



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,065	1.0% ▼
Open Interest (OI)	1,75,00,195	8.5% ▲
Change in OI (abs)	1,75,00,195	13,64,050 ▲
Premium / Discount (Abs)	104	43 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,553	0.8% ▼
Open interest (OI)	19,87,530	18.3% ▲
Change in OI (abs)	19,87,530	3,07,715 ▲
Premium / Discount (Abs)	314	36 ▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	11.13	0.82 ▲
Nifty ATM IV (%)	9.86	0.88 ▲
Bank Nifty ATM IV (%)	10.57	0.96 ▲
PCR (Nifty)	0.64	0.58 ▼
PCR (Bank Nifty)	0.90	0.18 ▼

The FII Long Ratio in Index Futures **drop** to 12 %, **slide** from 13.8 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TECHM	2,18,59,200	2.0%	1595.9	1.3%
WIPRO	11,84,70,000	0.6%	262.56	0.6%
SHREECEM	2,91,575	0.4%	26235	0.2%
POLICYBZR	74,46,250	-0.1%	1918.1	0.8%
HCLTECH	1,75,92,400	-1.1%	1692.4	0.3%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDIGO	1,14,10,050	26.5%	4948	-8.3%
HINDUNILVR	55,97,700	24.7%	2325.2	-0.8%
KEI	10,97,425	13.3%	4053.9	-2.7%
FEDERALBNK	6,48,55,000	6.0%	258.65	-0.7%
OBEROIRLTY	45,61,550	5.9%	1601.3	-3.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HCLTECH	1,75,92,400	-1.1%	1692.4	0.3%
POLICYBZR	74,46,250	-0.1%	1918.1	0.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KAYNES	39,41,200	-10.3%	3880.5	-11.4%
NUVAMA	3,55,850	-6.9%	7161	-0.5%
HEROMOTOCO	54,96,750	-4.9%	6183	-3.1%
MUTHOOTFIN	25,14,600	-4.6%	3774.9	-0.9%
360ONE	16,94,000	-4.1%	1134.1	-1.5%

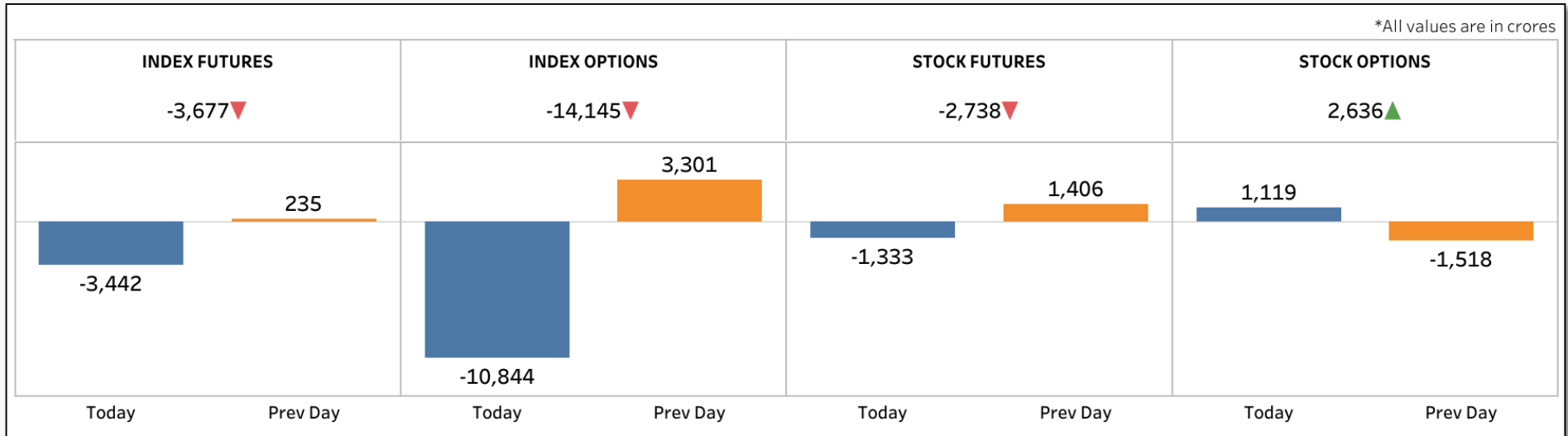
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

