



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,185	0.7%▲
Open Interest (OI)	1,95,94,950	1.8%▲
Change in OI (abs)	1,95,94,950	3,47,475▲
Premium / Discount (Abs)	108	5▼
<b>Inference</b>	<b>Long Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	56,298	0.8%▲
Open interest (OI)	20,38,925	3.3%▼
Change in OI (abs)	20,38,925	70,140▼
Premium / Discount (Abs)	193	72▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	10.19	0.13▲
Nifty ATM IV (%)	9.17	0.0▲
Bank Nifty ATM IV (%)	10.27	0.0▲
PCR (Nifty)	1.33	0.16▲
PCR (Bank Nifty)	1.13	0.02▼

The FII Long Ratio in Index Futures **jump** to 7.1 %, **up** from 6.7 % in the previous session.

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
<b>POWERINDIA</b>	19,800	44.5%	18305	0.1%
FORTIS	87,30,375	13.5%	1057.45	7.2%
DELHIVERY	1,79,81,950	10.7%	465.1	5.6%
CYIENT	35,49,175	8.2%	1185.2	1.3%
NYKAA	6,25,18,750	6.3%	254.44	6.2%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
SAMMAANCAP	10,23,52,900	16.3%	161.32	-2.8%
IREDA	4,28,35,200	8.6%	150.95	-2.3%
TORNTPOWER	44,31,375	7.1%	1209.2	-1.6%
SAIL	16,63,42,400	6.1%	133.27	-1.9%
IGL	1,53,67,000	5.8%	209.27	-0.6%

### Short Covering (Open Interest Lower + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
MAXHEALTH	1,80,11,700	-4.2%	1143.2	6.5%
NUVAMA	3,37,800	-4.0%	6932	2.5%
AXISBANK	8,51,50,000	-3.7%	1216.2	2.5%
KPITTECH	44,24,400	-3.6%	1157	0.4%
PAYTM	2,72,28,100	-3.2%	1229.1	4.9%

### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
EICHERMOT	36,50,325	-4.2%	6919.5	-0.7%
TATAMOTORS	5,97,85,600	-4.0%	714.85	-0.6%
ASHOKLEY	12,91,30,000	-3.4%	138.1	-0.8%
SBILIFE	67,42,500	-2.6%	1774.3	-1.0%
POWERGRID	7,32,37,400	-2.5%	287.85	-0.8%

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

## Open Interest Trends by Participant

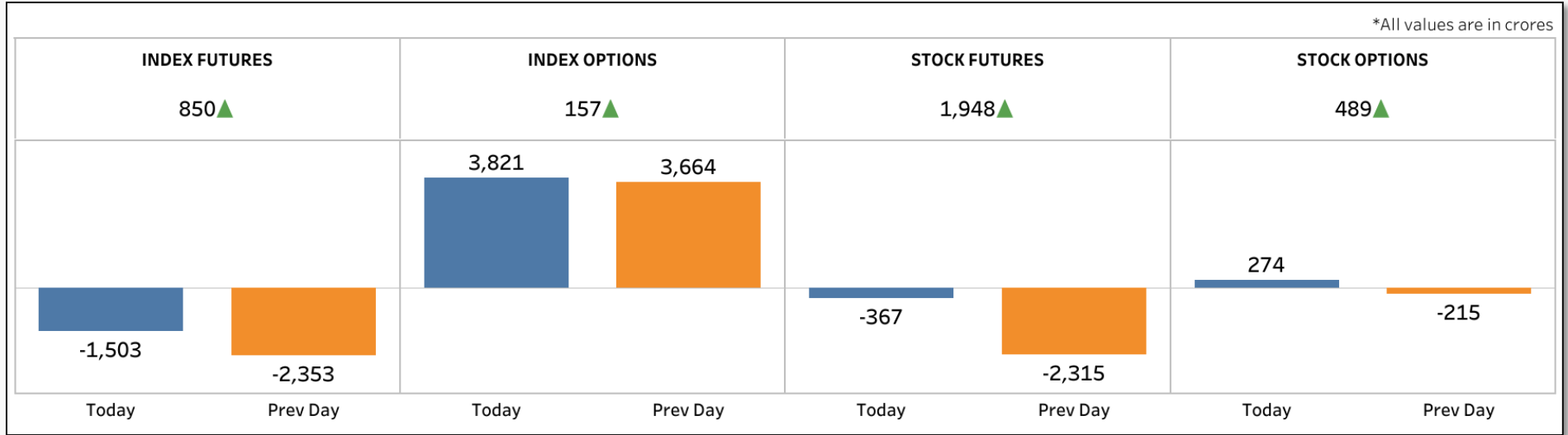
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
21,035 ▲	4,504 ▲	-18,852 ▼	19,852 ▲	0	-3,637 ▼	0	-1,747 ▼
31,183							7,447
10,148							5,700
-8,082	-12,586	-9,366	-8,812	0	209	0	
			-28,664		-3,428		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
26,524	-197,578	281,369	1,282,759	10,603	48,075	25,645	-4,155,038
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

