

Daily Derivatives Report



Nifty Futures

	Value	Change
Most recent settlement	23,620	0.9%▲
Open Interest (OI)	1,86,75,075	3.1%▲
Change in OI (abs)	1,86,75,075	5,66,100▲
Premium / Discount (Abs)	112	57▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change	
Most recent settlement	49,862	0.4%▲	
Open interest (OI)	33,63,720	7.2% ▲	
Change in OI (abs)	33,63,720	2,25,810▲	
Premium / Discount (Abs)	275	100▼	
Inference	Long Build Up		

Volatility Insights

	Value	Change
India VIX Index	16.25	1.1 ▼
Nifty ATM IV (%)	20.25	4.3▼
Bank Nifty ATM IV (%)	19.65	1.6▼
PCR (Nifty)	1.01	0.04 ▲
PCR (Bank Nifty)	0.85	0.08▼

The Long Ratio for the FII Index Futures jumped to 11.9%, against 11.1% recorded in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
JSL	37,80,450	12.6%	653.2	0.5%			
POONAWALLA	1,30,15,200	9.8%	302.95	0.2%			
INDIANB	52,37,350	8.4%	555.5	1.1%			
HUDCO	1,73,07,225	8.1%	231.08	6.3%			
GLENMARK	27,82,650	6.2%	1462.25	0.4%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
INDIAMART	9,31,500	6.1%	2076.4	-0.6%			
BANKBARODA	16,34,08,050	4.1%	214.07	-4.4%			
MANAPPURAM	6,24,09,000	3.6%	196.44	-1.6%			
KPITTECH	26,30,800	3.6%	1413.6	-1.8%			
COFORGE	29,34,000	3.1%	8298.1	-0.8%			

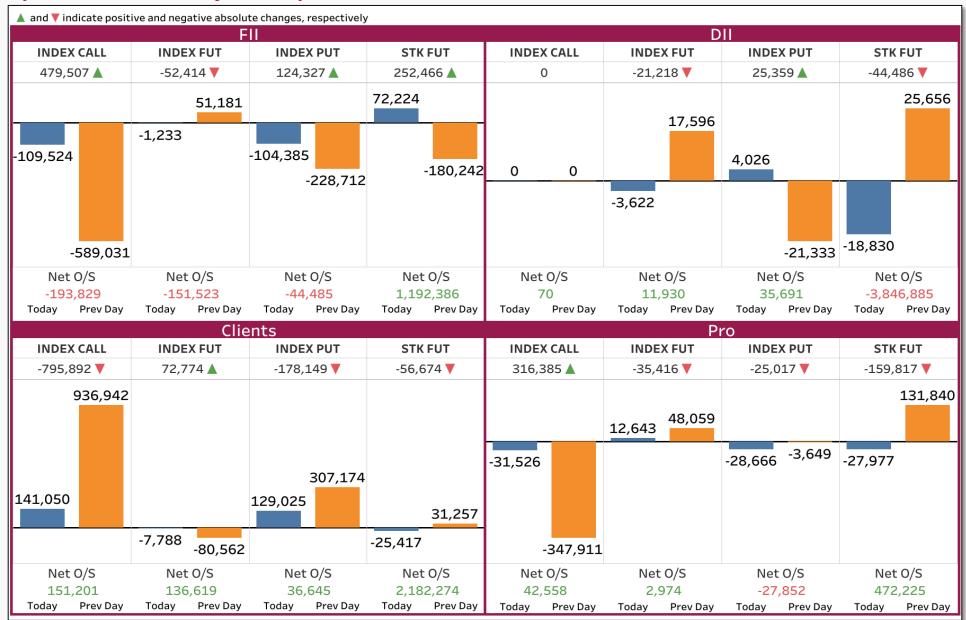
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
KALYANKJIL	1,41,41,425	-15.2%	499	12.6%			
POLICYBZR	40,87,850	-14.1%	1731.05	3.9%			
MAXHEALTH	58,69,500	-10.1%	1065.05	1.4%			
HEROMOTOCO	52,25,850	-9.8%	4311	3.1%			
LODHA	50,43,150	-8.3%	1207.6	3.7%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Symbol Open Interest Chg (%) Price Chg (
JINDALSTEL	1,66,78,125	-7.5%	793.65	-5.7%			
LALPATHLAB	10,99,050	-5.6%	2859.75	-1.0%			
CAMS	11,11,750	-3.4%	3605.9	-1.0%			
LAURUSLABS	1,84,94,300	-3.2%	586.05	-1.1%			
JSWSTEEL	3,01,87,350	-2.6%	949.9	-0.7%			

