

**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change	
Most recent settlement	25,881	0.1%▼	
Open Interest (OI)	1,82,98,915	1.5%▼	
Change in OI (abs)	1,82,98,915	2,70,170▼	
Premium / Discount (Abs)	65	14▼	
Inference	Long Unwinding		

**Bank Nifty Futures** 

	Value	Change	
Most recent settlement	59,074	0.1%▼	
Open interest (OI)	20,42,980	2.6%▼	
Change in OI (abs)	20,42,980	53,480▼	
Premium / Discount (Abs)	161	59▼	
Inference	Long Unwinding		

**Volatility Insights** 

	Value	Change
India VIX Index	9.71	0.13▼
Nifty ATM IV (%)	8.74	0.15▼
Bank Nifty ATM IV (%)	9.77	0.39▼
PCR (Nifty)	0.83	0.06 ▲
PCR (Bank Nifty)	0.75	0.00 ▲

The FII Long Ratio in Index Futures drop to 8.1 %, down from 8 % in the previous session.

## **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
HDFCAMC	56,99,100	14.5%	2732.7	7.2%			
NUVAMA	4,28,350	13.7%	7331.5	1.8%			
ASHOKLEY	17,04,50,000	6.6%	170.12	2.4%			
LICI	1,21,19,800	4.9%	848.05	0.1%			
MAXHEALTH	2,05,65,300	4.3%	1052	1.8%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
POWERINDIA	2,88,400	7.5%	18210	-5.2%			
MUTHOOTFIN	33,81,125	6.9%	3750.9	-0.5%			
HINDUNILVR	1,17,12,300	6.8%	2265.6	-0.4%			
JINDALSTEL	1,33,02,500	5.8%	988.9	-1.5%			
POWERGRID	8,71,83,400	5.2%	258.75	-1.2%			

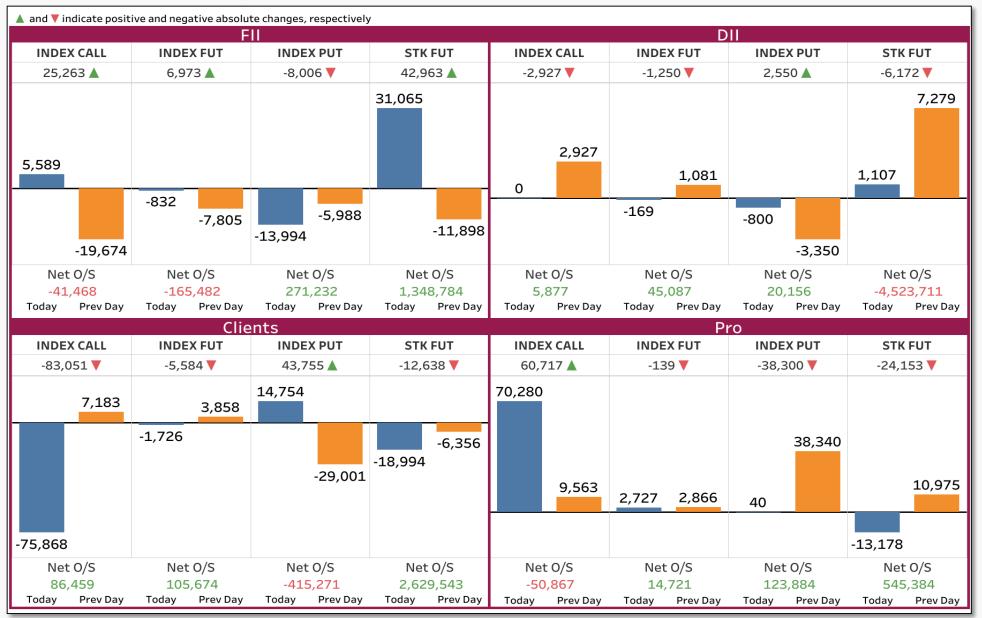
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
INDIGO	1,15,80,450	-5.7%	5130.5	2.9%			
SHRIRAMFIN	6,40,87,650	-5.4%	869.55	0.2%			
KFINTECH	35,13,900	-4.5%	1073.1	4.0%			
360ONE	18,76,500	-2.6%	1144.4	1.3%			
HAVELLS	83,39,500	-2.3%	1404.2	0.4%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol Open Interest Chg (%) Price Chg (%							
NATIONALUM	5,67,97,500	-4.6%	279.55	-0.1%			
UNITDSPR	1,20,98,800	-3.6%	1393.8	-2.0%			
KAYNES	36,91,200	-3.3%	4048	-1.2%			
CGPOWER	1,43,56,500	-2.9%	662.55	-1.2%			
NCC	2,18,16,000	-2.4%	153.3	-1.7%			