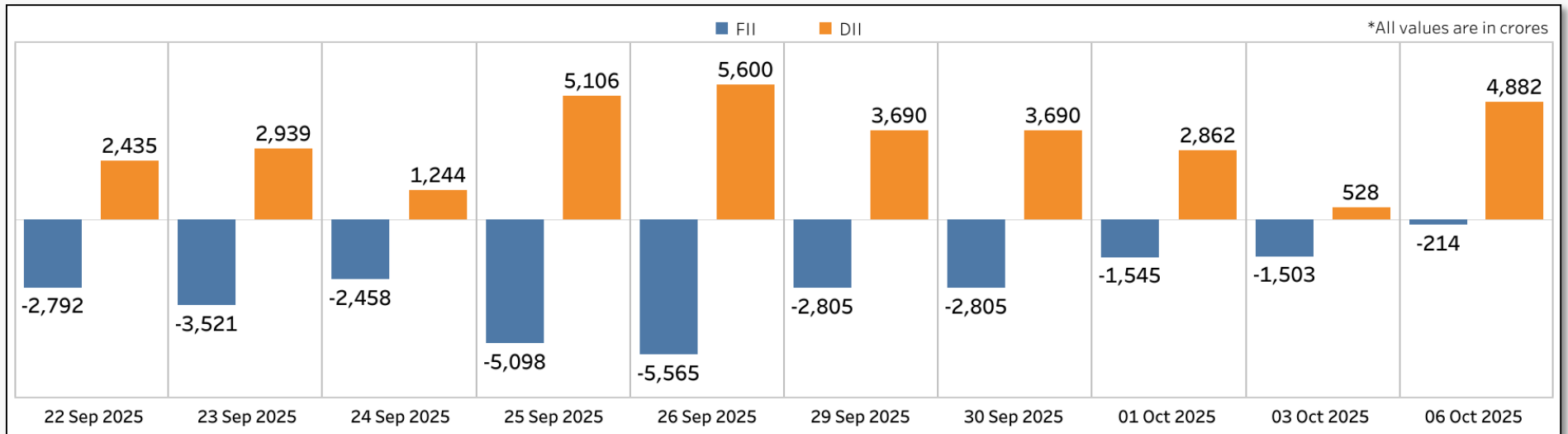
  

Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
231,940 ▲	-17,659 ▼	174,541 ▲	-15,415 ▼	-252,976 ▼	16,792 ▲	-155,688 ▼	-2,690 ▼
112,625		111,950					
	9,361		17,722	109,168	19,808	53,105	33,137
					3,016		
-119,315	-8,298	-62,591		-143,808		-102,583	
							-14,610
							-11,920
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-96,573	133,625	-294,571	2,379,037	59,446	15,878	-12,442	493,242
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

