

**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change
Most recent settlement	25,036	0.6%▲
Open Interest (OI)	1,97,39,400	1.7%▲
Change in OI (abs)	1,97,39,400	3,25,500▲
Premium / Discount (Abs)	40	13▲
Inference	Long Build Up	

**Bank Nifty Futures** 

	Value	Change	
Most recent settlement	55,687	0.3%▲	
Open interest (OI)	21,75,665	1.7%▲	
Change in OI (abs)	21,75,665	36,385▲	
Premium / Discount (Abs)	115	18▲	
Inference	Long Build Up		

**Volatility Insights** 

	Value	Change
India VIX Index	18.02	0.74 ▲
Nifty ATM IV (%)	22.71	6.8▲
Bank Nifty ATM IV (%)	25.80	8.6 ▲
PCR (Nifty)	1.06	0.03▼
PCR (Bank Nifty)	0.89	0.01▼

The Long Ratio for FII Index Futures jump at 34.7%, up from 32,9% in the last session..

# **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
M&MFIN	3,53,15,912	12.4%	257.45	0.2%			
NCC	1,75,61,500	11.6%	235.18	0.7%			
MFSL	69,64,000	8.8%	1479.7	0.7%			
SAIL	15,83,99,200	8.8%	127.83	1.5%			
HUDCO	3,10,38,800	7.9%	238.3	4.3%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
ETERNAL	27,63,92,325	18.8%	226.2	-5.0%			
GLENMARK	75,58,450	9.8%	1393.4	-2.1%			
ABFRL	3,40,93,800	8.6%	87	-2.3%			
BSOFT	1,11,84,800	7.3%	418.1	-1.7%			
INDUSTOWER	7,00,21,300	6.3%	381.25	-0.7%			

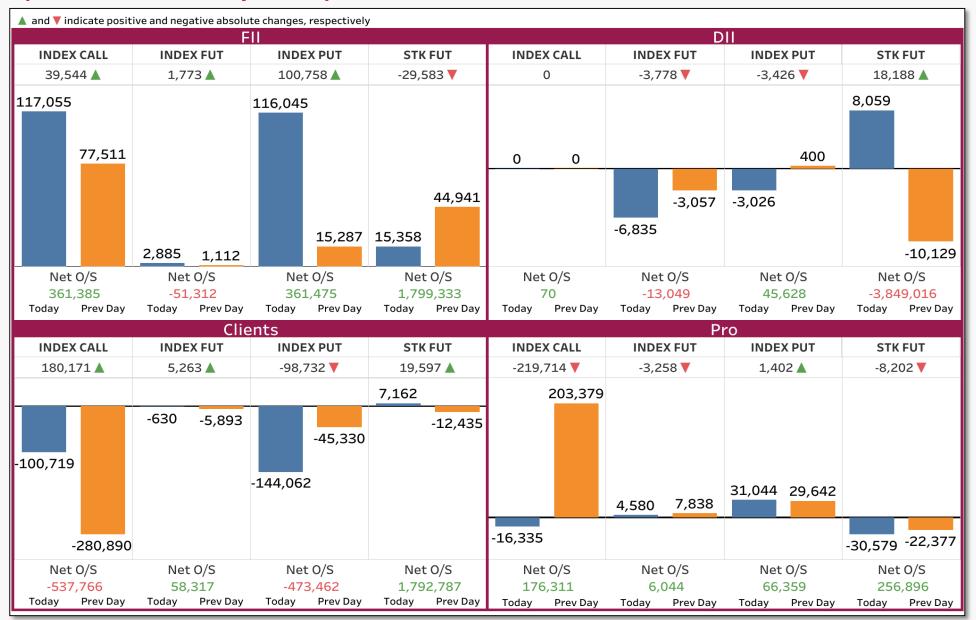
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
APOLLOTYRE	35,64,900	-19.8%	496.95	0.5%			
MRF	42,665	-18.0%	146620	1.9%			
IRFC	7,81,92,000	-12.7%	140.56	2.7%			
CDSL	1,60,17,975	-11.6%	1472.7	0.5%			
ASHOKLEY	5,69,07,500	-10.3%	240.25	0.1%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Symbol Open Interest Chg (%) Price Chg						
ESCORTS	7,71,000	-21.3%	3502.3	-0.4%			
ANGELONE	36,11,550	-17.6%	2990.4	-3.0%			
CESC	1,85,90,875	-9.0%	169.85	-0.1%			
RAMCOCEM	51,78,200	-9.0%	983.05	-2.3%			
INDIANB	57,04,950	-8.6%	594.95	-0.1%			

