



**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change	
Most recent settlement	22,965	0.0%▼	
Open Interest (OI)	1,93,93,500	1.1%▲	
Change in OI (abs)	1,93,93,500	2,10,000 🛦	
Premium / Discount (Abs)	32	4 🛦	
Inference	Short Build Up		

**Bank Nifty Futures** 

	Value	Change	
Most recent settlement	49,631	0.9%▲	
Open interest (OI)	40,07,340	1.2%▼	
Change in OI (abs)	40,07,340	49,230▼	
Premium / Discount (Abs)	60	60▼	
Inference	Short Covering		

**Volatility Insights** 

`	Value	Change
India VIX Index	15.42	0.2▼
Nifty ATM IV (%)	17.14	0.3▼
Bank Nifty ATM IV (%)	17.24	1.2▼
PCR (Nifty)	0.80	0.04▼
PCR (Bank Nifty)	0.82	0.12▲

The Long Ratio for the FII Index Futures jumped to 16.2%, against 15.9% recorded in the previous session.

## **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
BSE	43,57,750	25.2%	5595.6	8.0%			
NHPC	7,25,63,200	9.8%	74.74	2.2%			
LAURUSLABS	2,22,46,200	8.8%	548.4	0.5%			
CYIENT	28,28,400	8.5%	1483.4	0.5%			
CDSL	98,53,550	6.9%	1211.1	2.4%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
DRREDDY	1,60,50,625	8.0%	1156.8	-3.0%			
DABUR	2,13,10,000	8.0%	505.95	-2.0%			
POONAWALLA	1,46,59,500	6.6%	285.4	-1.1%			
HINDUNILVR	1,47,10,800	5.4%	2255.1	-1.8%			
ADANIGREEN	1,52,58,375	4.9%	863.1	-1.5%			

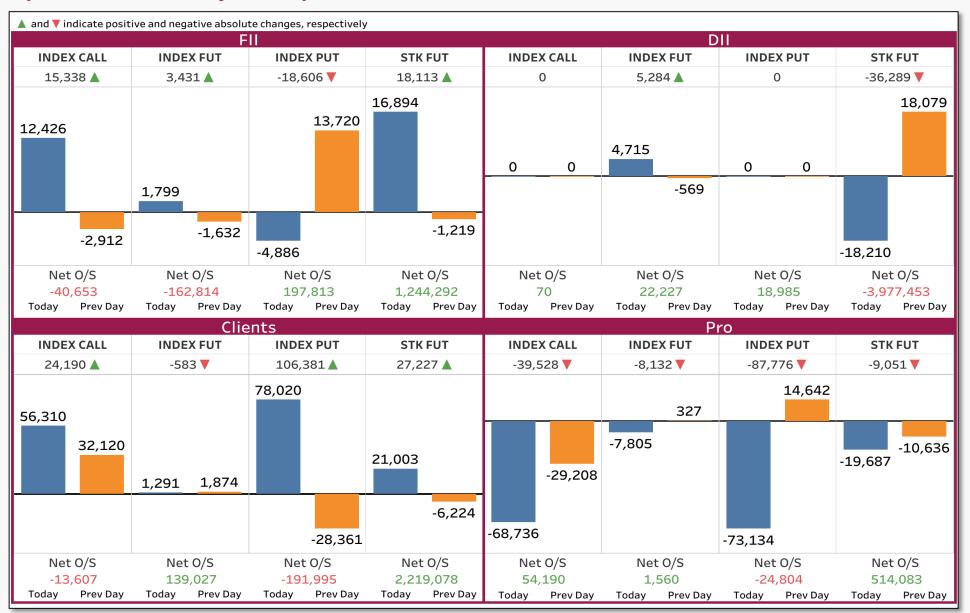
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
ATUL	4,39,400	-11.5%	5573.85	3.2%			
ABBOTINDIA	34,820	-11.4%	29680.15	1.5%			
COROMANDEL	18,65,150	-8.0%	1715.85	0.4%			
CUB	1,91,25,000	-6.6%	157.88	0.2%			
DELHIVERY	1,13,84,125	-6.4%	275.6	3.3%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
NAVINFLUOR	6,07,600	-10.6%	4045.4	-1.0%			
IPCALAB	16,13,950	-10.5%	1461.95	-0.5%			
INDIAMART	5,62,500	-7.6%	2065.35	-0.1%			
METROPOLIS	6,84,800	-4.5%	1645.35	-0.5%			
LALPATHLAB	7,12,350	-2.8%	2616.5	-0.6%			

