



**Daily Derivatives Report** 



**Nifty Futures** 

	Value	Change	
Most recent settlement	24,304	0.8%▲	
Open Interest (OI)	1,24,87,625	3.1%▼	
Change in OI (abs)	1,24,87,625	3,92,200▼	
Premium / Discount (Abs)	173	28▼	
Inference	Short Covering		

# **Bank Nifty Futures**

	Value	Change	
Most recent settlement	52,364	0.1%▲	
Open interest (OI)	25,14,225	6.3%▲	
Change in OI (abs)	25,14,225	1,48,275 ▲	
Premium / Discount (Abs)	309	114▼	
Inference	Long Build Up		

## **Volatility Insights**

	Value	Change
India VIX Index	14.43	0.8▼
Nifty ATM IV (%)	12.53	2.1▼
Bank Nifty ATM IV (%)	15.02	0.6▼
PCR (Nifty)	1.09	0.26 ▲
PCR (Bank Nifty)	0.85	0.01 ▼

## **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
IGL	2,22,48,875	27.4%	329.5	2.4%			
DIVISLAB	35,43,300	12.3%	6215.4	3.7%			
MGL	34,84,800	11.7%	1201.05	1.2%			
GNFC	50,58,300	10.2%	641.45	3.9%			
PETRONET	3,00,09,000	7.7%	336.25	1.9%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
APOLLOHOSP	18,54,125	10.3%	6875.8	-0.2%			
CHOLAFIN	1,23,32,500	8.3%	1242.6	-2.8%			
GODREJPROP	45,28,575	5.5%	2788.15	-1.6%			
HEROMOTOCO	43,75,200	4.6%	4792.9	-0.4%			
COLPAL	44,83,500	4.5%	2907.8	-3.8%			

Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
AMBUJACEM	3,82,35,600	-2.7%	534.9	3.6%			
JKCEMENT	7,01,750	-2.2%	4290.2	2.9%			
ABBOTINDIA	93,760	-1.9%	27913.75	1.6%			
PERSISTENT	15,19,900	-1.6%	5935.85	1.5%			
MARUTI	33,71,900	-1.6%	11146.8	1.4%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol Open Interest Chg (%) Price Chg (							
OBEROIRLTY	70,81,200	-1.5%	1979.4	-0.1%			
HDFCLIFE	2,24,35,600	-1.4%	660.25	-0.1%			
GRANULES	1,72,82,000	-1.3%	586.4	-0.3%			
MFSL	41,00,000	-0.9%	1141.45	-0.3%			
HDFCBANK	14,24,42,300	-0.8%	1804.1	-0.1%			

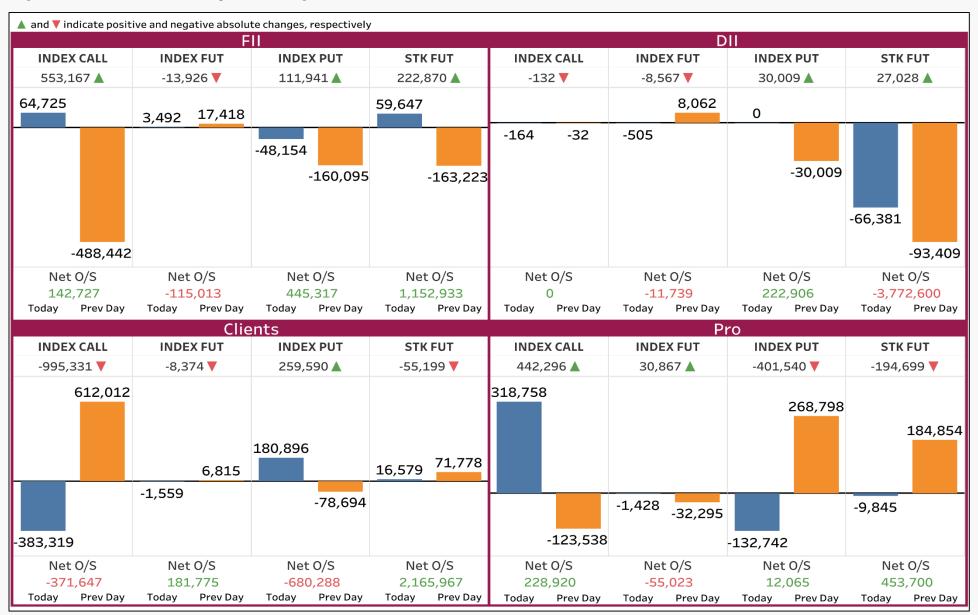
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

