



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,758	0.4%▲
Open Interest (OI)	1,95,58,800	3.9%▼
Change in OI (abs)	1,95,58,800	7,83,000▼
Premium / Discount (Abs)	48	23▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	57,757	0.5%▲
Open interest (OI)	19,56,570	1.4%▼
Change in OI (abs)	19,56,570	26,845▼
Premium / Discount (Abs)	44	20▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	11.63	0.76▲
Nifty ATM IV (%)	9.62	0.5▲
Bank Nifty ATM IV (%)	11.55	0.8▲
PCR (Nifty)	1.20	0.18▼
PCR (Bank Nifty)	1.18	0.00▲

The FII Long Ratio in Index Futures **Jump** to 16.6 %, **up** from 13.8 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MUTHOOTFIN	30,61,850	13.4%	3334.4	1.8%
AMBER	8,82,200	10.1%	8202	0.9%
HAL	99,00,450	4.8%	4893.2	0.3%
APLAPOLLO	1,01,30,050	4.4%	1759.2	1.5%
CIPLA	1,23,07,875	3.5%	1582.4	0.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
WIPRO	20,02,71,000	26.5%	240.01	-5.7%
TATAMOTORS	4,97,51,200	15.2%	395.45	-0.3%
POWERINDIA	1,07,050	14.1%	17491	-1.5%
POLICYBZR	82,73,300	13.3%	1651.5	-2.7%
KEI	17,50,700	11.4%	4115.5	-1.3%

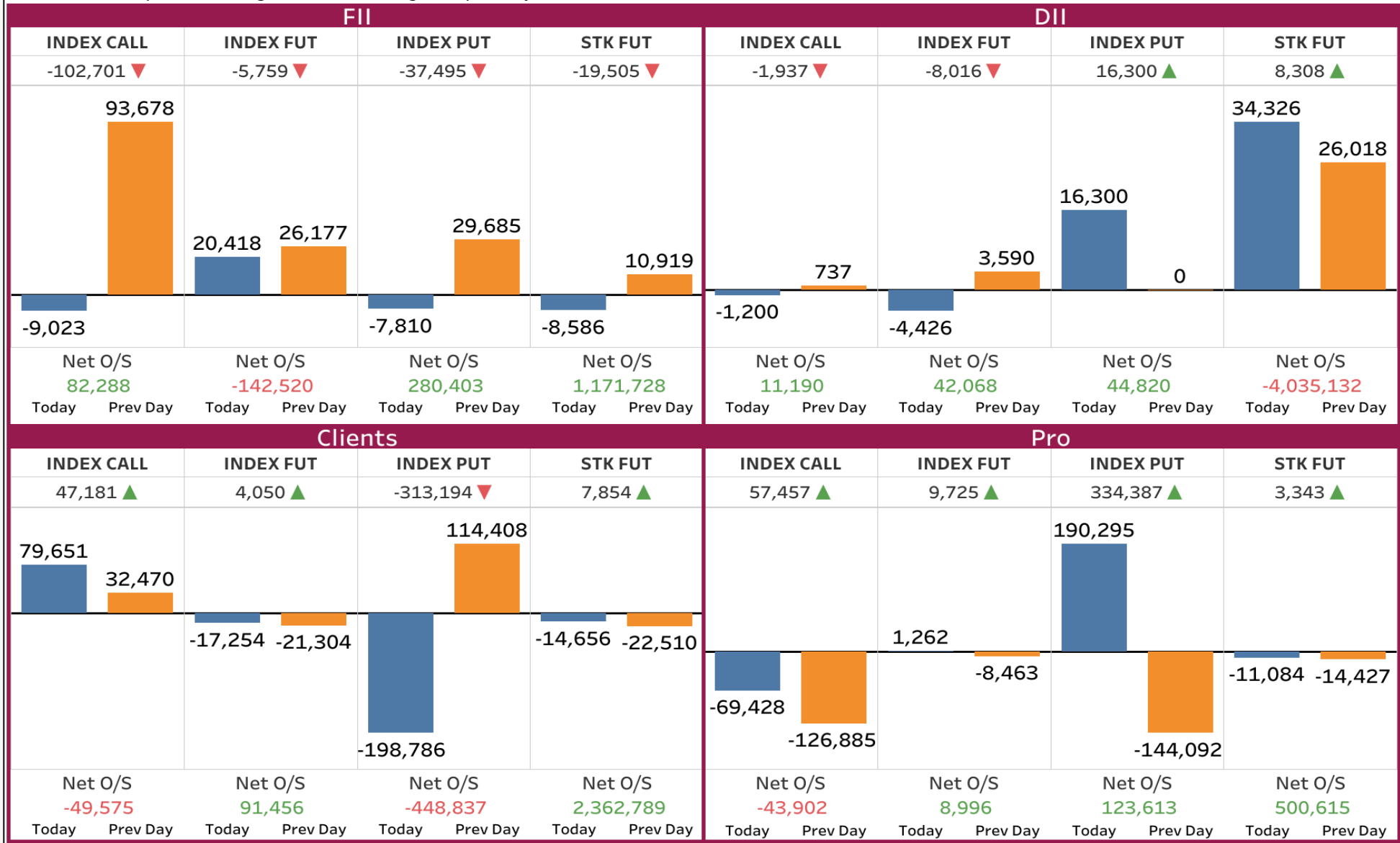
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ASIANPAINT	1,26,49,000	-6.3%	2514.4	4.0%
KAYNES	14,09,300	-6.2%	7020	0.3%
DABUR	2,53,50,000	-5.4%	508.75	1.5%
ICICIBANK	10,41,90,100	-5.0%	1437.1	1.3%
PAYTM	2,32,96,425	-4.4%	1285.8	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NUVAMA	3,49,425	-4.5%	7026	-3.1%
HDFCAMC	22,63,950	-2.9%	5716.5	-1.7%
SONACOMS	1,82,45,850	-2.7%	462.4	-1.4%
KOTAKBANK	3,29,42,400	-2.5%	2206	-0.1%
DLF	3,72,19,050	-2.5%	768.95	-0.2%

