



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,418	0.0%▼
Open Interest (OI)	1,51,00,500	2.2%▲
Change in OI (abs)	1,51,00,500	3,22,950▲
Premium / Discount (Abs)	84	5▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,242	0.5%▼
Open interest (OI)	25,40,055	2.5%▼
Change in OI (abs)	25,40,055	63680▼
Premium / Discount (Abs)	155	36▲
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	18.22	0.85▲
Nifty ATM IV (%)	16.21	0.6▲
Bank Nifty ATM IV (%)	17.85	0.5▲
PCR (Nifty)	1.16	0.22▲
PCR (Bank Nifty)	0.94	0.01▼

The Long Ratio for FII Index Futures **jump** at 46.8 %, **up** from 44.3 % in the **last session..**

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IOC	10,76,40,000	9.0%	138.45	1.4%
OBEROIRLTY	46,65,500	6.2%	1637.8	1.2%
PHOENIXLTD	24,94,800	6.2%	1664	1.4%
POLICYBZR	71,86,475	5.4%	1631.3	1.4%
SBILIFE	1,09,86,000	5.3%	1771.6	2.0%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
EXIDEIND	2,48,16,600	12.6%	351.85	-5.4%
PNBHOUSING	44,88,250	7.4%	1014.7	-2.1%
APOLLOHOSP	23,10,875	6.7%	7012.5	-0.3%
BAJFINANCE	1,07,44,150	6.5%	8663	-5.0%
CHAMBLFERT	77,97,600	5.4%	685.15	-0.8%

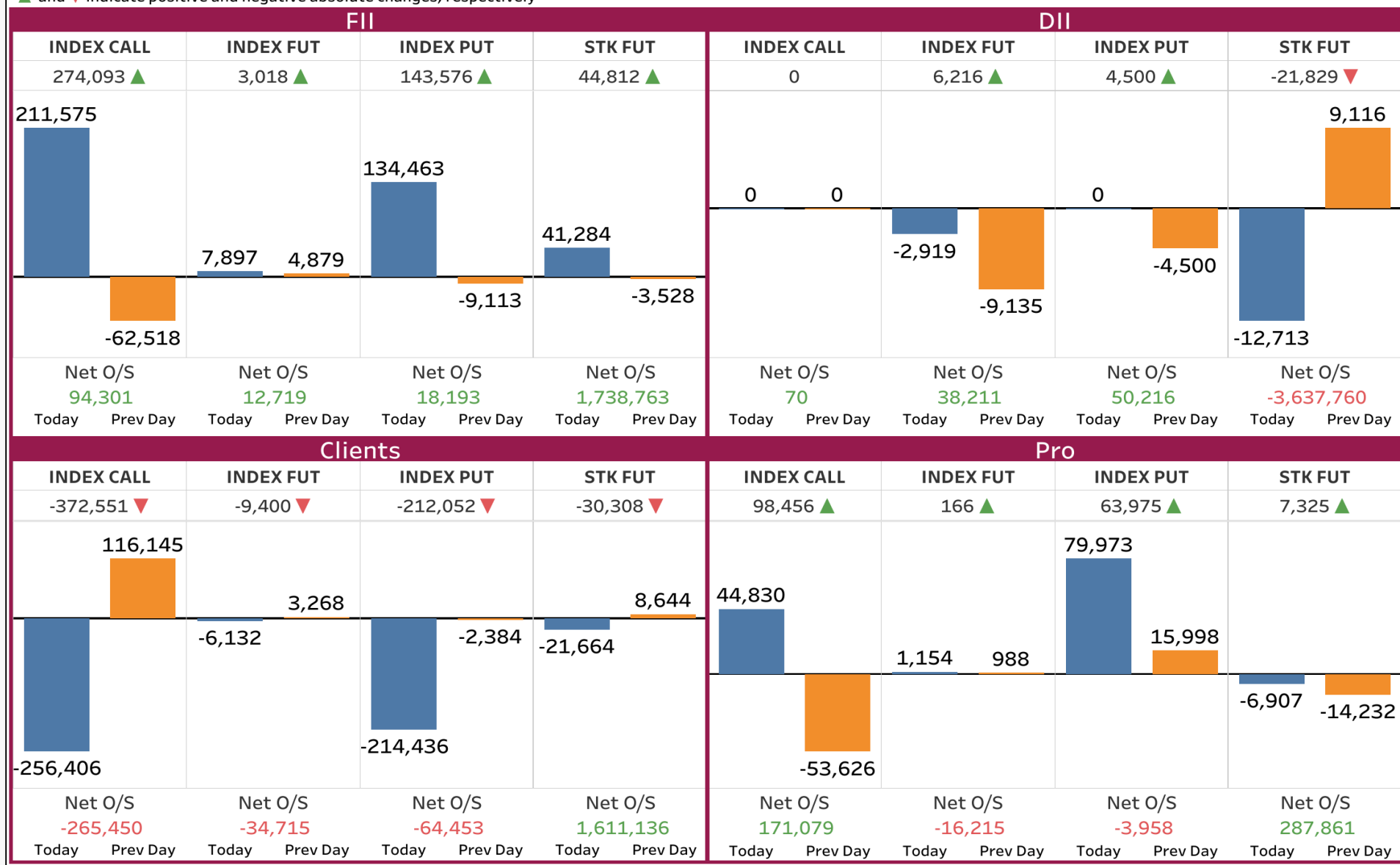
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
APOLLOTYRE	75,39,500	-13.1%	471.15	2.8%
KEI	16,96,200	-3.2%	3066.6	0.5%
BIOCON	2,25,50,000	-3.2%	322.6	0.6%
LTF	8,96,37,118	-3.1%	162.73	1.3%
BALKRISIND	23,28,000	-2.8%	2680.5	2.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
OFSS	5,66,425	-3.4%	8741	-1.4%
DMART	35,08,500	-3.3%	4218	-2.5%
IEX	3,28,98,750	-3.1%	189.74	-1.3%
NCC	1,23,81,925	-3.1%	212.44	-2.5%
RBLBANK	7,68,64,875	-2.6%	201.41	-1.8%

