



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,401	0.1%▼
Open Interest (OI)	1,47,30,075	2.5%▼
Change in OI (abs)	1,47,30,075	3,70,425▼
Premium / Discount (Abs)	54	30▼
Inference	Long Unwinding	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,210	0.1%▼
Open interest (OI)	25,03,530	1.4%▼
Change in OI (abs)	25,03,530	36,525▼
Premium / Discount (Abs)	94	60▼
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	18.26	0.04▲
Nifty ATM IV (%)	15.86	0.4▼
Bank Nifty ATM IV (%)	17.66	0.2▼
PCR (Nifty)	0.91	0.25▼
PCR (Bank Nifty)	0.94	0.00▲

The Long Ratio for FII Index Futures **jump** at 51.3 %, **up** from 46.8 % in the **last session..**

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PNBHOUSING	52,76,050	17.6%	1055.6	4.0%
ETERNAL	19,65,32,825	8.8%	235.37	0.9%
NCC	1,31,02,575	5.8%	217.9	2.6%
LODHA	67,90,950	4.7%	1336.2	0.7%
BOSCHLTD	2,48,325	3.9%	29665	0.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
FEDERALBNK	10,11,95,000	16.0%	190.21	-3.7%
HINDZINC	51,60,925	8.4%	429.75	-2.2%
CDSL	1,80,33,800	6.9%	1258.2	-1.3%
INDIANB	55,05,300	6.8%	556.5	-1.7%
PHOENIXLTD	26,55,450	6.4%	1538.9	-7.5%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DEEPAKNTR	10,95,300	-7.9%	1999.2	2.8%
AUBANK	2,76,14,000	-7.3%	679.05	0.3%
MGL	37,68,800	-6.1%	1361.8	0.8%
LAURUSLABS	1,71,37,700	-4.6%	620.75	2.4%
PERSISTENT	22,12,200	-4.0%	5433	2.0%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
JINDALSTEL	1,83,06,250	-3.5%	898.5	-0.2%
OFSS	5,47,050	-3.4%	8710	-0.4%
GRASIM	1,10,96,750	-3.3%	2730.8	-0.7%
INOXWIND	2,21,42,850	-2.4%	166.39	-1.8%
MFSL	62,83,200	-2.2%	1305.3	-0.2%

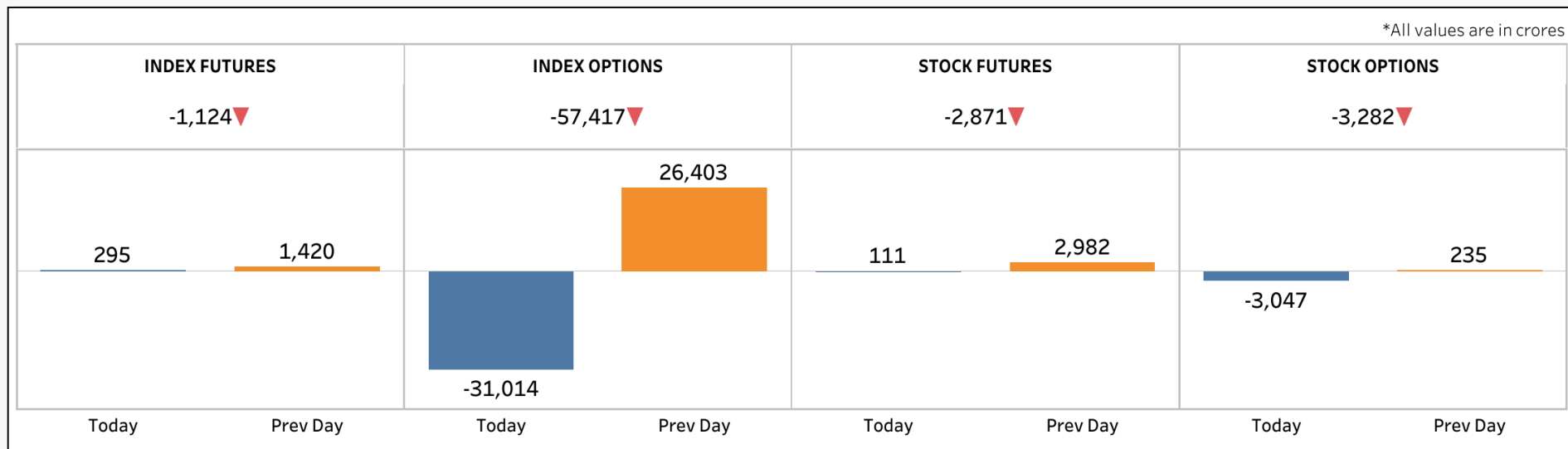
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