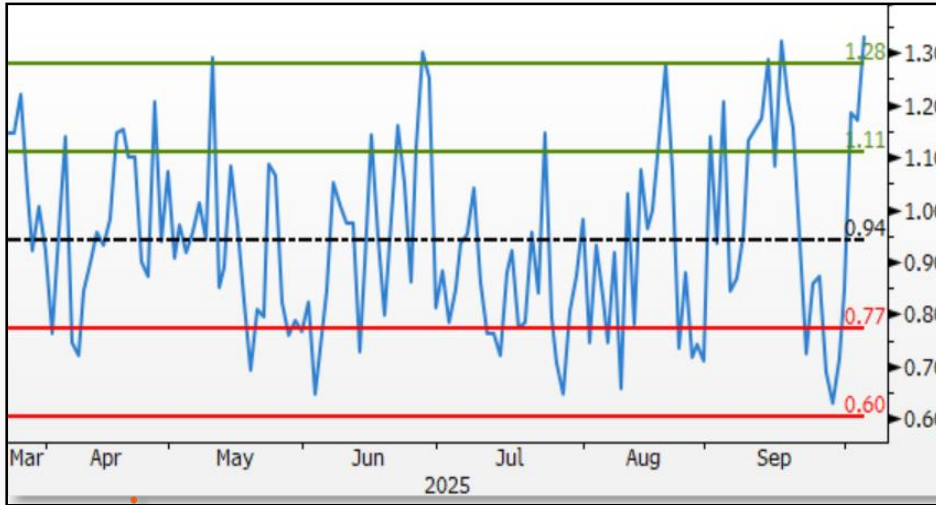
## Daily Net Open Interest Change



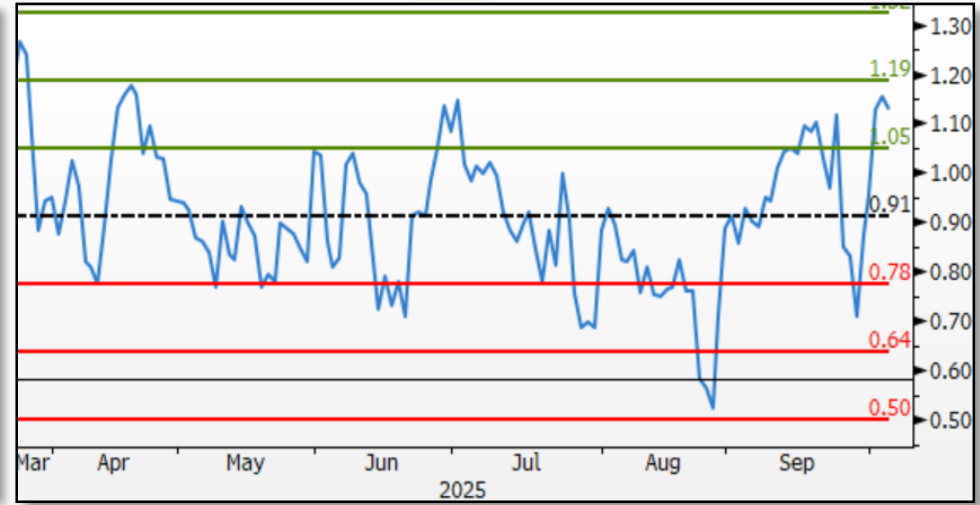
## DII and FII Daily Cash Market Flows



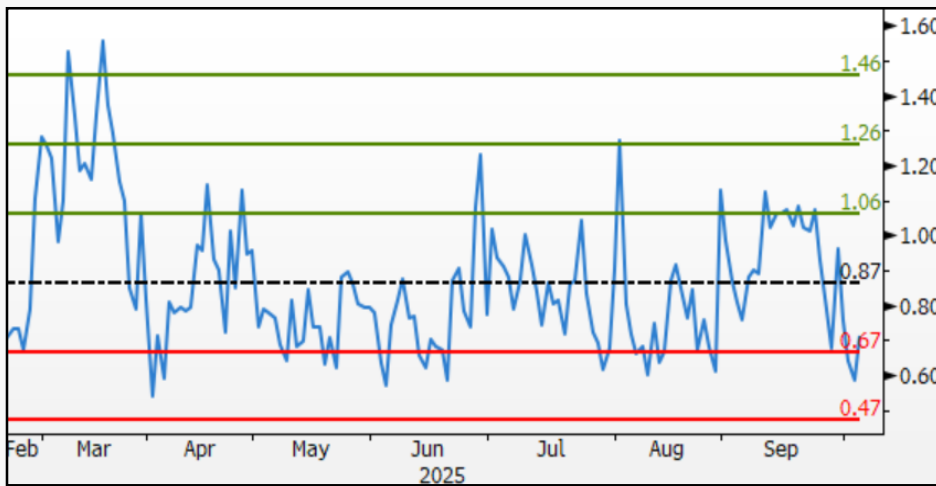
### Nifty



### Bank Nifty



### Fin Nifty



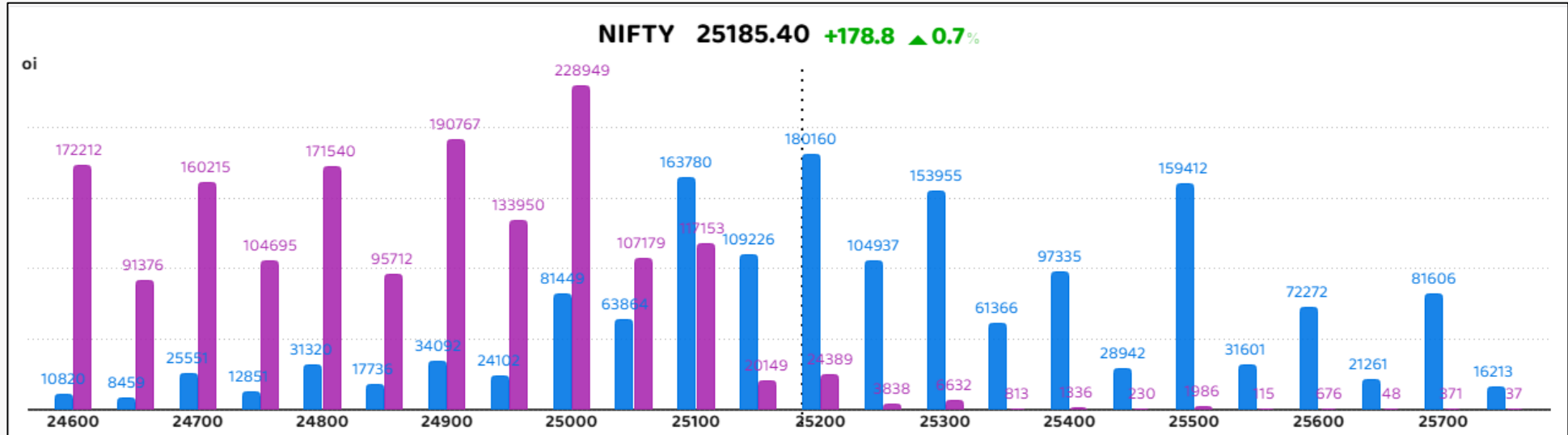
### Midcap Select Nifty



On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation

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

Call ■ Put ■



For the Nifty, the 25,200 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 56,000 Put saw the most amount of open interest.