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

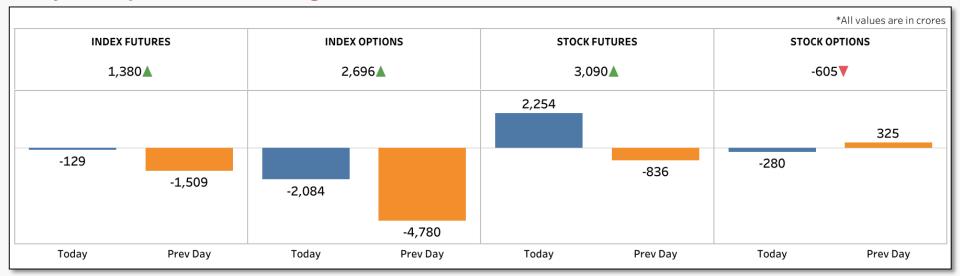


### **Open Interest Trends by Participant**

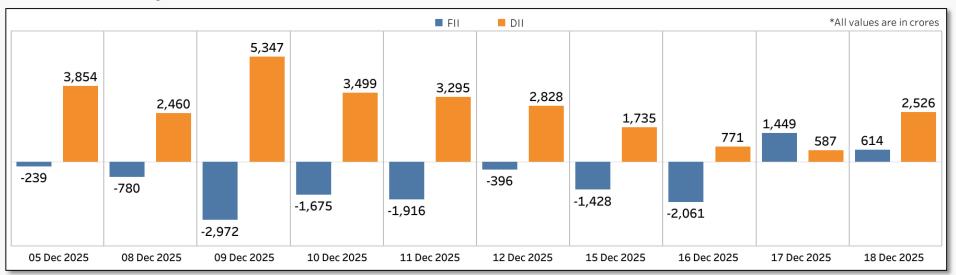




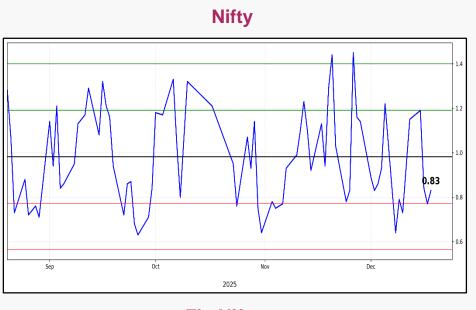
### **Daily Net Open Interest Change**

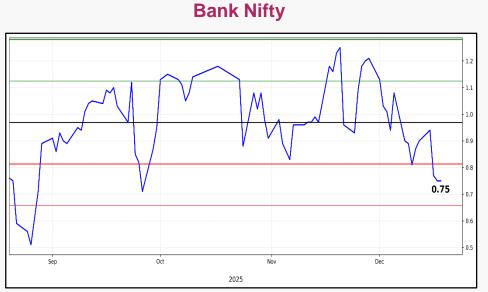


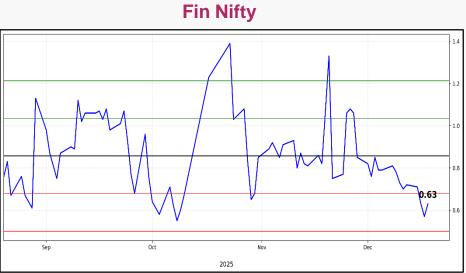
## **DII and FII Daily Cash Market Flows**