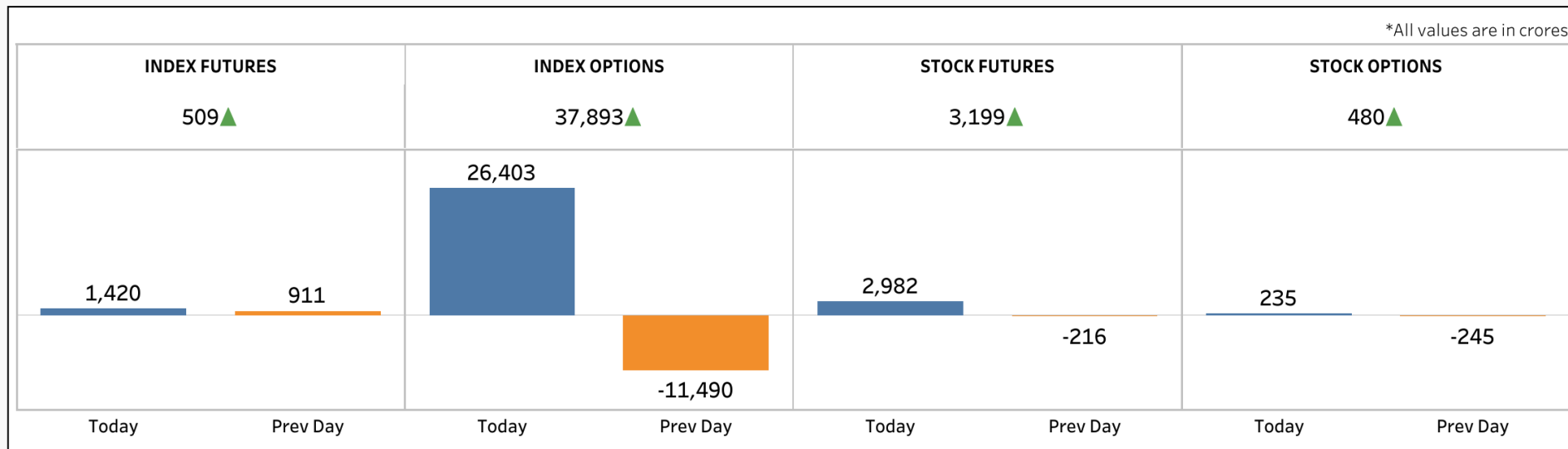
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