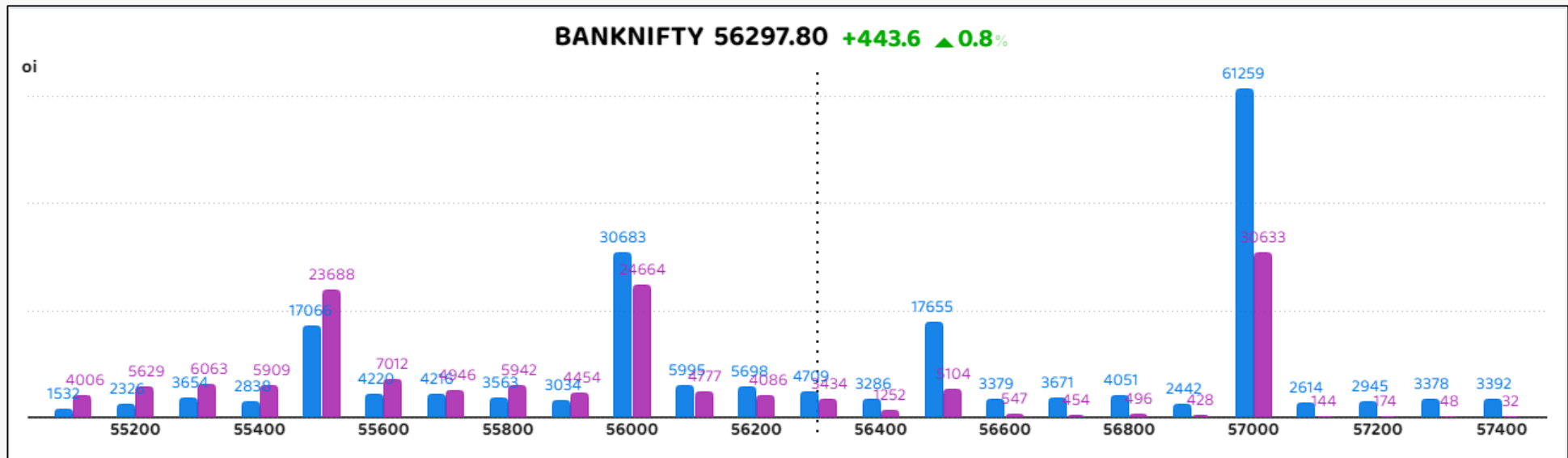
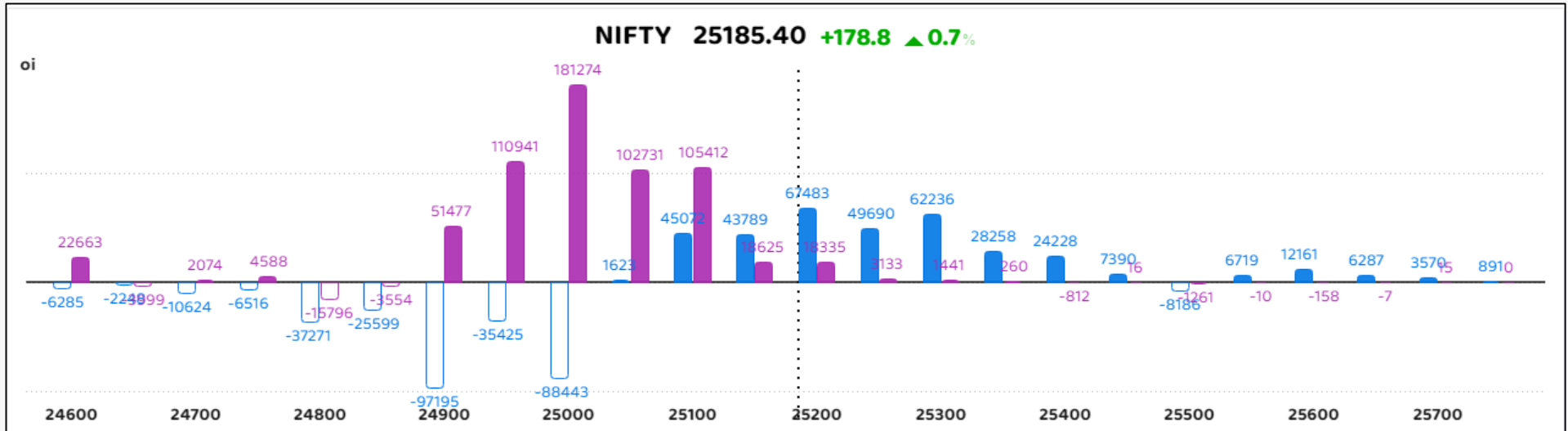


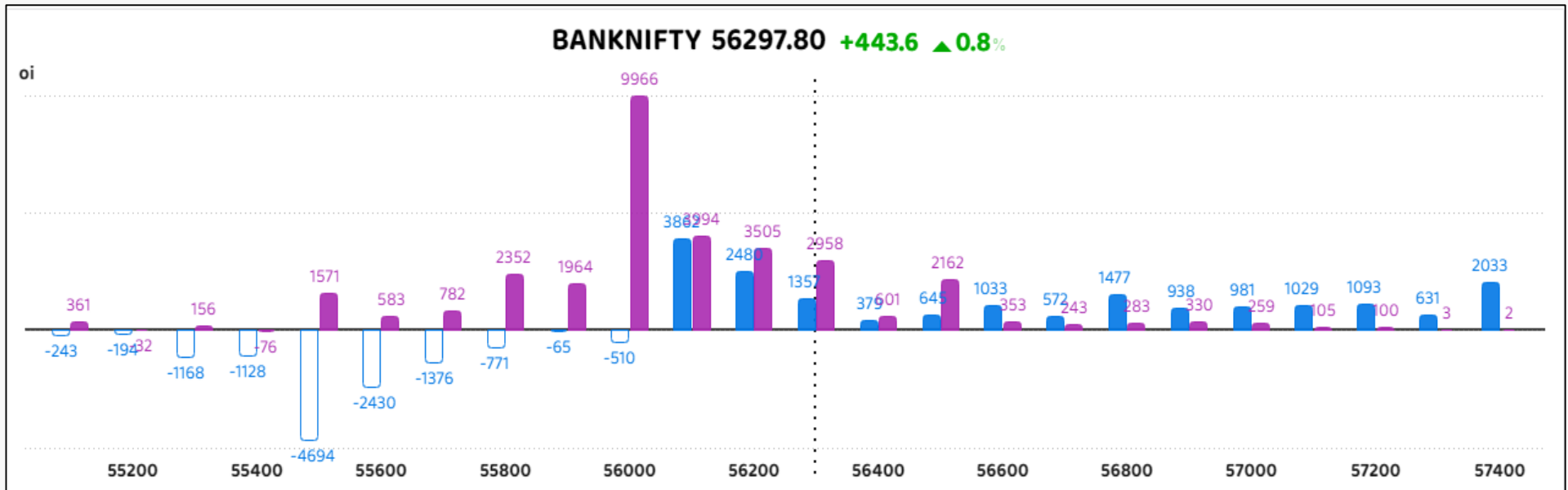
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■