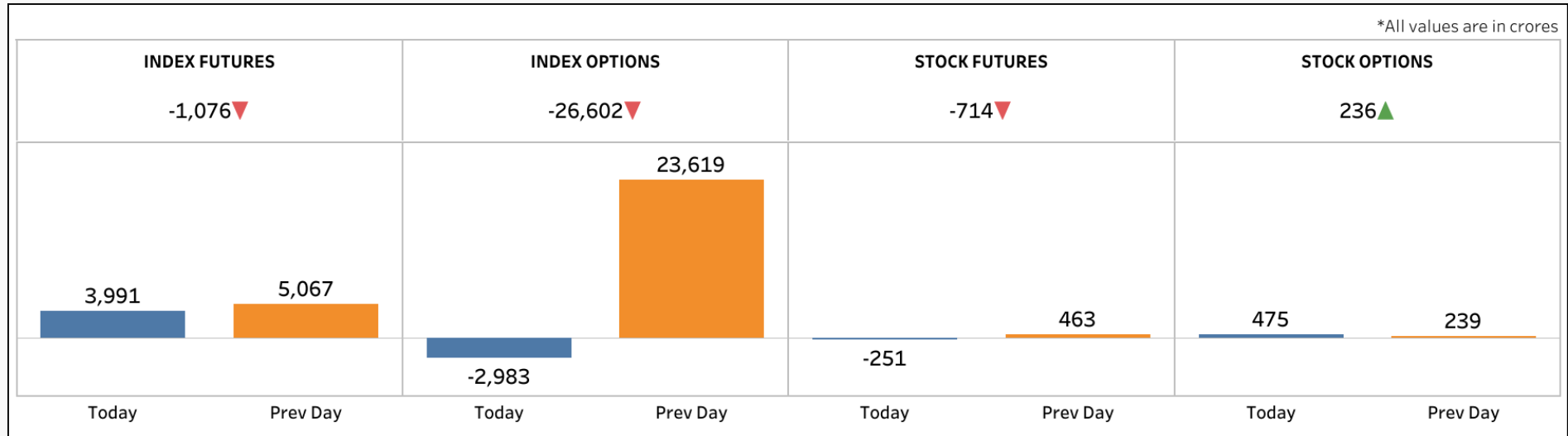
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

