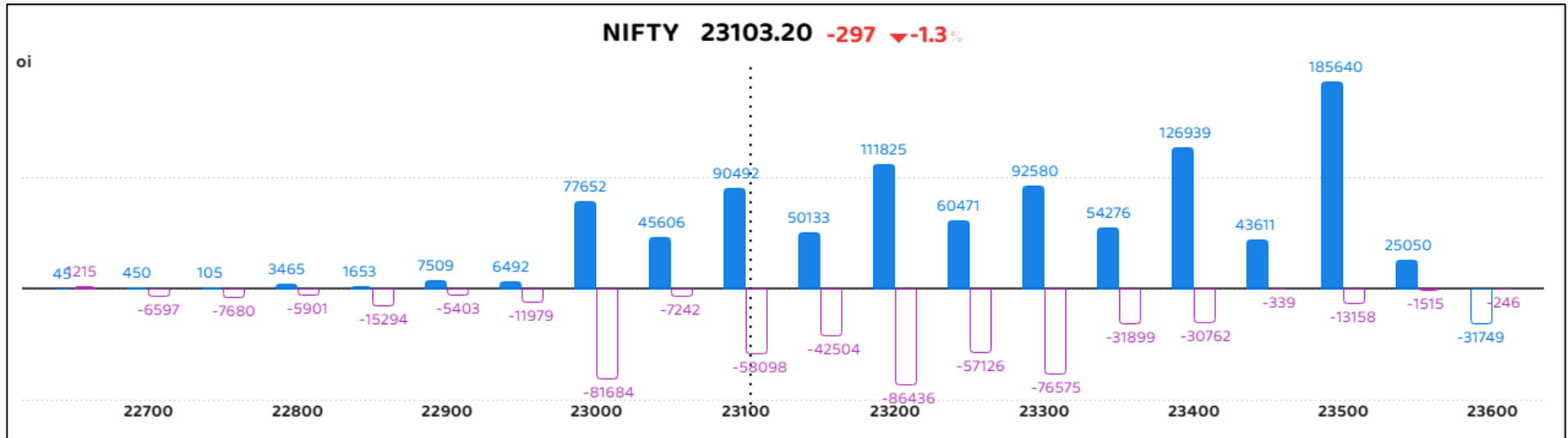


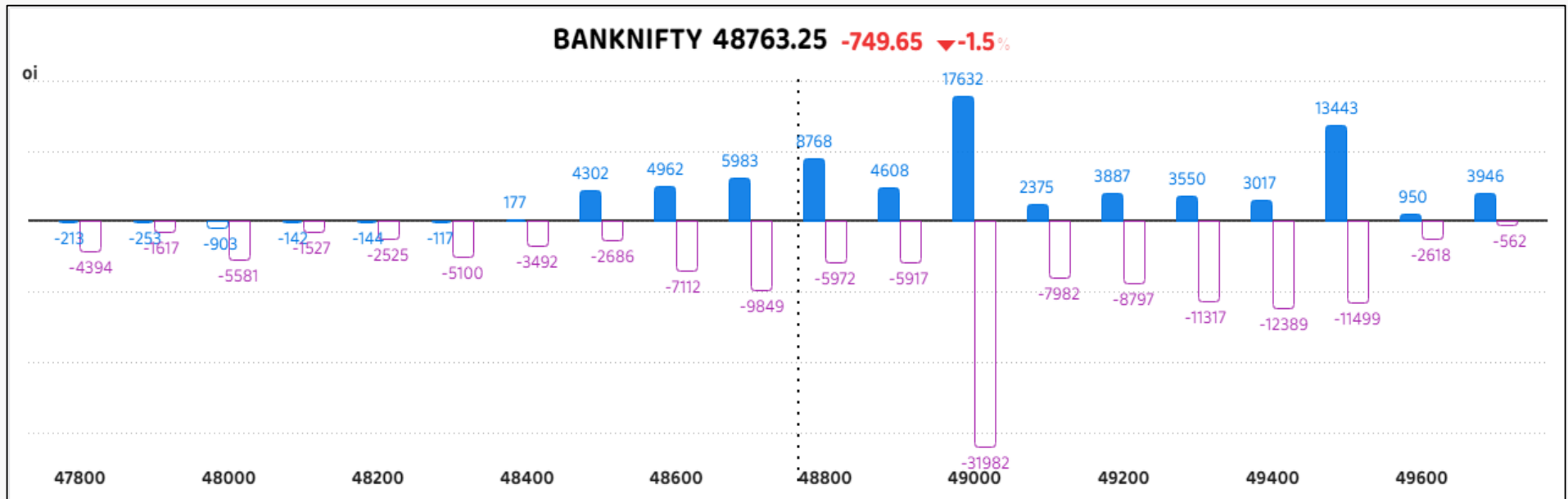
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 23500 Call and the 23200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 49000 Call & the 49000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INDIAMART INTERM	2294.85	1.1	56.4	56.4	16.6	100.0
HINDUSTAN UNILEV	2340.5	-0.2	24.0	25.0	14.0	90.2
TATA CONSUMER PR	972.1	1.2	30.5	32.3	13.6	89.9
TRENT LTD	5736.95	-5.8	48.0	54.5	2.2	87.6
BRITANNIA INDS	4903.85	0.4	28.7	30.9	15.1	86.3