<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

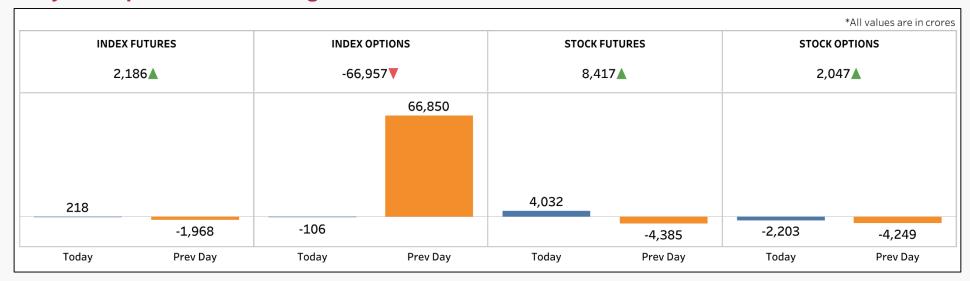


## **Open Interest Data by Participant**

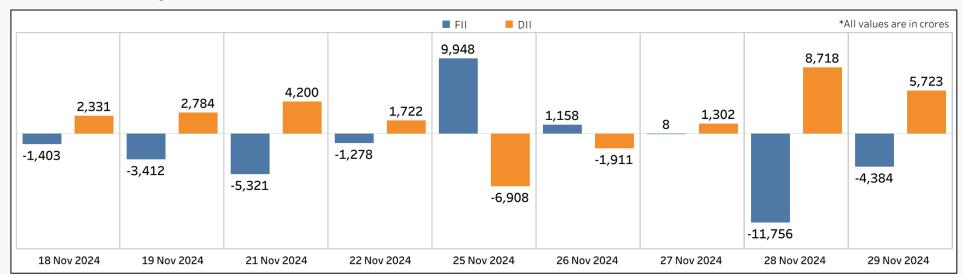




# **Daily Net Open Interest Change**



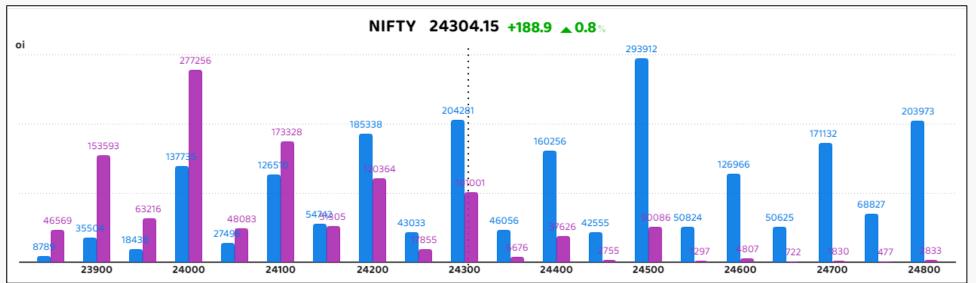
## **DII and FII Daily Cash Market Flows**



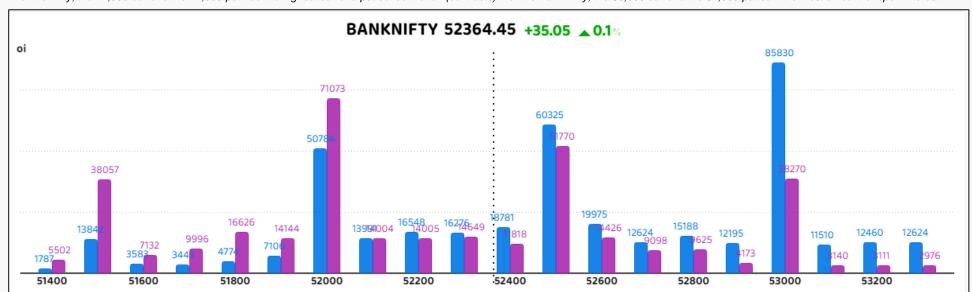


### Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)