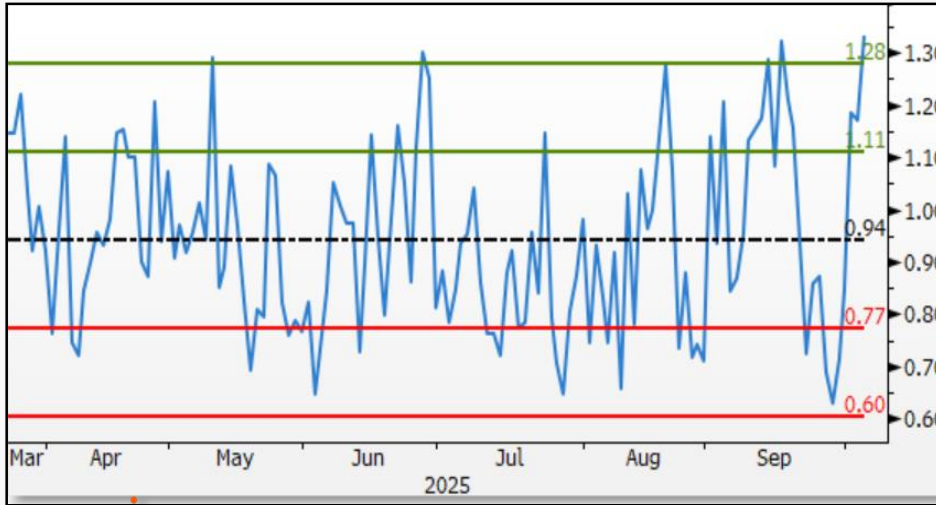


The largest open interest changes (contracts) were seen at the 24,900 Call and the 25,000 Put

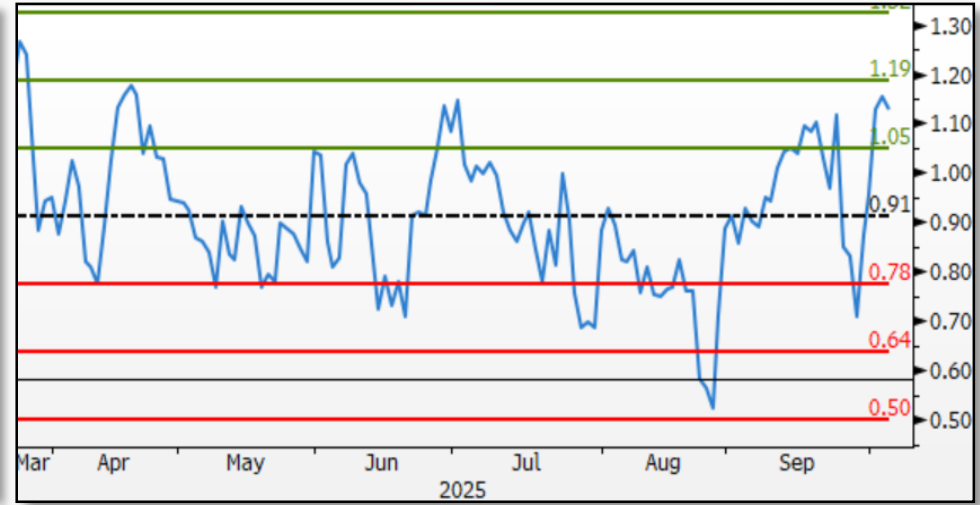


For the Bank Nifty, the biggest open interest changes were seen at the 55,500 Call & the 56,000 Put