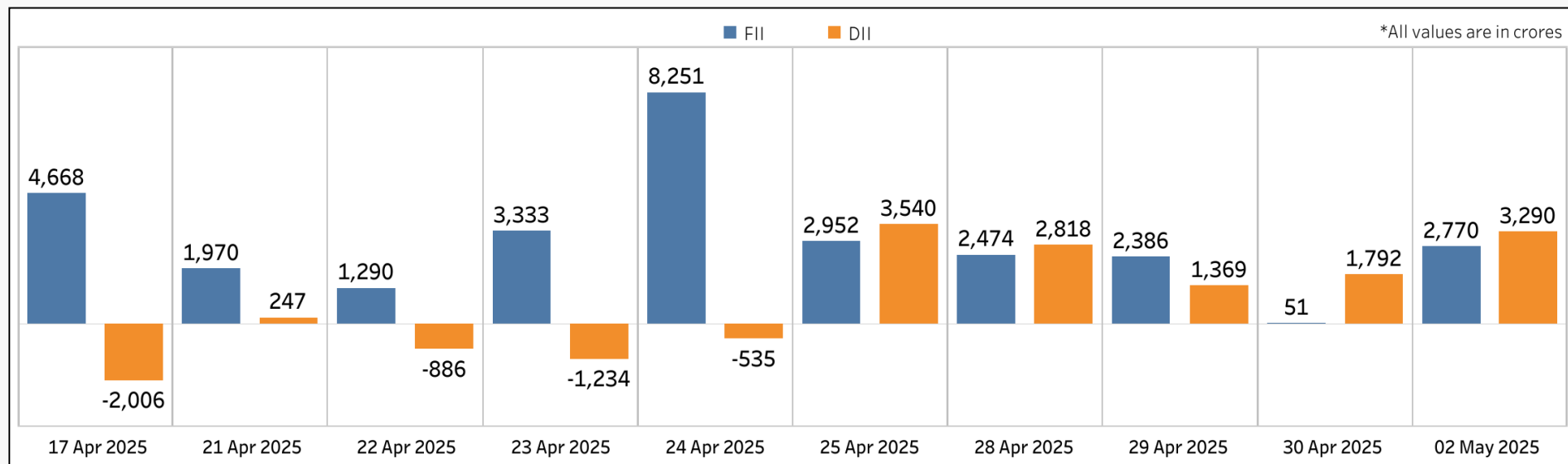
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-524,919 ▼	3,615 ▲	-274,888 ▼	-1,812,435 ▼	90 ▲	-38,256 ▼	-49,915 ▼	3,669,393 ▲
211,575	11,512	134,463	41,284				3,656,680
-313,344		-140,425	-1,771,151	90	0	0	
					-41,175	-2,919	-12,713
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-430,618	16,334	-256,695	-73,672	160	-45	301	31,633
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
667,462 ▲	38,855 ▲	414,283 ▲	-1,584,883 ▼	-142,632 ▼	-4,214 ▼	-89,480 ▼	-272,075 ▼
411,056	32,723	199,847	-1,606,547	44,830	1,154	79,973	
-256,406	-6,132	-214,436	-21,664	-97,802	-3,060	-9,507	-6,907
							-278,982
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
402,012	4,140	349,830	26,253	28,447	-20,429	-93,438	15,786
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