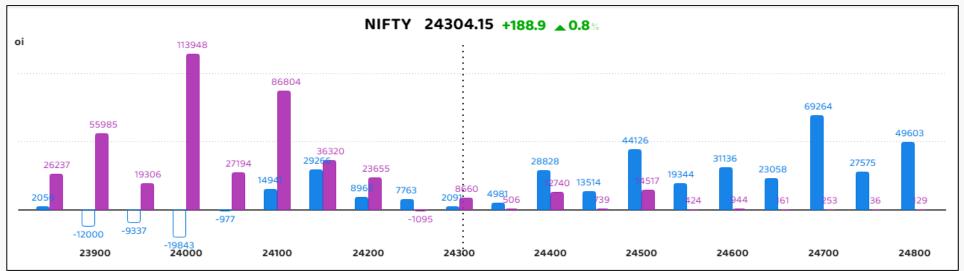
For the Nifty, the 24,500 call and the 24,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 53,000 call and the 52,000 put saw the most amount of open interest.



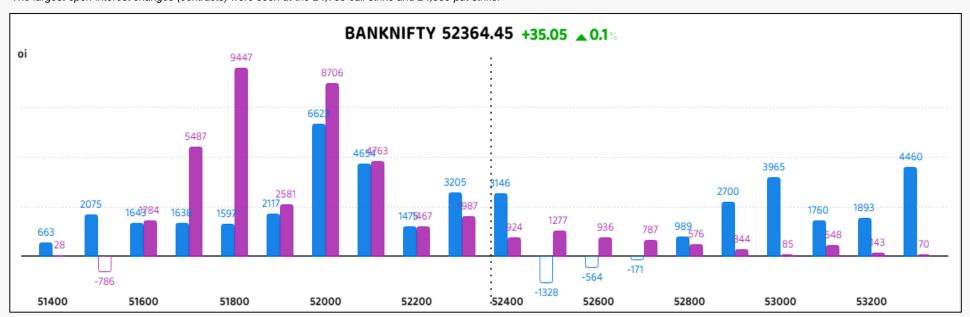






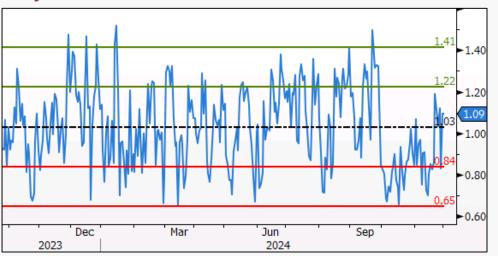


The largest open interest changes (contracts) were seen at the 24,700 call strike and 24,000 put strike.