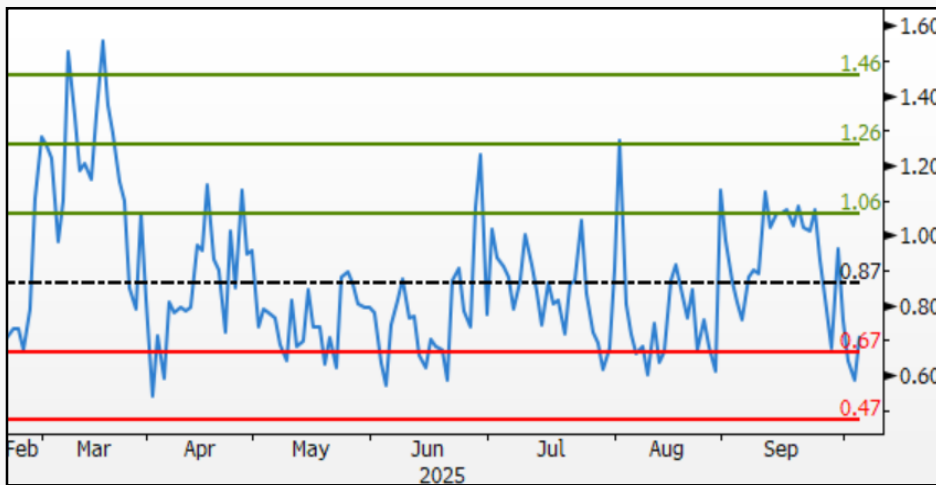
### Nifty



### Bank Nifty



### Fin Nifty



### Midcap Select Nifty



On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation



**Stocks with High IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LIC	907.15	0.2	39.2	40.4	17.0	95.1
SBI CARDS & PAYMENTS	902.6	1.2	29.2	36.9	4.6	76.1
BAJAJ AUTO LTD	8792	1.3	25.6	36.4	2.1	68.6
RAIL VIKAS NIGAM	346.6	-0.1	40.6	50.3	22.9	64.5
ASTRAL LTD	1383.6	0.0	25.9	40.4	2.9	61.4

**Stocks with Low IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ICICI LOMBARD	1925.8	0.7	3.2	38.2	3.2	0.0
INTERGLOBE AVIATION	5694.5	0.7	21.3	43.2	21.0	1.3
ADANI PORTS	1400.5	-1.3	22.5	99.7	19.8	3.3
NTPC LTD	339.1	-0.8	20.1	116.6	16.7	3.4
PG ELECTROPLAST	517.2	0.6	37.8	89.8	35.6	4.1

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LIC	907.15	0.2	39.2	40.4	17.0	99.8
VODAFONE IDEA LTD	8.47	-4.0	77.9	136.3	29.5	94.5
SBI CARDS & PAYMENTS	902.6	1.2	29.2	36.9	4.6	87.5
GODREJ CONSUMER	1147.6	-0.1	28.4	38.0	18.7	84.7
TCS	2988.4	3.0	22.5	57.2	1.3	80.3

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ICICI LOMBARD	1925.8	0.7	3.2	38.2	3.2	0.0
TATA MOTORS LTD	712.65	-0.5	17.5	72.6	3.9	1.8
INTERGLOBE AVIATION	5694.5	0.7	21.3	43.2	21.0	1.8
UNO MINDA LTD	1335.9	1.5	26.2	43.6	10.9	2.3
ADANI PORTS	1400.5	-1.3	22.5	99.7	19.8	4.4

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
IIFL FINANCE LTD	469.5	2.7	5886	1157	5.1
COLGATE PALMOLIVE	2228.8	0.7	6338	1270	5.0
RAIL VIKAS NIGAM	346.6	-0.1	6804	1373	5.0
KAYNES TECHNOLOGY	7466.5	2.7	15294	3229	4.7
CYIENT LTD	1180.6	0.9	5406	1146	4.7

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
KPIT TECHNOLOGIES	1156.7	-0.1	7533	5549	0.7
BPCL	343.6	0.6	17179	12296	0.7
PB FINTECH LTD	1725.4	1.5	3383	2400	0.7
INDUSIND BANK	739.3	-1.1	21778	14952	0.7
HINDUSTAN UNILEVER	2541.8	-0.1	11043	7249	0.7

**Call Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

**Put Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAX HEALTHCARE	1139.7	6.6	5571	5571	100.0

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MAX HEALTHCARE	1139.7	6.6	62071	62071	100.0
FORTIS HEALTHCARE	1053.9	7.5	67451	67451	100.0

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
MAX HEALTHCARE	1139.7	6.6	28774	28774	100.0
FORTIS HEALTHCARE	1053.9	7.5	23454	23454	100.0

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
FORTIS HEALTHCARE	1053.9	7.5	5453	3216	1.7
RBL BANK LTD	275.6	-0.1	8038	5826	1.4
STEEL AUTHORITY	132.62	-1.7	9111	7117	1.3
IREDA	151.16	-1.9	8098	6517	1.2
TATA MOTORS LTD	712.65	-0.5	108074	87476	1.2

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
FORTIS HEALTHCARE	1053.9	7.5	3807	2070	1.8
MAX HEALTHCARE	1139.7	6.6	5571	3806	1.5
TITAN CO LTD	3425.4	-0.8	13622	10091	1.3
KPIT TECHNOLOGIES	1156.7	-0.1	5184	4052	1.3
TATA MOTORS LTD	712.65	-0.5	57716	45758	1.3

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
FORTIS HEALTHCARE	1053.9	7.5	67451	7552	8.9
MAX HEALTHCARE	1139.7	6.6	62071	12478	5.0
FSN E-COMMERCE	255.34	6.5	25084	5773	4.3
DELHIVERY LTD	462.6	5.8	18541	6370	2.9
SHRIRAM FINANCE	671.45	4.0	47285	19887	2.4

