



**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change
Most recent settlement	24,813	0.5%▲
Open Interest (OI)	1,77,42,300	0.4%▲
Change in OI (abs)	1,77,42,300	67,275▲
Premium / Discount (Abs)	98	14▼
Inference	Long Build Up	

**Bank Nifty Futures** 

	Value	Change	
Most recent settlement	54,039	0.6%▲	
Open interest (OI)	31,97,950	2.3%▼	
Change in OI (abs)	31,97,950	71,995▼	
Premium / Discount (Abs)	378	72▼	
Inference	Short Covering		

**Volatility Insights** 

	Value	Change
India VIX Index	10.93	0.47▼
Nifty ATM IV (%)	9.89	0.4▼
Bank Nifty ATM IV (%)	10.92	0.5▼
PCR (Nifty)	1.21	0.22 ▲
PCR (Bank Nifty)	0.93	0.07 ▲

The FII Long Ratio in Index Futures drop to 8 %, down from 8.01 % in the previous session.

## **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
PPLPHARMA	1,26,17,500	18.0%	201.91	7.5%			
RBLBANK	8,69,88,650	10.1%	270.6	0.1%			
KALYANKJIL	2,64,29,275	6.9%	515.8	1.1%			
PIIND	18,23,150	5.9%	3793.5	0.5%			
NYKAA	6,99,59,375	5.4%	235.33	2.4%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
INDUSTOWER	9,20,87,300	10.9%	326.2	-1.6%			
RVNL	2,79,55,125	6.4%	323.7	-0.5%			
SAMMAANCAP	5,86,73,500	5.2%	138.91	-0.5%			
PHOENIXLTD	41,34,200	5.0%	1519.6	-3.4%			
PGEL	86,70,900	3.8%	554.9	-1.4%			

Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
KFINTECH	16,21,350	-4.6%	1069	0.7%			
SRF	31,76,600	-3.9%	2957.5	1.4%			
EICHERMOT	40,09,075	-2.8%	6390	0.3%			
COALINDIA	6,94,25,100	-2.7%	392.05	2.7%			
INDIGO	86,28,300	-2.5%	5741.5	1.0%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol Open Interest Chg (%) Price Chg (							
POWERGRID	6,70,03,500	-3.2%	287.15	-0.2%			
SBILIFE	70,31,250	-2.9%	1817.6	-0.1%			
HINDUNILVR	1,48,17,000	-2.1%	2673	-0.7%			
COFORGE	1,10,63,625	-1.3%	1741	-1.2%			
ICICIPRULI	1,10,47,275	-1.3%	611.3	-0.3%			