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
PI INDUSTRIES	3519.85	-2.2	18.3	46.7	18.3	0.0
DR LAL PATHLABS	2794.3	-0.9	20.5	46.8	20.4	0.5
MRF LTD	112097.3	-1.5	9.9	39.1	8.9	3.5
CAN FIN HOMES	691.8	-2.3	22.8	46.5	21.2	6.4
HDFC LIFE INSURA	624	-1.6	25.3	80.6	19.6	9.3

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDIAMART INTERM	2294.85	1.1	56.4	56.4	16.6	100.0
INDUSIND BANK	960.45	-1.1	37.2	60.4	12.4	99.2
BALKRISHNA INDS	2681.6	-1.5	42.7	58.3	18.4	98.7
HINDUSTAN UNILEV	2340.5	-0.2	24.0	25.0	14.0	98.6
BRITANNIA INDS	4903.85	0.4	28.7	30.9	15.1	98.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
PI INDUSTRIES	3519.85	-2.2	18.3	46.7	18.3	0.0
DR LAL PATHLABS	2794.3	-0.9	20.5	46.8	20.4	0.5
MRF LTD	112097.3	-1.5	9.9	39.1	8.9	0.6
CAN FIN HOMES	691.8	-2.3	22.8	46.5	21.2	1.1
BANDHAN BANK LTD	150.28	-1.4	26.2	54.2	15.9	2.4

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGE INDUSTRIES	45975.85	-0.8	5119	992	5.2
BALKRISHNA INDS	2681.6	-1.5	14604	4012	3.6
PVR INOX LTD	1077.4	-1.4	9113	2649	3.4
VODAFONE IDEA LT	9.36	-5.8	35877	10867	3.3
TORRENT PHARMA	3156.3	-0.3	3206	1025	3.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PIRAMAL ENTERPRI	1009.85	-1.5	2930	3803	1.3
KOTAK MAHINDRA	1893.3	-1.4	84151	102782	1.2
HINDUSTAN AERONA	4050.8	-3.3	137099	164446	1.2
LTIMINDTREE LTD	5758.4	-1.1	12157	13609	1.1
CANARA BANK	99.47	-1.6	19770	20992	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
KKC IS	2924.95	0.4	15228	15228	100.0
IH IS	811.45	0.2	17655	17655	100.0
OBER IS	1964.9	1.2	9828	10675	92.1
DIXON TECHNOLOGI	16938.9	1.7	44065	48247	91.3
SBI LIFE INSURAN	1513.6	1.8	19729	22365	88.2