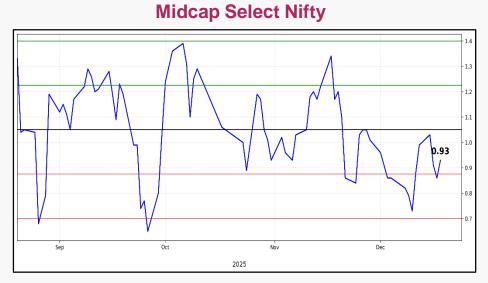








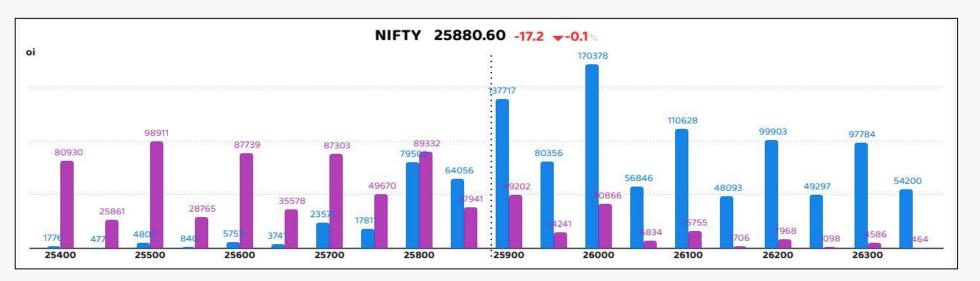




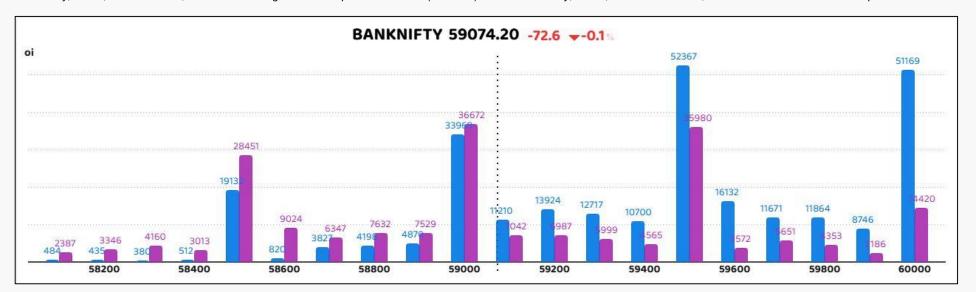


#### Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





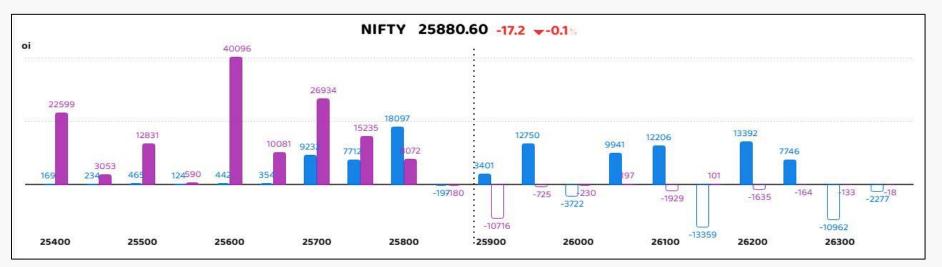
For Nifty, the 26,000 Call and 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 59,500 Call and the 59,000 Put saw the most amount of open interest.



