



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	22,280	1.8% ▼
Open Interest (OI)	1,89,92,850	7.7% ▲
Change in OI (abs)	1,89,92,850	13,53,450 ▲
Premium / Discount (Abs)	155	17 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	48,628	0.8% ▼
Open interest (OI)	37,41,960	8.2% ▲
Change in OI (abs)	37,41,960	2,82,390 ▲
Premium / Discount (Abs)	284	7 ▼
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	13.91	0.6 ▲
Nifty ATM IV (%)	13.50	1.8 ▲
Bank Nifty ATM IV (%)	15.58	0.3 ▲
PCR (Nifty)	0.78	0.20 ▼
PCR (Bank Nifty)	0.95	0.03 ▼

The Long Ratio for the FII Index Futures **drop** to 15.2%, against 16.2% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PHOENIXLTD	11,68,300	29.7%	1550.6	1.9%
KEI	13,64,700	9.5%	2989.3	0.8%
JSWENERGY	1,85,67,000	4.3%	465.45	0.8%
BANDHANBNK	10,19,59,200	2.6%	141.77	2.8%
INDIGO	74,51,700	0.3%	4484.9	0.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MANAPPURAM	6,33,99,000	56.5%	202.27	-4.0%
LODHA	53,05,950	13.5%	1129.4	-4.3%
ADANIGREEN	1,49,45,625	10.8%	777.95	-3.7%
MCX	15,70,600	9.7%	5018.85	-7.2%
DIXON	12,85,800	8.6%	13772.5	-0.3%

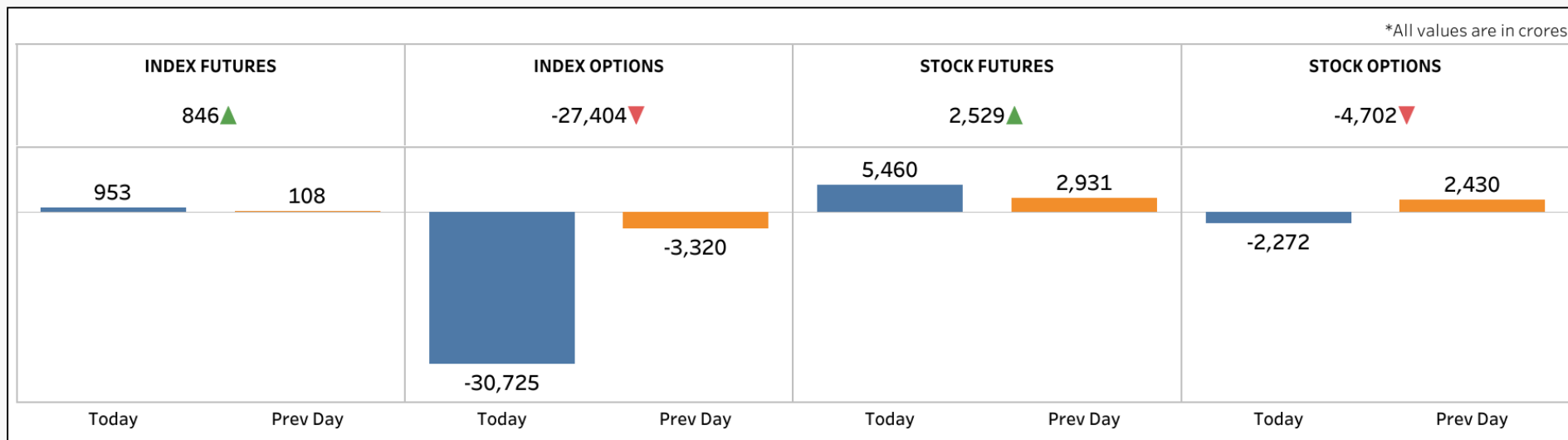
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
COALINDIA	5,78,38,200	-4.5%	371.35	1.5%
LUPIN	57,57,900	-2.8%	1903.75	0.3%
GMRAIRPORT	22,64,51,250	-2.2%	69.66	0.2%
POLYCAB	33,09,500	-1.3%	4717.9	0.2%
HDFCBANK	13,68,10,850	-0.7%	1738	1.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
COFORGE	27,01,200	-8.7%	7379.65	-2.1%
BERGEPAIN	96,21,480	-8.0%	485	-1.9%
NAUKRI	12,43,275	-7.5%	7012.2	-5.3%
APLAPOLLO	41,00,950	-5.0%	1442.9	-0.4%
OBEROIRLTY	45,06,250	-4.9%	1486.6	-1.7%