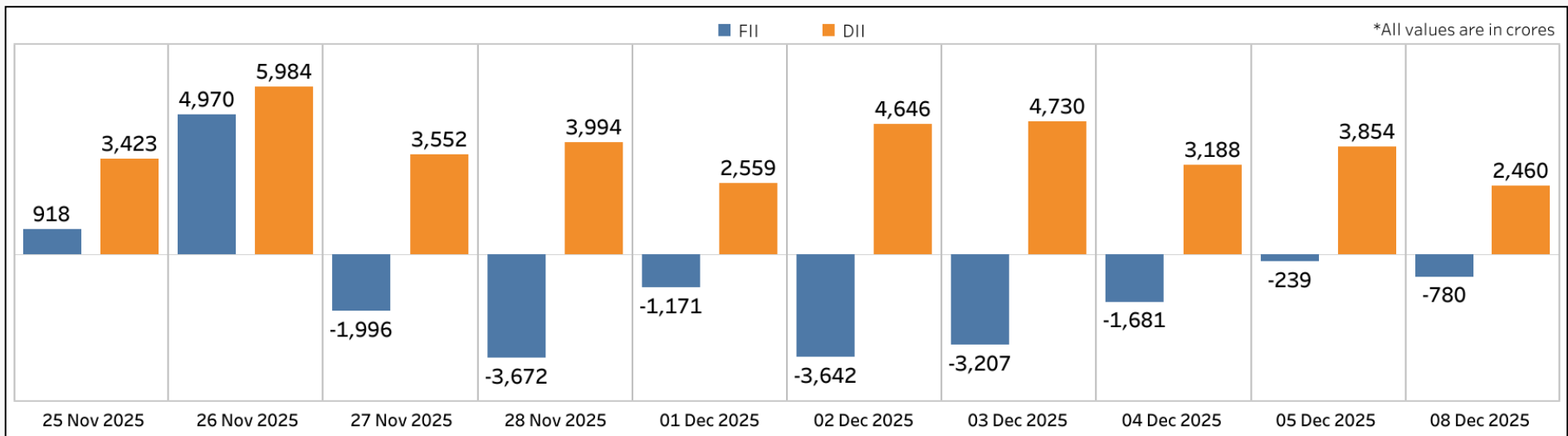
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-180,068 ▼	-18,455 ▼	105,916 ▲	-36,776 ▼	-25 ▼	-8,705 ▼	-5,000 ▼	28,396 ▲
51,529	1,228	73,289	18,701	0	267	2,100	10,589
-128,539	-17,227	-32,627	-18,075	-25		-2,900	-17,807
Net O/S -114,170 Today Prev Day	Net O/S -138,529 Today Prev Day	Net O/S 331,461 Today Prev Day	Net O/S 1,353,798 Today Prev Day	Net O/S 2,925 Today Prev Day	Net O/S 35,235 Today Prev Day	Net O/S 25,424 Today Prev Day	Net O/S -4,523,702 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
526,806 ▲	7,618 ▲	-260,862 ▼	-18,824 ▼	-346,712 ▼	19,542 ▲	159,946 ▲	27,204 ▲
416,605	2,442	120,160	1,379	58,671	14,518	70,313	24,931
-110,201	-5,176	-140,702	-17,445	-288,041	-5,024	-89,633	-2,273
Net O/S 295,468 Today Prev Day	Net O/S 88,522 Today Prev Day	Net O/S -518,413 Today Prev Day	Net O/S 2,635,588 Today Prev Day	Net O/S -184,223 Today Prev Day	Net O/S 14,772 Today Prev Day	Net O/S 161,529 Today Prev Day	Net O/S 534,316 Today Prev Day

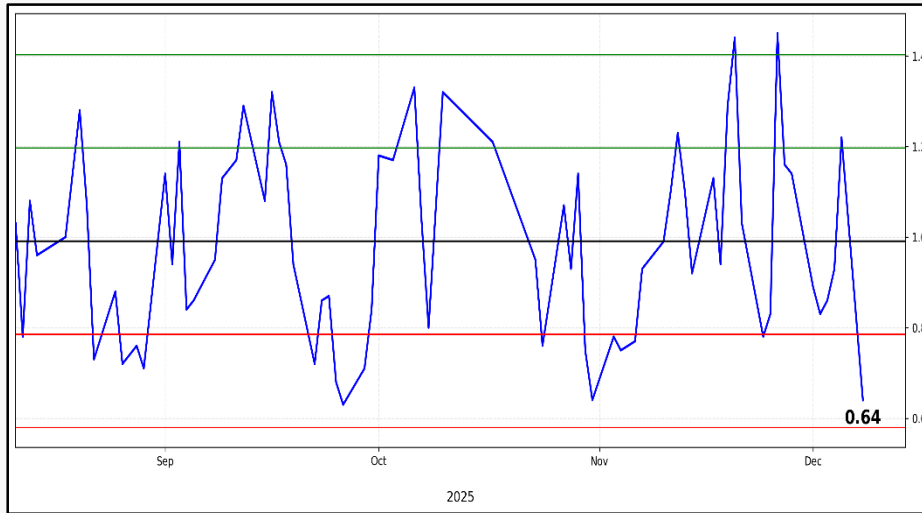
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