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

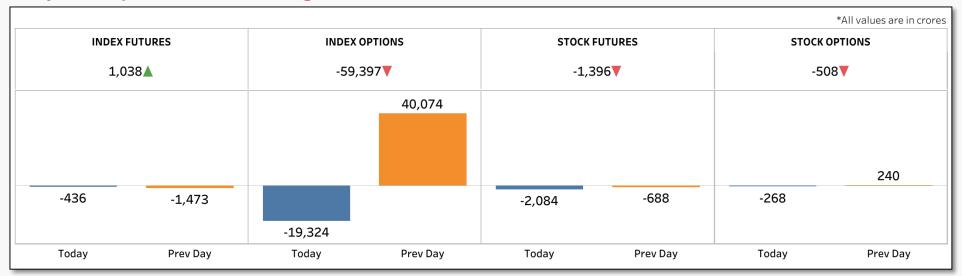


## **Open Interest Trends by Participant**

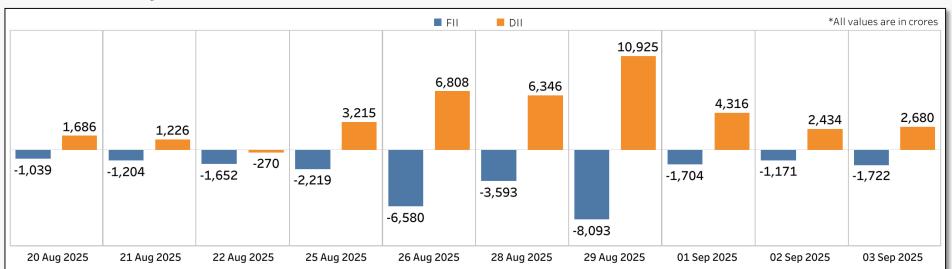




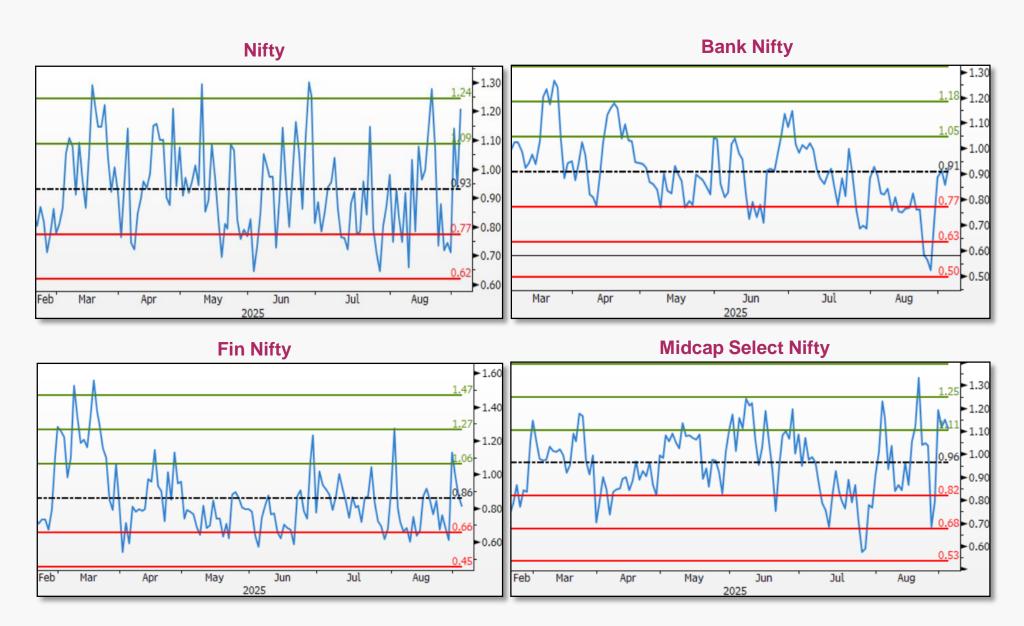
### **Daily Net Open Interest Change**



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



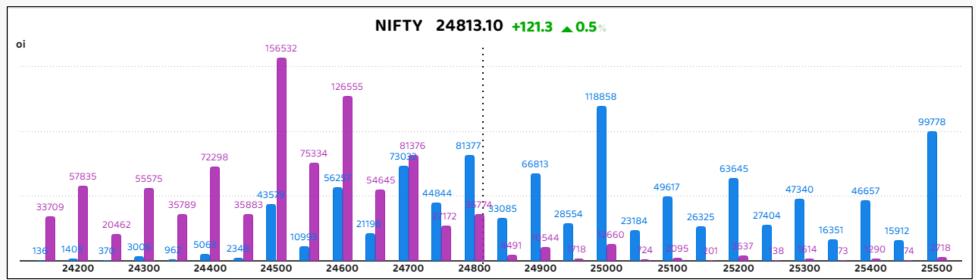




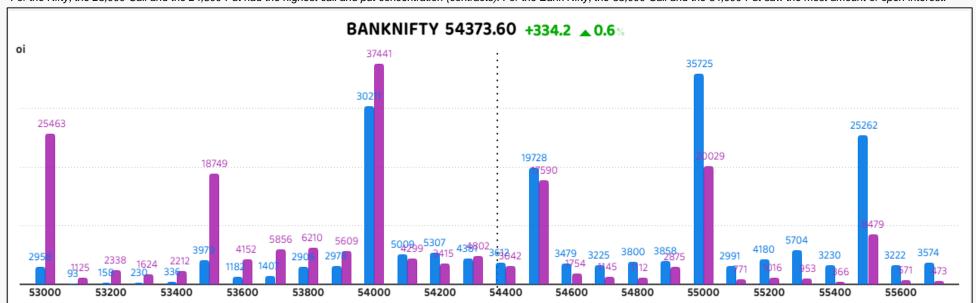


#### Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





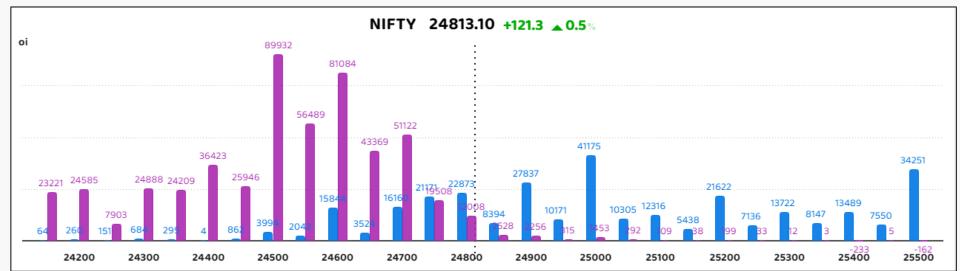
For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 54,000 Put saw the most amount of open interest.



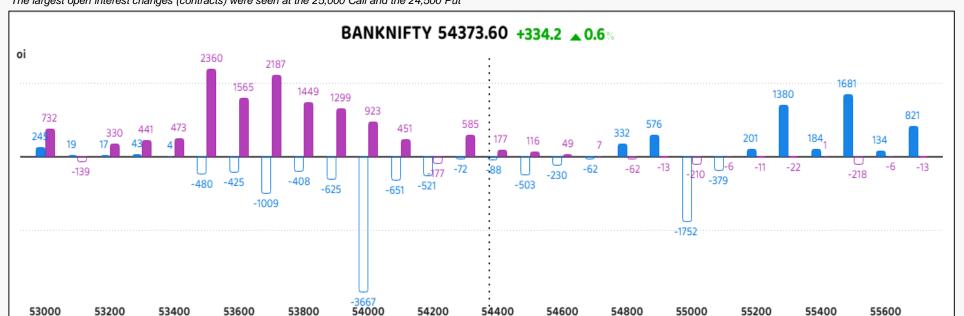


#### **Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)**





The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,500 Put





# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
STATE BANK	803.9	1.0	15.5	39.0	3.1	84.6
BAJAJ AUTO LTD	9030.5	0.9	22.8	36.4	2.1	62.5
MARUTI SUZUKI	14842	0.6	18.0	29.9	0.4	61.8
BOSCH LTD	41315	-0.5	22.4	36.2	2.1	58.6
BLUE STAR LTD	1940.3	1.0	30.2	40.0	23.4	56.4

#### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
POWER FINANCE	392.65	0.4	24.1	51.5	24.1	0.0
WIPRO LTD	250.93	-0.5	22.2	93.6	19.4	0.0
