

**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change	
Most recent settlement	24,803	0.1%▼	
Open Interest (OI)	1,83,23,400	0.7%▲	
Change in OI (abs)	1,83,23,400	1,31,025▲	
Premium / Discount (Abs)	10	5▼	
Inference	Short Build Up		

**Bank Nifty Futures** 

	Value	Change	
Most recent settlement	55,655	0.4%▼	
Open interest (OI)	22,46,785	1.3%▼	
Change in OI (abs)	22,46,785	28,935▼	
Premium / Discount (Abs)	78	7▲	
Inference	Long Unwinding		

**Volatility Insights** 

	Value	Change
India VIX Index	14.26	0.02▼
Nifty ATM IV (%)	13.83	0.2▼
Bank Nifty ATM IV (%)	14.54	0.2▼
PCR (Nifty)	1.03	0.23 ▲
PCR (Bank Nifty)	0.72	0.07▼

The FII Long Ratio in Index Futures **rose** to 22.3%, **up** from 20.5% in the previous session.

## **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
MARUTI	34,06,900	4.2%	12751	0.4%			
ETERNAL	20,67,72,000	2.8%	250.24	0.5%			
JUBLFOOD	2,06,36,250	1.8%	685.25	0.2%			
HEROMOTOCO	53,77,650	1.8%	4377.7	0.3%			
HDFCBANK	11,46,42,000	0.6%	1939.6	0.2%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
KPITTECH	39,65,600	20.6%	1389	-2.0%			
SBICARD	1,45,81,600	14.3%	941.5	-3.5%			
ATGL	61,04,625	12.0%	619.25	-4.8%			
BDL	25,76,925	10.9%	1889	-1.2%			
JSWENERGY	3,35,87,500	6.5%	481.65	-4.6%			

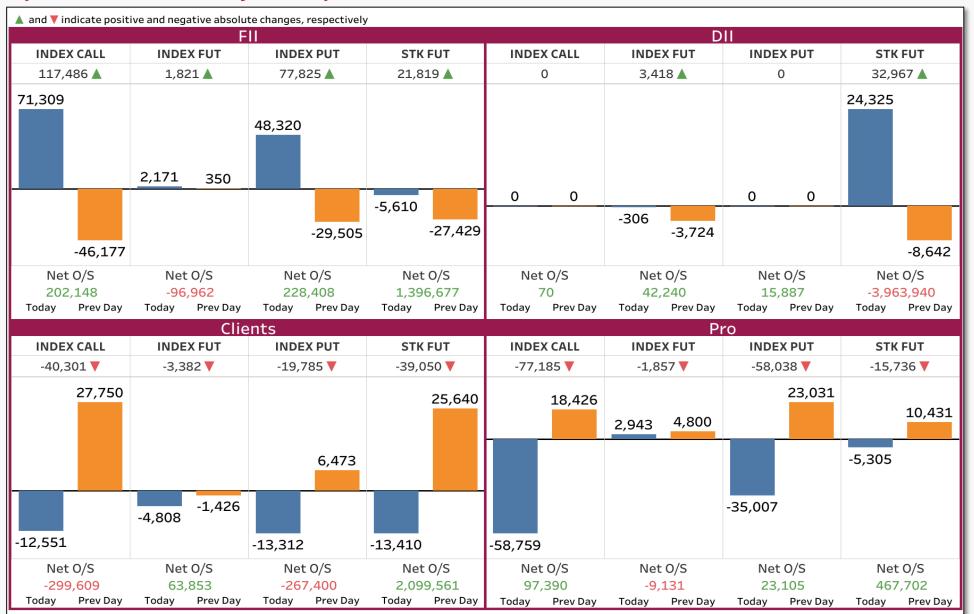
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
BIOCON	4,52,80,000	-9.2%	345.65	1.0%			
APOLLOHOSP	26,07,750	-4.1%	7007	1.0%			
EICHERMOT	37,77,375	-3.2%	5494	1.6%			
BHARTIARTL	4,66,96,775	-2.4%	1876.4	0.6%			
LT	1,56,76,050	-2.1%	3621.2	0.5%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol Open Interest Chg (%) Price Chg (%)							
MGL	28,83,200	-5.3%	1392.4	-2.6%			
PAGEIND	1,58,265	-4.1%	44845	-0.9%			
ADANIPORTS	2,39,71,575	-3.4%	1340.4	-2.5%			
PRESTIGE	38,89,350	-3.0%	1673.4	-1.1%			
BSOFT	1,18,31,900	-2.5%	413.35	-2.6%			