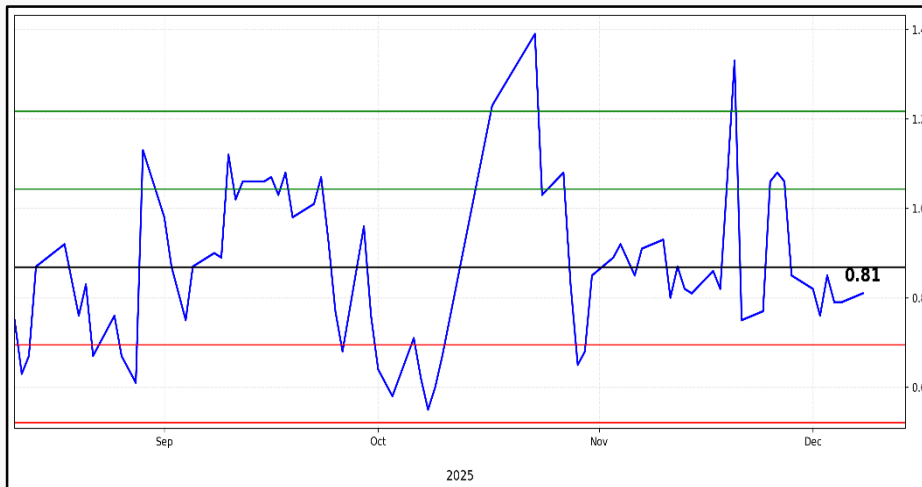
Nifty



Bank Nifty



Fin Nifty

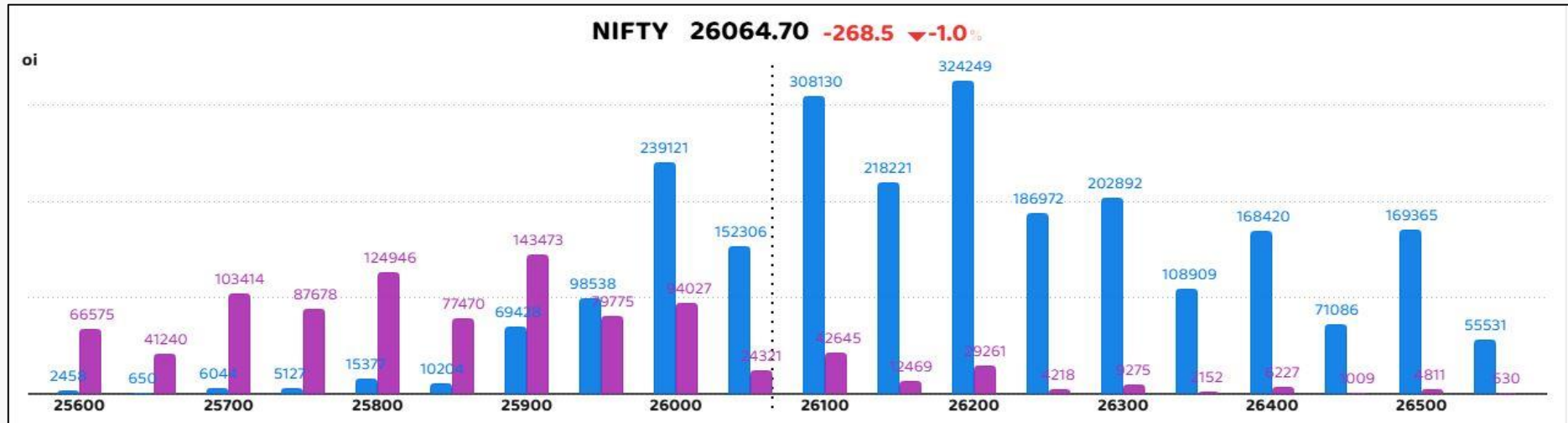


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,200 Call and 25,900 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.