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

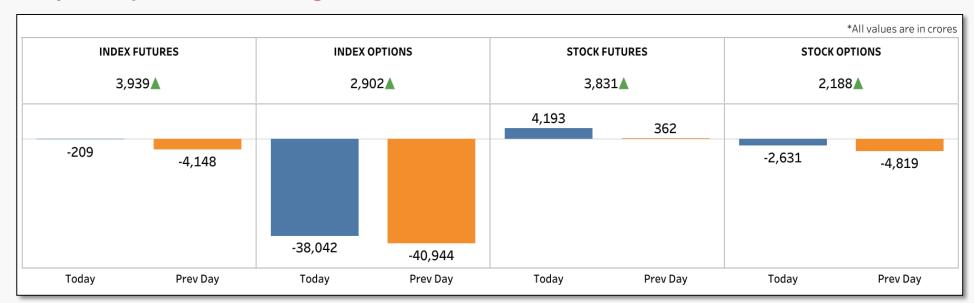


Open Interest Data by Participant

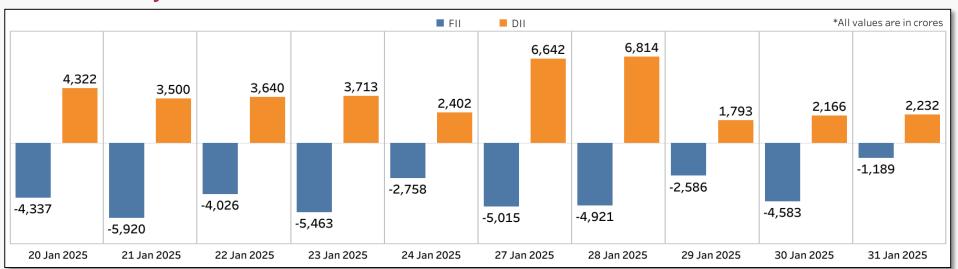




Daily Net Open Interest Change



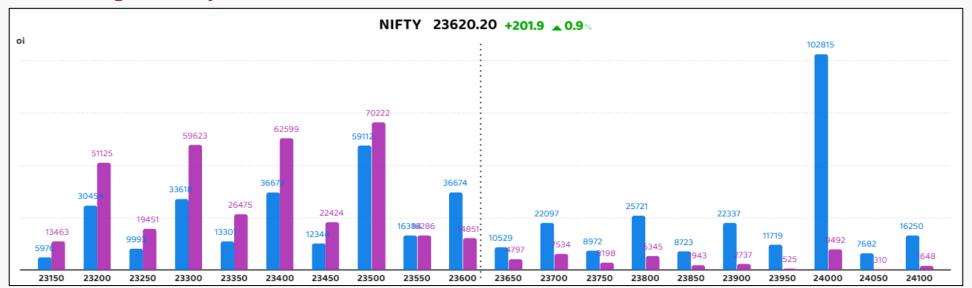
DII and FII Daily Cash Market Flows



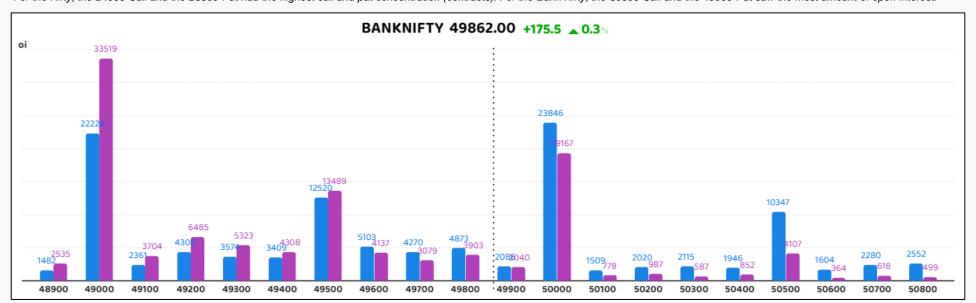


Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

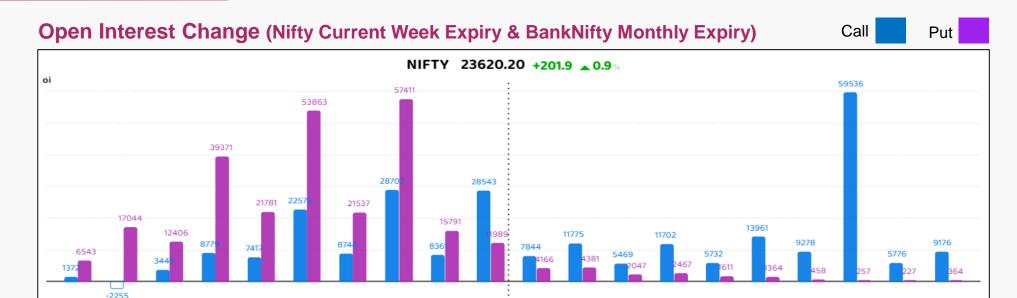




For the Nifty, the 24000 Call and the 23500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 50000 Call and the 49000 Put saw the most amount of open interest.

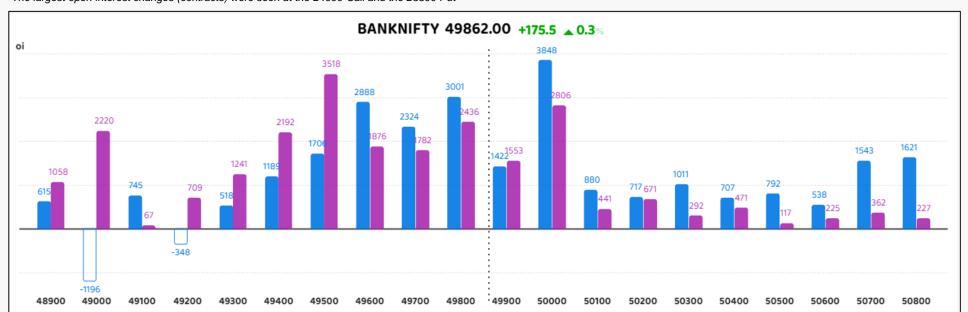






23600 ·

The largest open interest changes (contracts) were seen at the 24000 Call and the 23500 Put





Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TITAN CO LTD	3490.25	3.6	30.7	33.5	2.3	91.1
AARTI INDUS LTD	444.7	1.5	50.9	55.8	15.5	87.9
ABBOTT INDIA LTD	26173.3	0.2	32.8	36.5	6.5	87.8