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

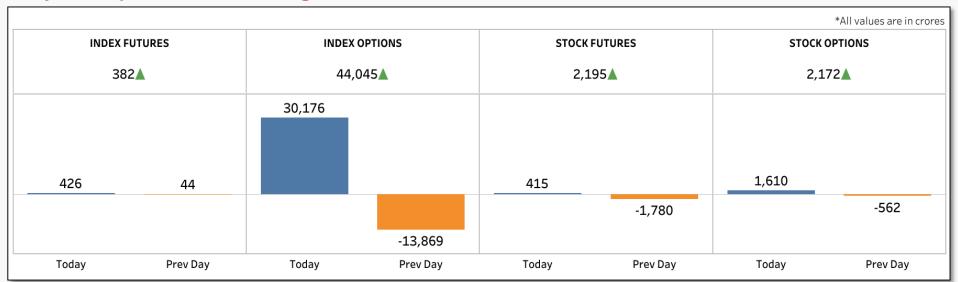


### **Open Interest Trends by Participant**

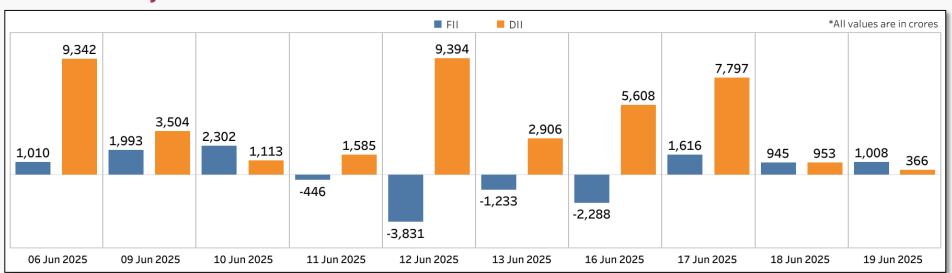




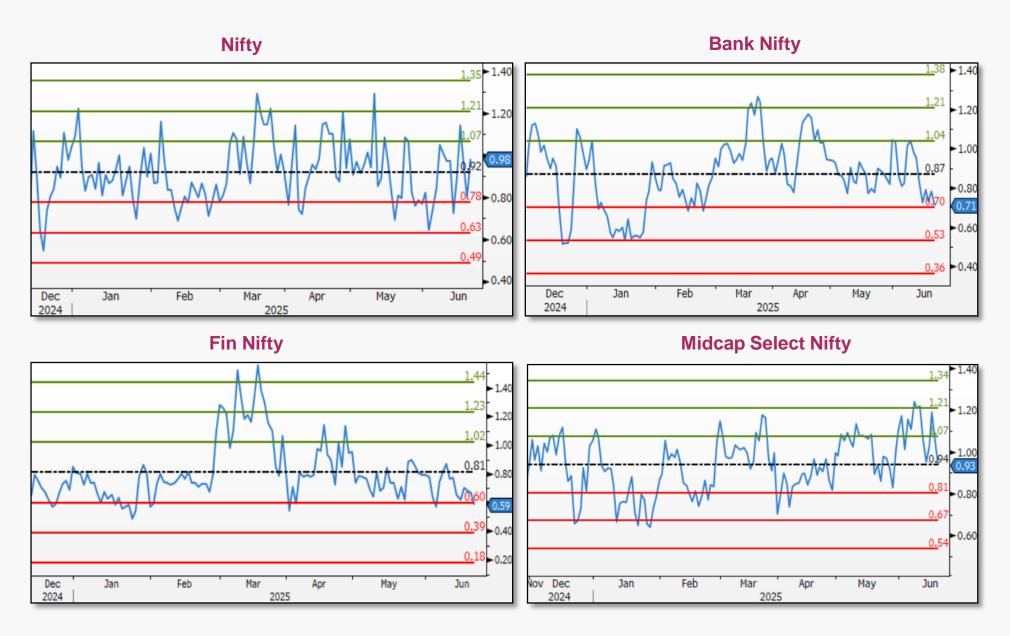
### **Daily Net Open Interest Change**



# **DII and FII Daily Cash Market Flows**



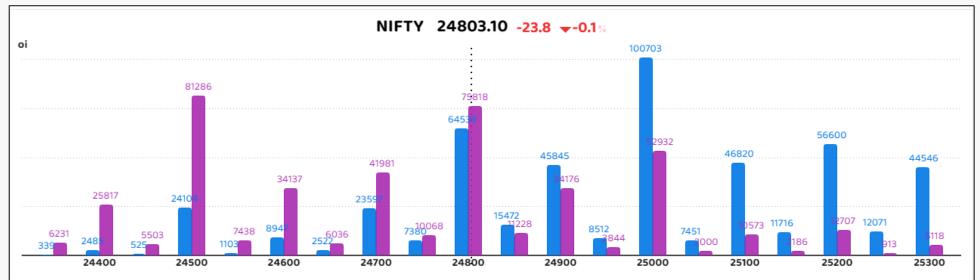




