

**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change	
Most recent settlement	23,349	0.8%▼	
Open Interest (OI)	1,40,56,600	1.2%▲	
Change in OI (abs)	1,40,56,600	1,62,025▲	
Premium / Discount (Abs)	-1	18▼	
Inference	Short Build Up		

# **Bank Nifty Futures**

	Value	Change
Most recent settlement	50,407	0.4%▼
Open interest (OI)	32,74,245	2.3%▲
Change in OI (abs)	32,74,245	72,060 ▲
Premium / Discount (Abs)	35	70▲
Inference	Short Build Up	

## **Volatility Insights**

	Value	Change
India VIX Index	15.99	0.3▲
Nifty ATM IV (%)	14.95	0.4▲
Bank Nifty ATM IV (%)	16.50	0.5 ▲
PCR (Nifty)	0.86	0.03 ▲
PCR (Bank Nifty)	0.91	0.00 ▲

# **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
DALBHARAT	31,00,900	17.4%	1771.4	1.2%			
MGL	31,50,400	14.8%	1130.95	0.1%			
JKCEMENT	6,68,625	12.5%	4007.75	1.6%			
FEDERALBNK	6,89,75,000	10.4%	210.34	2.0%			
NATIONALUM	7,74,00,000	7.1%	248.18	3.4%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
ADANIENT	2,20,36,800	9.6%	2178.55	-22.7%			
ADANIPORTS	2,87,15,200	6.3%	1113.15	-13.6%			
NAVINFLUOR	17,68,550	6.3%	3260.25	-2.5%			
M&MFIN	3,63,16,000	5.9%	256.05	-0.1%			
ABBOTINDIA	1,17,300	5.6%	27076.15	-0.5%			

Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
ALKEM	13,86,000	-4.5%	5561.9	0.9%			
POWERGRID	9,27,10,800	-4.2%	325.4	3.3%			
HCLTECH	1,24,02,600	-3.9%	1832.9	0.5%			
APOLLOHOSP	19,34,500	-3.4%	6731.8	0.5%			
GODREJPROP	39,73,725	-3.3%	2701.8	0.5%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
AMBUJACEM	3,88,84,500	-8.6%	482.8	-12.0%			
IGL	2,55,65,375	-6.9%	312	-2.6%			
EICHERMOT	44,41,325	-4.9%	4888.4	-1.5%			
ACC	49,97,700	-4.5%	2020.7	-7.6%			
M&M	1,99,31,975	-4.2%	2938.9	-0.3%			

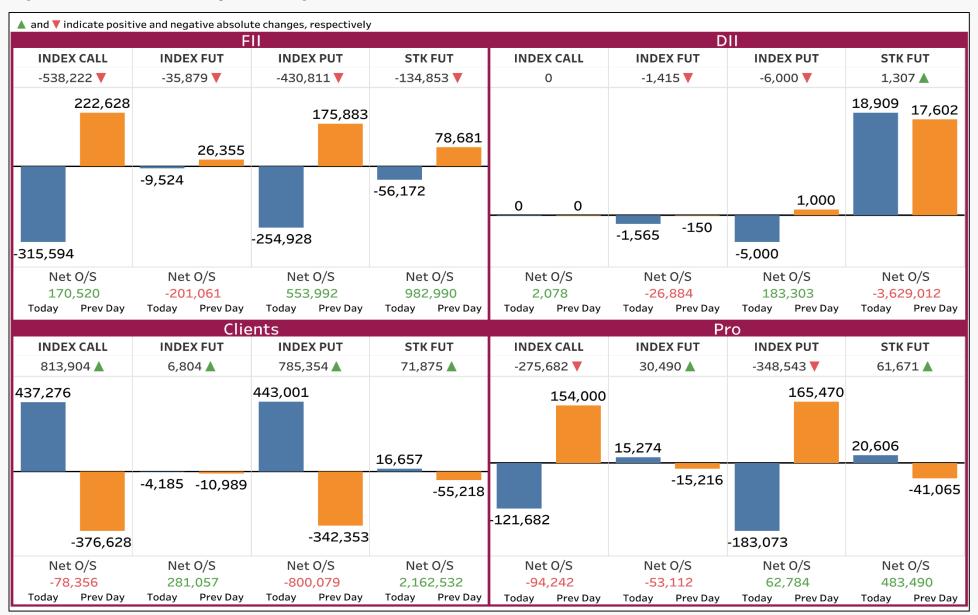
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