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
HAVELLS INDIA	1574.2	1.0	10530	10530	100.0
ICICI LOMBARD GE	1948.75	2.1	8074	8074	100.0
L&T TECHNOLOGY S	5373.95	2.5	15062	15062	100.0
CAN FIN HOMES	691.5	0.6	5807	5807	100.0
INDUS TOWERS LTD	362.7	2.3	13500	13630	99.1

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
DIXON TECHNOLOGI	15144.35	-13.8	600370	600370	100.0
MCX INDIA LTD	5504.95	-8.7	196415	196415	100.0
OBEROI REALTY	1858.05	-7.2	113672	125994	90.2

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
DIXON TECHNOLOGI	15144.35	-13.8	364061	364061	100.0
MCX INDIA LTD	5504.95	-8.7	143141	143141	100.0
OBEROI REALTY	1858.05	-7.2	61394	61394	100.0
DALMIA BHARAT LT	1771.2	1.1	14456	17923	80.7

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
OBEROI REALTY	1858.05	-7.2	113672	15555	7.3
MCX INDIA LTD	5504.95	-8.7	196415	27677	7.1
DIXON TECHNOLOGI	15144.35	-13.8	600370	99918	6.0
ULTRATECH CEMENT	10667.8	0.4	139043	27232	5.1
APOLLO HOSPITALS	6919.15	2.0	112382	24449	4.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
MCX INDIA LTD	5504.95	-8.7	143141	15701	9.1
OBEROI REALTY	1858.05	-7.2	61394	8799	7.0
DIXON TECHNOLOGI	15144.35	-13.8	364061	60394	6.0
INDIAMART INTERM	2294.85	1.1	13242	2424	5.5
DALMIA BHARAT LT	1771.2	1.1	14456	2785	5.2

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
DIXON TECHNOLOGI	15144.35	-13.75	108171	37909	2.9
OBEROI REALTY	1858.05	-7.23	21245	7454	2.9
SBI LIFE INSURAN	1466.55	-2.21	23507	8698	2.7
ORACLE FINANCIAL	9765.9	-2.51	28204	11354	2.5
ICICI PRUDENTIAL	635.55	-0.90	8756	3698	2.4

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
DALMIA BHARAT LT	1771.2	1.1	6221	2490	2.5
L&T TECHNOLOGY S	5380.4	0.1	14256	6176	2.3
INDIAMART INTERM	2294.85	1.1	5212	2273	2.3
OBEROI REALTY	1858.05	-7.2	7775	3768	2.1
ORACLE FINANCIAL	9765.9	-2.5	12576	6565	1.9