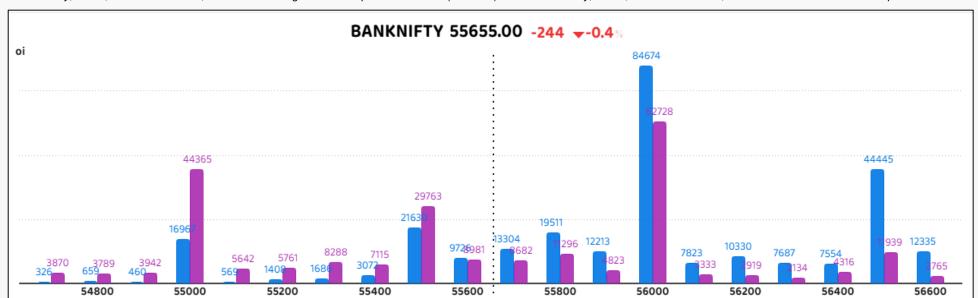


#### Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





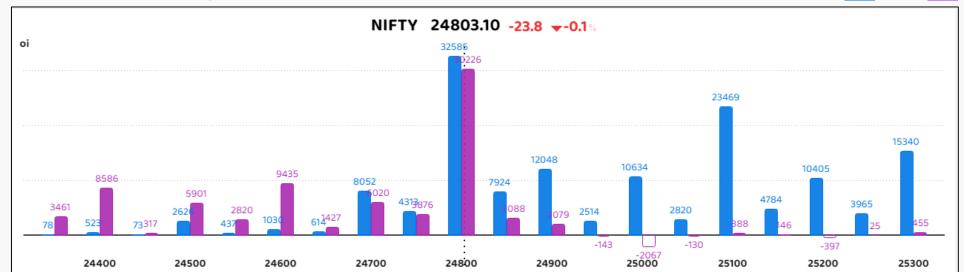
For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 56,000 Put saw the most amount of open interest.



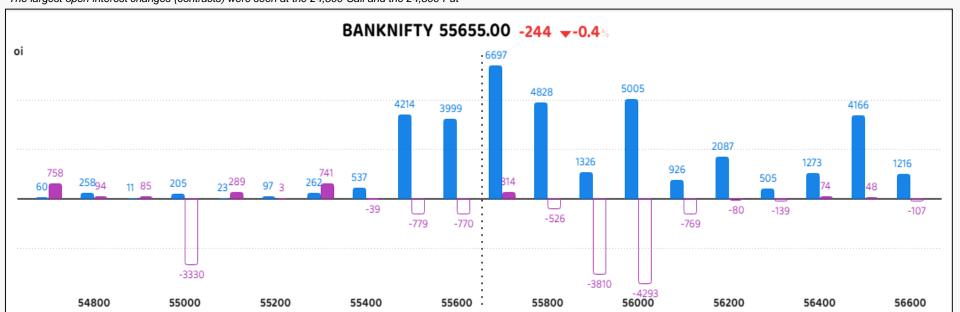








The largest open interest changes (contracts) were seen at the 24,800 Call and the 24,800 Put





# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADITYA BIRLA FASHION	72.47	-2.6	97.3	97.3	9.9	100.0
MARUTI SUZUKI	12806	0.5	22.4	29.9	0.4	74.7
RBL BANK LTD	223.84	-2.0	59.5	76.5	13.3	73.1
BIRLASOFT LTD	413.65	-2.5	40.3	52.7	10.1	70.8
ICICI LOMBARD	1927.5	-0.2	28.9	38.2	9.9	67.0

#### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BANK OF BARODA	231.66	-2.1	22.7	66.9	22.7	0.0
REC LTD	383.65	-2.3	8.0	57.8	8.0	0.0
MANKIND PHARMA	2325.2	-1.4	27.1	33.2	27.1	0.0
PHOENIX MILLS	1566.3	-2.4	30.5	64.3	30.5	0.0
KAYNES TECHNOLOGIES	5612	-1.9	32.2	49.4	32.2	0.0



## **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RBL BANK LTD	223.84	-2.0	59.5	76.5	13.3	96.4
ICICI LOMBARD	1927.5	-0.2	28.9	38.2	9.9	87.3
TATA CONSULTANCY	3424	-0.8	22.2	57.2	1.3	73.4
OBEROI REALTY	1880.3	-0.8	36.1	50.6	23.1	72.5
L&T FINANCE LTD	187.51	-0.7	34.2	67.0	5.4	65.0

#### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BANK OF BARODA	231.66	-2.1	22.7	66.9	22.7	0.0
REC LTD	383.65	-2.3	8.0	57.8	8.0	0.0
MANKIND PHARMA	2325.2	-1.4	27.1	33.2	27.1	0.0
PHOENIX MILLS	1566.3	-2.4	30.5	64.3	30.5	0.0
KAYNES TECHNOLOGIES	5612	-1.9	32.2	49.4	32.2	0.0



## **Stocks With High Call Volume To Put Volume**

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BOSCH LTD	32375	0.0	9928	1449	6.9
SONA BLW PRECISION	478.05	-0.1	6778	1569	4.3
EICHER MOTORS	5493.5	1.9	87132	23496	3.7
EXIDE INDUS LTD	374.75	-0.9	10579	3040	3.5
UNITED SPIRITS	1460.8	-0.1	22467	6585	3.4

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
NCC LTD	219.32	-1.9	4333	7092	1.6
PI INDUSTRIES	4108.4	-0.7	5108	7064	1.4
SBI CARDS	939.7	-3.4	18265	23542	1.3
FORTIS HEALTHCARE	748.1	-1.4	1620	1925	1.2
MAX FINANCIAL	1576.3	-0.6	3587	4219	1.2



#### **Call Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDUSTAN ZINC	437.45	-3.4	42347	42347	100.0
MAZAGON DOCK	3223.5	-1.0	31320	31320	100.0
MANKIND PHARMA	2325.2	-1.4	2891	2891	100.0
BHARAT DYNAMICS	1884.3	-1.1	16334	16334	100.0
SUPREME INDS LTD	4417.29	-3.8	5468	5468	100.0

#### **Put Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
HINDUSTAN ZINC	437.45	-3.4	18224	18224	100.0
MUTHOOT FINANCE	2637.1	0.1	16262	16262	100.0
RAIL VIKAS NIGAM	381.95	-4.0	4526	4526	100.0
BHARAT DYNAMICS	1884.3	-1.1	6214	6214	100.0
KAYNES TECHNOLOGIES	5612	-1.9	1749	1749	100.0



