



Daily Derivatives Report



Nifty Futures

	Value	Change	
Most recent settlement	24,692	0.2%▼	
Open Interest (OI)	1,76,75,025	0.1%▼	
Change in OI (abs)	1,76,75,025	18,975▼	
Premium / Discount (Abs)	112	11▼	
Inference	Long Unwinding		

Bank Nifty Futures

	Value	Change	
Most recent settlement	54,039	0.6%▼	
Open interest (OI)	31,97,950	5.0% ▲	
Change in OI (abs)	31,97,950	1,51,655 ▲	
Premium / Discount (Abs)	378	11▲	
Inference	Short Build Up		

Volatility Insights

	Value	Change
India VIX Index	11.4	0.11 ▲
Nifty ATM IV (%)	10.33	0.0▲
Bank Nifty ATM IV (%)	11.44	0.3 ▲
PCR (Nifty)	0.99	0.15▼
PCR (Bank Nifty)	0.86	0.05▼

The FII Long Ratio in Index Futures drop to 8 %, down from 9.2 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
SAMMAANCAP	5,57,83,900	37.8%	139.63	10.9%			
DABUR	2,31,92,500	8.1%	548	4.1%			
NATIONALUM	6,86,96,250	7.3%	199.47	4.7%			
ITC	9,85,26,400	5.2%	409.2	0.3%			
RVNL	2,62,76,250	5.1%	325.15	4.6%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
LAURUSLABS	1,40,77,700	5.1%	865.45	0.0%			
KALYANKJIL	2,47,22,000	4.9%	510.4	-0.3%			
MCX	23,24,875	4.3%	7671	-2.1%			
HFCL	10,60,31,550	3.4%	70.65	-1.5%			
AUBANK	1,95,27,000	3.3%	712.4	-1.8%			

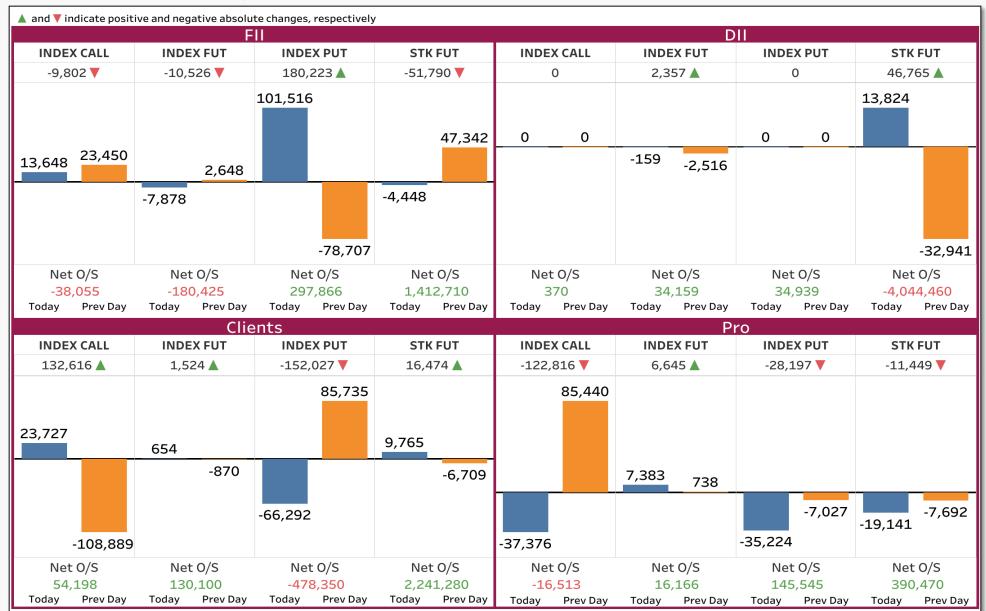
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
POWERGRID	6,92,30,300	-6.4%	287.65	2.4%			
MAZDOCK	31,69,075	-5.5%	2744.9	3.0%			
IGL	1,49,87,500	-4.7%	216	2.5%			
CGPOWER	1,82,24,000	-4.7%	742.5	2.9%			
NMDC	23,95,17,000	-4.4%	73.29	4.6%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Symbol Open Interest Chg (%) Price Chg (
KAYNES	9,86,700	-4.7%	6596.5	-0.7%			
PPLPHARMA	1,06,92,500	-4.4%	187.76	-0.5%			
KPITTECH	32,44,000	-4.2%	1212.6	-1.5%			
KFINTECH	16,99,650	-3.8%	1062	-1.1%			
PRESTIGE	48,60,450	-3.5%	1571	-0.8%			