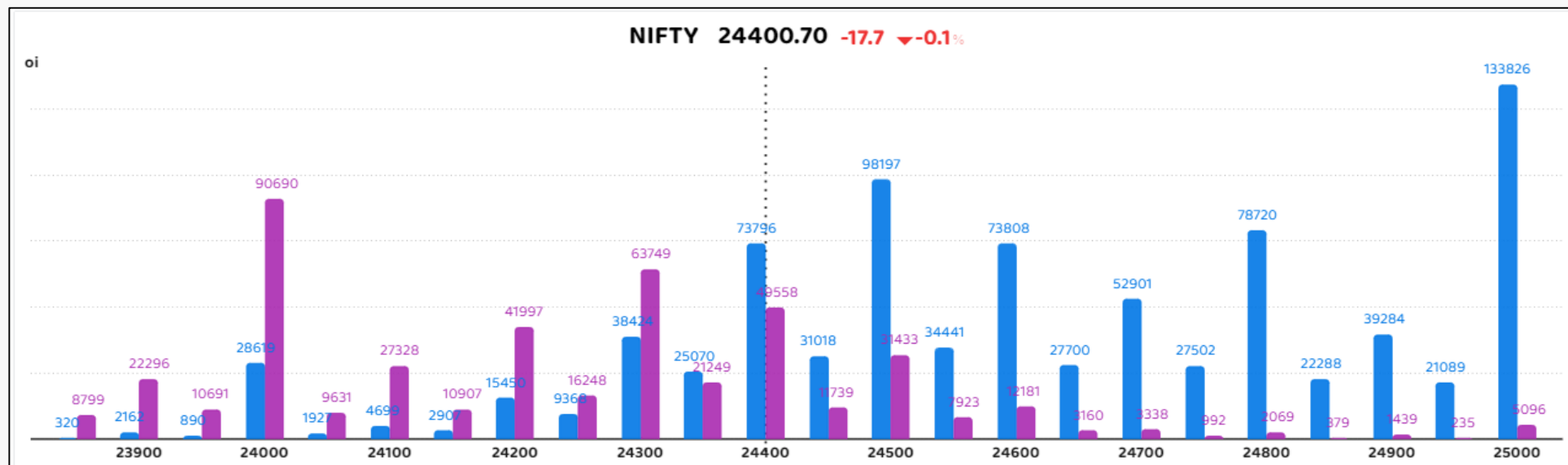


DII and FII Daily Cash Market Flows



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

Call  Put 