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

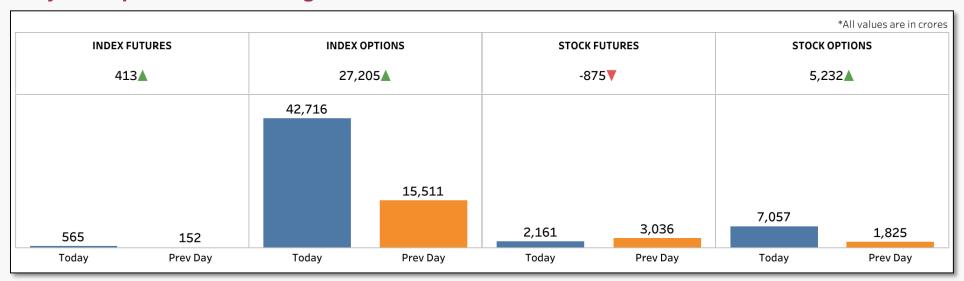


## **Open Interest Trends by Participant**

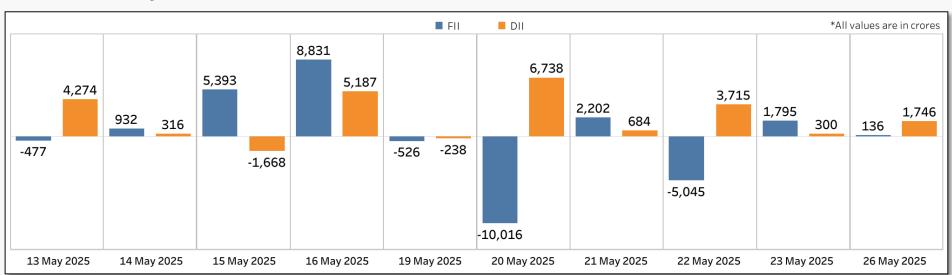




## **Daily Net Open Interest Change**

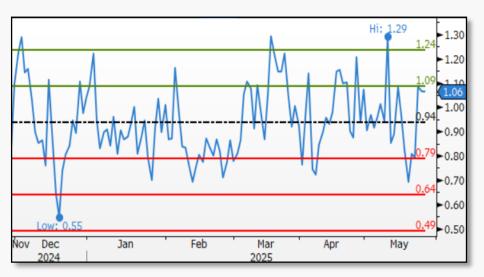


# **DII and FII Daily Cash Market Flows**









## **Bank Nifty**



**Fin Nifty** 



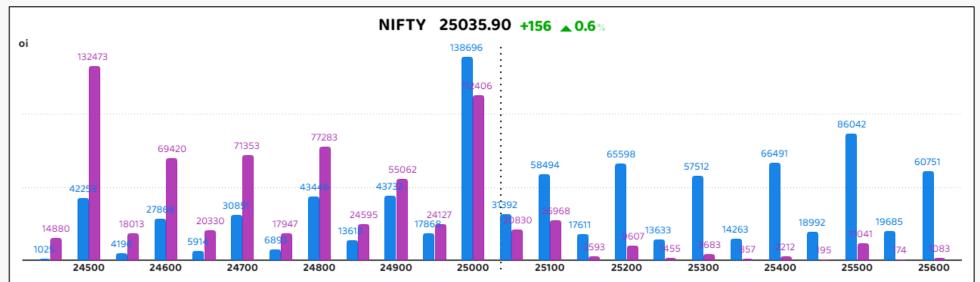
## **MIdcap Select Nifty**



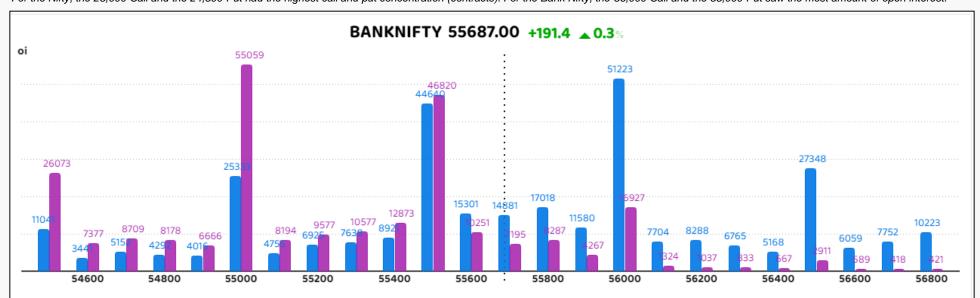


### Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





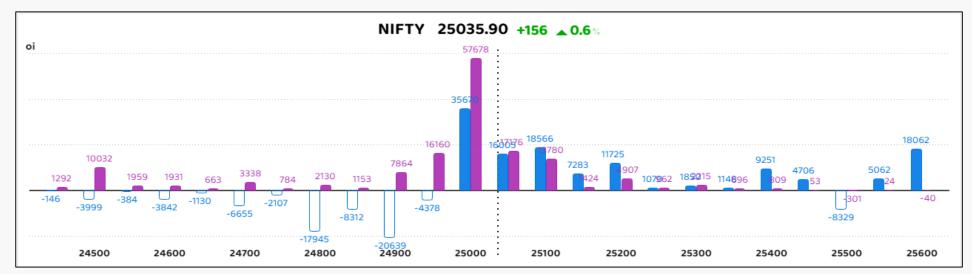
For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.



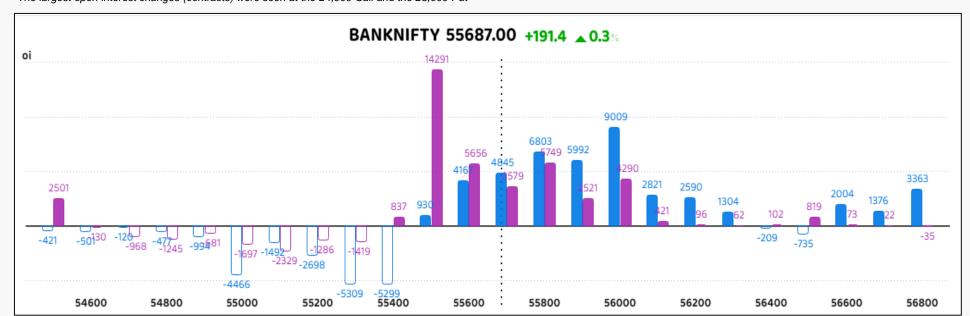


## **Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)**





The largest open interest changes (contracts) were seen at the 24,900 Call and the 25,000 Put





# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DEEPAK NITRITE	2045.2	-1.2	49.2	50.0	21.4	97.4
BAJAJ AUTO LTD	8958.5	2.5	32.8	36.4	2.1	89.4
DIXON TECHNOLOGI	15085	0.4	42.4	53.0	1.8	79.3
ASTRAL LTD	1508.7	3.6	33.1	42.9	2.9	75.5
RAMCO CEMENT/THE	982.75	-2.3	32.4	43.6	0.5	74.1

### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INDIAN RENEWABLE	173.55	1.0	43.5	69.2	42.7	3.2
BANK OF BARODA	241.52	-0.6	26.7	66.9	24.3	5.6