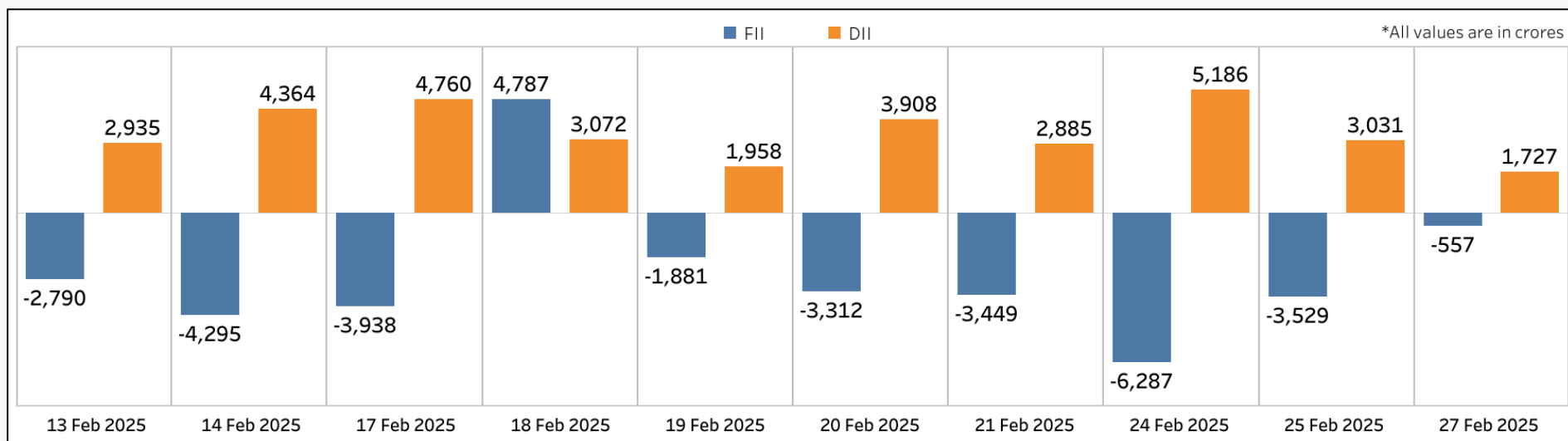
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



## Daily Net Open Interest Change

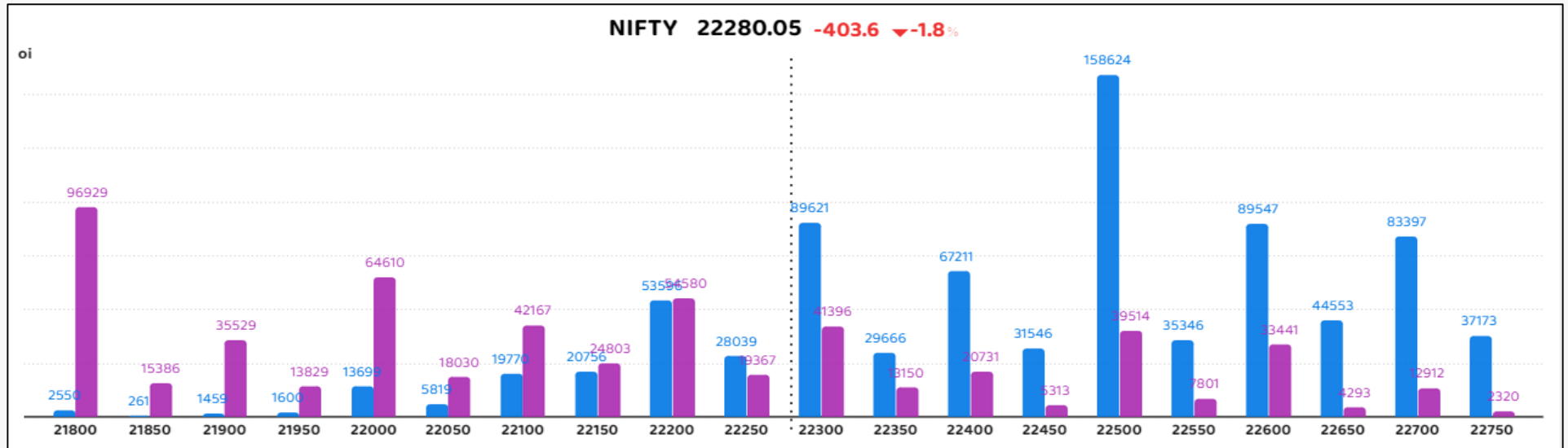


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 22500 Call and the 21800 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 49000 Call and the 48000 Put saw the most amount of open interest.