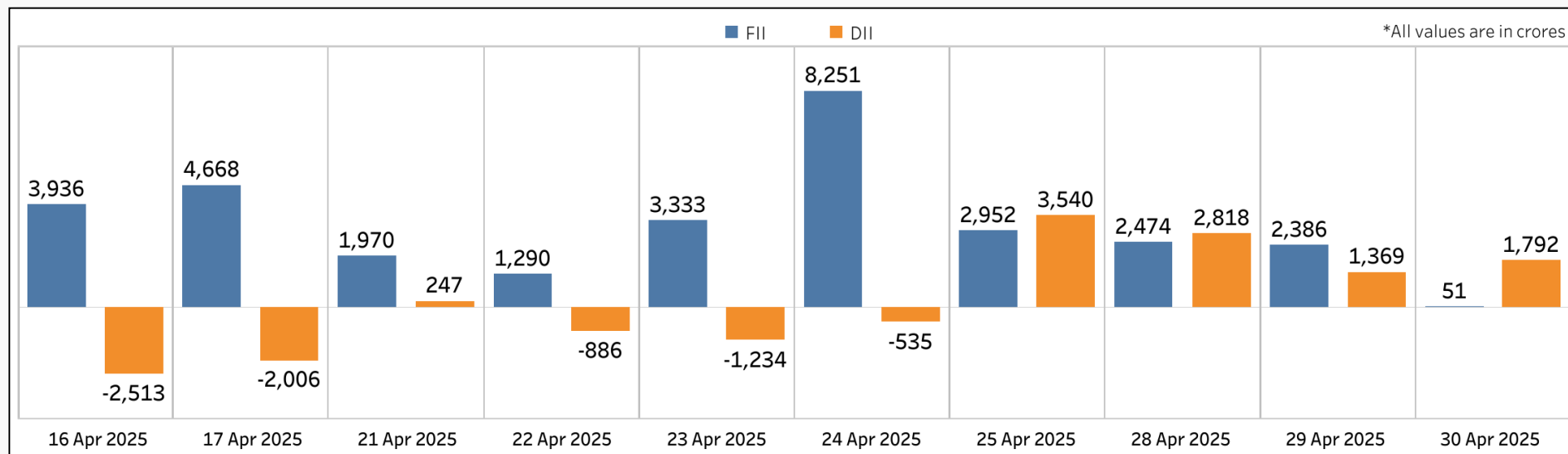
▲ and ▼ indicate positive and negative absolute changes, respectively



Daily Net Open Interest Change

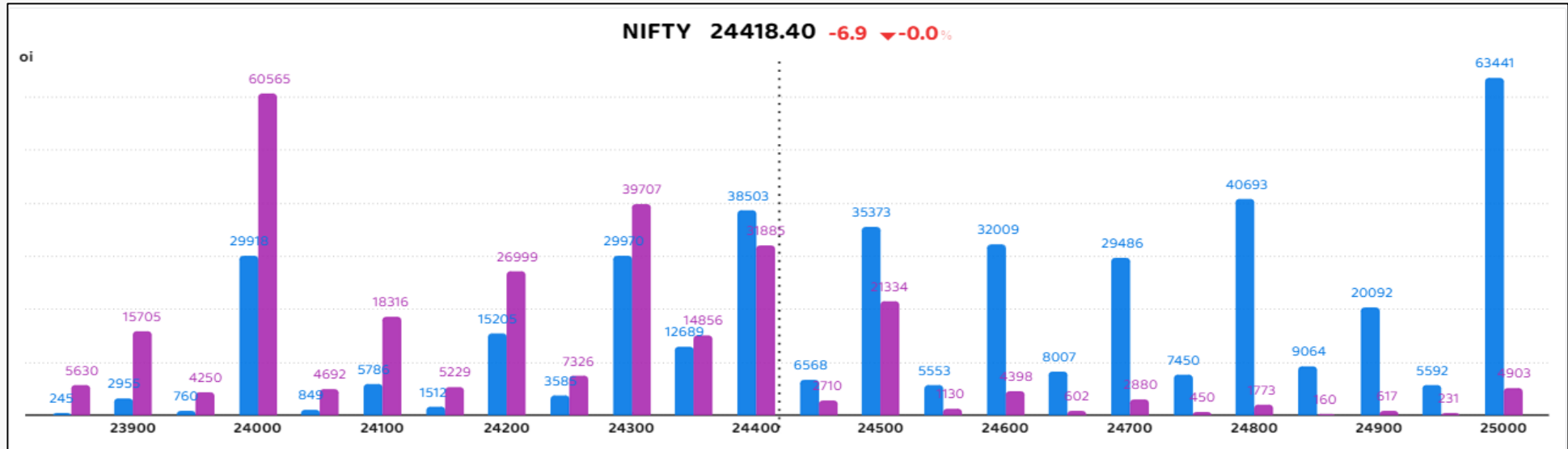


DII and FII Daily Cash Market Flows



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

Call  Put 



For the Nifty, the 24,500 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.