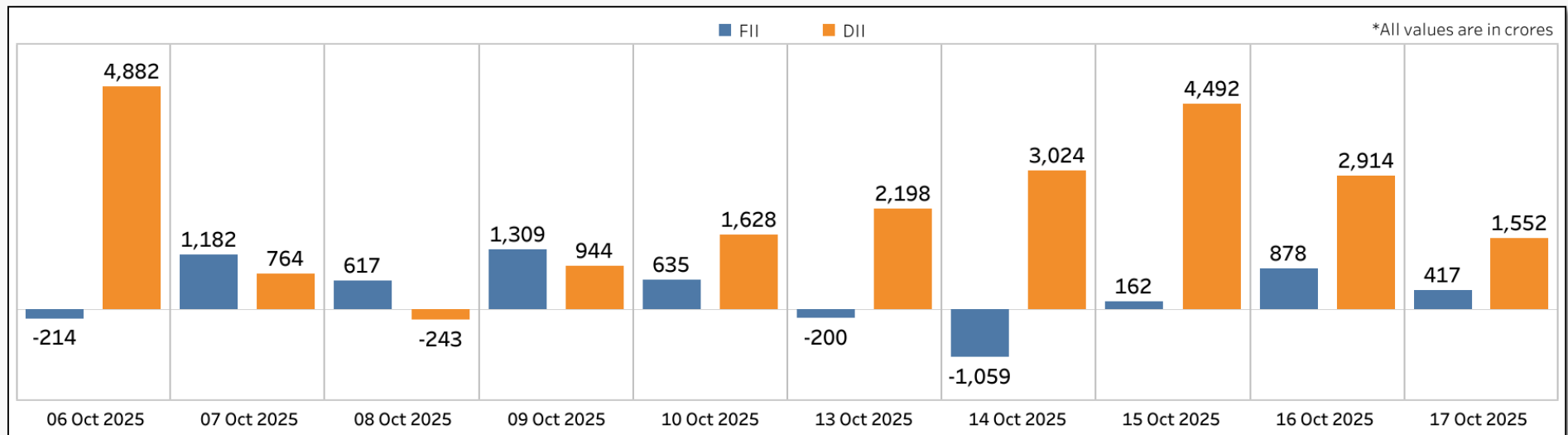
▲ and ▼ indicate positive and negative absolute changes, respectively