PVR INOX LTD	1090.5	2.0	41.2	45.3	14.8	86.4
COLGATE PALMOLIV	2821.55	1.8	28.8	32.8	9.5	83.0

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HDFC LIFE INSURA	638.05	0.6	28.2	80.6	19.6	14.1
CIPLA LTD	1479.4	1.5	24.7	61.3	18.0	15.3
HDFC BANK LTD	1698.75	0.4	14.6	32.7	11.1	16.1
MCX INDIA LTD	5732.95	2.4	36.9	71.9	29.9	16.7
FED BANK LTD	187.21	1.2	28.0	130.9	7.0	16.9



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
AARTI INDUS LTD	444.7	1.5	50.9	55.8	15.5	99.7
ABBOTT INDIA LTD	26173.3	0.2	32.8	36.5	6.5	99.3
TITAN CO LTD	3490.25	3.6	30.7	33.5	2.3	98.7
INDUSIND BANK	991.2	3.6	38.7	60.4	12.4	97.5
PVR INOX LTD	1090.5	2.0	41.2	45.3	14.8	97.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HDFC BANK LTD	1698.75	0.4	14.6	32.7	11.1	1.6
ICICI BANK LTD	1252.8	-0.2	16.7	46.1	9.3	2.7
M&M FIN SERVICES	284.95	3.0	29.2	52.0	11.5	15.4
INFOSYS LTD	1879.8	1.1	21.1	45.6	4.9	25.8
BALKRISHNA INDS	2771.25	0.2	27.4	58.3	17.8	31.6



Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BOSCH LTD	28729.15	0.5	3995	774	5.2
ESCORTS KUBOTA L	3623.45	0.9	5345	1374	3.9
AARTI INDUS LTD	444.7	1.5	12370	3217	3.9
CUMMINS INDIA	2914.05	2.1	7032	1932	3.6
HINDUSTAN AERONA	3936.8	4.2	89425	25720	3.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
RAMCO CEMENT/THE	917.5	-0.9	2433	6636	2.7
JK CEMENTS LTD	4834.85	0.7	1173	2358	2.0
GUJARAT NARM VLY	554.45	1.6	1279	1783	1.4
ICICI LOMBARD GE	1858.5	0.7	5218	6491	1.2
CHAMBAL FERTILIS	504.1	2.0	3909	4369	1.1



Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
VOLTAS LTD	1260.85	-0.7	33116	33116	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Last Px Chg (%)		Highest Put OI	Put OI Diff	
VOLTAS LTD	1260.85	-0.7	13282	15902	83.5	



Call Volume Relative to Record High

Ticker	Last Px Chg (%) Total Cal		Total Call Vol	I Vol Highest CV CV			
NO STOCK	OPTION MET THE CR	ITERIA MENTIONI	ED IN THE FOOTNOT	E BELOW			

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
CHOLAMANDALAM IN	1285.85	0.5	28964	30201	95.9



Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
JINDAL STEEL & P	791.55	-5.8	102457	17776	5.8
NESTLE INDIA LTD	2313.2	4.3	138197	24591	5.6
UPL LTD	603.75	6.5	66548	15952	4.2
NAVIN FLUORINE I	4148.7	6.2	45002	12422	3.6
BANDHAN BANK LTD	151.38	2.1	17734	4956	3.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
JINDAL STEEL & P	791.55	-5.8	74251	13353	5.6
NESTLE INDIA LTD	2313.2	4.3	68725	13899	4.9
SHREE CEMENT	27795.9	3.6	4020	951	4.2
UPL LTD	603.75	6.5	27962	7407	3.8
MARICO LTD	670.65	-0.2	20876	5587	3.7



Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
VOLTAS LTD	1260.85	-0.7	33116	12222	2.7
JINDAL STEEL & P	791.55	-5.8	12361	8330	1.5
AMBUJA CEMENTS	512.8	0.6	14856	11143	1.3
BOSCH LTD	28729.15	0.5	4742	4175	1.1
NESTLE INDIA LTD	2313.2	4.3	13352	11829	1.1

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
VOLTAS LTD	1260.85	-0.7	13282	7928	1.7
JINDAL STEEL & P	791.55	-5.8	10231	7640	1.3
BOSCH LTD	28729.15	0.5	4176	3407	1.2
LAURUS LABS LTD	584.05	-0.7	6025	5351	1.1
AMBUJA CEMENTS	512.8	0.6	9327	8968	1.0