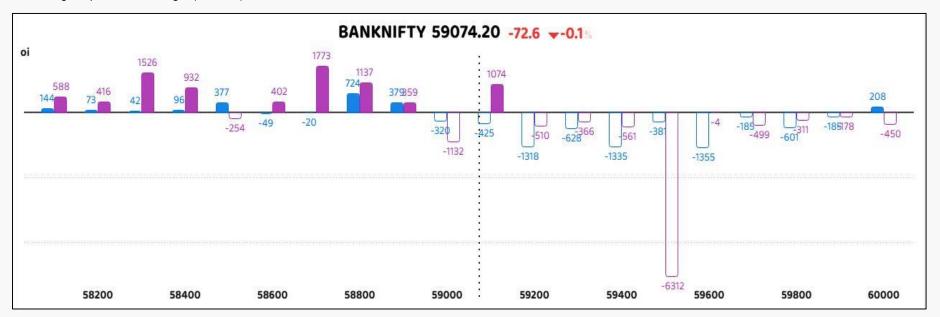


#### **Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)**





The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,600 Put





# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
JSW STEEL LTD	1,082.2	0.3	55.5	55.5	20.1	100.0
BANDHAN BANK LTD	145.3	-1.7	74.3	74.3	15.9	100.0
HINDUSTAN UNILEV	2,265.5	-0.4	17.1	25.8	0.8	65.1
HDFC BANK LTD	979.7	-0.4	18.6	28.0	1.5	64.6
STEEL AUTHORITY	127.3	-2.3	51.0	91.3	0.6	55.6

#### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LARSEN & TOUBRO	4,031.1	-0.8	14.2	35.5	14.2	0.0
SAMVARDHANA MOTH	117.2	-2.0	24.8	59.6	24.8	0.0
ASTRAL LTD	1,407.9	-1.5	18.9	40.4	18.9	0.0
BAJAJ AUTO LTD	8,831.0	-0.7	18.9	36.4	18.6	1.6
GAIL INDIA LTD	167.6	-0.9	21.0	91.4	19.8	1.7



## **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
JSW STEEL LTD	1,082.2	0.3	55.5	55.5	20.1	100.0
BANDHAN BANK LTD	145.3	-1.7	74.3	74.3	15.9	100.0
BLUE STAR LTD	1,854.6	1.5	37.5	40.0	20.4	96.4
STEEL AUTHORITY	127.3	-2.3	51.0	91.3	0.6	96.2
KAYNES TECHNOLOG	4,046.5	-1.1	51.1	62.9	30.3	95.8

#### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LARSEN & TOUBRO	4,031.1	-0.8	14.2	35.5	14.2	0.0
SAMVARDHANA MOTH	117.2	-2.0	24.8	59.6	24.8	0.0
ASTRAL LTD	1,407.9	-1.5	18.9	40.4	18.9	0.0
BHARAT ELECTRON	383.5	-0.6	15.7	60.0	13.8	0.5
ICICI BANK LTD	1,356.8	0.3	2.0	35.4	0.4	0.6



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
CYIENT	1141.3	0.2	6,089	1,179	5.2
TITAGARH	772.4	-0.3	7,719	1,635	4.7
YESBANK	21.4	-0.1	9,990	2,119	4.7
NAUKRI	1333.7	-0.3	5,404	1,179	4.6
MPHASIS	2887.9	0.8	12,824	2,866	4.5

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
UNITDSPR	1391.2	-2.4	18,806	22,052	1.2
TVSMOTOR	3592.2	-1.3	20,794	22,908	1.1
MARUTI	16329.0	-0.4	50,169	54,992	1.1
SAMMAANCAP	143.4	-1.6	27,211	27,011	1.0
PAGEIND	35695.0	-1.0	8,884	8,609	1.0



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

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
CROMPTON	255.7	2.6	15,733	15,733	100.0
NBCC	108.3	-1.2	9,578	9,578	100.0
POWERINDIA	18160.0	-5.2	13,200	13,200	100.0
BDL	1342.5	1.4	22,757	22,931	99.2
TIINDIA	2579.9	-1.3	7,811	7,907	98.8

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

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ASHOKLEY	171.6	3.3	14,684	14,684	100.0
CHOLAFIN	1679.0	0.3	8,551	8,551	100.0
HINDZINC	592.2	2.4	30,021	30,021	100.0
HUDCO	206.9	-0.5	6,770	6,770	100.0
TIINDIA	2579.9	-1.3	5,067	5,067	100.0



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

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
CROMPTON	255.7	2.6	58,179	63,090	92.2
TMPV	345.8	-0.2	1,93,966	2,87,427	67.5
IDEA	11.3	1.5	51,516	90,380	57.0
HDFCAMC	2722.9	7.2	1,08,148	1,90,222	56.9
INDIGO	5115.5	2.7	2,38,124	4,39,821	54.1