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 Data by Participant**

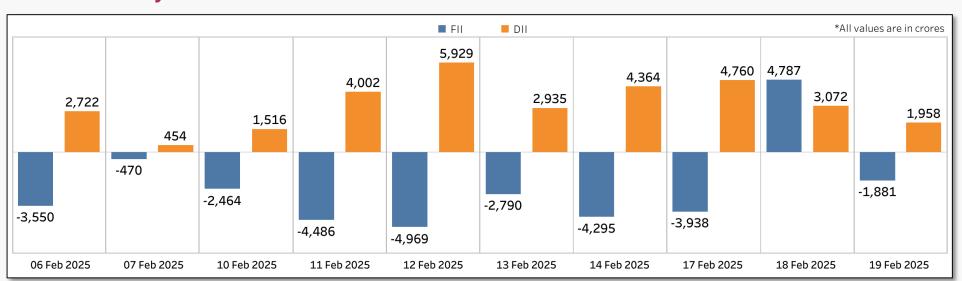




### **Daily Net Open Interest Change**



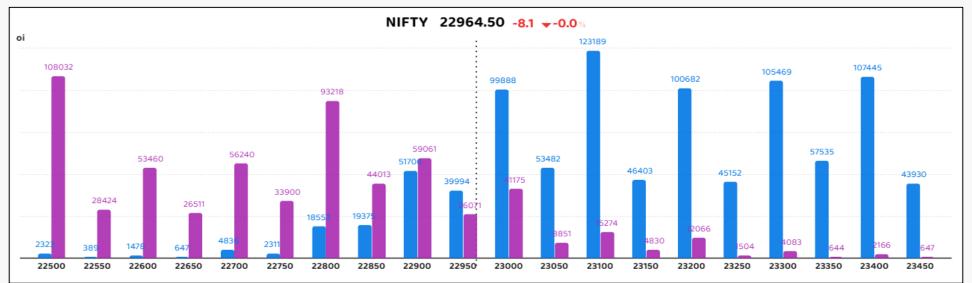
# **DII and FII Daily Cash Market Flows**



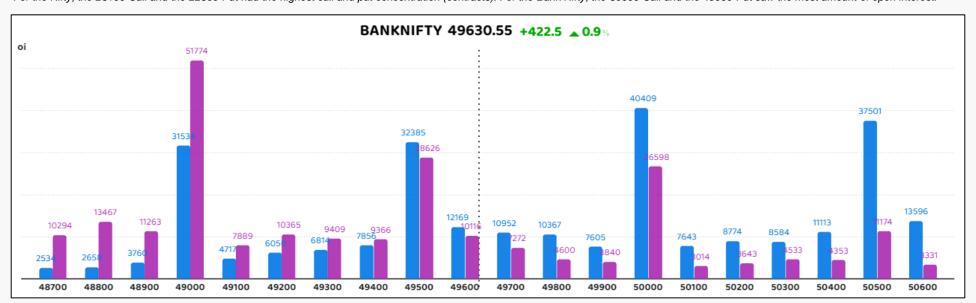


#### Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





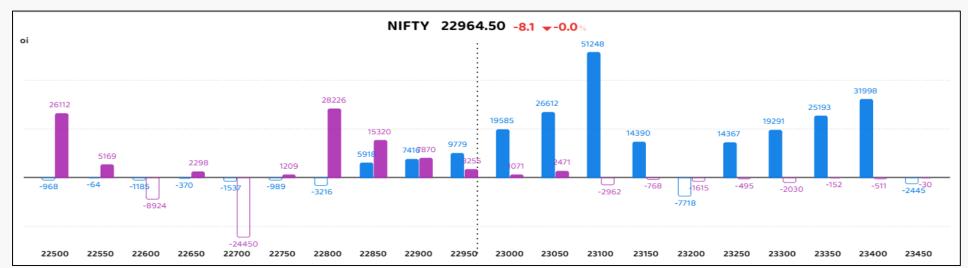
For the Nifty, the 23100 Call and the 22500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 50000 Call and the 49000 Put saw the most amount of open interest.