ADANI GREEN	933.85	0.2	30.9	74.3	30.5	0.0
FED BANK LTD	193.56	-0.2	17.2	130.9	17.2	0.0
POONAWALLA FINCORP	425.75	4.0	25.7	66.5	25.7	0.0



# **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
STATE BANK	803.9	1.0	15.5	39.0	3.1	3.6
HERO MOTOCORP	5312	0.7	27.4	37.4	22.1	60.8
HINDUSTAN UNILEVER	2677	-0.5	18.5	25.8	14.1	42.6
PG ELECTROPLAST	560.3	-1.3	45.8	63.7	35.6	68.0
DABUR INDIA LTD	544.6	-0.2	22.9	37.5	11.6	71.6

#### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SUZLON ENERGY	58.25	-0.4	29.7	50.1	29.7	0.0
KFIN TECHNOLOGIES	1057	0.9	31.4	44.8	31.4	0.0
BHARAT DYNAMICS	1471.1	-0.4	28.6	46.7	28.6	0.0
MAZAGON DOCK	2731	-0.6	32.9	48.4	32.9	0.0
BAJAJ FINSERV LTD	1955.9	0.5	19.2	33.8	19.2	0.0



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PIRAMAL PHARMA	201.16	7.7	55877	10175	5.5
YES BANK LTD	20.35	4.1	29877	5449	5.5
CUMMINS INDIA	3885.2	1.5	8300	1524	5.5
SUZLON ENERGY	57.99	-0.4	6074	1127	5.4
MUTHOOT FINANCE	2783.6	3.1	41183	9046	4.6

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MPHASIS LTD	2892.9	-0.3	4148	3935	0.9
PERSISTENT SYS	5367	-0.7	7158	6452	0.9
CYIENT LTD	1203.2	0.0	1212	1087	0.9
TECH MAHINDRA LTD	1508.2	-0.3	4332	3709	0.9
UNO MINDA LTD	1283.2	-2.0	1958	1584	0.8