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	2800	1313400	22.4%	2288	2800	2619600	22.4%	INFY	1900	1079600	1.1%	1880	1800	839600	-4.2%
ADANIPORTS	1100	1581600	0.1%	1099	1100	787200	0.1%	ITC	460	4070400	2.8%	448	440	2478400	-1.7%
APOLLOHOSP	7000	58375	2.8%	6811	6800	25375	-0.2%	JSWSTEEL	950	496125	0.5%	945	900	439425	-4.8%
ASIANPAINT	2500	563400	8.7%	2301	2200	342400	-4.4%	KOTAKBANK	1900	1068000	-0.1%	1901	1800	790000	-5.3%
AXISBANK	1000	3066250	1.4%	986	980	1568750	-0.6%	LT	3700	925200	3.7%	3567	3500	560700	-1.9%
BAJAJ-AUTO	10000	134625	13.0%	8848	8500	69600	-3.9%	LTIM	7000	78600	18.4%	5914	5500	48600	-7.0%
BAJAJFINSV	1800	1097500	3.7%	1736	1700	504000	-2.1%	M&M	3000	292250	0.3%	2990	3000	262675	0.3%
BAJFINANCE	8000	368875	1.5%	7885	7500	250125	-4.9%	MARUTI	13000	212800	5.6%	12311	12000	144250	-2.5%
BHARTIARTL	1700	521550	4.5%	1626	1600	888725	-1.6%	NESTLEIND	2400	791200	3.8%	2313	2100	293800	-9.2%
BPCL	300	5621400	14.9%	261	250	2143800	-4.3%	NTPC	340	4813500	4.9%	324	390	3787500	20.4%
BRITANNIA	5000	173100	-2.5%	5130	5000	67900	-2.5%	ONGC	270	8431500	2.8%	263	250	2109800	-4.8%
CIPLA	1500	911625	1.4%	1479	1440	262275	-2.7%	POWERGRID	310	4806000	2.8%	302	280	1166400	-7.2%
COALINDIA	400	2637600	1.0%	396	450	3094350	13.7%	RELIANCE	1300	7238000	2.8%	1265	1200	3513500	-5.1%
DIVISLAB	6000	85900	7.6%	5578	5400	80900	-3.2%	SBILIFE	1600	508875	7.8%	1484	1400	155250	-5.6%
DRREDDY	1300	818750	6.8%	1217	1050	238125	-13.7%	SBIN	800	4946250	3.5%	773	800	3162750	3.5%
EICHERMOT	5200	102200	0.1%	5194	5000	77000	-3.7%	SUNPHARMA	1800	944650	3.2%	1744	1700	444150	-2.5%
GRASIM	2600	239250	3.6%	2509	2400	138250	-4.3%	TATACONSUM	1100	366624	7.4%	1025	1000	453720	-2.4%
HCLTECH	1900	506450	10.1%	1725	1540	408100	-10.7%	TATAMOTORS	800	7025150	11.7%	716	700	3524950	-2.2%
HDFCBANK	1800	3258750	6.0%	1699	1700	1745700	0.1%	TATASTEEL	150	18045500	11.4%	135	160	11297000	18.9%
HDFCLIFE	650	1426700	1.9%	638	600	741400	-6.0%	TCS	4250	345975	3.3%	4112	4000	366800	-2.7%
HEROMOTOCO	4500	222150	3.7%	4339	4000	127200	-7.8%	TECHM	1800	348000	7.5%	1674	1600	283800	-4.4%
HINDALCO	600	1244600	1.0%	594	600	1965600	1.0%	TITAN	3500	181300	0.3%	3490	3400	161175	-2.6%
HINDUNILVR	2500	755700	1.3%	2469	2300	307500	-6.8%	ULTRACEMCO	12000	196050	4.5%	11487	11000	106500	-4.2%
ICICIBANK	1300	2275700	3.8%	1253	1200	1972600	-4.2%	UPL	600	2013530	-0.6%	604	550	1120585	-8.9%
INDUSINDBK	1000	2516500	0.9%	991	1000	1201500	0.9%	WIPRO	320	2340000	2.6%	312	274	2472000	-12.2%



- 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

^{*}ATM IV is the midpoint of the IV for the ATM call and put respectively

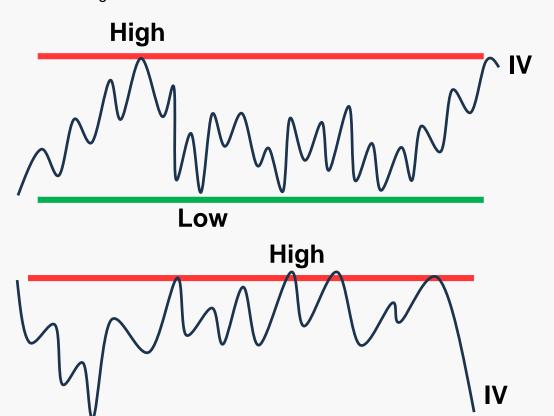


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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

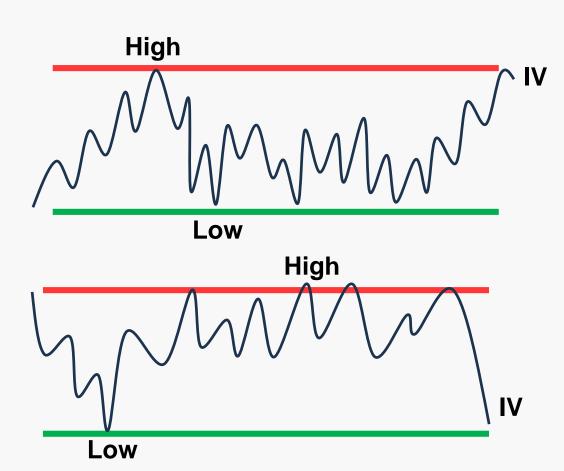


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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