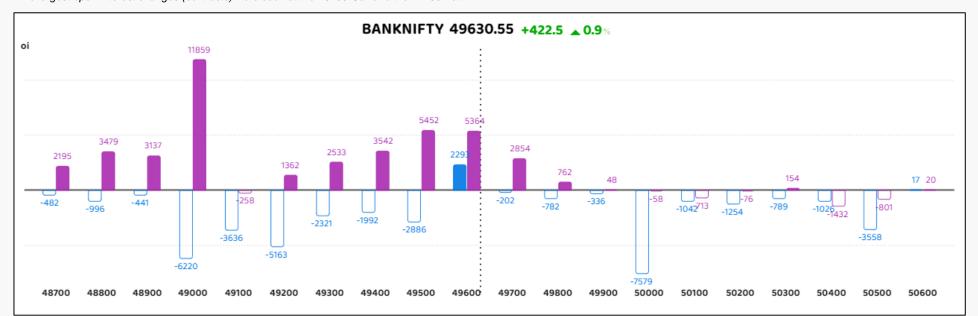


### **Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)**





The largest open interest changes (contracts) were seen at the 23100 Call and the 22700 Put





## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TATA STEEL LTD	135.76	0.9	78.1	78.1	8.8	100.0
LAURUS LABS LTD	546.75	0.1	43.0	44.3	16.1	95.5
DIXON TECHNOLOGI	14088.3	0.6	44.0	51.5	1.8	84.9
OBEROI REALTY	1602.15	0.7	42.7	47.5	20.3	82.1
SYNGENE INTERNAT	704.35	0.6	33.7	38.8	17.8	75.7

#### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HDFC LIFE INSURA	622.85	0.6	24.6	80.6	19.6	8.2
CIPLA LTD	1464.15	-1.2	24.3	61.3	18.0	14.5
LARSEN & TOUBRO	3275.9	1.7	20.9	40.9	17.4	15.2
ADANI PORTS AND	1082.85	-0.2	34.8	97.8	23.2	15.5
MRF LTD	109570.7	0.5	13.3	36.7	8.9	16.1



# **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA STEEL LTD	135.76	0.9	78.1	78.1	8.8	100.0
LAURUS LABS LTD	546.75	0.1	43.0	44.3	16.1	98.7
L&T FINANCE LTD	135.25	2.2	46.3	67.0	5.4	98.4
OBEROI REALTY	1602.15	0.7	42.7	47.5	20.3	97.7
AU SMALL FINANCE	525.65	4.6	41.7	116.2	1.7	95.2

#### **Stocks With Low IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
JK CEMENTS LTD	4621.85	2.3	13.1	42.0	5.9	1.2
MRF LTD	109570.7	0.5	13.3	36.7	8.9	3.1
TORRENT PHARMA	3120.55	2.6	20.1	45.4	12.0	6.5
INFO EDGE	7595.05	0.5	28.4	48.1	23.7	9.6
DR REDDY'S LABS	1165.85	-2.6	19.5	35.3	14.4	9.9



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
HAVELLS INDIA	1515.65	0.3	11267	2813	4.0
PAGE INDUSTRIES	41530.45	2.2	15689	4042	3.9
INDIAMART INTERM	2064.15	-0.2	3968	1129	3.5
HINDUSTAN COPPER	218.11	2.2	4495	1349	3.3
MRF LTD	109570.7	0.5	2679	842	3.2

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MAX FINANCIAL SE	1047.15	-1.4	3206	7042	2.2
BALKRISHNA INDS	2675.55	1.0	1112	2060	1.9
GLENMARK PHARMA	1369.45	-0.7	8784	12278	1.4
AUROBINDO PHARMA	1135.2	-2.4	36451	49729	1.4
COROMANDEL INTER	1714.6	0.3	1690	2146	1.3



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

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
MAHINDRA & MAHIN	2757.4	-1.2	73217	73217	100.0
HINDUSTAN AERONA	3363.75	0.6	86872	86872	100.0
TRENT LTD	4991.45	-0.1	75784	76558	99.0
HINDUSTAN UNILEV	2250.4	-2.0	43722	45551	96.0
CUMMINS INDIA	2690.3	-1.0	15016	15666	95.9