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

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
PHOENIX MILLS	1512.4	-3.4	3571	4058	88.0
INDUS TOWERS LTD	324.15	-1.6	19300	23094	83.6

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

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
PIRAMAL PHARMA	201.16	7.7	2148	2148	100.0
MAZAGON DOCK	2715.8	-0.6	7907	9557	82.7
RAIL VIKAS NIGAM	334.6	0.8	3644	4526	80.5



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

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
PIRAMAL PHARMA	201.16	7.7	55877	55877	100.0

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

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
PIRAMAL PHARMA	201.16	7.7	10175	10763	94.5



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
CG POWER	733.3	-0.9	8390	4628	1.8
PHOENIX MILLS	1512.4	-3.4	3571	2082	1.7
INTERGLOBE AVIATION	5740	1.3	20958	12507	1.7
FSN E-COMMERCE	237.71	2.2	6408	4266	1.5
INDUS TOWERS LTD	324.15	-1.6	19300	12969	1.5

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
CG POWER	733.3	-0.9	6017	3220	1.9
TATA STEEL LTD	167.85	6.0	18488	11221	1.6
DABUR INDIA LTD	543.5	-0.2	6183	4131	1.5
PIRAMAL PHARMA	201.16	7.7	2148	1494	1.4
PHOENIX MILLS	1512.4	-3.4	1835	1280	1.4



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

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PIRAMAL PHARMA	201.16	7.7	55877	4745	11.8
STEEL AUTHORITY	129.68	5.4	28142	6139	4.6
YES BANK LTD	20.35	4.1	29877	6783	4.4
CESC LTD	155.16	-1.1	12657	2916	4.3
TATA STEEL LTD	167.85	6.0	135049	32264	4.2

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

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PIRAMAL PHARMA	201.16	7.7	10175	1550	6.6
TATA STEEL LTD	167.85	6.0	63503	16865	3.8
INDUS TOWERS LTD	324.15	-1.6	33764	9577	3.5
GRANULES INDIA	518.45	2.1	5481	1803	3.0
RBL BANK LTD	270	0.3	5546	1885	2.9



### 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	934200	0.5%	2289	2600	924900	13.6%	ITC	410	7446400	-0.4%	412	410	4729600	-0.4%
ADANIPORTS	1400	1218850	5.1%	1332	1400	1119100	5.1%	JIOFIN	320	6330900	2.0%	314	320	3649550	2.0%
APOLLOHOSP	8000	129125	3.4%	7736	7500	57000	-3.1%	JSWSTEEL	1100	1296000	2.6%	1072	1060	355050	-1.1%
ASIANPAINT	2600	970750	1.8%	2554	2500	335750	-2.1%	KOTAKBANK	2100	1007200	7.1%	1960	1920	605200	-2.1%
AXISBANK	1100	2548750	4.3%	1055	1060	1400625	0.5%	LT	3600	583625	0.0%	3601	3600	589225	0.0%
BAJAJ-AUTO	10000	142050	9.7%	9116	8800	91350	-3.5%	M&M	3400	638800	3.5%	3286	3200	452400	-2.6%
BAJAJFINSV	2000	502000	1.7%	1966	1760	507000	-10.5%	MARUTI	15000	399150	0.5%	14927	14500	290350	-2.9%
BAJFINANCE	900	2673750	0.4%	896	900	1524750	0.4%	NESTLEIND	1200	746000	0.4%	1195	1200	286500	0.4%
BEL	400	6939750	5.6%	379	370	4654050	-2.3%	NTPC	340	5943000	1.7%	334	330	2019000	-1.3%
BHARTIARTL	1900	1283925	0.9%	1884	1900	879225	0.9%	ONGC	240	3444750	0.4%	239	235	2544750	-1.7%
CIPLA	1600	1053375	1.4%	1578	1600	203625	1.4%	POWERGRID	290	2319900	1.4%	286	280	1816400	-2.1%
COALINDIA	400	3456000	2.6%	390	380	2596050	-2.5%	RELIANCE	1400	11209000	2.0%	1373	1400	5687000	2.0%
DRREDDY	1300	2364375	3.0%	1262	1100	586875	-12.9%	SBILIFE	1900	310125	4.9%	1811	1800	143625	-0.6%
EICHERMOT	6300	171500	-1.1%	6372	6000	211575	-5.8%	SBIN	820	4740000	1.0%	812	800	3946500	-1.5%
ETERNAL	330	10478425	1.2%	326	300	7515075	-8.0%	SHRIRAMFIN	600	2414775	2.3%	586	580	1121175	-1.1%
GRASIM	2900	204250	4.3%	2781	2800	112000	0.7%	SUNPHARMA	1600	1309350	1.3%	1579	1500	841050	-5.0%
HCLTECH	1500	1059800	2.3%	1466	1500	375550	2.3%	TATACONSUM	1200	817300	8.7%	1104	970	424050	-12.2%
HDFCBANK	1000	8655900	4.8%	954	950	3599200	-0.5%	TATAMOTORS	700	6321600	1.1%	692	680	2761600	-1.7%
HDFCLIFE	800	1853500	3.0%	776	800	577500	3.0%	TATASTEEL	170	13887500	1.3%	168	160	19068500	-4.7%
HEROMOTOCO	5400	326250	1.0%	5349	5000	258750	-6.5%	TCS	3200	1528100	3.3%	3098	3100	783650	0.1%
HINDALCO	750	1786400	0.9%	743	700	1453200	-5.8%	TECHM	1500	353400	-0.5%	1508	1360	403800	-9.8%
HINDUNILVR	2800	2235900	5.1%	2665	2600	375000	-2.4%	TITAN	3700	346850	0.3%	3691	3600	265475	-2.5%
ICICIBANK	1400	2607500	0.2%	1397	1400	2228100	0.2%	TRENT	5600	371800	2.2%	5479	5400	161500	-1.4%
INDUSINDBK	800	1524600	4.2%	768	720	999600	-6.3%	ULTRACEMCO	13000	91500	2.1%	12733	12000	34650	-5.8%
INFY	1600	1839200	8.2%	1479	1500	1305200	1.4%	WIPRO	260	5322000	4.2%	250	250	2508000	0.2%