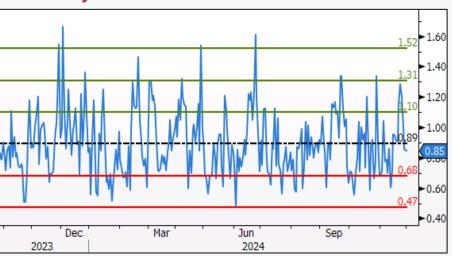




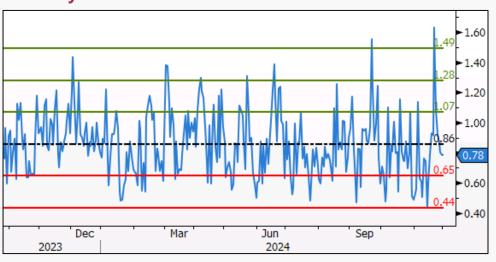
### Nifty



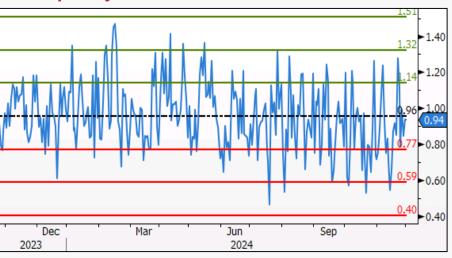
### **Bank Nifty**



### **Fin Nifty**

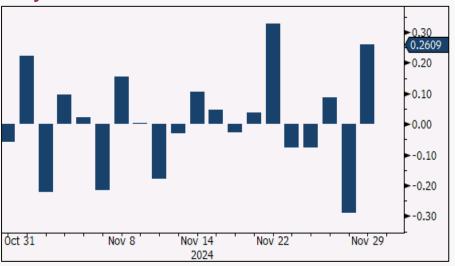


### **Midcap Nifty**

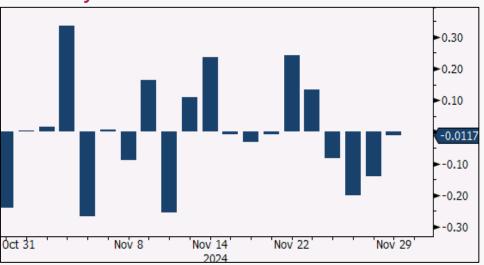




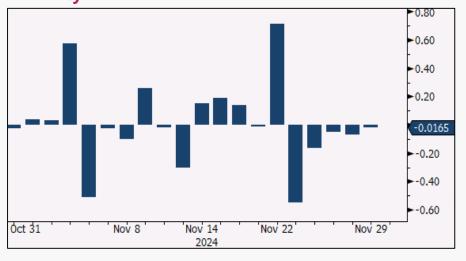
### **Nifty**



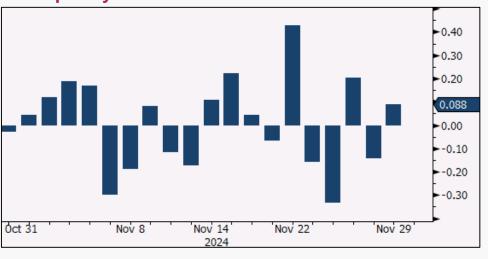
### **Bank Nifty**



### **Fin Nifty**



### **Midcap Nifty**





# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
COLPAL	2889.8	-3.7	25.6	31.7	9.5	72.4
DIXON	15807.4	1.3	36.2	51.3	1.8	69.5
TITAN	3249.0	1.1	23.0	33.5	2.3	66.3
MARUTI	11074.2	1.1	22.4	33.7	0.4	66.1
HEROMOTOCO	4761.7	-0.5	26.8	40.4	2.8	63.8

### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
RECLTD	532.6	0.8	33.0	86.9	31.2	3.1
IRCTC	816.0	0.2	25.6	59.6	23.5	5.7
CUB	179.5	-0.1	28.1	52.1	26.7	5.7
GMRINFRA	83.2	0.9	30.9	69.5	28.3	6.3
JINDALSTEL	906.5	1.1	26.8	55.4	24.8	6.5



# **Stocks With High IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANIPORTS	1190.1	1.9	43.4	85.8	23.2	85.1
COLPAL	2889.8	-3.7	25.6	31.7	9.5	83.4
ADANIENT	2463.2	1.1	49.8	89.6	2.4	76.6
IGL	327.1	2.4	36.6	55.4	20.3	69.2
M&M	2966.1	2.3	29.7	58.8	0.8	69.2

## **Stocks With Low IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SBIN	839.0	0.0	13.9	55.4	3.1	1.4
JINDALSTEL	906.5	1.1	26.8	55.4	24.8	2.4
NAVINFLUOR	3507.9	1.1	26.3	46.3	16.8	2.6
IEX	176.2	0.7	32.1	66.6	12.2	2.7
GUJGASLTD	479.8	1.6	25.2	52.6	21.8	3.4



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
JKCEMENT	4278.3	3.2	3350	600	5.6
ABBOTINDIA	27723.4	1.3	1170	232	5.0
TORNTPHARM	3324.2	3.8	5043	1179	4.3
IDEA	8.4	0.0	19846	4951	4.0
ALKEM	5642.5	3.4	10210	2982	3.4

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
BOSCHLTD	34966.2	0.8	1525	1775	1.2
EICHERMOT	4831.9	0.3	6806	7288	1.1
COFORGE	8685.9	0.3	10565	10041	1.0
DABUR	527.2	0.2	4648	4341	0.9
SHRIRAMFIN	3019.7	-0.8	10391	9233	0.9



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

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff	
COLPAL	2889.75	-3.7	11954	12151	98.4	

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

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
COLPAL	2889.75	-3.71	5191	6323	82.1