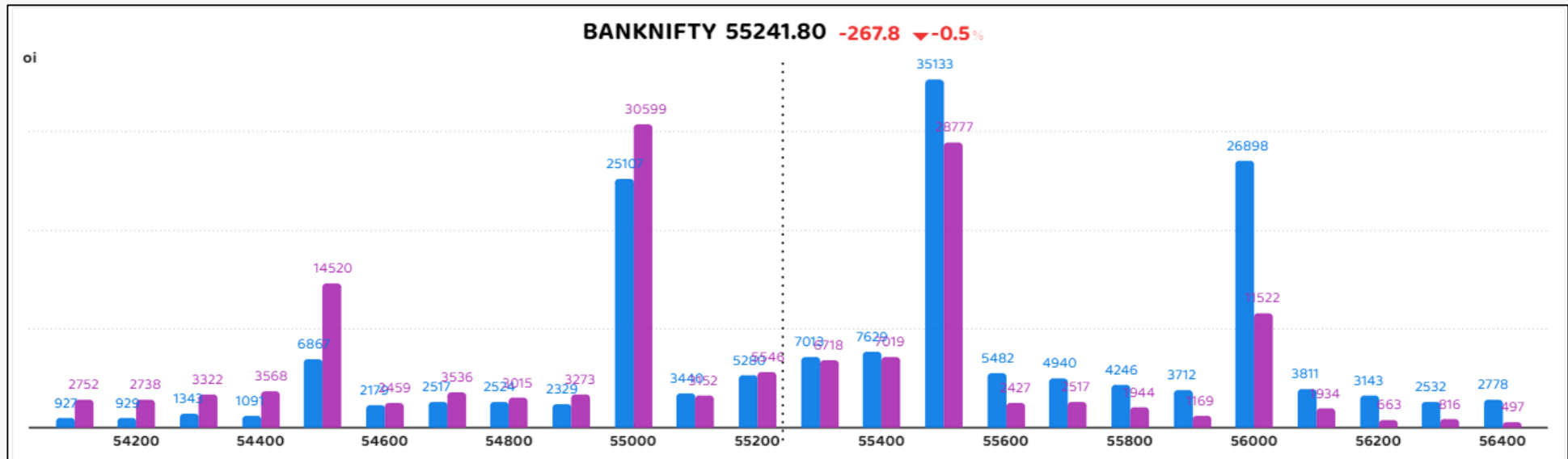
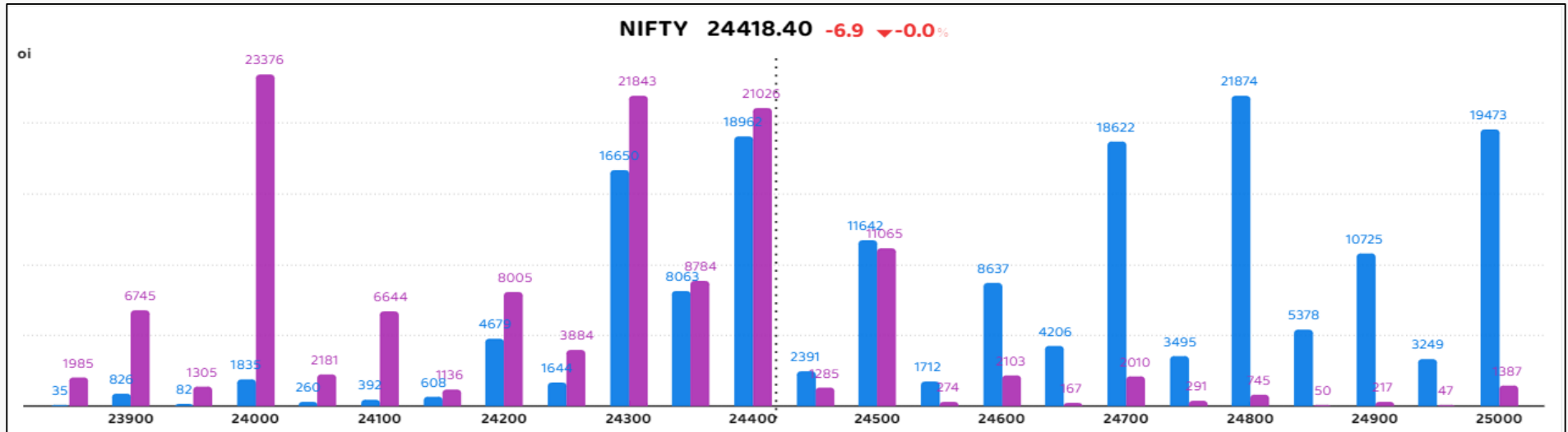