<sup>\*</sup>ATM IV is the midpoint of the IV for the ATM call and put respectively

<sup>\*</sup>On expiration days, the premium/discount will be the difference between the new front-month contract and the cash market level on the day

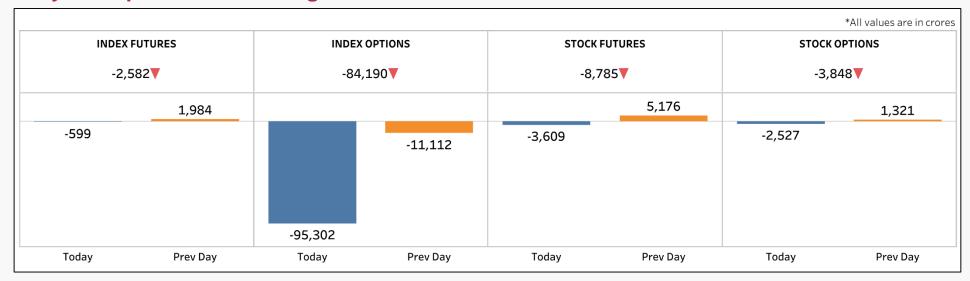


### **Open Interest Data by Participant**

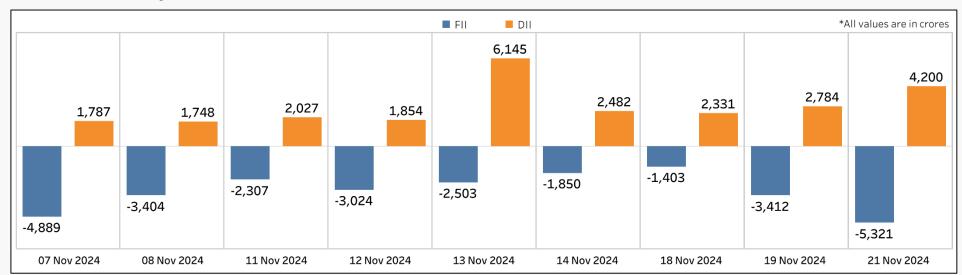




# **Daily Net Open Interest Change**



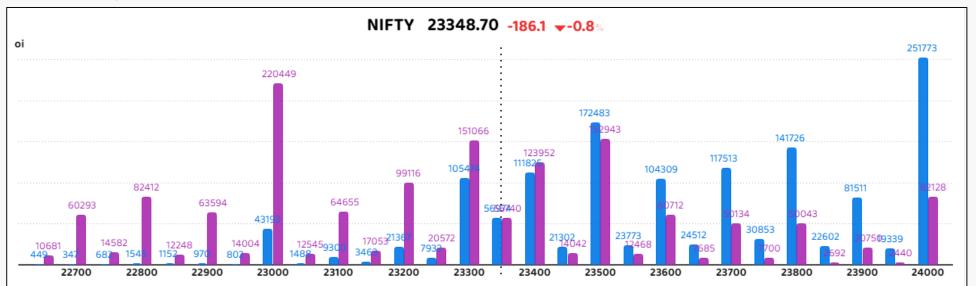
## **DII and FII Daily Cash Market Flows**