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

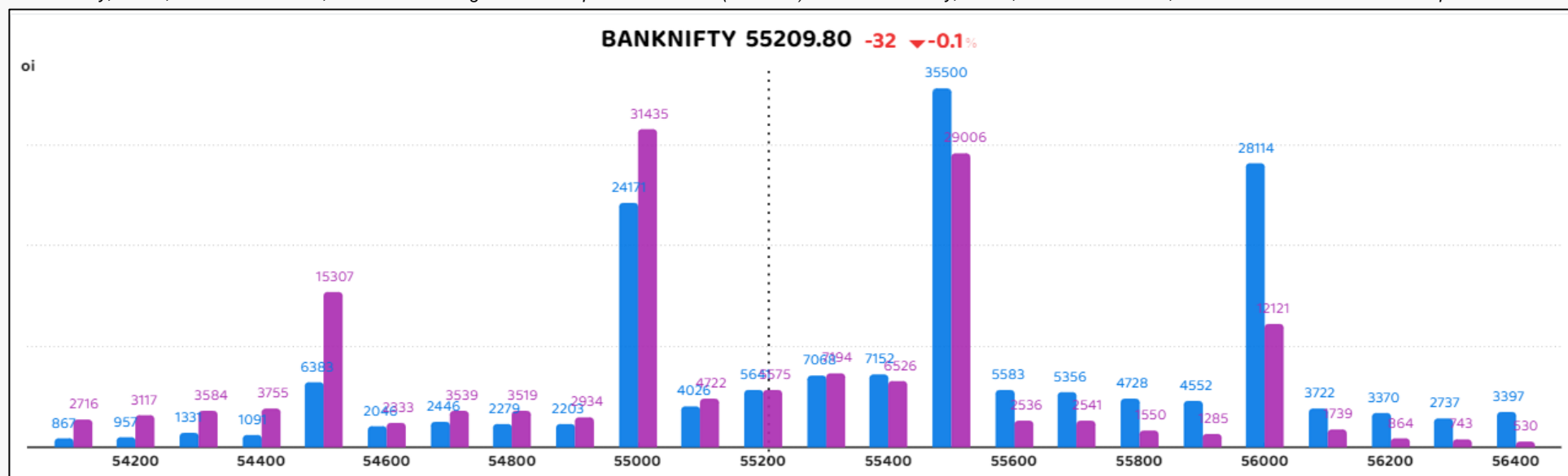
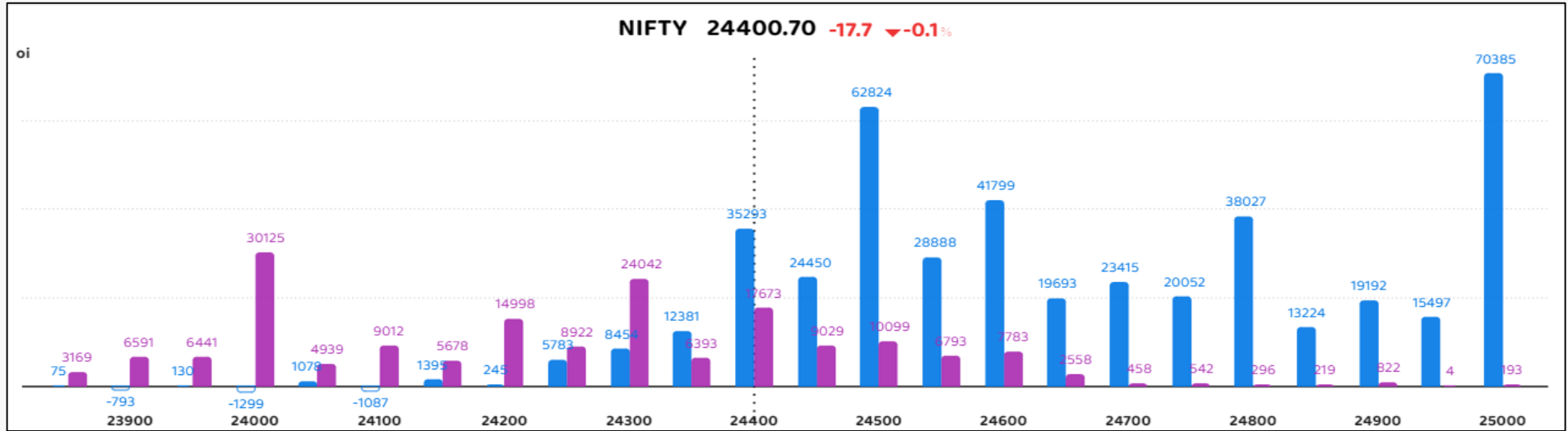