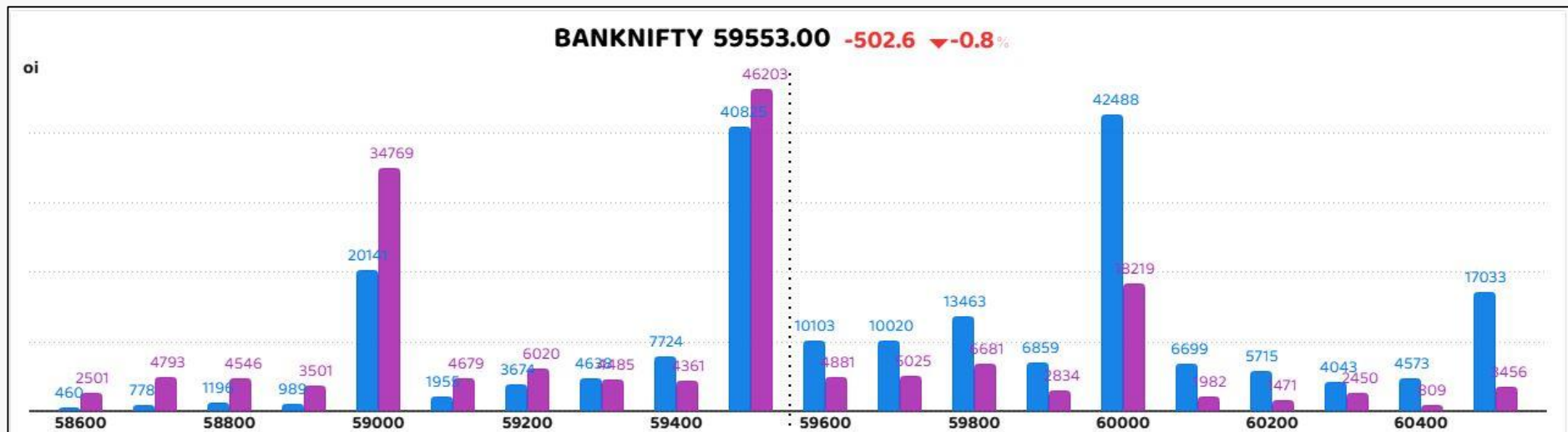
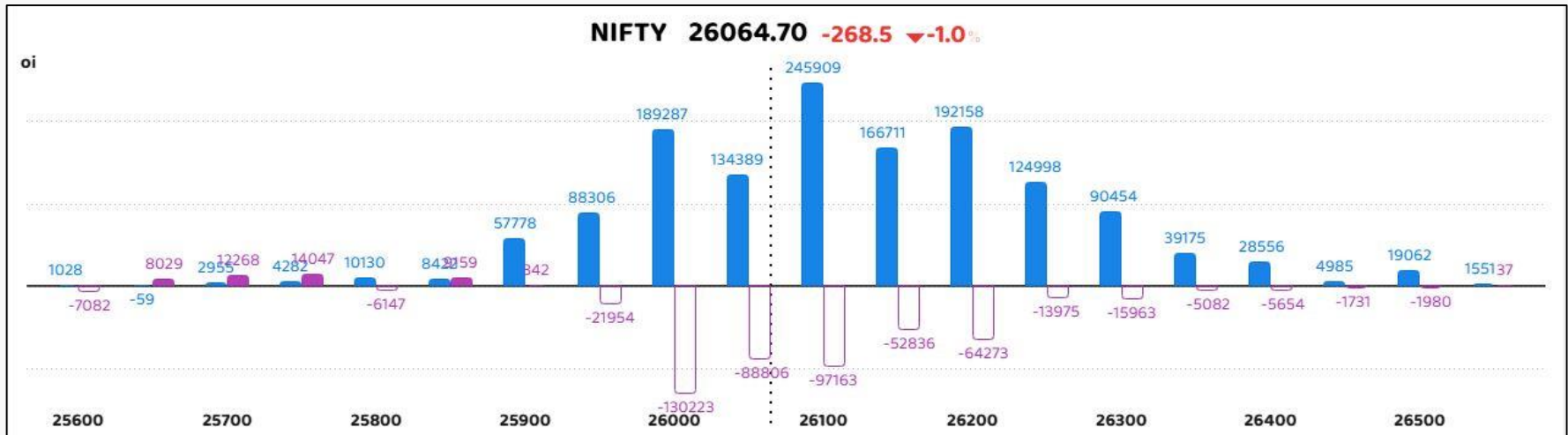