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
FORTIS HEALTHCARE	1053.9	7.5	23454	2973	7.9
MAX HEALTHCARE	1139.7	6.6	28774	5770	5.0
FSN E-COMMERCE	255.34	6.5	9181	2757	3.3
DELHIVERY LTD	462.6	5.8	8704	3402	2.6
SHRIRAM FINANCE	671.45	4.0	20775	9300	2.2

## 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
ADANIANT	2600	1040400	1.0%	2574	2500	609900	-2.9%	ITC	410	8056000	2.3%	401	400	4092800	-0.2%
ADANIPTS	1500	1197950	7.1%	1401	1400	1175150	0.0%	JIOFIN	320	8142750	4.5%	306	300	6558850	-2.0%
APOLLOHOSP	8000	123750	4.4%	7662	7500	62875	-2.1%	JSWSTEEL	1300	760725	12.1%	1160	1100	459000	-5.2%
ASIANPAINT	2500	898500	6.2%	2355	2300	461500	-2.3%	KOTAKBANK	2100	1110400	-2.1%	2146	2100	1343200	-2.1%
AXISBANK	1160	3976250	-4.4%	1213	1200	1476875	-1.1%	LT	3800	956725	1.7%	3737	3600	436800	-3.7%
BAJAJ-AUTO	9000	231900	2.4%	8792	8500	119025	-3.3%	M&M	3600	844200	3.7%	3472	3400	422800	-2.1%
BAJAJFINSV	2100	452500	3.3%	2033	1800	674000	-11.5%	MARUTI	17000	398400	6.3%	15998	15000	258150	-6.2%
BAJFINANCE	1100	2201250	9.0%	1009	1000	1240500	-0.9%	NESTLEIND	1200	775000	1.5%	1182	1180	290000	-0.1%
BEL	420	6121800	1.6%	413	400	5155650	-3.2%	NTPC	350	4948500	3.2%	339	380	1840500	12.1%
BHARTIARTL	1900	1407900	-0.2%	1903	1900	828875	-0.2%	ONGC	250	12046500	1.7%	246	240	3647250	-2.4%
CIPLA	1600	464250	5.7%	1513	1500	324375	-0.9%	POWERGRID	300	5684800	4.6%	287	285	2251500	-0.7%
COALINDIA	400	4255200	4.7%	382	450	2087100	17.8%	RELIANCE	1400	7427000	1.8%	1375	1400	3301500	1.8%
DRREDDY	1320	666250	5.7%	1249	1200	318750	-3.9%	SBILIFE	1800	576000	1.6%	1771	1800	100125	1.6%
EICHERMOT	7000	284550	1.7%	6880	6200	171675	-9.9%	SBIN	880	6799500	0.7%	874	870	3061500	-0.5%
ETERNAL	320	13948600	-4.5%	335	320	7997650	-4.5%	SHRIRAMFIN	700	1295250	4.3%	671	660	1031250	-1.7%
GRASIM	2900	307750	3.3%	2807	2700	152250	-3.8%	SUNPHARMA	1680	702800	1.5%	1655	1500	637700	-9.3%
HCLTECH	1500	1012900	5.8%	1418	1400	628600	-1.2%	TATACONSUM	1150	358050	0.7%	1142	1100	176550	-3.7%
HDFCBANK	1000	6168800	2.7%	973	900	3020600	-7.5%	TATAMOTORS	800	12389600	12.3%	713	700	5921600	-1.8%
HDFCLIFE	800	1452000	4.8%	763	760	623700	-0.4%	TATASTEEL	180	19657000	5.8%	170	165	8679000	-3.0%
HEROMOTOCO	6000	340050	7.5%	5582	5400	286200	-3.3%	TCS	3000	3076150	0.4%	2988	2900	1405775	-3.0%
HINDALCO	800	3078600	3.0%	777	750	1495200	-3.4%	TECHM	1500	659400	4.2%	1439	1400	633600	-2.7%
HINDUNILVR	2600	710100	2.3%	2542	2500	392700	-1.6%	TITAN	3500	709625	2.2%	3425	3400	592550	-0.7%
ICICIBANK	1400	4081000	2.7%	1363	1400	2220400	2.7%	TRENT	5500	793700	15.1%	4777	4800	315300	0.5%
INDUSINDBK	750	1570800	1.4%	739	700	1621200	-5.3%	ULTRACEMCO	13000	108200	7.8%	12055	12000	47900	-0.5%
INFY	1500	3397200	1.6%	1476	1500	1918400	1.6%	WIPRO	250	7221000	3.3%	242	240	2937000	-0.9%