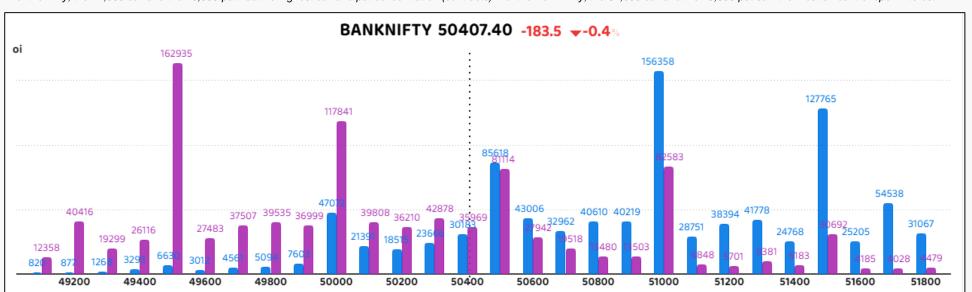


## **Positioning Stack by Strike (Current Week Expiry)**





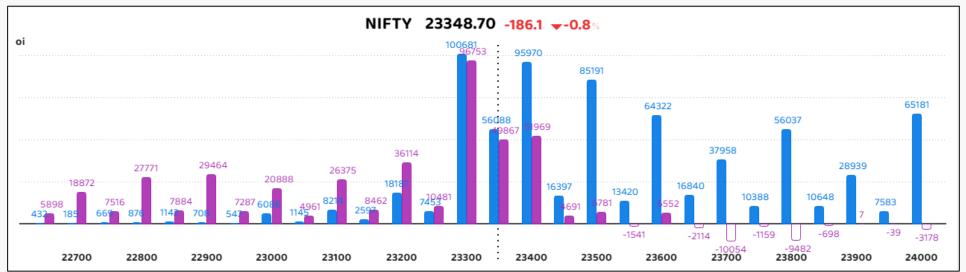
For the Nifty, the 24,000 call and the 23,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 51,000 call and the 49,500 put saw the most amount of open interest.



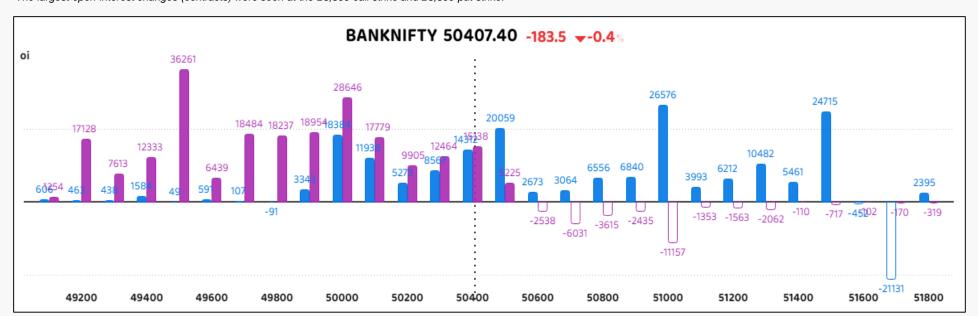


## **Open Interest Change (Current Week Expiry)**



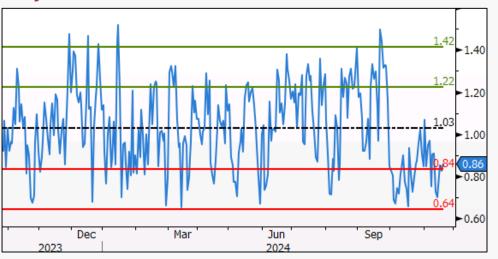


The largest open interest changes (contracts) were seen at the 23,300 call strike and 23,300 put strike.