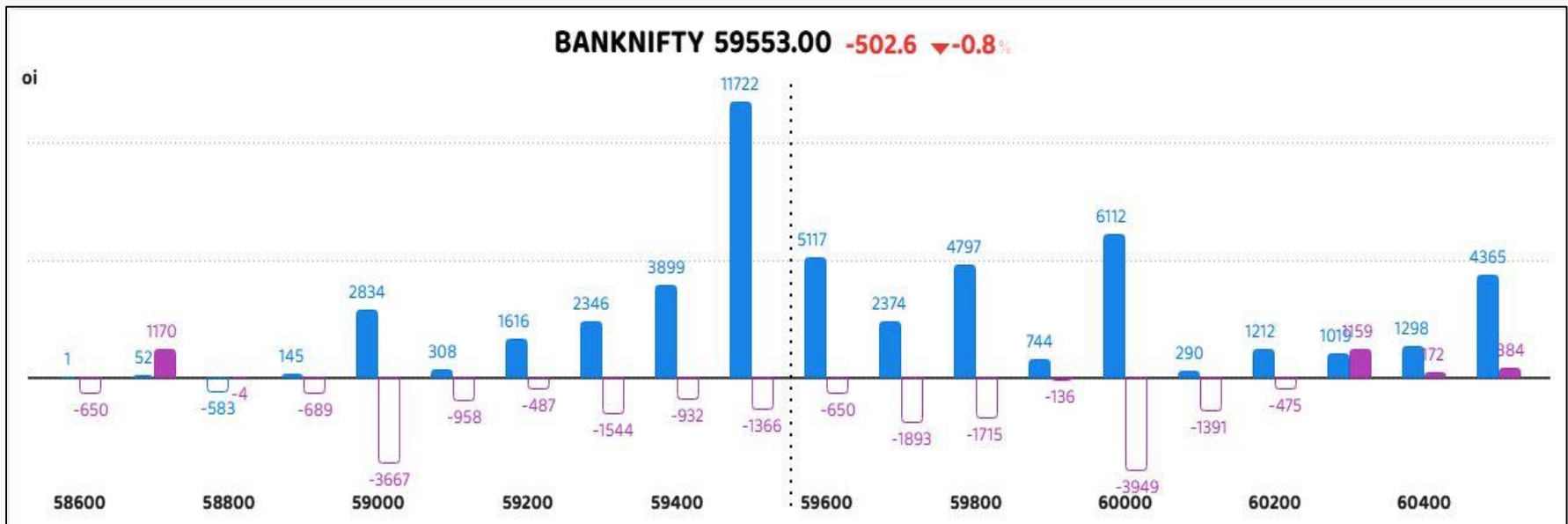
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,100 Call and the 26,000 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,500 Call & the 60,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INTERGLOBE AVIAT	4,923.5	-8.3	42.7	43.2	13.2	98.6
BHARAT ELECTRON	386.4	-5.0	51.0	60.0	13.8	80.5
LTIMINDTREE LTD	6,256.0	-0.6	36.0	43.3	6.8	79.9
STEEL AUTHORITY	129.8	-2.1	64.2	91.3	0.6	70.1
HINDUSTAN UNILEV	2,314.0	-1.1	16.5	25.8	0.8	62.8

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CONTAINER CORP	500.2	-2.1	17.4	47.4	17.4	0.0
DABUR INDIA LTD	504.5	-1.1	17.7	37.5	17.6	0.4
NTPC LTD	319.5	-1.2	16.6	116.6	14.9	1.7
WIPRO LTD	261.4	0.6	20.7	93.6	19.1	2.1
BANDHAN BANK LTD	135.5	-3.3	17.5	66.9	15.9	3.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
KAYNES TECHNOLOG	3,807.0	-12.6	59.6	59.6	30.3	100.0
INTERGLOBE AVIAT	4,923.5	-8.3	42.7	43.2	13.2	99.9
BHARAT ELECTRON	386.4	-5.0	51.0	60.0	13.8	99.7
STEEL AUTHORITY	129.8	-2.1	64.2	91.3	0.6	98.4
LTIMINDTREE LTD	6,256.0	-0.6	36.0	43.3	6.8	92.1

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
APL APOLLO TUBES	1,736.1	-2.0	15.4	43.9	15.4	0.0
CONTAINER CORP	500.2	-2.1	17.4	47.4	17.4	0.0
DABUR INDIA LTD	504.5	-1.1	17.7	37.5	17.6	0.7
NHPC LTD	76.4	-0.8	22.7	53.0	21.6	0.7
BANDHAN BANK LTD	135.5	-3.3	17.5	66.9	15.9	0.8