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

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
POWERINDIA	18160.0	-5.2	25,246	30,860	81.8
TMPV	345.8	-0.2	57,573	98,498	58.5
HINDZINC	592.2	2.4	51,338	94,741	54.2
CROMPTON	255.7	2.6	20,270	38,282	52.9
HDFCAMC	2722.9	7.2	48,829	95,507	51.1



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SHREECEM	25645.0	-1.5	6,056	2,690	2.3
HEROMOTOCO	5748.5	-1.2	34,362	17,398	2.0
HINDZINC	592.2	2.4	41,683	21,142	2.0
SUNPHARMA	1745.9	-2.6	25,849	13,120	2.0
HDFCAMC	2722.9	7.2	12,486	6,390	2.0

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
HDFCAMC	2722.9	7.2	11,907	4,737	2.5
CHOLAFIN	1679.0	0.3	8,551	3,574	2.4
HINDZINC	592.2	2.4	30,021	13,188	2.3
VEDL	579.2	1.6	47,829	23,115	2.1
INDIGO	5115.5	2.7	59,259	30,589	1.9



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

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
HDFCAMC	2722.9	7.2	1,08,148	7,877	13.7
CROMPTON	255.7	2.6	58,179	6,302	9.2
NUVAMA	7301.5	1.8	50,798	6,229	8.2
VOLTAS	1401.7	1.5	36,021	9,287	3.9
SUNPHARMA	1745.9	-2.6	48,812	13,189	3.7

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

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
HDFCAMC	2722.9	7.2	48,829	3,684	13.3
CROMPTON	255.7	2.6	20,270	2,209	9.2
UNITDSPR	1391.2	-2.4	22,052	3,394	6.5
NUVAMA	7301.5	1.8	15,761	2,476	6.4
SUNPHARMA	1745.9	-2.6	33,682	7,078	4.8



# 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	2557284	3.2%	2229	2300	1030206	3.2%	JIOFIN	310	11141350	6.1%	292	300	5952550	2.6%
ADANIPORTS	1600	1964600	7.0%	1496	1500	798475	0.3%	JSWSTEEL	1200	3561300	10.9%	1082	1000	992925	-7.6%
APOLLOHOSP	7500	306375	8.4%	6919	7000	170500	1.2%	KOTAKBANK	2200	1480800	1.6%	2165	2100	963200	-3.0%
ASIANPAINT	3000	1276000	8.7%	2760	2600	480750	-5.8%	LT	4100	709800	1.7%	4031	4000	411250	-0.8%
AXISBANK	1300	5233125	5.7%	1230	1220	1714375	-0.8%	M&M	3800	1348600	5.9%	3587	3600	488800	0.4%
BAJAJ-AUTO	9300	270600	5.3%	8831	9000	142800	1.9%	MARUTI	16500	278800	1.0%	16329	16000	186300	-2.0%
BAJAJFINSV	2100	1083500	3.6%	2026	2000	414500	-1.3%	MAXHEALTH	1100	1125075	4.9%	1049	1160	435225	10.6%
BAJFINANCE	1020	3774000	2.0%	1000	1000	2097000	0.0%	NESTLEIND	1320	2316500	7.0%	1234	1180	270000	-4.3%
BEL	420	11777625	9.5%	383	410	4059825	6.9%	NTPC	325	7041000	2.0%	319	320	1906500	0.5%
BHARTIARTL	2100	3120750	0.4%	2092	2100	1057350	0.4%	ONGC	250	9744750	7.8%	232	230	2540250	-0.9%
CIPLA	1660	895875	10.7%	1499	1400	508500	-6.6%	POWERGRID	280	5553700	8.5%	258	260	2561200	0.8%
COALINDIA	380	1908900	-1.4%	385	440	1590300	14.2%	RELIANCE	1600	9318000	3.6%	1544	1500	2702000	-2.9%
DRREDDY	1300	2181875	1.6%	1280	1140	376250	-10.9%	SBILIFE	2040	932625	1.3%	2014	1900	289500	-5.7%
EICHERMOT	7300	393400	2.7%	7107	6300	236075	-11.3%	SBIN	1000	8990250	2.3%	978	950	3025500	-2.8%
ETERNAL	310	18573075	8.9%	285	285	5099775	0.1%	SHRIRAMFIN	880	3567300	1.2%	869	850	1651650	-2.2%
GRASIM	2800	397000	-0.3%	2808	2700	625000	-3.8%	SUNPHARMA	1840	2021250	5.4%	1746	1740	409150	-0.3%
HCLTECH	1720	1107050	3.5%	1661	1440	503300	-13.3%	TATACONSUM	1200	1730850	2.4%	1172	1070	378950	-8.7%
HDFCBANK	1000	8676250	2.1%	980	1000	3048100	2.1%	TMPV	360	11460000	4.1%	346	340	5519200	-1.7%
HDFCLIFE	800	4590300	5.7%	757	700	1387100	-7.5%	TATASTEEL	175	24689500	4.1%	168	170	15603500	1.1%
HINDALCO	800	1845900	-6.6%	857	780	1230600	-9.0%	TCS	3300	1111600	0.6%	3281	3200	632625	-2.5%
HINDUNILVR	2300	1121700	1.5%	2266	2300	505800	1.5%	TECHM	1600	1362000	-0.3%	1606	1560	565800	-2.8%
ICICIBANK	1400	8672300	3.2%	1357	1400	3310300	3.2%	TITAN	4000	523425	2.1%	3919	3800	407750	-3.0%
INDIGO	5500	1932450	7.5%	5116	5000	889050	-2.3%	TRENT	4300	969000	6.7%	4030	4000	418000	-0.7%
INFY	1600	8114400	-1.6%	1627	1600	3931600	-1.6%	ULTRACEMCO	12000	180450	4.7%	11461	10800	95250	-5.8%
ITC	410	10888000	2.4%	400	400	5179200	-0.1%	WIPRO	265	5301000	0.4%	264	250	3786000	-5.2%