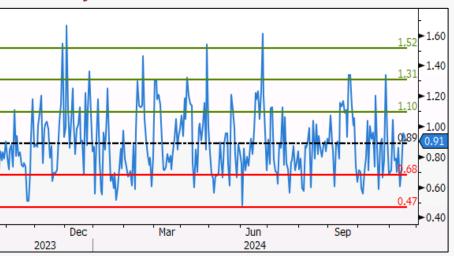




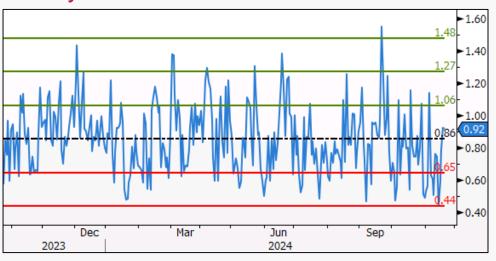
#### Nifty



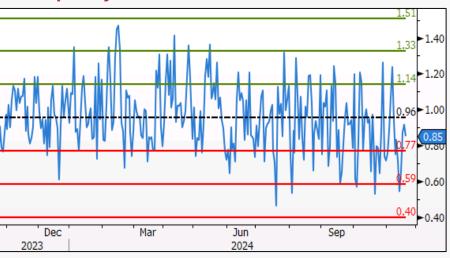
#### **Bank Nifty**



#### **Fin Nifty**

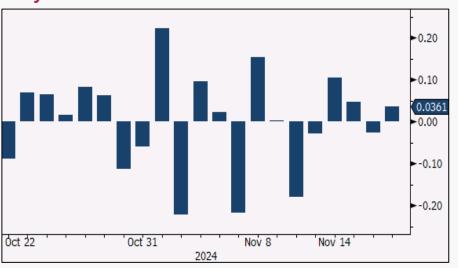


#### **Midcap Nifty**

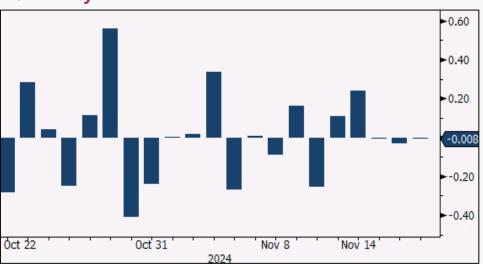




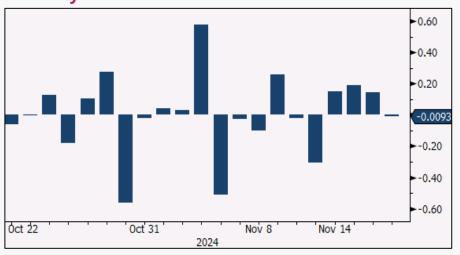
#### **Nifty**



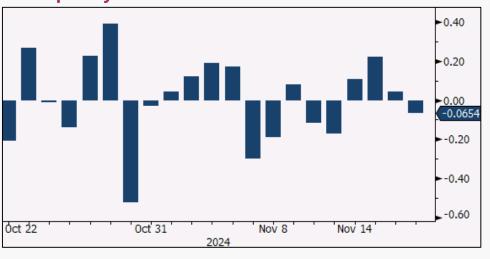
## **Bank Nifty**



# **Fin Nifty**



# **Midcap Nifty**





# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADANI ENTERPRISE	2183.65	-22.6	84.8	84.8	2.4	100.0
COLGATE PALMOLIV	2690.3	-1.6	27.4	31.7	9.5	80.7
INDRAPRASTHA GAS	311.4	-2.8	48.3	55.4	20.3	79.9
GRANULES INDIA	544.85	-1.4	45.7	54.5	11.0	79.8
DIXON TECHNOLOGI	14995.45	0.8	41.1	51.3	1.8	79.4

#### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LTIMINDTREE LTD	5931.05	0.8	23.8	39.1	22.5	7.9
INDIAN RAILWAY C	793.85	-0.8	26.4	59.6	23.5	8.0
CITY UNION BANK	170.09	-0.3	28.9	52.1	26.7	8.9
HDFC LIFE INSURA	674.4	-0.9	25.1	80.5	19.6	9.1
APOLLO HOSPITALS	6742.5	0.8	20.9	40.3	18.6	10.6



# **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI ENTERPRISE	2183.65	-22.6	84.8	84.8	2.4	100.0
ADANI PORTS AND	1114.65	-13.6	64.1	85.8	23.2	98.7
GRANULES INDIA	544.85	-1.4	45.7	54.5	11.0	98.7
INDRAPRASTHA GAS	311.4	-2.8	48.3	55.4	20.3	98.4
AMBUJA CEMENTS	484.15	-11.9	53.5	70.4	20.9	97.1

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

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
GUJARAT NARM VLY	555.55	-1.0	12.7	53.0	4.8	1.1
MRF LTD	123509.9	0.5	12.1	39.1	8.9	1.4
LTIMINDTREE LTD	5931.05	0.8	23.8	39.1	22.5	3.2
APOLLO HOSPITALS	6742.5	0.8	20.9	40.3	18.6	3.8
DIVI LABS LTD	5977.1	1.3	23.3	45.9	18.2	8.1



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ALKEM LABORATORI	5604.75	1.4	19415	5036	3.9
BALKRISHNA INDS	2721.95	-1.7	5885	1611	3.7
JK CEMENTS LTD	4003	1.3	3575	1029	3.5
L&T TECHNOLOGY S	5165.7	0.6	8220	2434	3.4
COROMANDEL INTER	1768	0.2	7282	2501	2.9

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
AMBUJA CEMENTS	484.15	-11.9	62219	76988	1.2
MANAPPURAM FINAN	150.29	-2.9	5931	7303	1.2
BERGER PAINTS	465.5	-2.3	2885	3388	1.2
DR REDDY'S LABS	1195.35	-1.5	19162	19697	1.0
MAX FINANCIAL SE	1173.5	-1.4	3758	3857	1.0