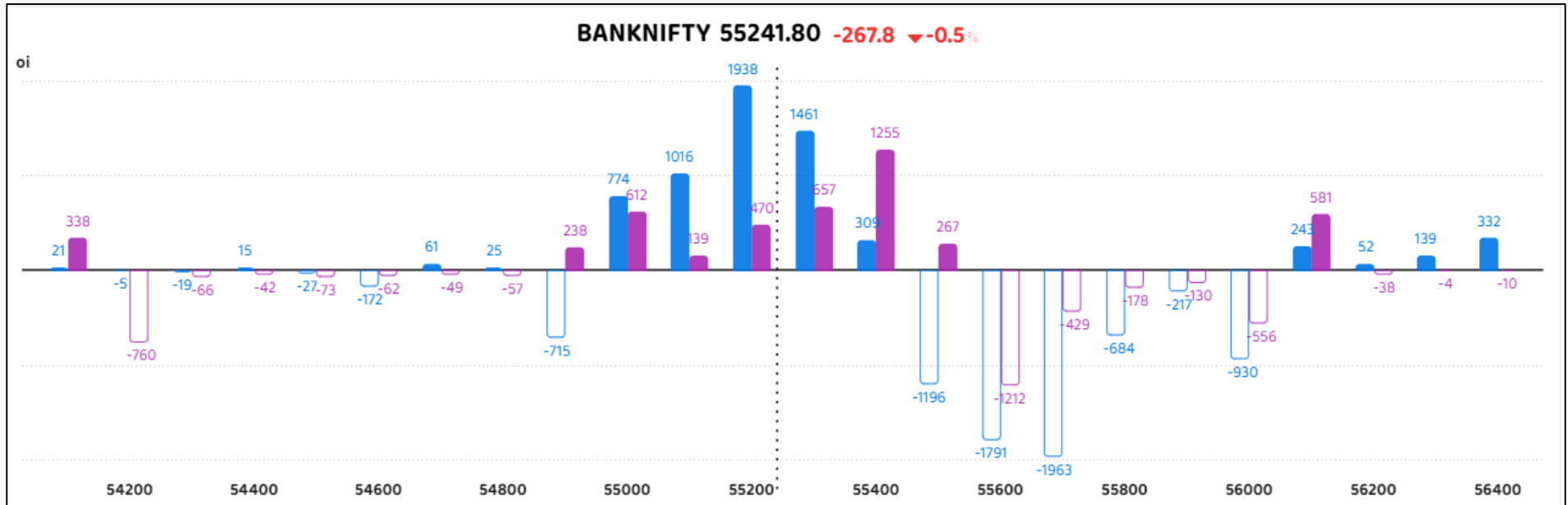
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,400 Call and the 24,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,000 Call & the 56,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CENTRAL DEPOSITO	1320	-1.9	60.7	60.7	31.2	100.0
KOTAK MAHINDRA	2208.1	0.1	31.3	32.4	1.9	96.6
RAMCO CEMENT/THE	943.6	-1.4	38.2	43.6	0.5	87.6
GODREJ CONSUMER	1260.5	-0.2	37.4	40.6	16.0	87.0
SONA BLW PRECISI	481.15	-2.2	51.6	57.8	18.5	84.4

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INDIAN RAILWAY F	124.47	-1.9	4.2	93.6	4.2	0.0
TATA TECHNOLOGIE	657.85	-0.9	31.5	54.4	30.9	2.6
ADANI GREEN ENER	900.7	-2.4	48.0	74.3	46.9	3.8
INDIAN RENEWABLE	167.06	-0.6	44.1	69.2	43.0	4.4
HDFC LIFE INSURA	743.7	4.0	25.4	80.6	19.6	9.4