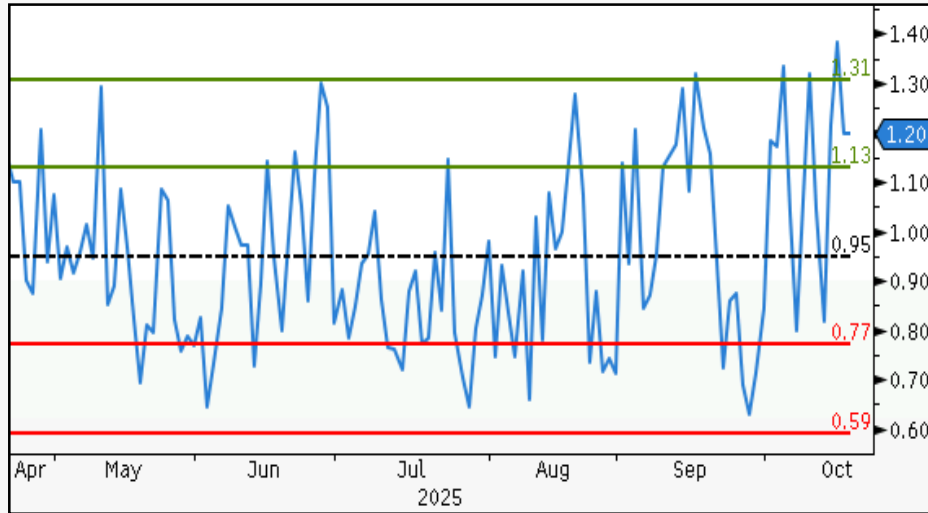
Daily Net Open Interest Change



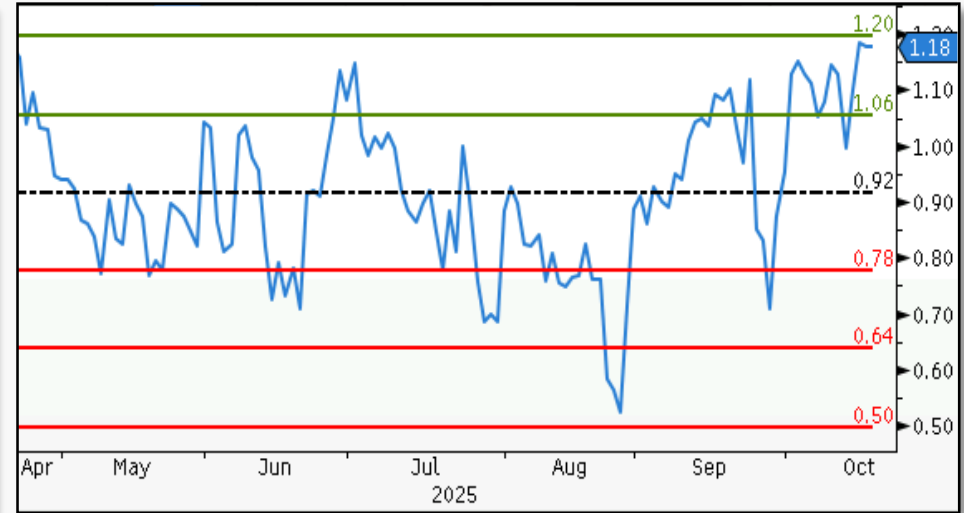
DII and FII Daily Cash Market Flows



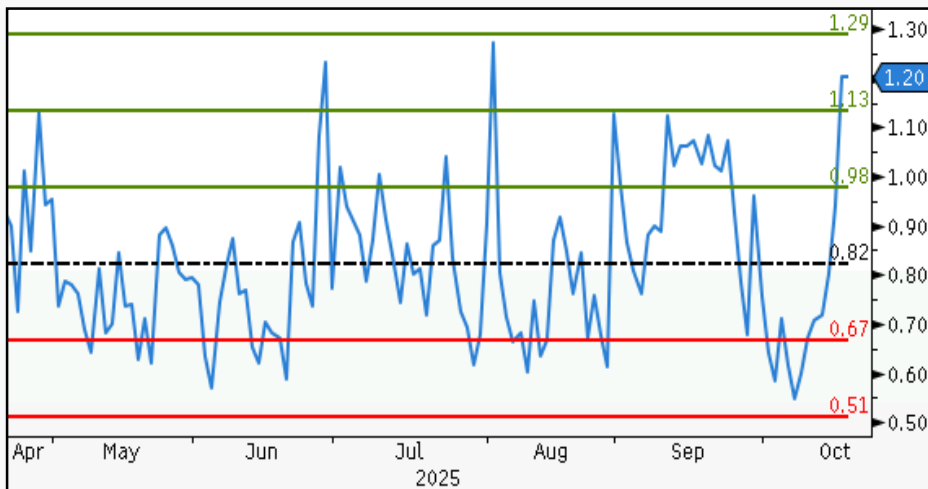
Nifty



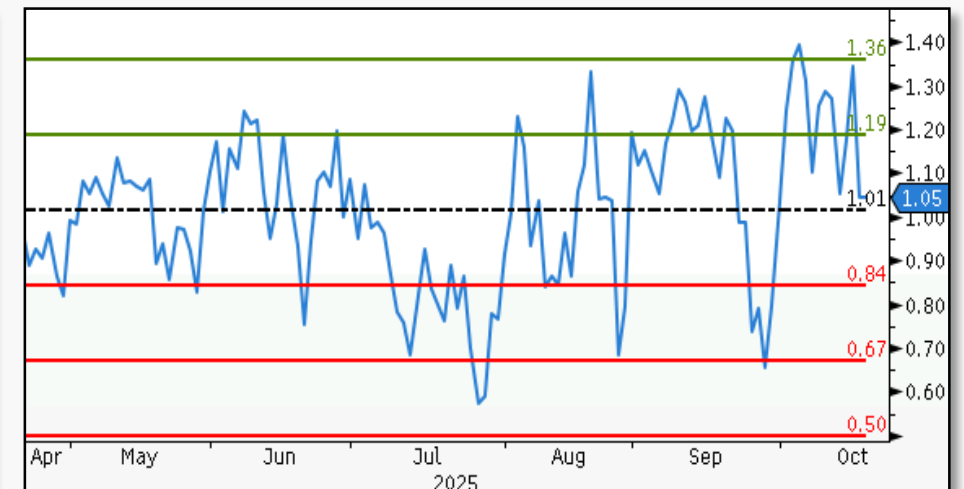