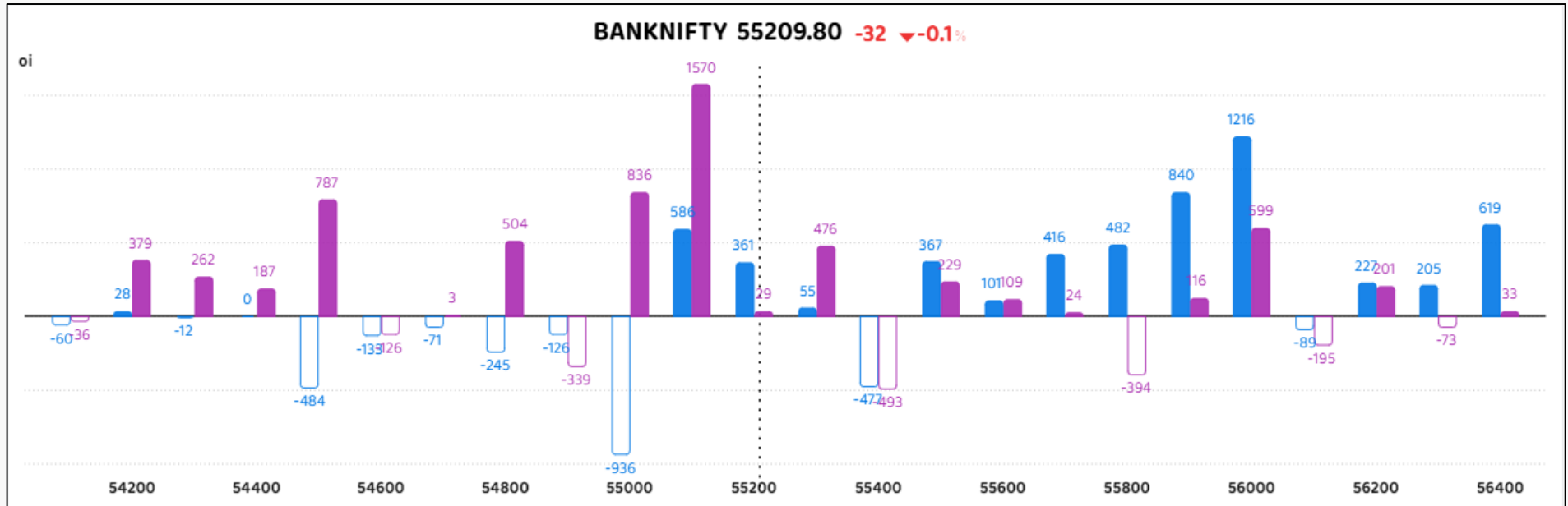
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,000 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,000 Call & the 55,200 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ESCORTS KUBOTA L	3216.1	-1.3	42.1	44.2	22.7	90.3
DIXON TECHNOLOGI	16347	-0.6	45.6	53.0	1.8	85.6
BAJAJ AUTO LTD	7836.5	-2.4	31.1	36.4	2.1	84.6
RAMCO CEMENT/THE	941.7	-0.2	36.9	43.6	0.5	84.5
TITAN CO LTD	3341	-1.1	28.6	33.5	2.3	84.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADANI GREEN ENER	905.25	0.5	47.4	74.3	46.9	1.6
INDIAN RENEWABLE	165.72	-0.8	43.8	69.2	43.0	3.0
TATA TECHNOLOGIE	647.1	-1.6	32.0	54.4	30.9	4.6
HDFC LIFE INSURA	727.75	-2.1	23.4	80.6	19.6	6.1
ADANI PORTS AND	1267.1	4.2	32.5	99.7	23.2	12.1

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ESCORTS KUBOTA L	3216.1	-1.3	42.1	44.2	22.7	99.3
MRF LTD	135200	0.5	30.5	35.6	6.7	97.4
AVENUE SUPERMART	4059.2	-3.4	37.9	62.3	25.7	97.0
BANK OF INDIA	115.38	0.2	44.8	49.1	27.4	96.9
PIDILITE INDS	3008.7	-0.8	28.9	33.7	13.3	96.7

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI GREEN ENER	905.25	0.5	47.4	74.3	46.9	2.3
MANAPPURAM FINAN	231.06	0.1	17.0	64.2	2.7	3.8
INDIAN RENEWABLE	165.72	-0.8	43.8	69.2	43.0	5.8
NBCC INDIA LTD	93.96	-1.3	43.8	65.4	38.6	8.3
TATA TECHNOLOGIE	647.1	-1.6	32.0	54.4	30.9	8.6

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BIRLASOFT LTD	395.0	1.2	9239	2730	3.4
MAX HEALTHCARE I	1089.8	-0.8	4190	1261	3.3
ADANI ENTERPRISE	2294.2	-0.3	68127	21388	3.2
TATA TECHNOLOGIE	647.1	-1.6	9545	3120	3.1
APOLLO TYRES LTD	478.3	1.4	8453	2795	3.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SHREE CEMENT	29710	-1.3	1088	2069	1.9
JUBILANT FOODWOR	715.4	-2.2	2589	3431	1.3
ICICI BANK LTD	1427	0.4	42851	53911	1.3
TATA COMMUNICATI	1591.4	-2.0	3780	4613	1.2
IIFL FINANCE LTD	359.2	-1.6	1038	1233	1.2

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TATA TECHNOLOGIE	657.85	-1.6	13547	13547	100.0
SYNGENE INTERNAT	634.05	-1.0	14246	14246	100.0
PHOENIX MILLS	1664.5	-7.6	2231	2231	100.0
MANAPPURAM FINAN	230.85	0.1	10548	11426	92.3