- 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

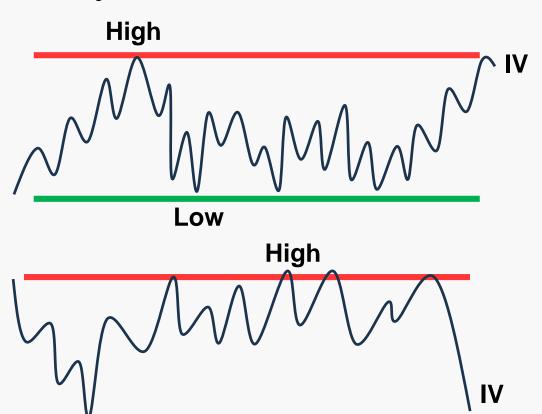


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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



#### **Disclaimer & Disclosures**

Axis Direct is the brand under Axis Securities Limited, which is a 100% subsidiary of Axis Bank Limited. Axis Bank Ltd. is a listed public company and one of India's largest private sector banks, and has its various subsidiaries engaged in businesses of Asset management, NBFC, Merchant Banking, Trusteeship, Venture Capital, Stock Broking, the details in respect of which are available on www.axisbank.com.

Axis Securities Limited is registered as a

- Stock Broker, Depository Participant, Portfolio Manager, Investment Adviser and Research Analyst with the Securities and Exchange Board of India
- Corporate Agent with Insurance Regulatory and Development Authority of India
- Point of Presence with Pension Fund Regulatory and Development Authority
- Distributor for Mutual Funds with AMFI

Registration Details:

SEBI Single Reg. No.- NSE, BSE, MSEI, MCX & NCDEX - INZ000161633 | SEBI Depository Participant Reg. No. IN-DP-403-2019 | Portfolio Manager Reg. No.- INP000000654 | Investment Advisor Reg No. INA000000615 | SEBI-Research Analyst Reg. No. INH000000297 | IRDA Corporate Agent (Composite) Reg. No. CA0073 | PFRDA - POP Reg. No. POP387122023 | Mutual Fund Distributor ARN- 64610.