If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green

If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

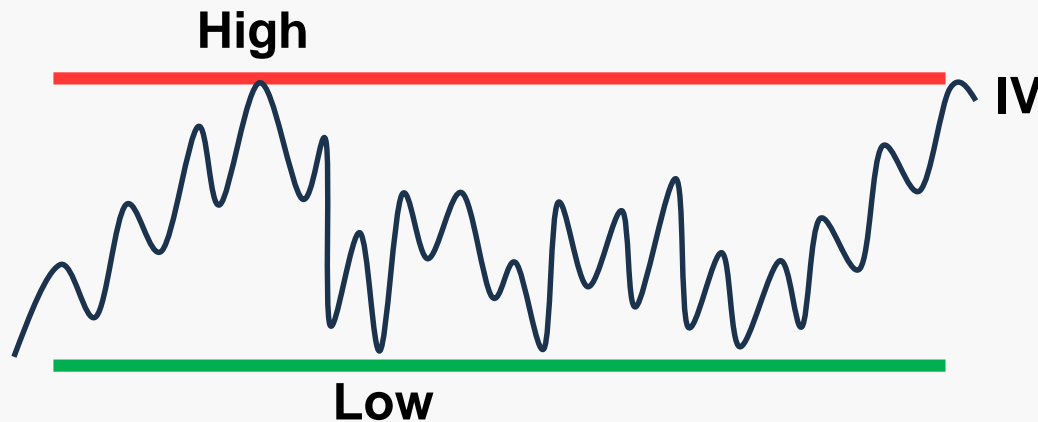


- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating 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**

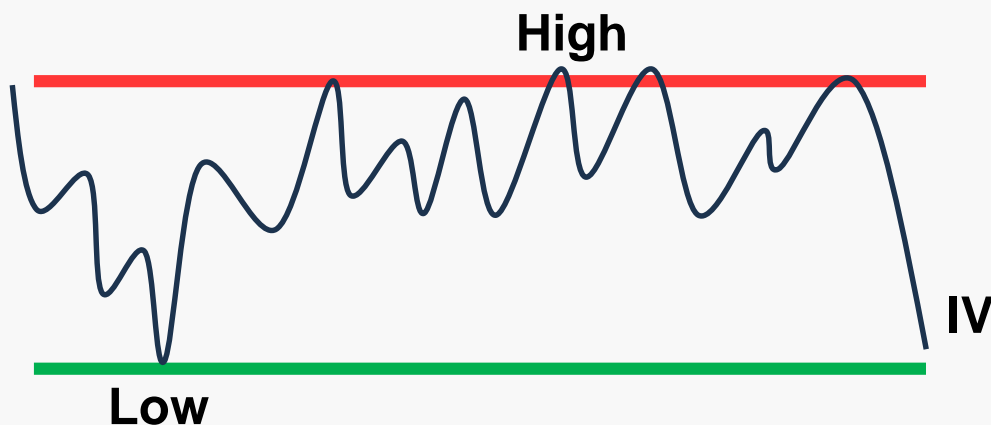
*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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):** [www.nseindia.com](http://www.nseindia.com), Bloomberg, MyFnO

- **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

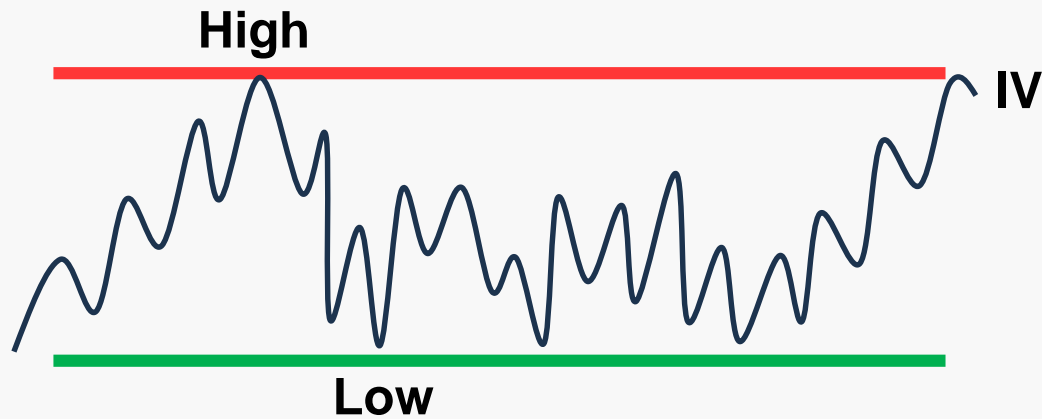


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

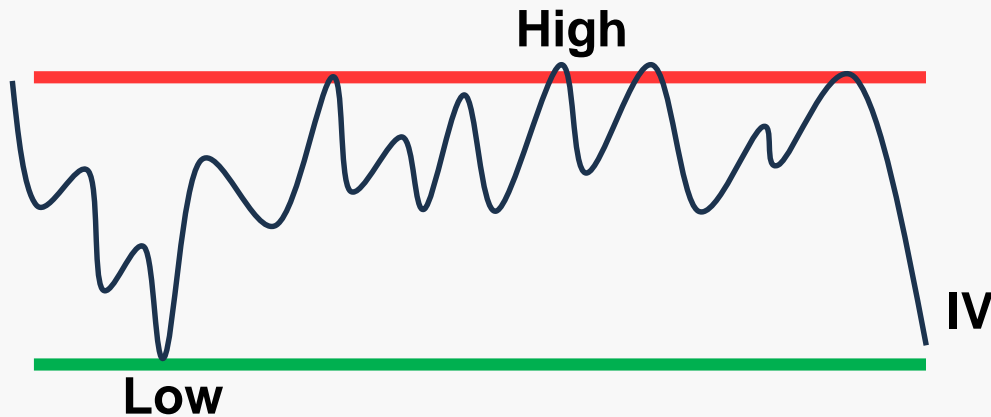


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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