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

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
DIXON TECHNOLOGI	14995.45	0.8	46233	46233	100.0
ADITYA BIRLA CAP	183.01	-0.9	13182	13343	98.8
CUMMINS INDIA	3282.25	-0.6	11720	12151	96.5
INDIAN HOTELS CO	786.8	4.4	14157	14749	96.0
OBEROI REALTY	1917.35	-0.8	9644	10054	95.9

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

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
INDIAN HOTELS CO	786.8	4.4	14776	14776	100.0
DIXON TECHNOLOGI	14995.45	0.8	28180	28180	100.0
ADITYA BIRLA CAP	183.01	-0.9	8646	8646	100.0
COFORGE LTD	8210.1	1.2	24966	24966	100.0
NATIONAL ALUMIN	248.21	3.3	14488	14488	100.0



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

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
INDIAN HOTELS CO	786.8	4.4	112724	127505	88.41
POWER FINANCE	453.35	-3.8	122901	140592	87.42

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

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
AMBUJA CEMENTS	484.15	-11.9	76988	76988	100.0
INDIAN HOTELS CO	786.8	4.4	53209	55207	96.4
POWER FINANCE	453.35	-3.8	78449	84811	92.5



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

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ADANI PORTS AND	1114.65	-13.6	274769	48102	5.7
ADANI ENTERPRISE	2183.65	-22.6	344090	64448	5.3
ACC LTD	2027.2	-7.3	59801	15361	3.9
INDIAN HOTELS CO	786.8	4.4	112724	30835	3.7
AMBUJA CEMENTS	484.15	-11.9	62219	19689	3.2

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

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
AMBUJA CEMENTS	484.15	-11.9	76988	12611	6.1
ADANI ENTERPRISE	2183.65	-22.6	205417	37032	5.5
ADANI PORTS AND	1114.65	-13.6	158769	28819	5.5
ACC LTD	2027.2	-7.3	52028	12461	4.2
REC LTD	490.95	-5.00	113108	29557	3.8



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio	
BRITANNIA INDS	4803.35	-1.8	44854	18098	2.5	
PI INDUSTRIES	4138.7	-0.2	5901	2673	2.2	
ADANI ENTERPRISE	2183.65	-22.6	66732	32127	2.1	
ADANI PORTS AND	1114.65	-13.6	41469	20074	2.1	
APOLLO HOSPITALS	6742.5	0.8	20611	10516	2.0	