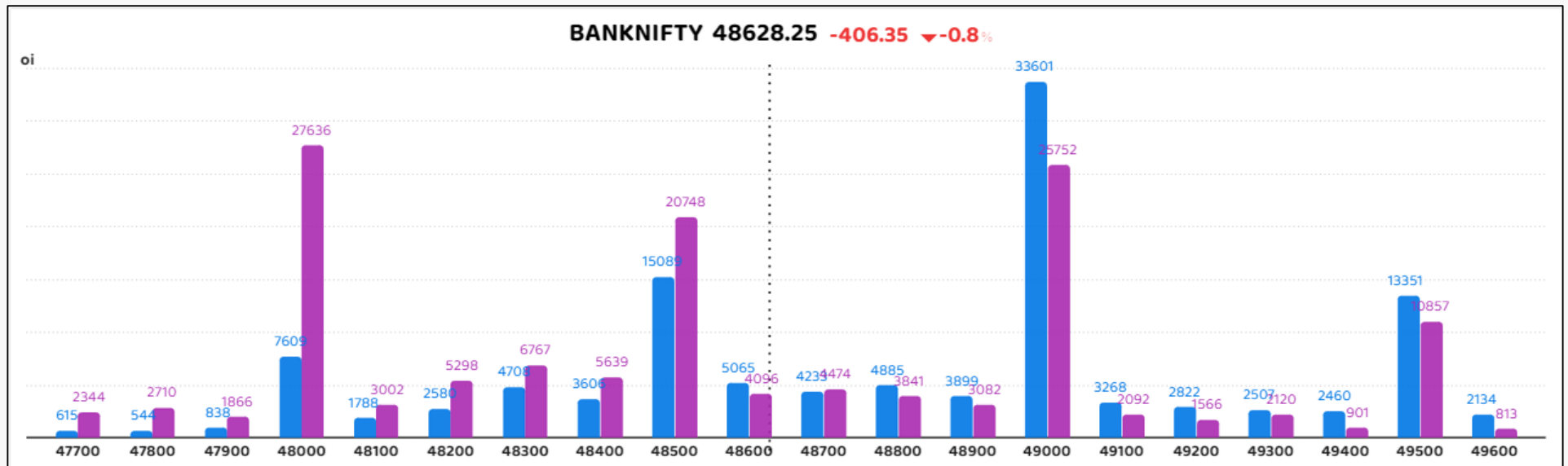
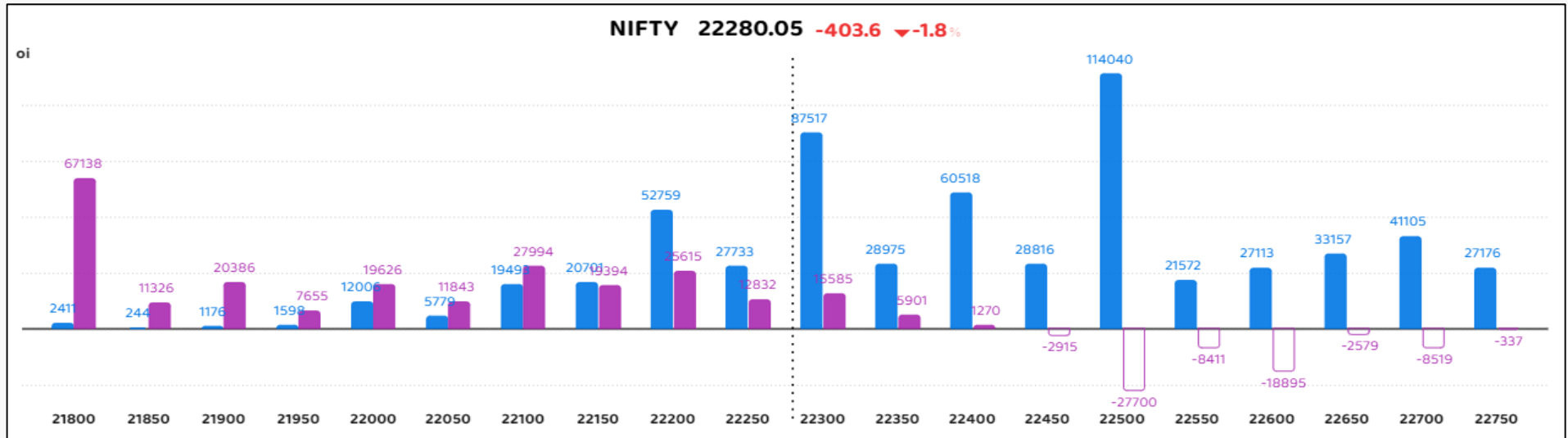