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

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff			
NO STOCK OPTION MET THIS CRITERIA ON THE DAY								

# **Put Volume Relative to Record High**

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff	
SBILIFE	1437.75	0.64	30201	37928	79.6	



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

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SBILIFE	1437.8	0.6	66070	18093	3.7
DIVISLAB	6172.7	3.7	75956	26962	2.8
BHARTIARTL	1627.2	4.3	140978	58853	2.4
TORNTPHARM	3324.2	3.8	5043	2456	2.1
LAURUSLABS	567.2	2.8	19615	9786	2.0

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

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SBILIFE	1437.8	0.6	30201	10130	3.0
BHARTIARTL	1627.2	4.3	65237	25574	2.6
COLPAL	2889.8	-3.7	14265	6948	2.1
LAURUSLABS	567.2	2.8	8956	5050	1.8
GMRINFRA	83.2	0.9	15432	9200	1.7



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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
COLPAL	2889.8	-3.7	11954	8060	1.5
ADANIPORTS	1190.1	1.9	34045	26435	1.3
LAURUSLABS	567.2	2.8	4706	3833	1.2
SBILIFE	1437.8	0.6	14829	12100	1.2
ADANIENT	2463.2	1.1	34808	32580	1.1

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BOSCHLTD	34966.2	0.8	3088	2028	1.5
SBILIFE	1437.8	0.6	5810	4120	1.4
BHARTIARTL	1627.2	4.3	15178	11500	1.3
LAURUSLABS	567.2	2.8	4085	3161	1.3
HDFCLIFE	657.8	0.0	5202	4058	1.3



## 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	1611900	21.8%	2463	3000	2086500	21.8%	INFY	2000	1638400	7.7%	1858	1800	885200	-3.1%
ADANIPORTS	1200	2591200	0.8%	1190	1200	1439600	0.8%	ITC	500	6304000	4.9%	477	450	2084800	-5.6%
APOLLOHOSP	7000	83375	2.5%	6829	7000	51375	2.5%	JSWSTEEL	1000	635175	3.5%	966	960	329400	-0.6%
ASIANPAINT	2600	586000	4.9%	2480	2500	446200	0.8%	KOTAKBANK	1900	1568800	7.6%	1765	1800	668000	2.0%
AXISBANK	1200	1901250	5.6%	1136	1140	943750	0.3%	LT	3700	494700	-0.7%	3725	3700	278850	-0.7%
BAJAJ-AUTO	10000	305475	10.7%	9034	9000	131700	-0.4%	LTIM	6500	79950	5.3%	6172	6000	34500	-2.8%
BAJAJFINSV	1700	664500	7.6%	1580	1600	475000	1.3%	M&M	3000	889700	1.1%	2966	2900	635425	-2.2%
BAJFINANCE	7000	626125	6.4%	6576	6500	270250	-1.2%	MARUTI	12000	186050	8.4%	11074	11000	118500	-0.7%
BHARTIARTL	1640	1350425	0.8%	1627	1600	1304825	-1.7%	NESTLEIND	2400	348000	7.4%	2235	2200	177800	-1.6%
BPCL	300	3958200	2.7%	292	300	1348200	2.7%	NTPC	370	11397000	1.7%	364	370	1710000	1.7%
BRITANNIA	5000	187100	1.2%	4941	5000	68200	1.2%	ONGC	260	5717250	1.3%	257	250	1767150	-2.6%
CIPLA	1600	338975	4.3%	1534	1500	284375	-2.2%	POWERGRID	350	2158200	6.3%	329	300	1636200	-8.9%
COALINDIA	420	2452800	0.9%	416	420	1722000	0.9%	RELIANCE	1300	10564500	0.6%	1292	1300	7021000	0.6%
DIVISLAB	6500	122300	5.3%	6173	6000	108600	-2.8%	SBILIFE	1440	895125	0.2%	1438	1400	384375	-2.6%
DRREDDY	1220	630000	1.5%	1202	1200	385625	-0.2%	SBIN	900	5522250	7.3%	839	800	3616500	-4.6%
EICHERMOT	5000	173950	3.5%	4832	4500	215250	-6.9%	SUNPHARMA	1800	611450	1.1%	1781	1700	329000	-4.5%
GRASIM	2700	223250	3.6%	2606	2500	113000	-4.1%	TATACONSUM	1000	677616	4.3%	959	940	277248	-1.9%
HCLTECH	1900	525350	2.8%	1848	1800	375550	-2.6%	TATAMOTORS	800	5453800	1.7%	786	800	2769800	1.7%
HDFCBANK	1800	6540600	0.2%	1796	1700	2818750	-5.3%	TATASTEEL	160	23232000	10.7%	145	140	12138500	-3.1%
HDFCLIFE	700	2359500	6.4%	658	650	794200	-1.2%	TCS	4400	503475	3.0%	4271	4000	468125	-6.3%
HEROMOTOCO	5000	347700	5.0%	4762	4800	193650	0.8%	TECHM	1800	627600	5.1%	1712	1600	578400	-6.6%
HINDALCO	700	1997800	6.7%	656	660	1202600	0.6%	TITAN	3300	421400	1.6%	3249	3100	309750	-4.6%
HINDUNILVR	2600	537600	4.2%	2496	2500	271200	0.2%	ULTRACEMCO	11500	57450	2.7%	11202	11000	60550	-1.8%
ICICIBANK	1300	1531600	0.0%	1300	1300	1428000	0.0%	UPL	575.55	547420	5.6%	545	556.35	491865	2.1%
INDUSINDBK	1100	2388000	10.5%	996	1000	1786500	0.4%	WIPRO	600	3067500	3.8%	578	580	1273500	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**