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
INDIAN HOTELS CO	786.8	4.4	14776	5991	2.5
PI INDUSTRIES	4138.7	-0.2	4784	2014	2.4
ADANI PORTS AND	1114.65	-13.6	29059	13262	2.2
NATIONAL ALUMIN	248.21	3.3	14488	7089	2.0
AMBUJA CEMENTS	484.15	-11.9	16072	7919	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	3000	1690200	37.4%	2184	3100	1398900	42.0%	INFY	1860	2760400	1.4%	1834	1800	2246800	-1.9%
ADANIPORTS	1400	1755600	25.6%	1115	1080	1481200	-3.1%	ITC	500	6526400	9.4%	457	460	2321600	0.6%
APOLLOHOSP	7500	378125	11.2%	6743	6700	103750	-0.6%	JSWSTEEL	1000	1021275	5.9%	944	940	1003050	-0.4%
ASIANPAINT	2600	1100400	7.1%	2428	2400	440800	-1.2%	KOTAKBANK	1800	1651600	3.6%	1737	1700	804400	-2.1%
AXISBANK	1200	2828125	5.3%	1139	1120	1136875	-1.7%	LT	3700	1350150	6.2%	3484	3600	478950	3.3%
BAJAJ-AUTO	11000	375450	15.7%	9505	9500	143700	-0.1%	LTIM	6000	142950	1.2%	5931	5800	59550	-2.2%
BAJAJFINSV	1600	756500	2.0%	1569	1500	245500	-4.4%	M&M	3000	1430275	2.2%	2936	2800	747075	-4.6%
BAJFINANCE	7000	799750	8.3%	6466	6500	375250	0.5%	MARUTI	12000	560600	10.5%	10861	11000	119900	1.3%
BHARTIARTL	1620	2403025	6.2%	1525	1600	872575	4.9%	NESTLEIND	2400	460200	8.5%	2211	2400	235800	8.5%
BPCL	320	4345200	13.3%	282	280	2842200	-0.8%	NTPC	400	10494000	12.3%	356	360	2292000	1.1%
BRITANNIA	5500	371100	14.5%	4803	4700	157300	-2.2%	ONGC	269	24449425	11.1%	242	244	2879800	0.8%
CIPLA	1600	988325	9.2%	1466	1400	468975	-4.5%	POWERGRID	330	7468200	1.3%	326	320	4251600	-1.8%
COALINDIA	430	2311050	5.9%	406	410	1558200	1.0%	RELIANCE	1300	10460000	6.3%	1223	1200	4299000	-1.9%
DIVISLAB	6000	368800	0.4%	5977	5000	378600	-16.3%	SBILIFE	1640	1365750	11.0%	1478	1500	204000	1.5%
DRREDDY	1300	1553125	8.8%	1195	1200	426250	0.4%	SBIN	850	11104500	8.9%	781	800	3255750	2.5%
EICHERMOT	5000	451150	2.4%	4882	4500	268975	-7.8%	SUNPHARMA	1900	1838900	6.7%	1780	1760	316750	-1.1%
GRASIM	2560	436000	1.0%	2535	2500	361250	-1.4%	TATACONSUM	1100	1078440	20.7%	912	900	478800	-1.3%
HCLTECH	1820	1225700	-0.9%	1836	1800	581700	-2.0%	<b>TATAMOTORS</b>	900	8445250	16.3%	774	700	2442000	-9.5%
HDFCBANK	1800	5976850	3.4%	1741	1700	2194500	-2.4%	TATASTEEL	155	46530000	10.5%	140	140	21279500	-0.2%
HDFCLIFE	730	2832500	8.2%	674	660	611600	-2.1%	TCS	4200	1034250	3.1%	4073	4000	620900	-1.8%
HEROMOTOCO	5000	637050	4.9%	4768	4500	239700	-5.6%	TECHM	1700	853800	-0.1%	1702	1600	542400	-6.0%
HINDALCO	700	7049000	8.0%	648	650	2063600	0.3%	TITAN	3300	722575	3.8%	3178	3000	344925	-5.6%
HINDUNILVR	2600	924900	9.1%	2383	2400	468000	0.7%	ULTRACEMCO	11200	84900	2.2%	10955	10500	49300	-4.2%
ICICIBANK	1300	4881800	4.0%	1251	1250	2009000	0.0%	UPL	560	2155400	0.8%	556	500	2922400	-10.0%
INDUSINDBK	1100	2816000	12.1%	981	1000	1055500	1.9%	WIPRO	580	4456500	4.1%	557	540	1951500	-3.1%



- 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

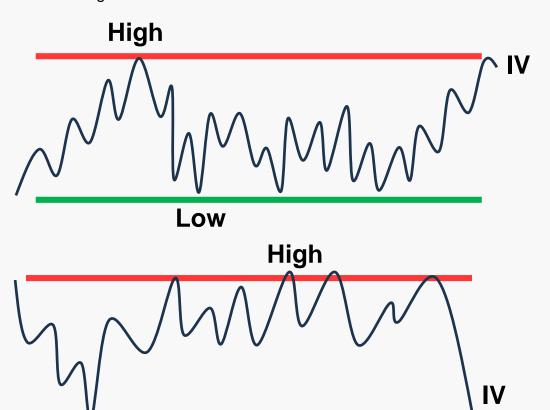


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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

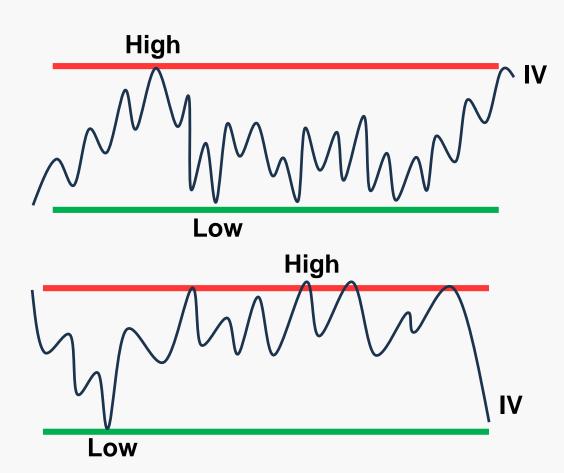


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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