Bank Nifty



Fin Nifty

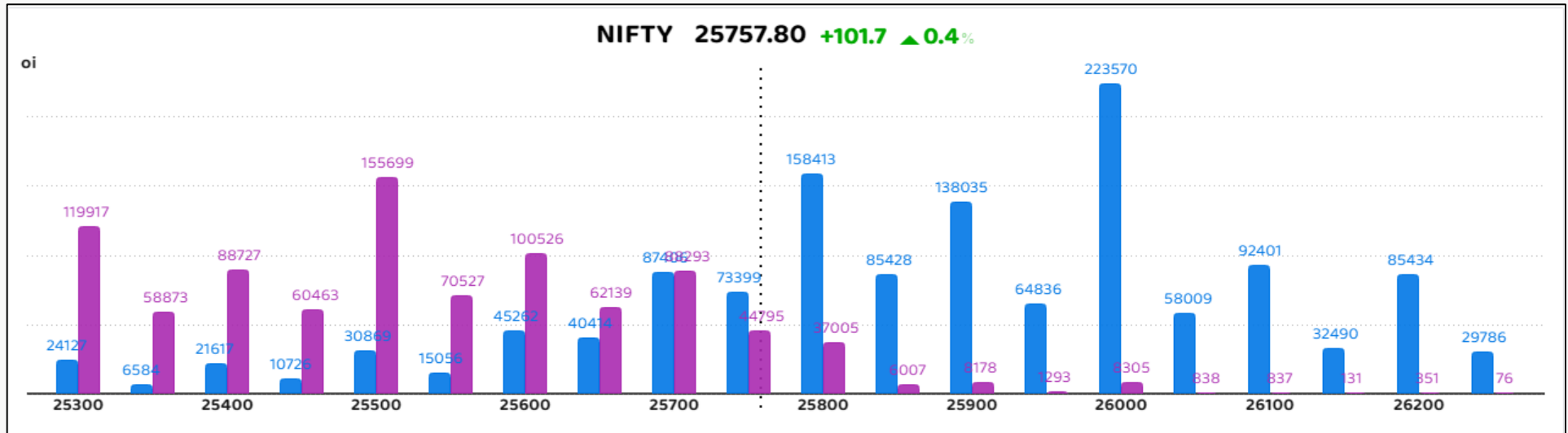


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 57,000 Put saw the most amount of open interest.

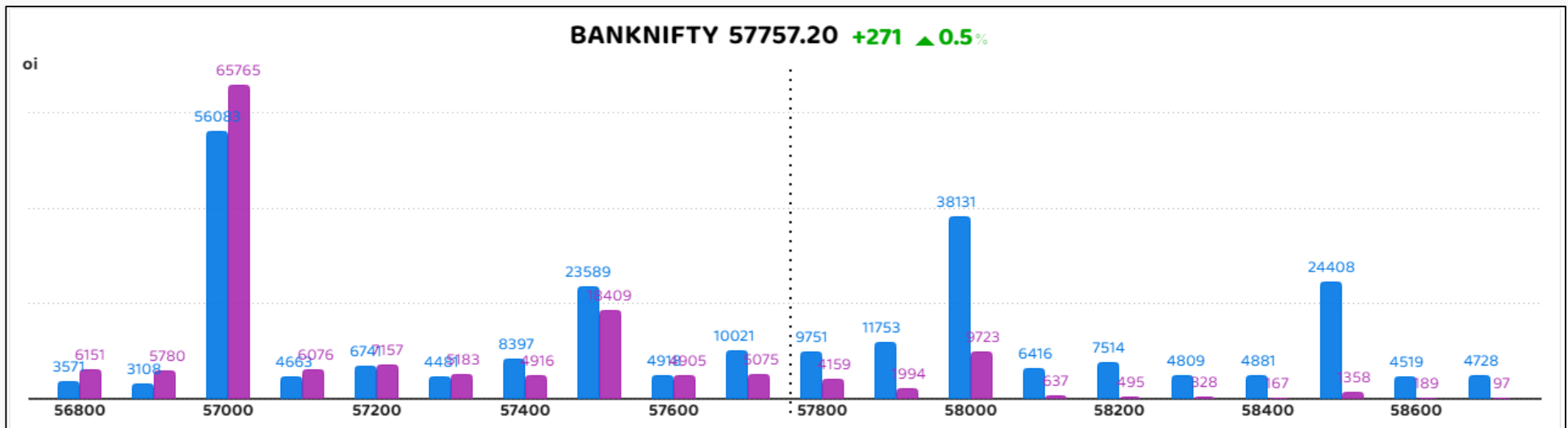
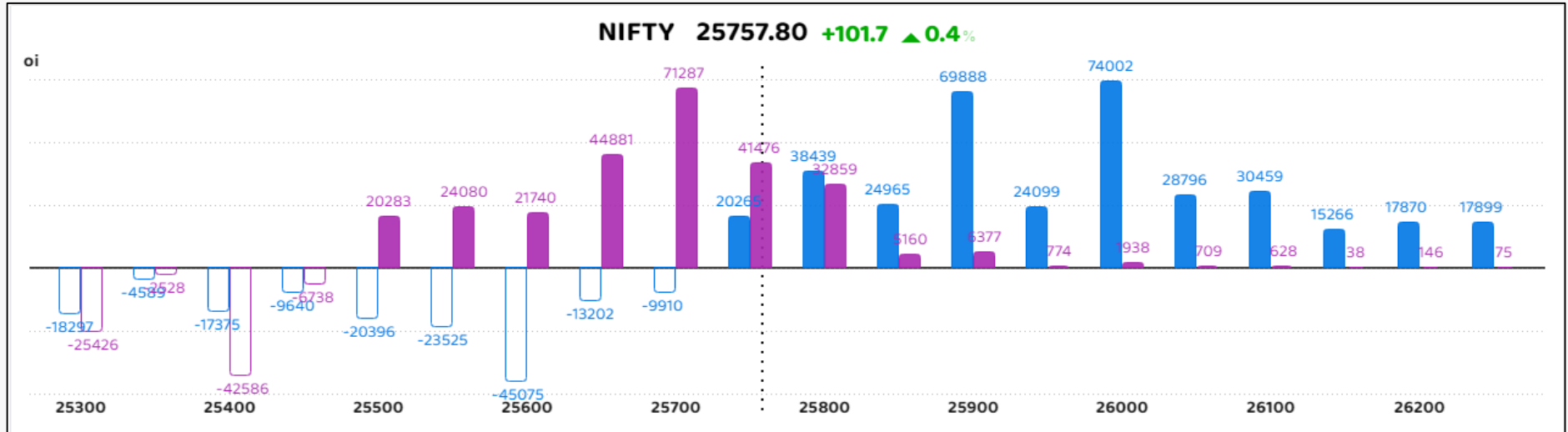