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
TATA TECHNOLOGIE	647.1	-1.6	6973	6973	100.0
HFCL LTD	78.15	-1.6	4622	4763	97.0
VOLTAS LTD	1207.8	-2.3	17675	18689	94.6
CENTRAL DEPOSITO	1328.2	0.6	15432	16626	92.8
SYNGENE INTERNAT	627.95	-1.0	5107	5631	90.7

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
PHOENIX MILLS	1537.30	-7.6	9560	10101	94.6

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
JSW STEEL LTD	973.20	-5.5	65904	65904	100.0
PHOENIX MILLS	1537.30	-7.6	8690	9126	95.2

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SYNGENE INTERNAT	627.95	-1.0	14246	5049	2.8
ACC LTD	1864.1	-1.3	15266	6688	2.3
PHOENIX MILLS	1537.3	-7.6	2231	1015	2.2
TATA TECHNOLOGIE	647.1	-1.6	13547	6332	2.1
SHRIRAM FINANCE	604.2	-1.2	21318	10486	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SYNGENE INTERNAT	627.95	-1.0	5107	2659	1.9
TATA TECHNOLOGIE	647.1	-1.6	6973	3749	1.9
ACC LTD	1864.1	-1.3	7925	4712	1.7
RBL BANK LTD	200.17	-0.1	6990	4219	1.7
MARUTI SUZUKI IN	12406	1.2	32944	20125	1.6

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ADANI PORTS AND	1267.1	4.2	160569	38327	4.2
JSW STEEL LTD	973.2	-5.5	62263	20274	3.1
GODREJ PROPERTIE	2249.3	4.1	58766	20910	2.8
BANDHAN BANK LTD	161.74	-2.3	37139	13252	2.8
FED BANK LTD	189.68	-3.6	36741	14145	2.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
JSW STEEL LTD	973.2	-5.5	65904	16054	4.1
GODREJ PROPERTIE	2249.3	4.1	33138	9329	3.6
ADANI PORTS AND	1267.1	4.2	69779	20713	3.4
ADITYA BIRLA FAS	256.2	-2.8	9738	3857	2.5
JINDAL STEEL & P	897.75	0.2	22569	9651	2.3

Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	2600	1721400	13.3%	2294	2600	2392500	13.3%	INFY	1500	2076000	-0.5%	1507	1200	1587200	-20.4%
ADANIPTS	1300	1617600	2.6%	1267	1200	890400	-5.3%	ITC	450	6084800	4.6%	430	430	3184000	-0.1%
APOLLOHOSP	7200	103125	3.5%	6955	6150	67625	-11.6%	JSWSTEEL	1050	992925	7.9%	973	900	1283175	-7.5%
ASIANPAINT	2500	512200	3.7%	2410	2260	302200	-6.2%	KOTAKBANK	2300	821600	5.3%	2185	2200	828800	0.7%
AXISBANK	1300	1893750	10.0%	1182	1200	1266250	1.5%	LT	3500	636900	5.1%	3330	3300	470850	-0.9%
BAJAJ-AUTO	8500	136350	8.5%	7837	8000	81975	2.1%	M&M	3000	685125	2.5%	2926	2900	372750	-0.9%
BAJAJFINSV	2100	2343000	7.3%	1958	1800	564500	-8.1%	MARUTI	12000	327950	-3.3%	12406	12000	210050	-3.3%
BAJFINANCE	10000	884250	12.8%	8863	8700	419750	-1.8%	NESTLEIND	2500	502200	6.9%	2338	2400	144800	2.7%
BEL	320	8612700	2.8%	311	310	4768050	-0.4%	NTPC	370	7825500	6.2%	348	380	2109000	9.1%
BHARTIARTL	1880	1669150	1.5%	1852	1700	964725	-8.2%	ONGC	250	6319775	2.7%	243	250	1911525	2.7%
BPCL	320	2854800	2.8%	311	290	1776600	-6.8%	POWERGRID	320	2041200	5.3%	304	320	1584000	5.3%
BRITANNIA	5500	85700	3.6%	5308	5400	33800	1.7%	RELIANCE	1400	6607000	-1.6%	1422	1300	7233000	-8.6%
CIPLA	1760	509275	15.4%	1526	1300	425100	-14.8%	SBILIFE	1960	413250	11.1%	1765	1700	432000	-3.7%
COALINDIA	400	5066250	4.1%	384	400	2193450	4.1%	SBIN	820	7089000	2.5%	800	800	5009250	0.0%
DRREDDY	1200	1068750	1.4%	1183	1100	499375	-7.0%	SHRIRAMFIN	700	3343500	15.9%	604	600	818250	-0.7%
EICHERMOT	5700	186025	4.8%	5438	5300	144900	-2.5%	SUNPHARMA	1900	1970850	3.9%	1829	1700	430500	-7.1%
GRASIM	3120	320500	14.8%	2718	2340	120000	-13.9%	TATACONSUM	1300	809856	12.4%	1157	1100	401280	-4.9%
HCLTECH	1600	829850	1.5%	1577	1200	918750	-23.9%	TATAMOTORS	700	3802150	7.4%	652	650	3320350	-0.3%
HDFCBANK	2000	2952950	3.9%	1925	1800	2286900	-6.5%	TATASTEEL	150	17512000	6.2%	141	140	13871000	-0.8%
HDFCLIFE	800	1575200	9.9%	728	650	693000	-10.7%	TCS	3500	903700	1.6%	3445	3400	520975	-1.3%
HEROMOTOCO	4000	369600	6.9%	3741	3900	235500	4.3%	TECHM	1500	583800	0.2%	1496	1400	432600	-6.4%
HINDALCO	650	1603000	2.8%	632	600	1286600	-5.1%	TITAN	3400	313425	1.8%	3341	3000	197225	-10.2%
HINDUNILVR	2500	1491600	7.6%	2324	2400	536700	3.3%	TRENT	5700	420000	10.7%	5148	5200	411500	1.0%
ICICIBANK	1500	2551500	4.7%	1432	1400	2222500	-2.3%	ULTRACEMCO	13000	286900	11.6%	11644	12000	78450	3.1%
INDUSINDBK	900	1807500	5.5%	853	800	1751000	-6.2%	WIPRO	250	8247000	2.9%	243	240	3321000	-1.2%

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

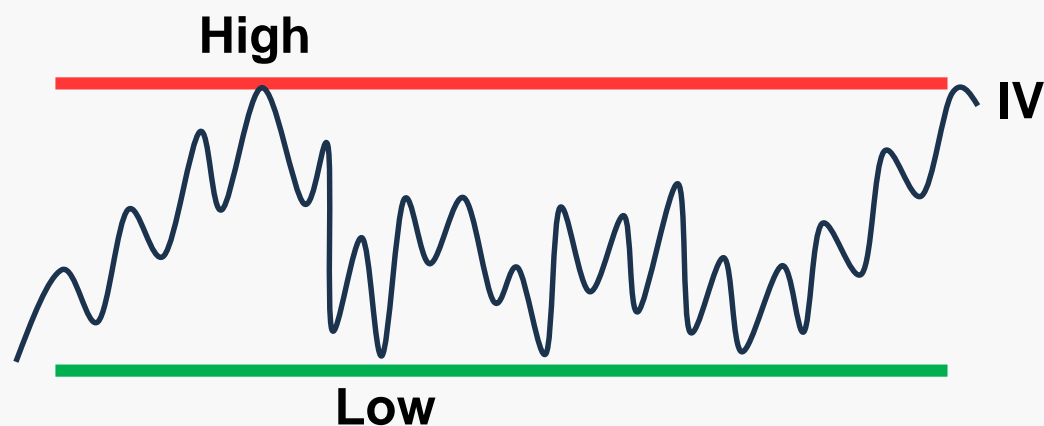
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