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

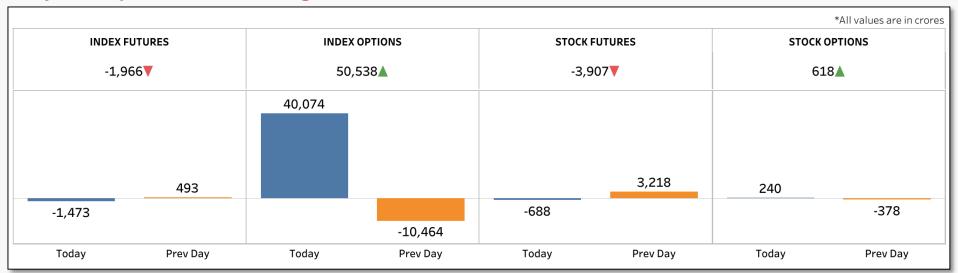


Open Interest Trends by Participant

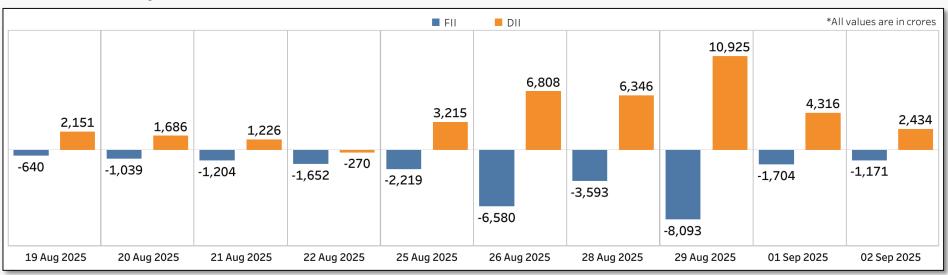




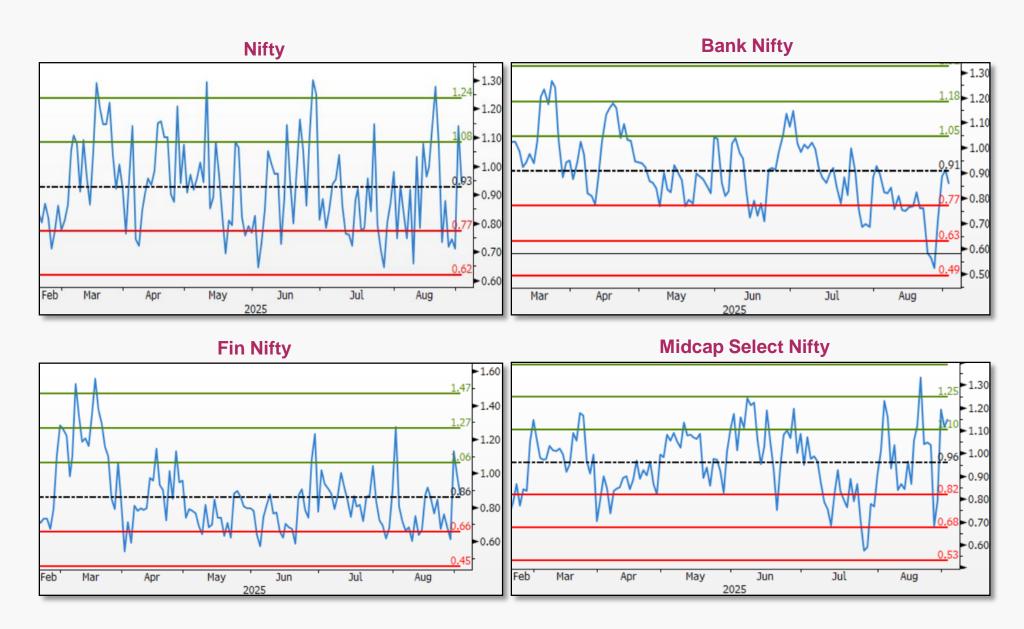
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