Compliance Officer Details: Name - Mr Rajiv Kejriwal, 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: Axis Securities Limited, 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.

In case of any grievances, please call us at 022-40508080 or write to us at helpdesk@axisdirect.in.

We hereby declare that our activities have neither been suspended nor have we defaulted with any stock exchange authority with whom we are registered in the last five years. However, SEBI, Exchanges, Clearing Corporations and Depositories, etc. have conducted the routine inspection and based on their observations have issued advice/warning/show cause notices/deficiency letters/ or levied penalty or imposed charges for certain deviations observed in inspections or in the normal course of business, as a Stock Broker/Depository Participant/Portfolio Manager. We have not been debarred from doing business by any Stock Exchange/SEBI or any other authorities; nor has our certificate of registration been cancelled by SEBI at any point in time.

Investments in the securities market are subject to market risks. Read all the related documents carefully before investing.

By referring to any particular sector, Axis Securities does not provide any promise or assurance of a favourable view for a particular industry or sector or business group in any manner.

Registration granted by SEBI, membership of BASL (in case of IAs) and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk-free return to the investors. Our research should not be considered as an advertisement or advice, professional or otherwise. This research report and its respective content by Axis Securities made available on this page or otherwise do not constitute an offer to sell or purchase or subscribe for any securities or solicitation of any investments or investment services for the residents of Canada and/or the USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been clients during the twelve months preceding the date of distribution of the research report. Derivatives are a sophisticated investment device. The investor is requested to take into consideration all the risk factors before actually trading in derivative contracts.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment of its original date of publication by ASL and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments.

The information and opinions in this report have been prepared by Axis Securities and are subject to change without notice. The report and information contained herein are strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of Axis Securities. The report must not be used as a singular basis for any investment decision. The views herein are of a general nature and do not consider the risk appetite, investment objective or the particular circumstances of an individual investor. The investor is requested to take into consideration all the risk factors, including their financial condition, suitability to risk return profile and the like and take professional advice before investing.

While we would endeavour to update the information herein on a reasonable basis, Axis Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent Axis Securities from doing so. Non-rated securities indicate that the rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or Axis Securities policies, in circumstances where Axis Securities might be acting in an advisory capacity to this company, or in certain other circumstances.



#### **Disclaimer & Disclosures**

This report is based on information obtained in good faith from public sources and sources believed to be reliable, but no independent verification has been made, nor is its accuracy or completeness guaranteed. This report and information herein are solely for informational purposes and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. Axis Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and/or tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and the needs of the specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. Axis Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see the Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice. Axis Securities or its associates might have managed or co-managed a public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months. Axis Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory services in a merger or specific transaction. Axis Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking, or brokerage services from the companies mentioned in the report in the past twelve months. Axis Securities encourages independence in research report preparation and strives to minimise conflict in the preparation of research reports. Axis Securities or its analysts, did not receive any compensation or other benefits from the companies mentioned in the report or a third party in connection with the preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and/or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance from the Research team, and all its activities are segregated from Research activities. The proprietary desk operates independently, potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of the subject company(ies). Axis Securities or Research Analysts, or their relatives, do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one per cent or more or other material conflicts of interest in various companies, including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusions from the information presented in this report. Certain transactions-including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centre on studying charts of a stock's price movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender/borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short positions in the above-mentioned scrip(s) and therefore may be considered as interested. This should not be construed as an invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independently of the PCG research, and accordingly, PMS may have positions contrary to the PCG research recommendation.

This research report is issued in India by Axis Securities Limited in accordance with the Securities and Exchange Board of India (Research Analysts) Regulations, 2014. It is intended solely for persons residing in India. The report is not directed at or intended for distribution to, or use by, any person or entity resident in the United States of America, Canada, or in any jurisdiction where such distribution, publication, availability, or use would be contrary to applicable securities laws, including the U.S. Securities Exchange Act of 1934, regulations of the U.S. Securities and Exchange Commission (SEC), and regulations of the Canadian Securities Administrators (CSA).

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