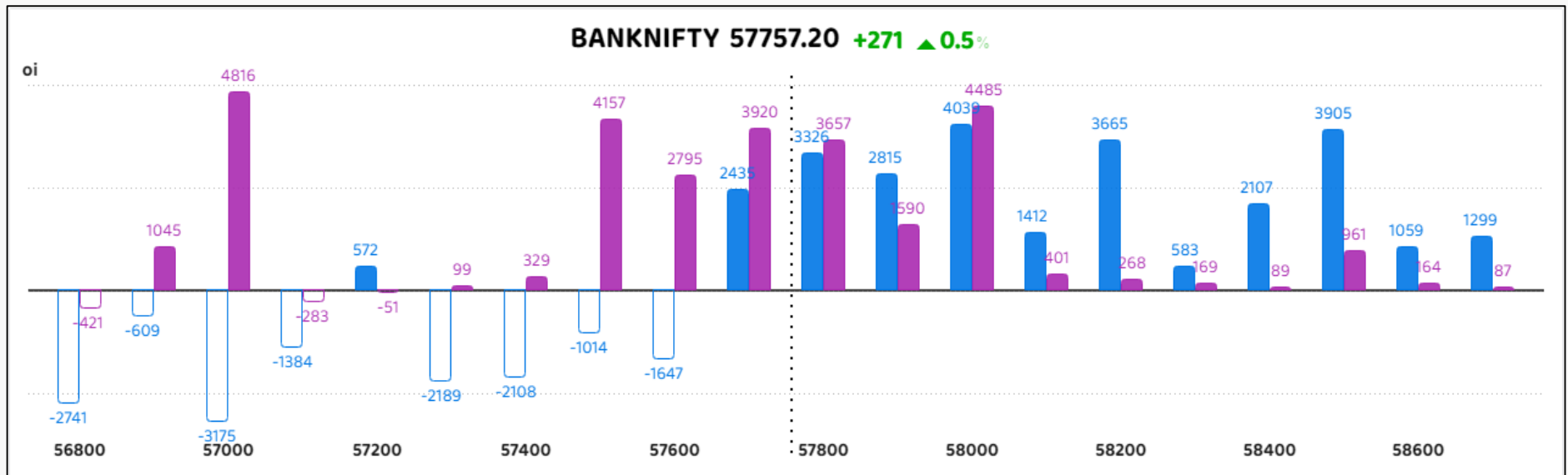
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,700 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,500 Call & the 57,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SBI CARDS & PAYM	927.0	-0.8	42.8	42.8	4.6	100.0
VOLTAS LTD	1426.6	0.8	39.0	46.9	16.9	73.6
SHREE CEMENT	29690.0	-1.1	25.2	31.9	7.9	72.0
RBL BANK LTD	299.5	-2.4	51.8	71.4	10.6	67.7
BAJAJ AUTO LTD	9150.5	0.0	24.9	36.4	2.1	66.5