## **Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
BHARAT DYNAMICS	1884.3	-1.1	52574	52574	100.0

### **Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Chg (%) Total Put Vol		Relative to Highest PV
	NO STOCK OPTION MET	THE CONDITIO	N MENTIONED IN THI	E FOOTNOTE	



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
HINDUSTAN ZINC	437.45	-3.4	42347	12158	3.5
POLYCAB INDIA	5822	-2.8	15025	7113	2.1
KAYNES TECHNOLOGIES	5612	-1.9	3627	1753	2.1
UNITED SPIRITS	1460.8	-0.1	28896	14241	2.0
ONE 97 COMMUNICATIONS	868.2	-2.6	25964	12803	2.0

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
HINDUSTAN ZINC	437.45	-3.4	18224	5447	3.3
OIL INDIA LTD	469.85	0.0	5724	3024	1.9
UNITED SPIRITS	1460.8	-0.1	12639	7000	1.8
BHARAT DYNAMICS	1884.3	-1.1	6214	3455	1.8
BLUE STAR LTD	1591.7	-2.4	1765	1021	1.7



## **Call Volume Relative to 20-day Average**

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
EICHER MOTORS	5493.5	1.9	87132	15858	5.5
TATA CONSUMER	1088.3	2.2	58116	10913	5.3
CYIENT LTD	1289.2	-5.0	38611	7704	5.0
TITAN CO LTD	3505.4	1.1	102662	23851	4.3
KPIT TECHNOLOGIES	1393	-2.0	31075	9355	3.3

## **Put Volume Relative to 20-day Average**

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
CYIENT LTD	1289.2	-5.0	38838	3761	10.3
KPIT TECHNOLOGIES	1393	-2.0	19430	3227	6.0
EICHER MOTORS	5493.5	1.9	23496	5820	4.0
SBI CARDS	939.7	-3.4	23542	6037	3.9
BHARAT DYNAMICS	1884.3	-1.1	17558	4592	3.8