APOLLO TYRES LTD	495.15	0.1	22.4	46.7	20.8	6.2
INDIAN OIL CORP	143.58	-0.3	25.8	51.7	23.7	7.5
HDFC LIFE INSURA	780	-0.1	24.9	80.6	19.6	8.6



# **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DEEPAK NITRITE	2045.2	-1.2	49.2	50.0	21.4	99.3
BAJAJ AUTO LTD	8958.5	2.5	32.8	36.4	2.1	97.4
AUROBINDO PHARMA	1180.9	-1.4	38.1	53.8	22.4	94.0
INFO EDGE	1473.5	-1.0	41.9	54.0	23.7	93.9
ADITYA BIRLA FAS	86.75	-2.0	43.0	66.6	9.9	93.5

#### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
APOLLO TYRES LTD	495.15	0.1	22.4	46.7	20.8	2.0
CHAMBAL FERTILIS	586.8	-1.3	27.8	77.1	4.3	6.0
YES BANK LTD	20.99	-0.8	33.0	55.3	29.4	6.6
COAL INDIA LTD	402.7	0.3	23.5	53.6	4.3	7.4
INDIAN OIL CORP	143.58	-0.3	25.8	51.7	23.7	9.7



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SUPREME INDS LTD	4036.2	3.1	21301	3894	5.5
JUBILANT FOODWOR	661.55	-0.4	8908	1913	4.7
YES BANK LTD	20.99	-0.8	7229	1637	4.4
TORRENT POWER LT	1426.1	1.7	6844	1578	4.3
DIXON TECHNOLOGI	15085	0.4	12568	3009	4.2

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
CESC LTD	169.26	-0.6	1737	5942	3.4
APL APOLLO TUBES	1838.3	0.4	4020	5853	1.5
DALMIA BHARAT LT	2056.1	-4.1	8218	10856	1.3
INDUSIND BANK	800.1	0.8	54937	65012	1.2
BIRLASOFT LTD	418.55	-1.5	8916	9922	1.1