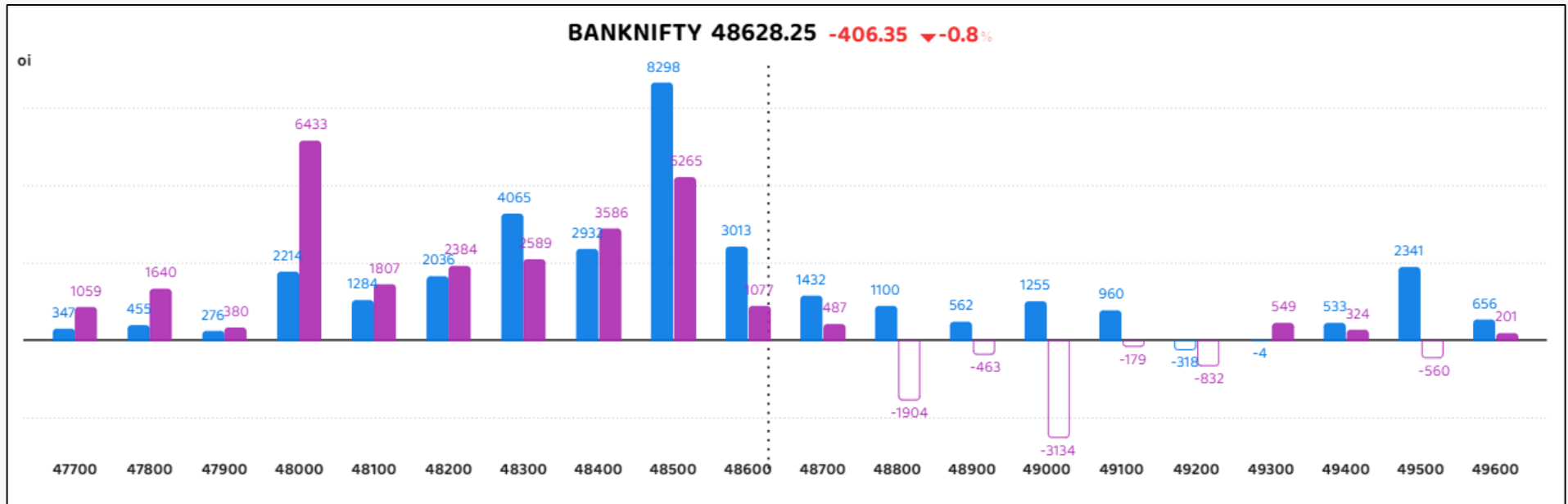
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 22500 Call and the 21800 Put



For the Bank Nifty, the biggest open interest changes were seen at the 48500 Call & the 48000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
PERSISTENT SYS	5303.9	-3.1	43.9	45.0	25.0	94.5
POLYCAB INDIA LT	4713.4	0.7	51.6	56.6	9.8	89.3
PVR INOX LTD	903.95	-1.3	40.4	45.3	3.8	88.1
TATA MOTORS LTD	620.65	-4.3	36.1	41.8	3.9	85.1
LAURUS LABS LTD	527.2	-2.9	40.0	44.8	16.1	83.2

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DR LAL PATHLABS	2310.45	-2.0	15.3	46.8	15.3	0.0
IPCA LABS LTD	1355.35	-1.0	15.3	49.3	14.4	2.6
HDFC LIFE INSURA	608.5	-1.6	24.6	80.6	19.6	8.2
CIPLA LTD	1407.5	-2.3	23.0	61.3	18.0	11.5
ADANI PORTS AND	1069.4	-0.9	33.3	97.8	23.2	13.6