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
MAXHEALTH	1,079.4	-1.6	15,822	3,526	4.5
MFSL	1,695.3	0.3	11,062	2,479	4.5
TMPV	348.3	-1.5	1,14,208	26,100	4.4
CROMPTON	252.7	-2.8	7,632	1,898	4.0
KFINTECH	1,042.0	-2.3	5,599	1,404	4.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
INDIGO	4,923.5	-8.3	4,39,821	6,68,497	1.5
AUBANK	952.6	-0.8	3,486	3,575	1.0
MARUTI	16,187.0	-0.6	34,866	34,613	1.0
HEROMOTOCO	6,167.0	-2.9	30,127	29,853	1.0
APLAPOLLO	1,736.1	-2.0	14,043	12,898	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BEL	386.4	-5.0	56,306	54,965	100.0
INDIANB	779.1	-3.7	10,939	10,032	100.0
INDIGO	4,923.5	-8.3	80,378	38,838	100.0
JSWSTEEL	1,119.1	-3.7	25,752	25,360	100.0
POWERINDIA	19,040.0	-1.4	11,401	10,028	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
INDIGO	4,923.5	-8.3	50,382	27,652	100.0
INOXWIND	124.5	-4.4	6,576	6,446	100.0
TMPV	348.3	-1.5	40,362	41,434	97.4
JSWENERGY	453.8	-1.8	9,660	10,025	96.4
HUDCO	212.8	-5.5	6,254	6,714	93.1

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
INDIGO	4,923.5	-8.3	4,39,821	2,22,582	100.0
POWERINDIA	19,040.0	-1.4	31,883	60,733	52.5
BEL	386.4	-5.0	1,17,401	2,44,424	48.0
IDEA	10.3	-4.7	37,340	90,380	41.3
TMPV	348.3	-1.5	1,14,208	2,87,427	39.7

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
INDIGO	4,923.5	-8.3	6,68,497	2,28,465	100.0
POWERINDIA	19,040.0	-1.4	18,434	30,860	59.7
BEL	386.4	-5.0	67,666	1,24,088	54.5
INOXWIND	124.5	-4.4	5,894	12,089	48.8
APLAPOLLO	1,736.1	-2.0	12,898	26,835	48.1

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
INDIGO	4,923.5	-8.3	80,378	18,765	4.3
POWERINDIA	19,040.0	-1.4	11,401	5,829	2.0
KAYNES	3,807.0	-12.6	57,962	30,161	1.9
ANGELONE	2,542.6	-3.8	19,006	9,970	1.9
INDIANB	779.1	-3.7	10,939	6,147	1.8

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
INDIGO	4,923.5	-8.3	50,382	13,688	3.7
KAYNES	3,807.0	-12.6	21,312	11,750	1.8
JSWSTEEL	1,119.1	-3.7	13,382	8,342	1.6
TIINDIA	2,566.8	-3.7	2,950	1,984	1.5
NHPC	76.4	-0.8	3,103	2,093	1.5

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
INDIGO	4,923.5	-8.3	4,39,821	43,528	10.1
GODREJPROP	1,975.1	-5.2	30,076	9,641	3.1
POLICYBZR	1,913.9	1.1	27,708	9,921	2.8
DLF	687.4	-4.5	41,195	17,922	2.3
HFCL	66.5	-3.7	15,603	6,837	2.3

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
INDIGO	4,923.5	-8.3	6,68,497	32,113	20.8
GODREJPROP	1,975.1	-5.2	24,852	3,501	7.1
APLAPOLLO	1,736.1	-2.0	12,898	3,185	4.0
DALBHARAT	1,993.8	0.2	10,007	2,631	3.8
MAZDOCK	2,483.7	-5.1	23,943	7,519	3.2