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

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
SOLAR INDUSTRIES	15885	3.6	10833	10833	100.0
SUN PHARMA INDU	1676.1	-0.4	49320	49320	100.0
VODAFONE IDEA LT	6.93	2.5	46492	47601	97.7
HFCL LTD	85.97	-1.3	10507	11002	95.5
APL APOLLO TUBES	1838.3	0.4	8607	9042	95.2

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

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
INDIAN RAILWAY F	140.18	2.5	11633	11633	100.0
IIFL FINANCE LTD	416.5	0.3	5928	5928	100.0
SOLAR INDUSTRIES	15885	3.6	12562	12562	100.0
TATA TECHNOLOGIE	763.4	-0.2	7925	7925	100.0
ASTRAL LTD	1508.7	3.6	8466	8466	100.0



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

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
SOLAR INDUSTRIES	15885	3.6	114895	114895	100.0
SONA BLW PRECISI	545	1.4	23771	23771	100.0
JSW STEEL LTD	1032.3	2.4	138839	138839	100.0
HOUSING & URBAN	238.26	4.6	57023	57023	100.0

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

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
SOLAR INDUSTRIES	15885	3.6	48263	48263	100.0
JSW STEEL LTD	1032.3	2.4	87434	87434	100.0
BALKRISHNA INDS	2492	-6.3	44542	44542	100.0
IIFL FINANCE LTD	416.5	0.3	7331	9058	80.9



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BALKRISHNA INDS	2492	-6.3	8112	2335	3.5
SOLAR INDUSTRIES	15885	3.6	10833	3180	3.4
ASHOK LEYLAND	239.89	0.1	21899	9327	2.3
COLGATE PALMOLIV	2510.3	1.2	13751	6352	2.2
TORRENT PHARMA	3187.4	0.4	5565	2711	2.1

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SOLAR INDUSTRIES	15885	3.6	12562	2814	4.5
BALKRISHNA INDS	2492	-6.3	6321	1674	3.8
MAX FINANCIAL SE	1476.5	0.4	4305	2098	2.1
ANGEL ONE LTD	2989	-2.9	15468	7936	1.9
DIVI LABS LTD	6737	3.9	17247	9286	1.9



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

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
BALKRISHNA INDS	2492	-6.3	70560	5554	12.7
JSW STEEL LTD	1032.3	2.4	138839	25389	5.5
GLENMARK PHARMA	1390.1	-2.1	35578	7673	4.6
DIVI LABS LTD	6737	3.9	218380	48039	4.5
ASHOK LEYLAND	239.89	0.1	70662	16672	4.2

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

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
BALKRISHNA INDS	2492	-6.3	44542	3288	13.5
JSW STEEL LTD	1032.3	2.4	87434	16363	5.3
GLENMARK PHARMA	1390.1	-2.1	21804	4398	5.0
DALMIA BHARAT LT	2056.1	-4.1	10856	2510	4.3
DIVI LABS LTD	6737	3.9	80996	20286	4.0