### 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	2700	1485600	11.5%	2421	2700	929400	11.5%	ITC	440	11038400	5.8%	416	420	5180800	1.0%
ADANIPORTS	1500	1854800	12.1%	1338	1400	915200	4.6%	JIOFIN	300	11167200	5.6%	284	290	4004550	2.1%
APOLLOHOSP	7100	302750	1.3%	7010	6900	157500	-1.6%	JSWSTEEL	1020	1225125	2.4%	996	840	486000	-15.7%
ASIANPAINT	2280	1476600	0.5%	2268	2200	1224400	-3.0%	KOTAKBANK	2200	1004800	2.5%	2146	2100	580000	-2.2%
AXISBANK	1250	4798750	2.7%	1218	1200	1506250	-1.4%	LT	3740	1194000	3.3%	3621	3600	461850	-0.6%
BAJAJ-AUTO	9000	580725	5.9%	8496	8500	153975	0.0%	M&M	3100	1059275	0.2%	3095	3000	964950	-3.1%
BAJAJFINSV	2100	1894500	6.7%	1968	2000	568000	1.6%	MARUTI	12500	313750	-2.4%	12806	12500	194000	-2.4%
BAJFINANCE	1000	8851250	11.0%	901	900	2831250	-0.1%	NESTLEIND	2500	301000	7.8%	2319	2340	194800	0.9%
BEL	400	12998850	0.4%	399	380	6489450	-4.7%	NTPC	340	11062500	3.0%	330	340	3405000	3.0%
BHARTIARTL	2000	3747275	6.6%	1877	1860	1705250	-0.9%	ONGC	255	18456900	1.4%	252	250	3212825	-0.6%
CIPLA	1600	1146275	7.8%	1484	1320	545350	-11.1%	POWERGRID	300	8780400	4.7%	286	270	2683800	-5.7%
COALINDIA	400	6410250	4.1%	384	400	3366300	4.1%	RELIANCE	1500	6027500	4.7%	1433	1400	2843000	-2.3%
DRREDDY	1300	1174375	-2.0%	1326	1300	755625	-2.0%	SBILIFE	1860	1128750	3.9%	1789	1800	322875	0.6%
EICHERMOT	5500	320075	0.1%	5494	5400	152250	-1.7%	SBIN	820	13073250	4.4%	785	820	5274000	4.4%
ETERNAL	270	8812000	8.3%	249	240	8360000	-3.8%	SHRIRAMFIN	700	2151000	7.3%	652	660	942000	1.2%
GRASIM	2700	338250	0.3%	2693	2600	227750	-3.5%	SUNPHARMA	1700	2595600	3.2%	1648	1660	737800	0.8%
HCLTECH	1720	1191750	0.4%	1714	1700	570150	-0.8%	TATACONSUM	1200	1098960	10.3%	1088	1080	261288	-0.8%
HDFCBANK	2000	6505950	3.3%	1935	1940	3242800	0.2%	TATAMOTORS	740	9218550	10.1%	672	650	3130600	-3.3%
HDFCLIFE	800	3569500	5.0%	762	730	684200	-4.2%	TATASTEEL	161.4	17605500	6.9%	151	146.4	7645000	-3.0%
HEROMOTOCO	4400	689850	0.4%	4384	4200	219000	-4.2%	TCS	3500	1761025	2.2%	3424	3400	859250	-0.7%
HINDALCO	700	3304000	9.1%	641	600	840000	-6.4%	TECHM	1700	933000	1.0%	1684	1600	930600	-5.0%
HINDUNILVR	2400	2817300	4.6%	2294	2300	807000	0.3%	TITAN	3600	463400	2.7%	3505	3400	358750	-3.0%
ICICIBANK	1450	4662000	2.7%	1411	1450	1944600	2.7%	TRENT	5800	620400	1.3%	5724	5500	337500	-3.9%
INDUSINDBK	820	3866500	-2.1%	838	800	2987000	-4.5%	ULTRACEMCO	12000	205550	5.1%	11420	9800	117500	-14.2%
INFY	1640	2364800	1.3%	1618	1600	1644800	-1.1%	WIPRO	270	7152000	1.7%	266	260	6021000	-2.1%



- 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

<sup>\*</sup>ATM IV is the midpoint of the IV for the ATM call and put respectively

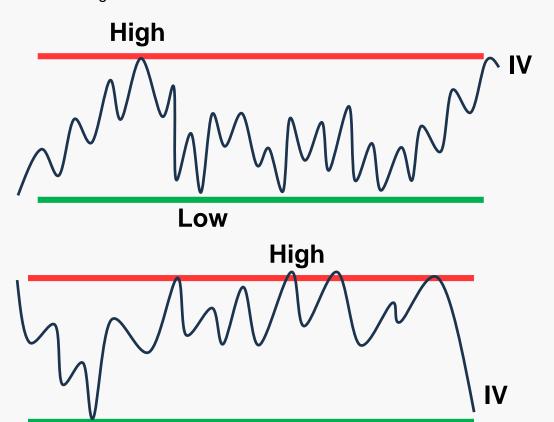


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the 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): <u>www.nseindia.com</u>, Bloomberg, MyFnO



Low

- 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

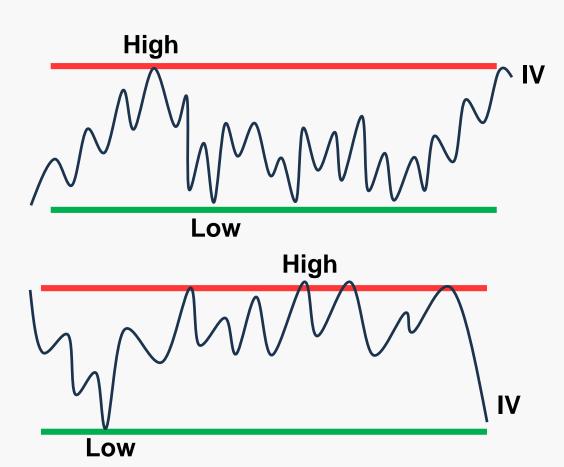


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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