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	2300	2436156	3.8%	2216	2300	1061724	3.8%	JIOFIN	310	9952250	4.3%	297	300	7188650	0.9%
ADANIPTS	1600	1968400	8.1%	1481	1500	802750	1.3%	JSWSTEEL	1200	4825575	7.2%	1119	1100	1536300	-1.7%
APOLLOHOSP	7500	347500	5.7%	7096	7500	116875	5.7%	KOTAKBANK	2200	1042800	3.2%	2132	2100	806800	-1.5%
ASIANPAINT	3000	726000	2.4%	2928	2900	464250	-1.0%	LT	4100	715575	2.6%	3997	4000	438375	0.1%
AXISBANK	1300	3356250	2.1%	1274	1280	886875	0.5%	M&M	3800	1039600	3.2%	3682	3700	494600	0.5%
BAJAJ-AUTO	9500	250275	5.3%	9026	9000	150225	-0.3%	MARUTI	16500	233200	1.9%	16187	15000	214500	-7.3%
BAJAJFINSV	2100	868250	2.0%	2059	2000	376000	-2.9%	MAXHEALTH	1180	754425	9.3%	1079	1160	450975	7.5%
BAJFINANCE	1100	3137250	7.2%	1026	1000	1918500	-2.6%	NESTLEIND	1320	2540000	8.7%	1215	1180	313500	-2.9%
BEL	420	13500450	8.7%	386	400	4686825	3.5%	NTPC	325	7027500	1.7%	320	300	2319000	-6.1%
BHARTIARTL	2200	2639100	5.5%	2086	2100	1328100	0.7%	ONGC	250	9864000	4.8%	239	240	1831500	0.6%
CIPLA	1660	942000	10.8%	1498	1410	563625	-5.8%	POWERGRID	280	4837400	5.6%	265	260	2593500	-2.0%
COALINDIA	380	2808000	0.7%	377	375	1593000	-0.6%	RELIANCE	1600	9874500	3.7%	1543	1500	2542500	-2.8%
DRREDDY	1300	1834375	2.6%	1267	1140	385625	-10.0%	SBILIFE	2060	681000	1.9%	2021	1840	277125	-8.9%
EICHERMOT	7300	312725	2.2%	7142	6300	241325	-11.8%	SBIN	1000	8860500	4.6%	956	950	3578250	-0.7%
ETERNAL	310	18083225	8.7%	285	290	4973675	1.7%	SHRIRAMFIN	880	2573175	5.5%	834	800	2013825	-4.1%
GRASIM	2800	612500	2.0%	2744	2700	567500	-1.6%	SUNPHARMA	1840	1237600	2.4%	1796	1800	218400	0.2%
HCLTECH	1720	1029000	1.9%	1689	1440	512750	-14.7%	TATACONSUM	1200	1206150	4.7%	1146	1070	375650	-6.6%
HDFCBANK	1000	4460500	-0.3%	1003	1000	4224550	-0.3%	TMPV	400	13100800	14.8%	348	360	5198400	3.4%
HDFCLIFE	800	4029300	4.7%	764	700	1465200	-8.4%	TATASTEEL	175	31669000	7.1%	163	170	13255000	4.0%
HINDALCO	800	2148300	-2.4%	819	800	1478400	-2.4%	TCS	3200	982100	-1.1%	3237	3200	613725	-1.1%
HINDUNILVR	2400	697200	3.7%	2314	2300	321000	-0.6%	TECHM	1600	1048200	0.5%	1592	1500	523200	-5.8%
ICICIBANK	1400	6968500	0.7%	1390	1400	3833900	0.7%	TITAN	4000	471625	6.2%	3767	3600	297150	-4.4%
INDIGO	5500	1514400	11.7%	4924	4500	1164150	-8.6%	TRENT	4300	780400	5.1%	4091	4300	319100	5.1%
INFY	1600	7122400	-0.7%	1611	1600	2774800	-0.7%	ULTRACEMCO	12000	143300	4.0%	11540	10800	133550	-6.4%
ITC	410	10716800	1.9%	402	390	9321600	-3.1%	WIPRO	285	5163000	9.0%	261	250	3246000	-4.4%

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

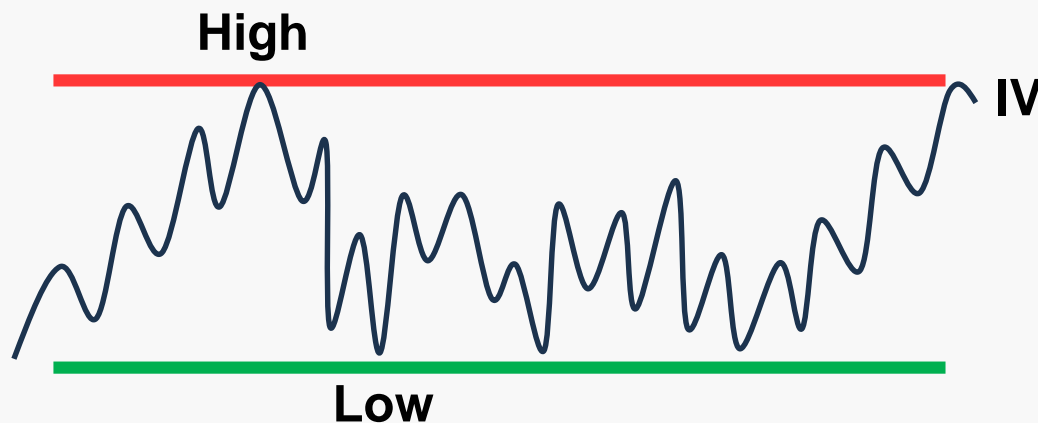
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