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
CENTRAL DEPOSITO	1320	-1.9	60.7	60.7	31.2	100.0
KOTAK MAHINDRA	2208.1	0.1	31.3	32.4	1.9	99.1
ASIAN PAINTS LTD	2425.7	-1.0	29.4	34.6	15.5	98.3
GODREJ CONSUMER	1260.5	-0.2	37.4	40.6	16.0	98.2
COFORGE LTD	7305	-2.4	48.5	60.2	26.0	98.1

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDIAN RAILWAY F	124.47	-1.9	4.2	93.6	4.2	0.0
MANAPPURAM FINAN	230.85	-0.5	11.5	64.2	2.7	1.9
ADANI GREEN ENER	900.7	-2.4	48.0	74.3	46.9	2.9
TATA TECHNOLOGIE	657.85	-0.9	31.5	54.4	30.9	6.1
INDIAN RENEWABLE	167.06	-0.6	44.1	69.2	43.0	6.3

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
VODAFONE IDEA LT	7.12	-1.7	20606	1843	11.2
ALKEM LABORATORI	5116	1.7	7116	1532	4.6
TATA COMMUNICATI	1591.4	0.8	5030	1169	4.3
TUBE INVESTMENTS	2898.6	3.6	18495	4869	3.8
BOSCH LTD	29455	1.0	4122	1095	3.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
NCC LTD	211.9	-2.2	3046	4583	1.5
HOUSING & URBAN	223.46	-1.7	2938	4097	1.4
PIRAMAL ENTERPRI	967.95	-2.1	1398	1712	1.2
BANK OF INDIA	115.15	-2.3	1212	1468	1.2
DALMIA BHARAT LT	1942.7	-0.6	1584	1690	1.1

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	-0.9	12811	12811	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
TATA TECHNOLOGIE	663.7	-0.9	6820	6820	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
VARUN BEVERAGES	522.35	-1.3	44048	54157	81.3

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NO STOCK OPTION HAS MET THE CONDITIONS MET IN THE FOOTNOTE					

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SYNGENE INTERNAT	634.05	0.8	13597	4565	3.0
TVS MOTOR CO LTD	2672	-1.1	10524	4600	2.3
ACC LTD	1888	-0.2	13566	6237	2.2
TATA TECHNOLOGIE	657.85	-0.9	12811	5952	2.2
SHRIRAM FINANCE	611.7	-0.5	19709	9916	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	634.05	0.8	5239	2530	2.1
TATA TECHNOLOGIE	657.85	-0.9	6820	3579	1.9
RBL BANK LTD	200.37	-1.4	7322	4073	1.8
ACC LTD	1888	-0.2	7505	4542	1.7
ULTRATECH CEMENT	11641	-1.9	15804	9688	1.6

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
EXIDE INDUS LTD	351.75	-4.9	27243	8200	3.3
GODREJ PROPERTIE	2161.5	3.0	55735	18373	3.0
APOLLO TYRES LTD	471.9	3.5	13741	4612	3.0
BAJAJ FINANCE LT	8634.5	-5.0	201669	80783	2.5
ALKEM LABORATORI	5116	1.7	7116	3136	2.3