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	1390500	17.4%	2384	2800	1597800	17.4%	INFY	2000	7194000	11.1%	1801	1800	1504800	0.0%
ADANIPTS	1200	1741200	8.5%	1106	1200	802400	8.5%	ITC	460	6776000	5.1%	438	440	2107200	0.6%
APOLLOHOSP	7500	196375	8.4%	6919	6800	83750	-1.7%	JSWSTEEL	940	684450	1.4%	927	900	933525	-2.9%
ASIANPAINT	2500	1005800	10.6%	2260	2200	690400	-2.7%	KOTAKBANK	2000	1612400	5.6%	1893	1800	1649600	-4.9%
AXISBANK	1000	5601875	3.1%	970	1000	2082500	3.1%	LT	3700	871650	4.5%	3541	3400	492150	-4.0%
BAJAJ-AUTO	10000	230325	18.1%	8469	7600	152100	-10.3%	LTIM	6500	197550	12.9%	5758	5700	175950	-1.0%
BAJAJFINSV	1700	1544500	-1.0%	1717	1700	898500	-1.0%	M&M	3200	867825	13.4%	2821	2900	447300	2.8%
BAJFINANCE	7500	521625	2.9%	7292	7200	316750	-1.3%	MARUTI	12000	670000	1.0%	11884	12000	220250	1.0%
BHARTIARTL	1640	2720325	0.9%	1626	1580	823175	-2.8%	NESTLEIND	2300	366000	4.7%	2196	1940	247800	-11.7%
BPCL	300	6967800	7.1%	280	270	2916000	-3.6%	NTPC	340	14233500	4.8%	324	300	2676000	-7.5%
BRITANNIA	5400	285300	10.1%	4904	4700	519200	-4.2%	ONGC	264	15170925	-0.7%	266	250	4358200	-5.9%
CIPLA	1540	718575	7.8%	1428	1320	256425	-7.6%	POWERGRID	310	3866400	2.5%	302	300	2296800	-0.8%
COALINDIA	400	4001550	4.8%	382	380	1864800	-0.4%	RELIANCE	1300	11879500	2.1%	1274	1200	4239500	-5.8%
DIVISLAB	6000	190100	3.1%	5819	5800	126200	-0.3%	SBLIFE	1600	1682625	9.1%	1467	1500	372750	2.3%
DRREDDY	1400	1834375	8.7%	1288	1300	467500	0.9%	SBIN	800	9591750	5.4%	759	700	4647000	-7.8%
EICHERMOT	5000	371350	0.6%	4970	5000	145775	0.6%	SUNPHARMA	1900	1366050	7.8%	1763	1740	350000	-1.3%
GRASIM	2500	314500	5.6%	2368	2500	187750	5.6%	TATACONSUM	1000	865032	2.9%	972	900	652080	-7.4%
HCLTECH	2000	3242050	11.0%	1802	1600	703150	-11.2%	TATAMOTORS	800	8286300	5.2%	761	750	3244450	-1.4%
HDFCBANK	1800	6851350	9.6%	1642	1560	2449700	-5.0%	TATASTEEL	140	25465000	7.9%	130	135	9047500	4.1%
HDFCLIFE	660	3271400	5.8%	624	600	1322200	-3.8%	TCS	4300	1537025	6.5%	4036	4000	490875	-0.9%
HEROMOTOCO	4300	519150	6.8%	4025	4000	157200	-0.6%	TECHM	1760	1764000	7.3%	1641	1660	475800	1.2%
HINDALCO	600	3369800	-2.4%	615	600	2490600	-2.4%	TITAN	3400	607600	1.4%	3353	3200	266350	-4.6%
HINDUNILVR	2500	1270800	6.8%	2341	2300	517200	-1.7%	ULTRACEMCO	12000	147150	12.5%	10668	10000	61150	-6.3%
ICICIBANK	1300	4069100	8.7%	1196	1200	2202200	0.3%	UPL	560	1998625	2.9%	544	520	827905	-4.5%
INDUSINDBK	1000	5061000	4.1%	960	960	1237000	0.0%	WIPRO	310	9006000	3.9%	298	280	5964000	-6.2%

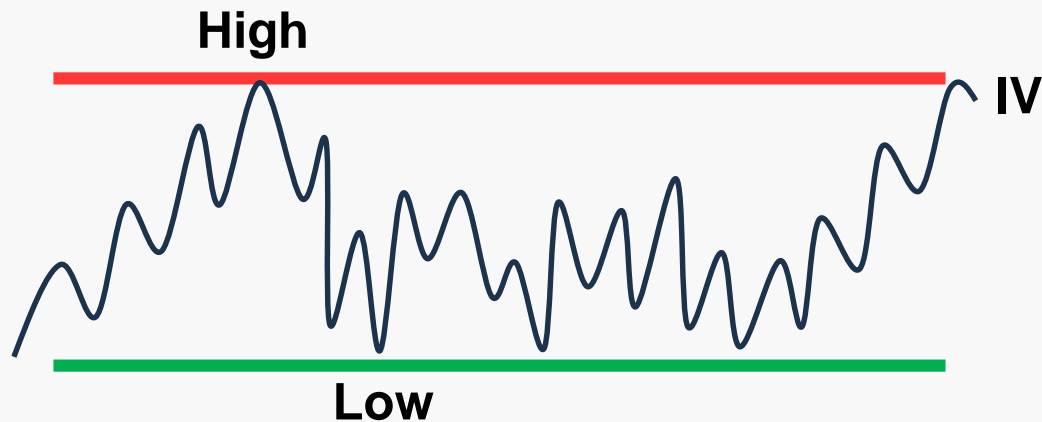
*If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green
If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike 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**