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

Ticker	Last Px	Chg (%)	Total Put Ol	Highest Put OI	Put OI Diff
LARSEN & TOUBRO	3275.9	1.7	42532	42532	100.0
LAURUS LABS LTD	546.75	0.1	8112	8491	95.5
GODREJ PROPERTIE	2047.5	3.6	8895	9326	95.4
VOLTAS LTD	1284.1	4.7	14797	15902	93.1
HINDUSTAN AERONA	3363.75	0.6	33856	36416	93.0



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

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STO	CK OPTION MET THE C	CONDITIONS MEN	TIONED IN THE FOO	TNOTE	

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

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
NO STOC	K OPTION MET THE (	CONDITIONS MEN	TIONED IN THE FOO	TNOTE	



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ABB INDIA LTD	5123.85	-0.4	29138	12303	2.4
MAHINDRA & MAHIN	2757.4	-1.2	73217	33886	2.2
TATA CONSULTANCY	3784.1	-2.3	64839	38150	1.7
LTIMINDTREE LTD	5470.1	-3.5	8833	5424	1.6
BHARTI AIRTEL	1645.2	-1.4	49854	30826	1.6

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
DEEPAK NITRITE	1912.85	0.7	8234	4160	2.0
ABB INDIA LTD	5123.85	-0.4	13304	6790	2.0
GLENMARK PHARMA	1369.45	-0.7	6987	3830	1.8
PETRONET LNG LTD	298.35	3.5	12585	7384	1.7
MUTHOOT FINANCE	2264.2	0.9	5955	3551	1.7



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

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
TATA CONSULTANCY	3784.1	-2.3	150248	64267	2.3
ABB INDIA LTD	5123.85	-0.4	70337	36363	1.9
AUBANK IS	525.65	4.6	39596	22141	1.8
LPC IS	1978.25	-1.8	41452	24320	1.7
RBK IS	161.08	6.7	11225	6682	1.7

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

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
AUROBINDO PHARMA	1135.2	-2.4	49729	10247	4.9
MAX FINANCIAL SE	1047.15	-1.4	7042	2581	2.7
TATA CONSULTANCY	3784.1	-2.3	111151	41520	2.7
LUPIN LTD	1978.25	-1.8	29527	14599	2.0
SUN PHARMA INDU	1676.6	-1.5	48856	24819	2.0