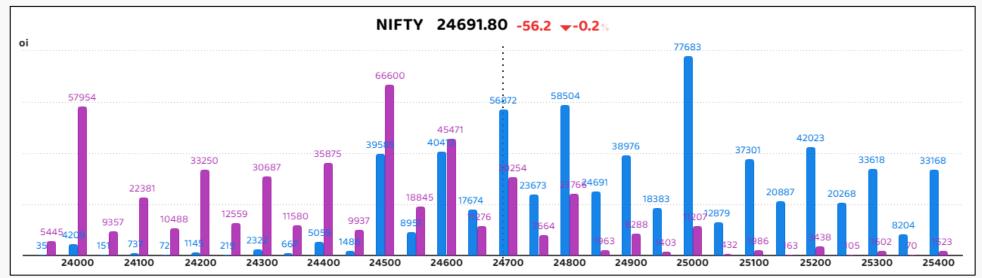




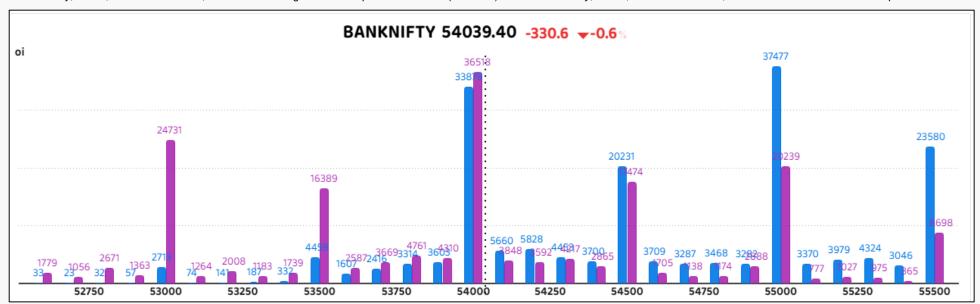


Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





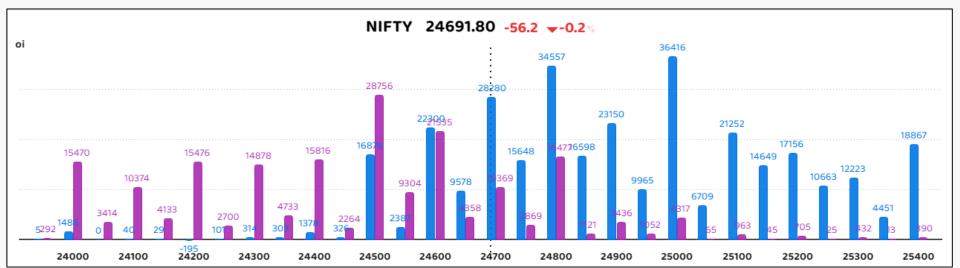
For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 54,000 Put saw the most amount of open interest.



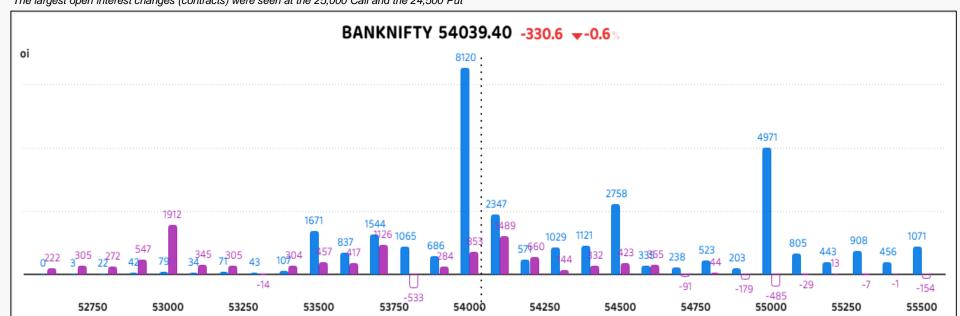


Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)





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)
RAIL VIKAS NIGAM	331.85	5.1	42.7	50.3	25.1	69.9
UPL LTD	710.65	-2.4	27.3	42.7	2.9	61.3
BAJAJ AUTO LTD	9030.5	0.7	22.8	36.4	2.1	60.2
MARUTI SUZUKI	14842	-0.3	18.0	29.9	0.4	59.7
BOSCH LTD	41315	1.3	22.4	36.2	2.1	59.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BAJAJ FINSERV LTD	1955.9	0.6	19.2	33.8	19.2	0.0
BHARAT ELECTRONICS	376.6	0.7	20.9	60.0	20.9	0.0
INTERGLOBE AVIATION	5665.5	-0.1	21.0	43.2	21.0	0.0
POWER FINANCE	392.65	0.8	24.1	51.5	24.1	0.0
MAZAGON DOCK	2731	2.9	32.9	48.4	32.9	0.0