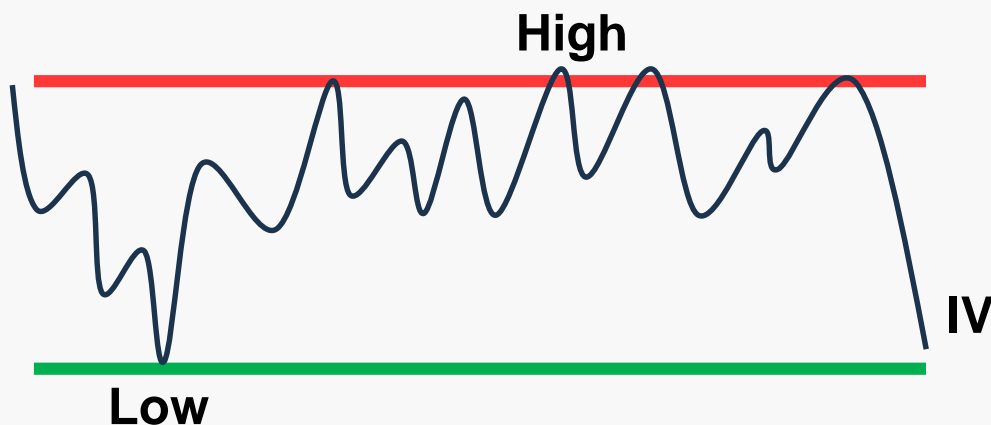
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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, 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

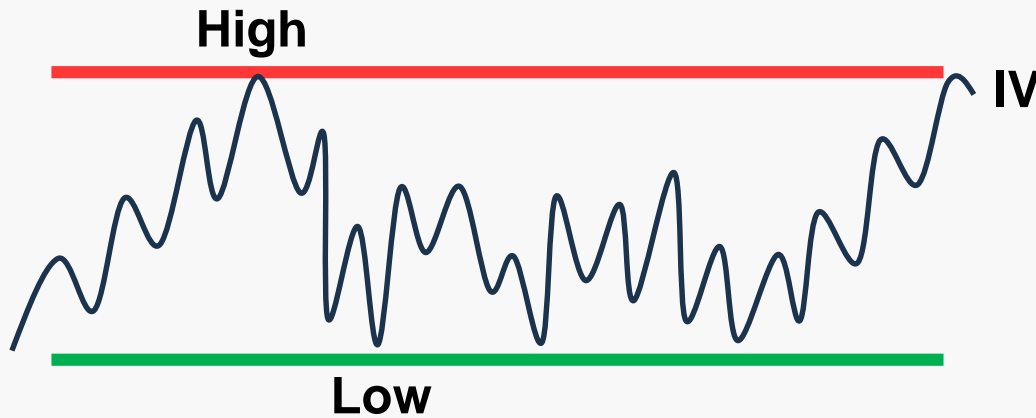


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

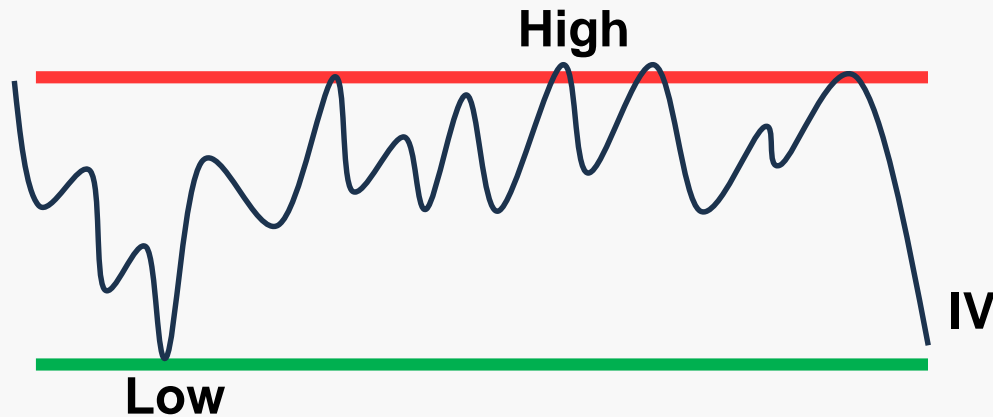


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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.