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
BAJAJ FINANCE LT	8634.5	-5.0	140626	52229	2.7
BAJAJ FINSERV LT	1951.6	-5.6	42424	16413	2.6
BHARAT PETROL	310.05	-0.5	23402	12881	1.8
INDIAN OIL CORP	137.86	1.5	16667	10063	1.7
HDFC LIFE INSURA	743.7	4.0	14736	9520	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	2600	1476900	13.0%	2301	2600	2391300	13.0%	INFY	1500	2108000	0.0%	1500	1200	1543200	-20.0%
ADANIPTS	1300	972400	6.9%	1217	1200	707600	-1.4%	ITC	450	5892800	5.7%	426	430	2289600	1.0%
APOLLOHOSP	8000	93500	14.7%	6977	6150	68375	-11.9%	JSWSTEEL	1220	781650	18.5%	1030	850	662175	-17.5%
ASIANPAINT	2500	437600	3.1%	2426	2300	252600	-5.2%	KOTAKBANK	2300	601600	4.2%	2208	2200	1169600	-0.4%
AXISBANK	1300	2056875	9.7%	1185	1200	1211875	1.3%	LT	3500	611700	4.8%	3341	3300	492900	-1.2%
BAJAJ-AUTO	8500	114675	5.9%	8030	8000	74250	-0.4%	M&M	3000	557725	2.4%	2929	2900	414750	-1.0%
BAJAJFINSV	2100	2310000	7.6%	1952	1800	569000	-7.8%	MARUTI	12000	330800	-2.1%	12257	12000	212900	-2.1%
BAJFINANCE	10000	916375	15.8%	8635	8000	432000	-7.3%	NESTLEIND	2500	410000	4.7%	2388	2400	177600	0.5%
BEL	320	8381850	1.9%	314	310	4203750	-1.3%	NTPC	370	7818000	4.4%	355	380	1932000	7.2%
BHARTIARTL	1880	1663450	0.8%	1865	1700	923875	-8.8%	ONGC	250	6067600	2.3%	244	250	2119425	2.3%
BPCL	320	2822400	3.2%	310	290	1803600	-6.5%	POWERGRID	320	1931400	4.1%	307	320	1558800	4.1%
BRITANNIA	5500	59000	1.1%	5439	5000	31400	-8.1%	RELIANCE	1400	6997000	-0.4%	1405	1300	7275000	-7.5%
CIPLA	1760	422175	13.5%	1550	1300	418275	-16.1%	SBILIFE	1800	402000	1.9%	1766	1700	426000	-3.7%
COALINDIA	400	4883550	3.8%	385	400	2445450	3.8%	SBIN	820	5331000	4.0%	789	800	4577250	1.4%
DRREDDY	1200	875625	1.4%	1184	1100	518125	-7.1%	SHRIRAMFIN	700	3081750	14.4%	612	600	803250	-1.9%
EICHERMOT	5700	153125	2.4%	5567	5300	133175	-4.8%	SUNPHARMA	1900	1965950	3.7%	1832	1800	404250	-1.8%
GRASIM	3120	322750	14.0%	2738	2340	119750	-14.5%	TATACONSUM	1300	762432	11.5%	1166	1100	458736	-5.6%
HCLTECH	1600	850150	2.1%	1568	1200	811650	-23.4%	TATAMOTORS	700	3833500	8.7%	644	650	3062950	0.9%
HDFCBANK	2000	2726900	3.9%	1925	1800	2281400	-6.5%	TATASTEEL	150	14949000	7.1%	140	140	13403500	-0.1%
HDFCLIFE	810	1513600	8.9%	744	650	726000	-12.6%	TCS	3500	876750	1.3%	3454	3400	478975	-1.6%
HEROMOTOCO	4000	351900	4.5%	3827	3900	225450	1.9%	TECHM	1500	588600	-0.2%	1503	1300	420000	-13.5%
HINDALCO	630	1712200	0.9%	625	600	1314600	-3.9%	TITAN	3400	288050	0.6%	3380	3000	191800	-11.2%
HINDUNILVR	2500	1383600	6.7%	2342	2400	517500	2.5%	TRENT	6000	421900	16.0%	5173	5200	419800	0.5%
ICICIBANK	1500	2767100	5.1%	1427	1400	3283700	-1.9%	ULTRACEMCO	13000	270850	11.7%	11641	12000	101050	3.1%
INDUSINDBK	1000	1737500	19.3%	838	800	1971500	-4.6%	WIPRO	250	7926000	3.5%	242	240	3243000	-0.6%

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

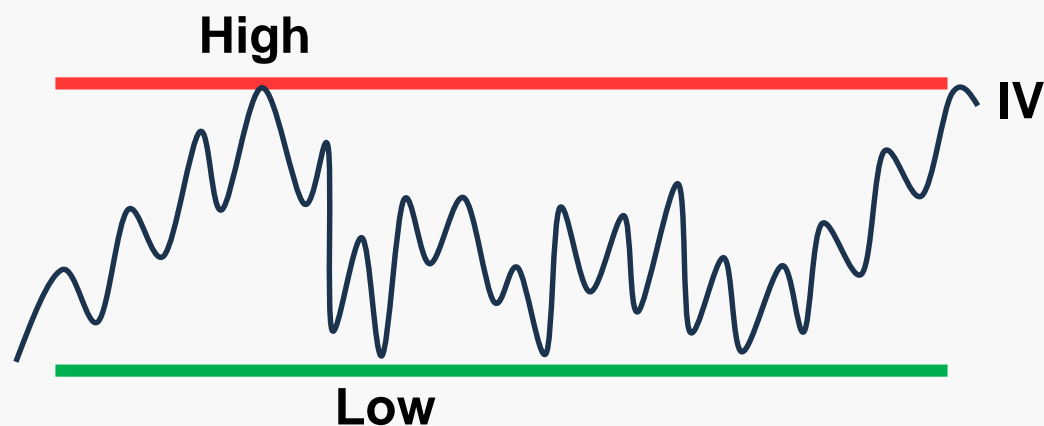
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