- 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

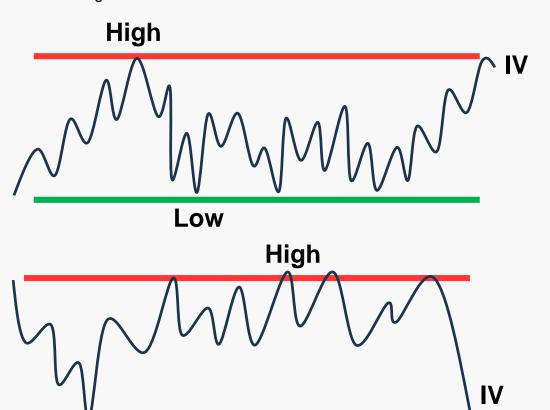


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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

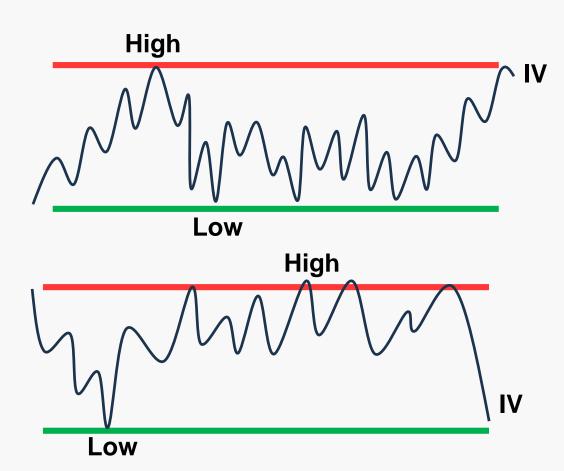


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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Compliance Officer Details: Name - Mr. Rajiv Keiriwal, Tel No. - 022-68555574, Email id - compliance.officer@axisdirect.in.;

Registered Office Address - Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai - 400070.

Administrative office address: Aurum Q Parć, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

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Sr. No	Name	Designation	E-mail
1	Rajesh Palviya	SVP Research (Head Technical & Derivatives)	rajesh.palviya@axissecurities.in
2	Hemang Gor	Derivative Analyst	hemang.gor@axissecurities.in
3	Rahil Vora	Derivative Analyst	rahil.vora@axissecurities.in