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
CITY UNION BANK	147.8	0.9	46.8	52.1	21.1	99.6
PERSISTENT SYS	5303.9	-3.1	43.9	45.0	25.0	98.5
POLYCAB INDIA LT	4713.4	0.7	51.6	56.6	9.8	97.7
GRANULES INDIA	461.8	-8.9	43.8	54.5	11.0	97.0
PETRONET LNG LTD	283.3	-5.0	41.0	61.3	17.4	96.5

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DR LAL PATHLABS	2310.45	-2.0	15.3	46.8	15.3	0.0
IPCA LABS LTD	1355.35	-1.0	15.3	49.3	14.4	0.6
DIXON TECHNOLOGI	13935.85	0.8	32.6	51.5	1.8	2.6
GODREJ CONSUMER	1005.15	-4.4	21.0	40.6	14.3	8.2
BERGER PAINTS	488.55	-3.3	22.8	43.1	12.0	12.7



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
AUROBINDO PHARMA	1058.3	-2.1	7060	2299	3.1
ADITYA BIRLA FAS	242.15	-0.1	5787	1892	3.1
BOSCH LTD	26544	-1.0	1727	701	2.5
VOLTAS LTD	1320.1	0.6	31010	13463	2.3
BERGER PAINTS	488.55	-3.3	6081	2794	2.2

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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ATUL LTD	5348.85	-0.7	2550	4980	2.0
GLENMARK PHARMA	1313.35	-2.6	3859	6798	1.8
DR LAL PATHLABS	2358.55	-2.0	10577	18462	1.7
BALKRISHNA INDS	2685.85	-2.6	1353	2260	1.7
SHREE CEMENT	28306.4	-3.6	792	1314	1.7

## Call Open Interest Relative to Record High

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

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
POLYCAB INDIA LT	4713.4	0.7	31025	14702	2.1
DR LAL PATHLABS	2310.45	-2.0	3999	2320	1.7
CITY UNION BANK	147.8	0.9	3773	2921	1.3
PETRONET LNG LTD	283.3	-5.0	9665	7614	1.3
ATUL LTD	5309.35	-0.7	2380	1933	1.2

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
POLYCAB INDIA LT	4713.4	0.7	15516	8260	1.9
DR LAL PATHLABS	2310.45	-2.0	2279	1580	1.4
ATUL LTD	5309.35	-0.7	1308	920	1.4
HAVELLS INDIA	1421.8	-2.0	5136	3816	1.3
INDIAMART INTERM	1964.95	0.2	1980	1639	1.2

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
POLYCAB INDIA LT	4713.4	0.7	134844	27842	4.8
DR LAL PATHLABS	2310.45	-2.0	10577	2207	4.8
SUN TV NETWORK	561.5	-3.4	13064	3709	3.5
COROMANDEL INTER	1666.95	-0.2	7341	2642	2.8
INDIAMART INTERM	1964.95	0.2	8433	3145	2.7

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
DR LAL PATHLABS	2310.45	-2.0	18462	2417	7.6
CAN FIN HOMES	577.65	0.5	8649	1472	5.9
POLYCAB INDIA LT	4713.4	0.7	79009	19383	4.1
GRANULES INDIA	461.8	-8.9	12923	3782	3.4
SUN TV NETWORK	561.5	-3.4	8776	2631	3.3