## 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	1411200	2.1%	2548	2400	711000	-5.8%	ITC	440	9064000	-0.7%	443	430	5340800	-2.9%
ADANIPORTS	1400	1796400	0.0%	1400	1400	853200	0.0%	JIOFIN	300	5662800	6.5%	282	250	3333000	-11.3%
APOLLOHOSP	7200	212500	1.5%	7097	7000	120250	-1.4%	JSWSTEEL	1050	1331775	1.7%	1032	1000	1612575	-3.1%
ASIANPAINT	2500	841400	7.4%	2327	2300	466800	-1.2%	KOTAKBANK	2200	1644800	5.3%	2089	1860	778400	-11.0%
AXISBANK	1220	3061250	0.4%	1215	1200	2190000	-1.3%	LT	3500	854400	-4.1%	3649	3600	694500	-1.3%
BAJAJ-AUTO	9000	205275	0.5%	8959	8800	111150	-1.8%	M&M	3200	1042650	3.9%	3080	3000	487550	-2.6%
BAJAJFINSV	2100	3191000	2.3%	2053	2000	597500	-2.6%	MARUTI	13000	466100	4.7%	12421	12000	228900	-3.4%
BAJFINANCE	10000	602875	7.9%	9270	9000	455250	-2.9%	NESTLEIND	2500	485800	1.9%	2454	2380	129200	-3.0%
BEL	390	11841750	1.4%	385	380	7025250	-1.2%	NTPC	350	15054000	1.9%	344	345	4797000	0.4%
BHARTIARTL	1900	3684100	2.8%	1847	1800	1601700	-2.6%	ONGC	250	11305525	1.7%	246	240	4645025	-2.4%
CIPLA	1600	1440075	7.8%	1484	1300	434525	-12.4%	POWERGRID	310	4199400	4.5%	297	290	1598400	-2.3%
COALINDIA	410	4692450	1.8%	403	400	2692200	-0.7%	RELIANCE	1450	7209500	1.1%	1435	1400	3803500	-2.4%
DRREDDY	1240	1597500	-0.1%	1241	1150	668125	-7.3%	SBILIFE	1780	1632375	-1.2%	1802	1780	525750	-1.2%
EICHERMOT	5600	387100	3.2%	5428	4500	136150	-17.1%	SBIN	800	12240000	0.7%	794	800	3849000	0.7%
ETERNAL	240	12500000	5.8%	227	230	7784000	1.4%	SHRIRAMFIN	700	2098500	5.3%	665	600	1419750	-9.7%
GRASIM	2800	402750	5.4%	2656	2700	149750	1.6%	SUNPHARMA	1700	2492350	1.4%	1676	1600	803950	-4.5%
HCLTECH	1700	1400700	1.6%	1674	1580	762650	-5.6%	TATACONSUM	1300	758784	13.4%	1146	1100	483360	-4.0%
HDFCBANK	1980	5182650	2.1%	1940	1920	2253900	-1.0%	TATAMOTORS	800	6310700	9.7%	729	700	3479300	-4.0%
HDFCLIFE	760	1861200	-2.6%	780	720	1991000	-7.7%	TATASTEEL	160	20812000	-1.5%	163	155	14432000	-4.6%
HEROMOTOCO	4500	409350	3.2%	4359	3900	208350	-10.5%	TCS	3600	1030575	1.8%	3537	3400	478800	-3.9%
HINDALCO	700	4020800	5.8%	661	650	1169000	-1.7%	TECHM	1600	774000	-0.1%	1601	1580	531000	-1.3%
HINDUNILVR	2400	1126500	0.2%	2394	2400	447300	0.2%	TITAN	3500	271250	-3.1%	3610	3500	458500	-3.1%
ICICIBANK	1460	4349100	0.0%	1461	1400	1887900	-4.1%	TRENT	6000	467100	8.6%	5526	5200	252400	-5.9%
INDUSINDBK	850	2714500	6.2%	800	750	2662000	-6.3%	ULTRACEMCO	12500	266200	6.9%	11689	10000	89400	-14.4%
INFY	1600	3107600	1.2%	1581	1500	1162800	-5.1%	WIPRO	300	9798000	19.9%	250	250	3021000	-0.1%



- 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

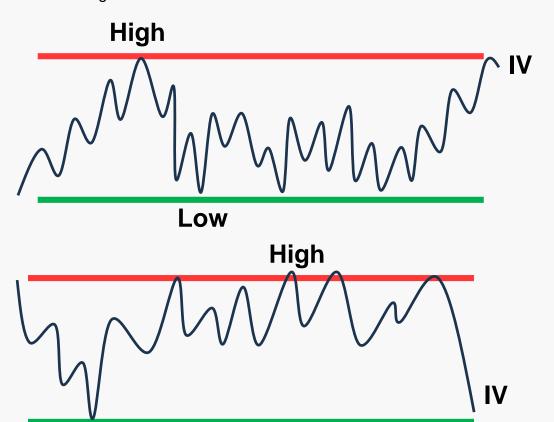


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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

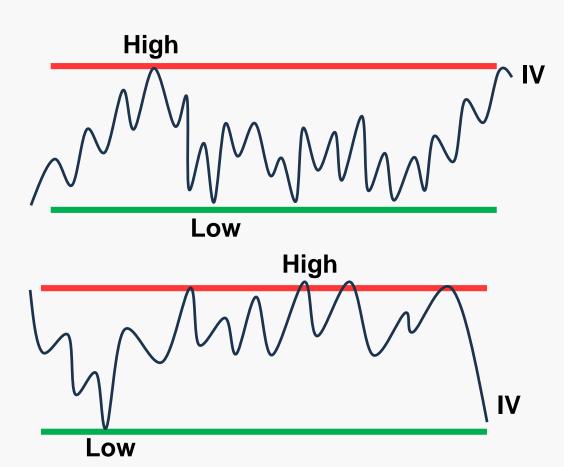


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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