### 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	2400	1053600	10.1%	2181	2800	2098200	28.4%	INFY	1900	3568400	4.9%	1811	1800	1174800	-0.6%
ADANIPORTS	1200	1737200	10.8%	1083	1000	816000	-7.7%	ITС	450	10656000	10.7%	406	400	3337600	-1.6%
APOLLOHOSP	7000	325000	9.0%	6423	6300	103250	-1.9%	JSWSTEEL	1000	1003050	2.3%	977	950	495450	-2.8%
ASIANPAINT	2400	1257600	7.2%	2239	2100	376200	-6.2%	KOTAKBANK	2000	2523200	0.8%	1985	1900	984400	-4.3%
AXISBANK	1050	7054375	3.8%	1011	1000	1527500	-1.1%	LT	3600	1781100	9.9%	3276	3250	697200	-0.8%
BAJAJ-AUTO	9000	222825	6.1%	8480	9000	73725	6.1%	LTIM	5800	298200	6.0%	5470	5500	75600	0.5%
BAJAJFINSV	1860	1777500	-0.8%	1875	1800	1028000	-4.0%	M&M	3000	1315650	8.8%	2757	2800	540225	1.5%
BAJFINANCE	8500	666625	0.7%	8439	7500	469125	-11.1%	MARUTI	13200	561000	4.1%	12686	12000	386650	-5.4%
BHARTIARTL	1720	4924325	4.5%	1645	1600	1224075	-2.7%	NESTLEIND	2400	681800	8.8%	2205	2000	213600	-9.3%
BPCL	270	9691200	5.6%	256	250	1503000	-2.2%	NTPC	315	9385500	0.1%	315	390	3742500	23.9%
BRITANNIA	5000	431800	3.4%	4838	4700	112800	-2.8%	ONGC	270	11143825	13.3%	238	240	2425500	0.7%
CIPLA	1500	1626625	2.4%	1464	1440	462800	-1.6%	POWERGRID	300	8289000	14.0%	263	240	2071800	-8.8%
COALINDIA	400	5179650	10.4%	362	450	2856000	24.2%	RELIANCE	1300	11272500	5.9%	1227	1200	4198000	-2.2%
DIVISLAB	6200	190900	4.5%	5935	5400	157400	-9.0%	SBILIFE	1460	829875	-1.1%	1476	1460	333750	-1.1%
DRREDDY	1240	1384375	6.4%	1166	1100	561250	-5.6%	SBIN	800	18879750	10.0%	727	720	4697250	-1.0%
EICHERMOT	5500	467250	14.3%	4811	4700	176050	-2.3%	SUNPHARMA	1800	1852200	7.4%	1677	1700	557900	1.4%
GRASIM	2500	242750	1.5%	2463	2400	292500	-2.6%	TATACONSUM	1060	503880	3.4%	1025	900	615144	-12.2%
HCLTECH	1760	1254050	2.8%	1712	1540	738150	-10.1%	TATAMOTORS	750	9387400	10.1%	681	600	3005200	-11.9%
HDFCBANK	1760	9552400	1.9%	1727	1700	2977700	-1.6%	TATASTEEL	150	34826000	10.5%	136	130	13937000	-4.2%
HDFCLIFE	640	3000800	2.8%	623	540	806300	-13.3%	TCS	4000	1093925	5.7%	3784	3800	520625	0.4%
HEROMOTOCO	4200	803700	8.3%	3879	4100	245250	5.7%	TECHM	1700	736800	0.8%	1686	1640	562200	-2.7%
HINDALCO	620	2594200	-1.0%	626	600	2756600	-4.2%	TITAN	3600	1213275	12.1%	3210	3200	529900	-0.3%
HINDUNILVR	2500	1330200	11.1%	2250	2200	506700	-2.2%	ULTRACEMCO	12000	283850	6.3%	11292	11000	91750	-2.6%
ICICIBANK	1300	5728100	3.0%	1262	1250	2244900	-0.9%	UPL	650	1346870	0.0%	650	600	1951200	-7.7%
INDUSINDBK	1100	4507000	6.2%	1036	1000	1071000	-3.5%	WIPRO	320	4068000	1.9%	314	300	4689000	-4.5%



- 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

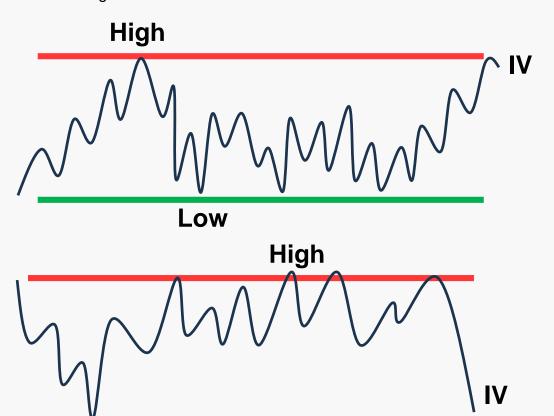


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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

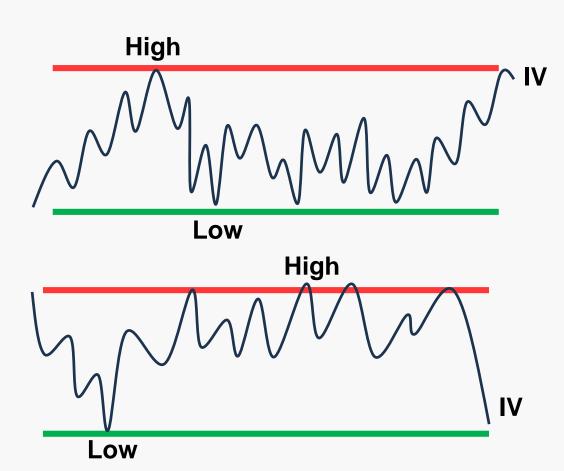


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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