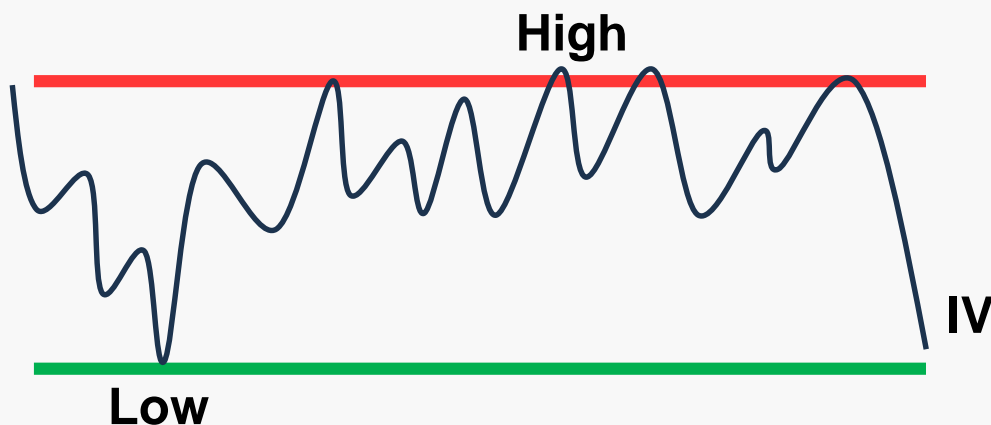
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

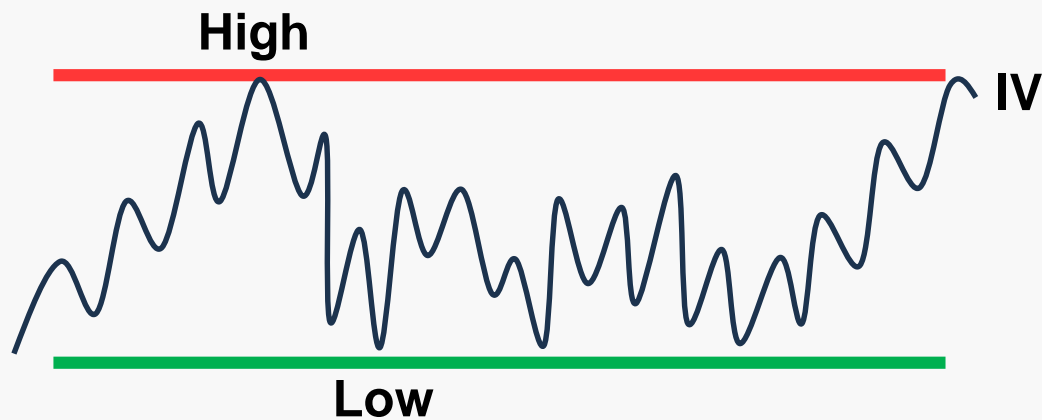


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

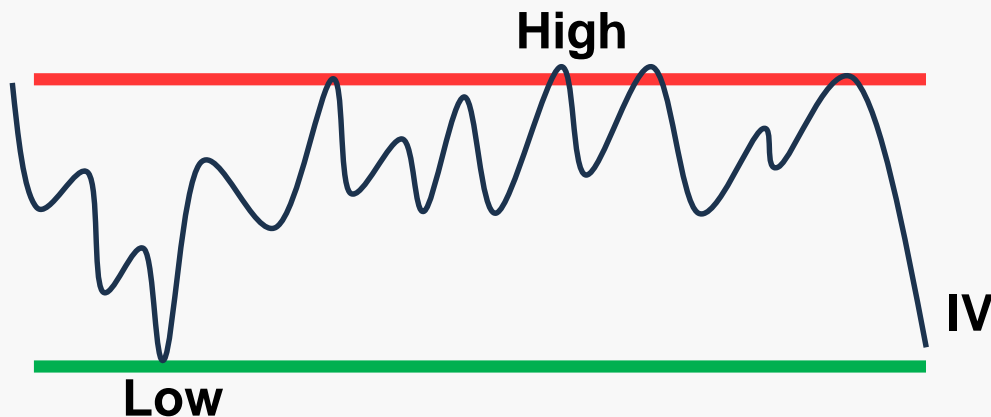


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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