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CANARA BANK	125.5	-1.5	6.6	47.8	6.6	0.0
POWER FINANCE	396.5	-1.3	24.5	51.5	23.8	2.7
NTPC LTD	341.0	-0.2	20.2	116.6	16.7	3.5
HDFC LIFE INSURA	746.0	0.4	20.5	80.6	18.2	3.7
ADANI PORTS AND	1479.4	0.0	24.5	99.7	19.8	5.9

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SBI CARDS & PAYM	927.0	-0.8	42.8	42.8	4.6	100.0
VODAFONE IDEA LT	8.7	-1.7	77.8	212.9	29.5	93.6
RBL BANK LTD	299.5	-2.4	51.8	71.4	10.6	89.5
VOLTAS LTD	1426.6	0.8	39.0	46.9	16.9	87.8
TATA MOTORS LTD	396.6	-0.1	36.8	72.6	1.3	86.8

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
CANARA BANK	125.49	-1.5	6.6	47.8	6.6	0.0
MAHINDRA & MAHIN	3647.2	2.4	23.3	43.5	0.8	0.8
COAL INDIA LTD	388.8	0.3	5.1	38.8	1.9	0.9
OIL INDIA LTD	408.9	-2.0	27.4	60.4	25.1	5.5
ICICI PRUDENTIAL	595.75	1.5	22.6	41.4	15.3	6.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGEIND	41,038.2	1.2	11,009	1,493	7.4
AMBER	8,249.4	-0.8	22,724	3,900	5.8
MANAPPURAM	283.8	1.2	9,322	1,751	5.3
TITAGARH	866.8	0.7	9,271	1,746	5.3
PGEL	588.2	0.6	39,182	7,722	5.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MPHASIS	2,693.7	-0.8	8,998	9,101	1.0
CYIENT	1,170.7	1.8	30,244	35,468	0.9
ALKEM	5,581.5	1.1	1,567	1,875	0.8
BAJFINANCE	1,070.1	2.5	28,149	34,406	0.8
TORNTPOWER	1,311.8	-2.2	2,483	3,093	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
INFY	1,441.1	-0.7	1,75,672	1,75,672	100.0
ETERNAL	342.6	-0.6	42,973	42,973	100.0
KAYNES	7,018.8	3.2	22,685	22,685	100.0
HDFCAMC	5,715.2	0.6	16,834	16,834	100.0
RVNL	331.6	0.6	15,990	15,990	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
NESTLEIND	1,289.5	2.8	19,404	19,404	100.0
SUZLON	52.9	2.3	9,709	9,709	100.0
ICICIGI	2,001.0	0.6	9,685	9,685	100.0
INDIANB	782.4	0.8	3,549	3,549	100.0
PPLPHARMA	192.6	-1.4	3,379	3,379	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ASIANPAINT	2,507.8	-3.3	2,35,567	2,45,031	96.1
INFY	1,441.1	-0.7	4,37,800	5,48,706	79.8
DALBHARAT	2,245.1	-3.0	34,323	48,778	70.4
NESTLEIND	1,289.5	2.8	85,649	1,38,197	62.0
BHARTIARTL	2,012.0	0.7	1,80,984	3,11,018	58.2

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NESTLEIND	1,289.5	2.8	56,810	70,834	80.2
BHARTIARTL	2,012.0	0.7	83,912	1,25,628	66.8
JIOFIN	309.3	-0.7	25,560	49,288	51.9
BDL	1,540.0	-0.9	14,244	30,098	47.3
INDIANB	782.4	0.8	6,184	13,433	46.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
KEI	4,131.0	0.3	11,892	2,829	4.2
HDFCAMC	5,715.2	0.6	16,834	4,716	3.6
POLYCAB	7,439.4	-2.2	14,093	5,461	2.6
INFY	1,441.1	-0.7	1,75,672	70,145	2.5
360ONE	1,164.8	0.8	4,685	2,103	2.2

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ICICIGI	2,001.0	0.6	9,685	2,248	4.3
NESTLEIND	1,289.5	2.8	19,404	4,692	4.1
KEI	4,131.0	0.3	4,224	1,783	2.4
PERSISTENT	5,755.7	0.9	16,413	7,277	2.3
CYIENT	1,170.7	1.8	5,797	2,647	2.2