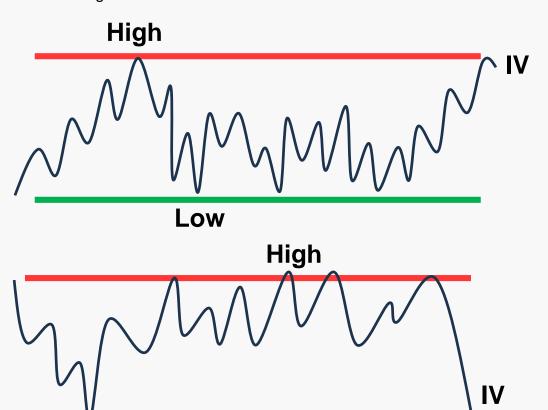


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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

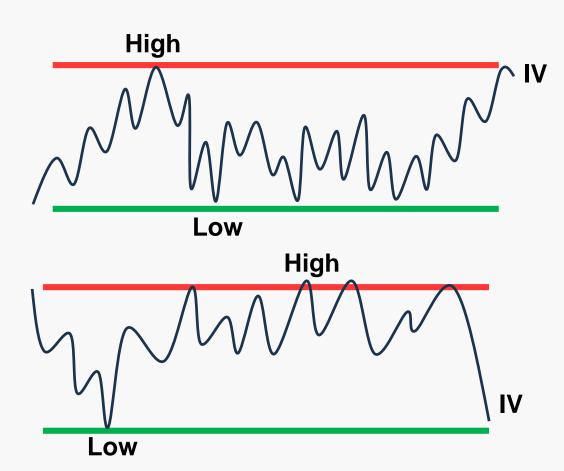


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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.



Axis Securities Limited is a subsidiary company of Axis Bank Ltd. axis Bank Ltd.

Axis Securities Limited, is registered as a Stock Broker, Depository Participant, Portfolio Manager, Investment Adviser and Research Analyst with 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. Maneesh Mathew, 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: 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 helpdesk@axisdirect.in.

We hereby declare that our activities were neither suspended nor we have defaulted with any stock exchange authority with whom we are registered in last five years. However, SEBI, Exchanges, Clearing Corporations and Depositories etc. have conducted the routine inspection and based on their observations have issued advise/warning/show cause notices/deficiency letters/ or levied penalty or imposed charges for certain deviations observed in inspections or in 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 of time.

Investments in 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 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 USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been client during 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 any notice. The report and information contained herein is 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 of 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 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 is solely for informational purpose 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 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 needs of 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 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 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 public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service 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 minimize conflict in preparation of research report. Axis Securities or its associates or its 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 with 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 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 percent or more or other material conflict 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 conclusion 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 centres on studying charts of a stock'sprice 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 position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.