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INFOSYS LTD	1498.7	0.0	29.6	60.8	3.3	90.2
RAIL VIKAS NIGAM	331.85	5.1	42.7	50.3	25.1	83.8
DABUR INDIA LTD	544.6	4.0	22.9	37.5	11.6	71.6
VOLTAS LTD	1440.6	2.0	34.2	46.9	16.9	68.2
PG ELECTROPLAST	560.3	1.0	45.8	63.7	35.6	68.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BAJAJ FINSERV LTD	1955.9	0.6	19.2	33.8	19.2	0.0
BHARAT ELECTRONICS	376.6	0.7	20.9	60.0	20.9	0.0
INTERGLOBE AVIATION	5665.5	-0.1	21.0	43.2	21.0	0.0
POWER FINANCE	392.65	0.8	24.1	51.5	24.1	0.0
MAZAGON DOCK	2731	2.9	32.9	48.4	32.9	0.0



Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
AMBER ENTERPRISES	7645	0.2	13519	2654	5.1
SUZLON ENERGY	58.25	0.7	15075	3112	4.8
BOSCH LTD	41315	1.3	10989	2445	4.5
INOX WIND LTD	143.34	1.8	6889	1571	4.4
HINDUSTAN ZINC	440.9	1.1	12250	2868	4.3

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
COMPUTER AGE	3802	-1.0	5867	5481	0.9
MCX INDIA LTD	7645.5	-1.9	26995	22240	0.8
MAHINDRA & MAHINDRA	3234.5	-2.4	58153	47116	0.8
AUROBINDO PHARMA	1022.2	-0.3	4019	3244	0.8
MARUTI SUZUKI	14842	-0.3	55857	44236	0.8



Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
	NO STOCK OPTION ME	T THE CONDTIC	ON MENTIONED IN	THE FOOTNOTE	

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAZAGON DOCK	2731	2.9	7904	9557	82.7



Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
No	O STOCK OPTION MET	THE CONDITION	ONS MENTIONED IN	THE FOOTNOTE	

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
N	IO STOCK OPTION MET	THE CONDITION	ONS MENTIONED IN	THE FOOTNOTE	



Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
INTERGLOBE AVIATION	5665.5	-0.1	20932	11785	1.8
CG POWER	739.65	3.1	7180	4337	1.7
PHOENIX MILLS	1565.7	3.2	2851	1972	1.4
DALMIA BHARAT LTD	2402.2	0.0	1845	1283	1.4
RAIL VIKAS NIGAM	331.85	5.1	5716	4602	1.2

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
CG POWER	739.65	3.1	6158	3039	2.0
MAZGAON DOCK	2731.0	2.9	7904	5616	1.4
DABUR INDIA	544.60	4.0	5518	3969	1.4
PHOENIX MILLS	1565.70	3.2	1689	1224	1.4
JINDAL STAINLESS	761.25	0.8	2131	1610	1.3



Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PHOENIX MILLS	1565.7	3.2	24070	3958	6.1
RAIL VIKAS NIGAM	331.85	5.1	35458	7342	4.8
NATIONAL ALUMINUM	200.53	4.6	26359	6547	4.0
CESC LTD	156.81	0.5	12657	3180	4.0
DABUR INDIA LTD	544.6	4.0	52304	13195	4.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PHOENIX MILLS	1565.7	3.2	6502	1584	4.1
DABUR INDIA LTD	544.6	4.0	19719	5324	3.7
CG POWER	739.65	3.1	14291	4023	3.6
NATIONAL ALUMINUM	200.53	4.6	12369	3668	3.4
RAIL VIKAS NIGAM	331.85	5.1	10056	3558	2.8