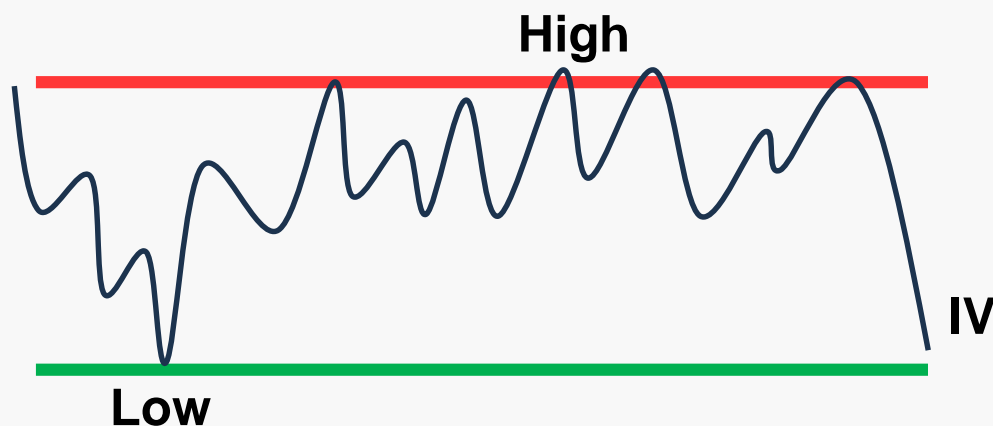
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (DII)s, proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** www.nseindia.com, Bloomberg, MyFnO

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR):** Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100

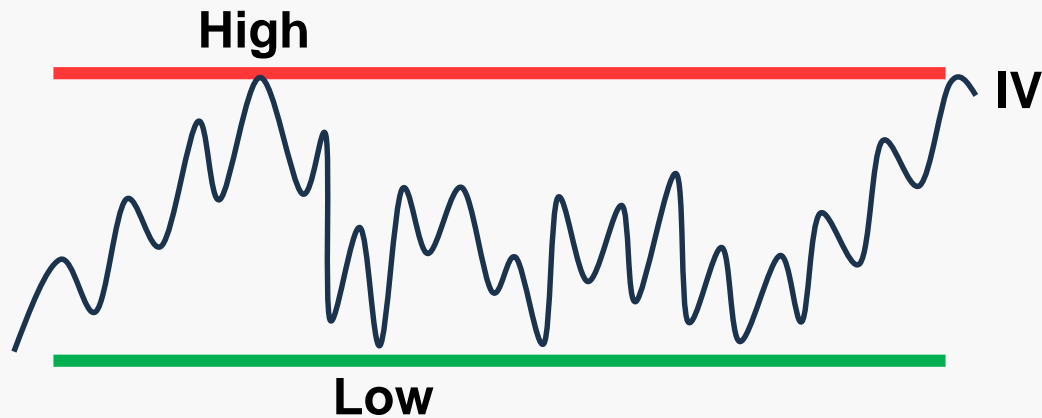


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

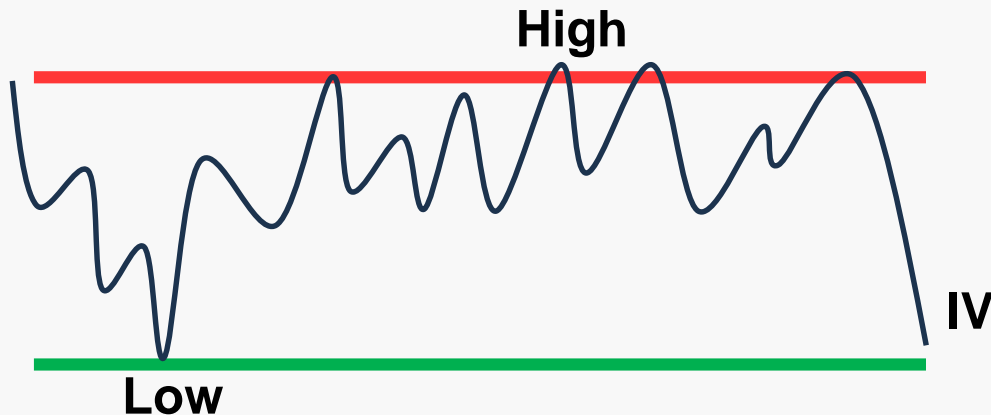


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **Implied Volatility Percentile (IVP):** Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.



In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.



Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

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