## 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	2600	1207200	24.0%	2096	2600	2708400	24.0%	INFY	1900	1232400	12.6%	1688	1600	760800	-5.2%
ADANIPTS	1100	734800	2.9%	1069	1200	580800	12.2%	ITC	400	3592000	1.3%	395	400	2515200	1.3%
APOLLOHOSP	7000	67000	15.7%	6053	6000	38500	-0.9%	JSWSTEEL	1000	560925	5.2%	951	900	338850	-5.3%
ASIANPAINT	2500	546200	14.7%	2180	2200	273600	0.9%	KOTAKBANK	2000	836000	5.1%	1903	1900	518000	-0.2%
AXISBANK	1050	1972500	3.4%	1016	1000	1221875	-1.5%	LT	3200	547950	1.1%	3164	3200	709950	1.1%
BAJAJ-AUTO	8500	83850	7.6%	7903	8000	42075	1.2%	LTIM	5200	89700	11.4%	4666	4000	56700	-14.3%
BAJAJFINSV	1940	600500	3.6%	1872	1800	367500	-3.9%	M&M	3000	1229900	16.0%	2585	2500	618450	-3.3%
BAJFINANCE	9000	431500	5.5%	8530	8000	309500	-6.2%	MARUTI	13000	125950	8.8%	11946	11000	93150	-7.9%
BHARTIARTL	1700	1292950	8.3%	1570	1580	604675	0.6%	NESTLEIND	2300	242000	5.0%	2190	2300	115200	5.0%
BPCL	250	3027600	5.4%	237	250	1512000	5.4%	NTPC	320	3258000	2.7%	311	380	2656500	22.0%
BRITANNIA	5000	60400	8.8%	4595	4800	53800	4.5%	ONGC	250	2731575	11.0%	225	230	2400475	2.1%
CIPLA	1500	339300	6.6%	1408	1240	230750	-11.9%	POWERGRID	300	1414800	19.6%	251	250	1225800	-0.3%
COALINDIA	450	2349900	21.8%	369	450	2618700	21.8%	RELIANCE	1300	5854000	8.3%	1200	1200	4139000	0.0%
DIVISLAB	6000	123700	9.5%	5480	5700	52000	4.0%	SBLIFE	1480	247875	3.5%	1431	1400	281625	-2.1%
DRREDDY	1200	658750	7.5%	1117	1100	310000	-1.5%	SBIN	800	7047750	16.1%	689	800	4518000	16.1%
EICHERMOT	5000	159775	4.7%	4774	4800	134750	0.6%	SUNPHARMA	1640	404950	2.9%	1593	1600	792400	0.4%
GRASIM	2400	136000	4.0%	2307	2300	120250	-0.3%	TATACONSUM	1100	327408	14.1%	964	900	279528	-6.6%
HCLTECH	1700	347900	7.9%	1575	1400	373450	-11.1%	TATAMOTORS	700	5521450	12.8%	621	600	1651100	-3.3%
HDFCBANK	1800	2765400	3.9%	1732	1700	3096500	-1.9%	TATASTEEL	150	12787500	9.3%	137	150	7150000	9.3%
HDFCLIFE	620	1311200	1.9%	609	520	449900	-14.5%	TCS	4000	1242850	14.8%	3483	3500	519575	0.5%
HEROMOTOCO	3800	278700	3.2%	3681	3800	114300	3.2%	TECHM	1800	1272000	21.0%	1488	1500	389400	0.8%
HINDALCO	660	2168600	4.0%	634	600	1047200	-5.4%	TITAN	3200	321475	4.0%	3077	3200	259700	4.0%
HINDUNILVR	2300	627900	5.0%	2190	2200	491400	0.4%	ULTRACEMCO	11000	185000	8.6%	10128	10500	76800	3.7%
ICICIBANK	1300	1820700	8.0%	1204	1200	2224600	-0.3%	UPL	640	1814345	1.1%	633	600	766930	-5.2%
INDUSINDBK	1100	1940500	11.1%	990	1000	1113500	1.0%	WIPRO	300	4638000	8.0%	278	290	2589000	4.4%

*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*

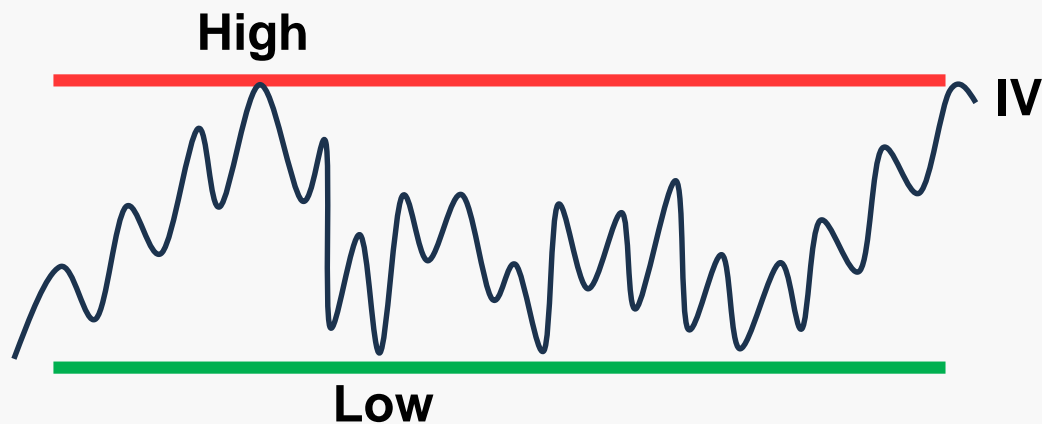
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