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	2300	957300	1.1%	2274	2600	924900	14.3%	ITC	410	8187200	0.8%	407	400	3950400	-1.7%
ADANIPORTS	1400	1183225	4.8%	1336	1400	1119575	4.8%	JIOFIN	320	6157000	2.6%	312	350	3520300	12.3%
APOLLOHOSP	8000	135250	4.1%	7682	7500	60125	-2.4%	JSWSTEEL	1100	967275	5.4%	1044	1000	340200	-4.2%
ASIANPAINT	2600	978750	2.4%	2540	2500	330250	-1.6%	KOTAKBANK	2000	972800	3.0%	1943	1920	612400	-1.2%
AXISBANK	1100	2306250	4.1%	1056	1060	1177500	0.4%	LT	3600	579075	0.7%	3575	3600	581000	0.7%
BAJAJ-AUTO	9000	162900	-0.3%	9031	8800	97275	-2.6%	M&M	3400	642400	5.1%	3235	3200	419000	-1.1%
BAJAJFINSV	2000	493500	2.3%	1956	1760	315000	-10.0%	MARUTI	15000	385700	1.1%	14842	14500	273050	-2.3%
BAJFINANCE	900	2730750	1.1%	890	900	1881750	1.1%	NESTLEIND	1200	752000	-0.1%	1201	1200	241500	-0.1%
BEL	400	6817200	6.2%	377	370	4805100	-1.8%	NTPC	340	5857500	1.1%	336	380	1875000	13.0%
BHARTIARTL	1900	1126225	0.7%	1887	1900	817000	0.7%	ONGC	240	2864250	0.2%	239	235	2488500	-1.9%
CIPLA	1600	613500	2.0%	1569	1500	196125	-4.4%	POWERGRID	290	1886700	1.2%	287	280	1812600	-2.3%
COALINDIA	400	2906550	5.2%	380	380	2344950	0.0%	RELIANCE	1400	10597000	2.5%	1367	1400	5605000	2.5%
DRREDDY	1300	1676250	3.7%	1254	1200	632500	-4.3%	SBILIFE	1900	222000	4.7%	1815	1800	108375	-0.8%
EICHERMOT	6300	168000	-0.8%	6349	6000	209650	-5.5%	SBIN	810	4205250	0.8%	804	800	3580500	-0.5%
ETERNAL	330	9515700	2.4%	322	300	6811825	-6.9%	SHRIRAMFIN	600	1849650	2.6%	585	580	1065075	-0.8%
GRASIM	2900	193750	4.3%	2780	2800	95500	0.7%	SUNPHARMA	1600	1354500	2.2%	1565	1500	828800	-4.2%
HCLTECH	1500	935200	2.3%	1466	1500	357700	2.3%	TATACONSUM	1200	822250	9.0%	1101	970	435050	-11.9%
HDFCBANK	1000	8320400	5.9%	945	950	3155900	0.6%	TATAMOTORS	700	6333600	2.3%	684	680	2633600	-0.6%
HDFCLIFE	800	1456400	2.2%	783	800	547800	2.2%	TATASTEEL	160	12314500	1.0%	158	150	7887000	-5.3%
HEROMOTOCO	5400	328050	1.7%	5312	5000	273900	-5.9%	TCS	3200	1286950	2.8%	3112	3100	733600	-0.4%
HINDALCO	730	1393000	1.3%	721	700	1216600	-2.9%	TECHM	1500	325200	-0.8%	1513	1500	414600	-0.8%
HINDUNILVR	2700	1440600	0.9%	2677	2600	340500	-2.9%	TITAN	3700	287525	2.2%	3621	3600	218575	-0.6%
ICICIBANK	1400	1820000	0.4%	1394	1400	2108400	0.4%	TRENT	5600	384800	3.5%	5412	5000	139800	-7.6%
INDUSINDBK	800	1443400	6.5%	751	720	1017800	-4.2%	ULTRACEMCO	13000	90250	2.1%	12730	12000	33900	-5.7%
INFY	1600	1637200	6.8%	1499	1500	1127600	0.1%	WIPRO	260	4659000	3.6%	251	250	2643000	-0.4%



- 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

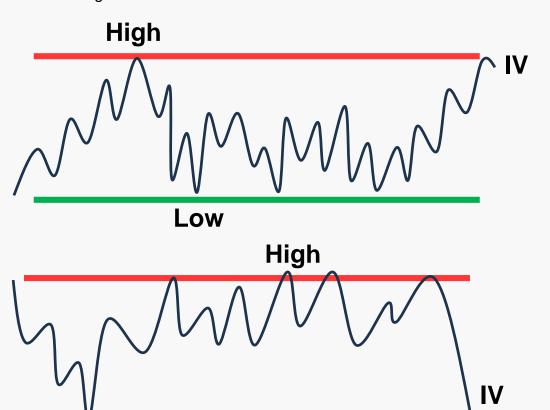


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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