Axis Securities Limited is a subsidiary company of Axis Bank Ltd. Axis Bank Ltd. is a listed public company and one of India's largest private sector banks and has its various subsidiaries engaged in businesses of Asset management, NBFC, Merchant Banking, Trusteeship, Venture Capital, Stock Broking, the details in respect of which are available on www.axisbank.com.

Axis Securities Limited, is registered as a Stock Broker, Depository Participant, Portfolio Manager, Investment Adviser and Research Analyst with Securities and Exchange Board of India Corporate Agent with Insurance Regulatory and Development Authority of India Point of Presence with Pension Fund Regulatory and Development Authority Distributor for Mutual Funds with AMFI

Registration Details:

SEBI Single Reg. No.- NSE, BSE, MSEI, MCX & NCDEX – INZ000161633 | SEBI Depository Participant Reg. No. IN-DP-403-2019 | Portfolio Manager Reg. No.- INP000000654 | Investment Advisor Reg No. INA000000615 | SEBI-Research Analyst Reg. No. INH000000297 | IRDA Corporate Agent (Composite) Reg. No. CA0073| PFRDA – POP Reg. No. POP387122023 | Mutual Fund Distributor ARN- 64610.

Compliance Officer Details: Name – Mr. Maneesh Mathew, Tel No. – 022-68555574, Email id – 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.

We hereby declare that our activities were neither suspended nor we have defaulted with any stock exchange authority with whom we are registered in last five years. However, SEBI, Exchanges, Clearing Corporations and Depositories etc. have conducted the routine inspection and based on their observations have issued advise/warning/show cause notices/deficiency letters/ or levied penalty or imposed charges for certain deviations observed in inspections or in normal course of business, as a Stock Broker / Depository Participant/Portfolio Manager. We have not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has our certificate of registration been cancelled by SEBI at any point of time.

Investments in securities market are subject to market risks. Read all the related documents carefully before investing.

By referring to any particular sector, Axis Securities does not provide any promise or assurance of favourable view for a particular industry or sector or business group in any manner.

Registration granted by SEBI, membership of BASL (in case of IAs) and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk-free return to the investors. Our research should not be considered as an advertisement or advice, professional or otherwise. This research report and its respective content by Axis Securities made available on this page or otherwise do not constitute an offer to sell or purchase or subscribe for any securities or solicitation of any investments or investment services for the residents of Canada and / or USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been client during twelve months preceding the date of distribution of the research report. Derivatives are a sophisticated investment device. The investor is requested to take into consideration all the risk factors before actually trading in derivative contracts.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment of its original date of publication by ASL and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments.

The information and opinions in this report have been prepared by Axis Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of Axis Securities. The report must not be used as a singular basis of any investment decision. The views herein are of a general nature and do not consider the risk appetite, investment objective or the particular circumstances of an individual investor. The investor is requested to take into consideration all the risk factors including their financial condition, suitability to risk return profile and the like and take professional advice before investing.

While we would endeavour to update the information herein on a reasonable basis, Axis Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent Axis Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or Axis Securities policies, in circumstances where Axis Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

Disclaimer & Disclosures :

This report is based on information obtained in good faith from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. Axis Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. Axis Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice. Axis Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months. Axis Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction. Axis Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months. Axis Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and / or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance with the Research team and all its activities are segregated from Research activities. The proprietary desk operates independently, potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of subject company(ies). Axis Securities or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Certain transactions -including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centres on studying charts of a stock's price movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

Disclaimer & Disclosures:

Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and / or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance with the Research team and all its activities are segregated from Research activities. The proprietary desk operates independently, potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of subject company(ies). Axis Securities or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Certain transactions -including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centres on studying charts of a stock's price movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

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