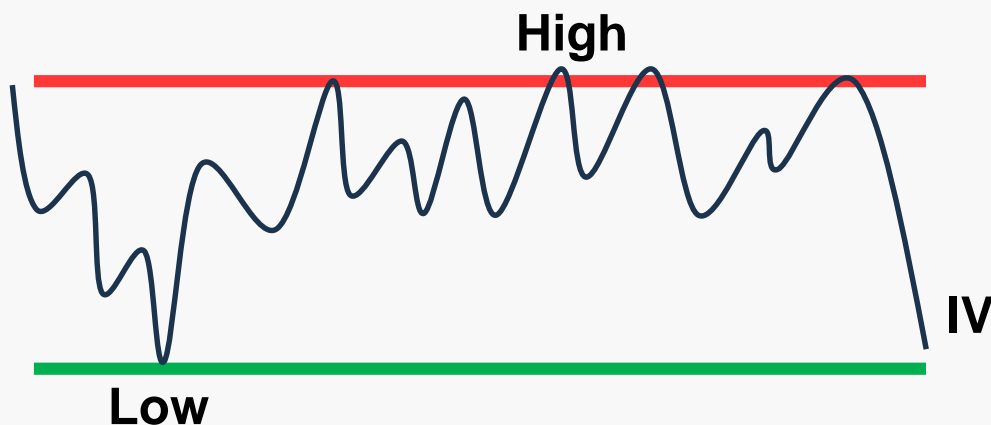
- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls,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

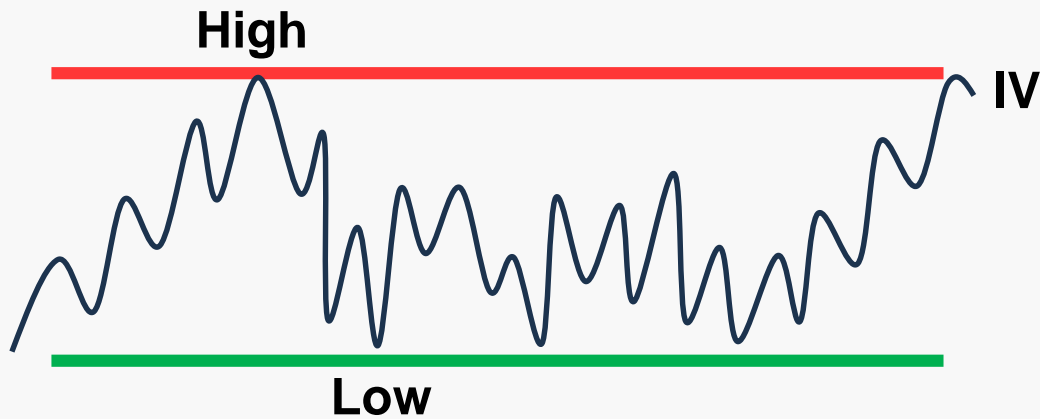


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

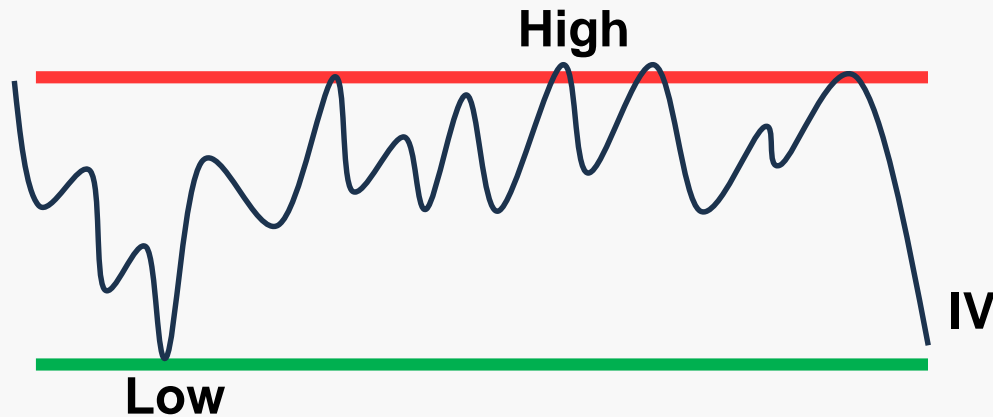


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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