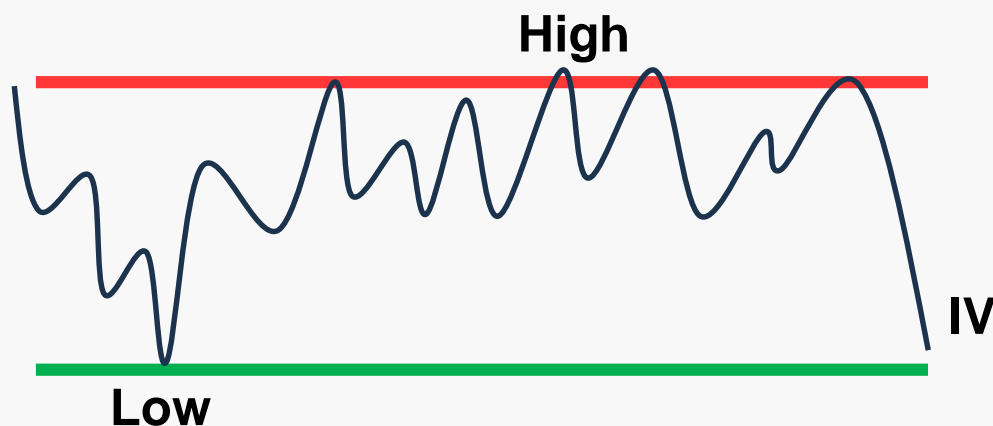
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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), 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

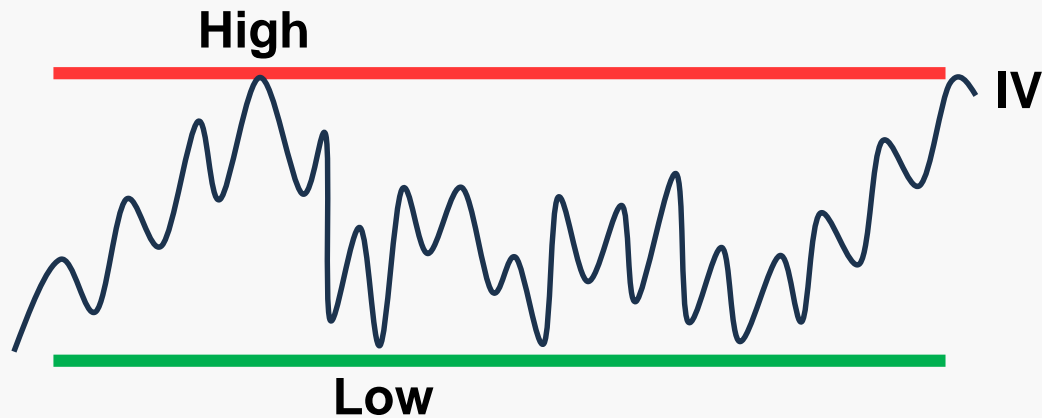


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

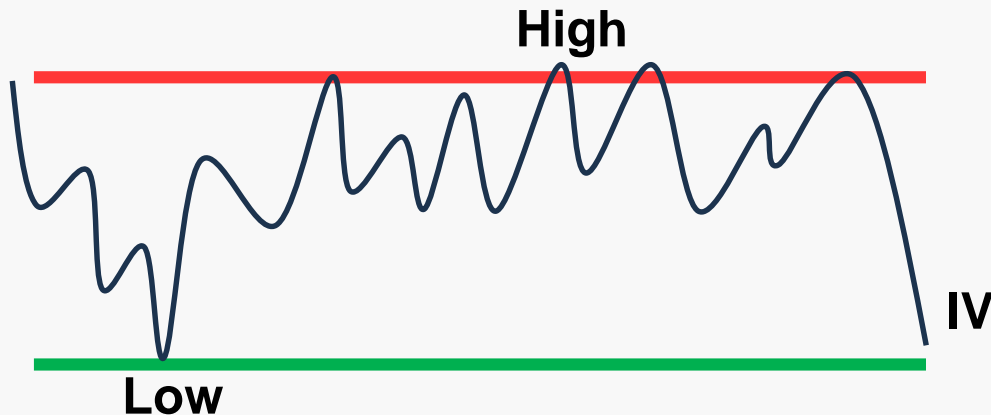


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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