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
NESTLEIND	1,289.5	2.8	85,649	7,272	11.8
HDFCAMC	5,715.2	0.6	47,925	6,236	7.7
ASIANPAINT	2,507.8	-3.3	2,35,567	31,917	7.4
DALBHARAT	2,245.1	-3.0	34,323	4,941	6.9
CYIENT	1,170.7	1.8	35,468	5,902	6.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
NESTLEIND	1,289.5	2.8	56,810	3,805	14.9
CYIENT	1,170.7	1.8	30,244	2,255	13.4
ASIANPAINT	2,507.8	-3.3	1,03,477	14,966	6.9
DALBHARAT	2,245.1	-3.0	12,272	1,787	6.9
ICICIGI	2,001.0	0.6	10,704	1,562	6.9

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	1755000	2.0%	2549	2500	651000	-1.9%	JIOFIN	320	12497300	3.5%	309	300	6525950	-3.0%
ADANIPTS	1500	1703825	1.4%	1479	1400	1040725	-5.4%	JSWSTEEL	1200	1242000	3.2%	1163	1100	908550	-5.4%
APOLLOHOSP	8000	180500	1.2%	7902	7600	70000	-3.8%	KOTAKBANK	2100	884000	-4.8%	2206	2100	1426400	-4.8%
ASIANPAINT	2600	824000	3.7%	2508	2300	482750	-8.3%	LT	3800	1417500	-1.0%	3839	3800	732200	-1.0%
AXISBANK	1200	4120000	0.0%	1200	1200	1806875	0.0%	M&M	3700	835400	1.4%	3647	3500	451600	-4.0%
BAJAJ-AUTO	10000	221400	9.3%	9151	8800	101775	-3.8%	MARUTI	17000	379400	3.7%	16401	15000	246550	-8.5%
BAJAJFINSV	2100	1132500	0.8%	2084	2040	569000	-2.1%	MAXHEALTH	1240	512925	3.1%	1203	1160	324450	-3.6%
BAJFINANCE	1100	1961250	2.8%	1070	1020	1782000	-4.7%	NESTLEIND	1300	1121500	0.8%	1290	1200	2129500	-6.9%
BEL	420	12024150	1.7%	413	410	5851050	-0.7%	NTPC	345	9673500	1.2%	341	340	1945500	-0.3%
BHARTIARTL	1960	3594325	-2.6%	2012	1960	1710950	-2.6%	ONGC	250	19991250	0.9%	248	245	3899250	-1.1%
CIPLA	1700	1342125	7.8%	1578	1460	370875	-7.5%	POWERGRID	300	7073700	3.5%	290	290	1945600	0.1%
COALINDIA	400	4314600	2.9%	389	450	2112750	15.7%	RELIANCE	1500	7627000	5.9%	1417	1400	3770500	-1.2%
DRREDDY	1260	1016250	0.3%	1256	1250	448125	-0.5%	SBILIFE	1800	564750	-2.4%	1844	1800	208125	-2.4%
EICHERMOT	7000	291900	-0.6%	7043	6500	182175	-7.7%	SBIN	890	7403250	0.1%	889	880	2994000	-1.0%
ETERNAL	350	19965025	2.1%	343	330	7289550	-3.7%	SHRIRAMFIN	680	1358775	0.7%	676	660	832425	-2.3%
GRASIM	2900	308250	2.2%	2836	2700	129250	-4.8%	SUNPHARMA	1680	1542450	0.1%	1679	1500	618450	-10.7%
HCLTECH	1600	1555050	7.7%	1486	1500	483700	0.9%	TATACONSUM	1170	548900	0.3%	1166	1100	242550	-5.7%
HDFCBANK	1000	4153600	-0.3%	1003	960	2806100	-4.2%	TATAMOTORS	400	9161600	0.9%	397	390	2716000	-1.7%
HDFCLIFE	800	2931500	7.2%	746	740	1169300	-0.8%	TATASTEEL	175	28539500	1.6%	172	170	13711500	-1.3%
HINDALCO	800	3743600	3.5%	773	750	1750000	-3.0%	TCS	3100	3034500	4.7%	2962	3000	1234625	1.3%
HINDUNILVR	2600	830100	-0.1%	2604	2500	623100	-4.0%	TECHM	1500	1077600	3.6%	1448	1400	709200	-3.3%
ICICIBANK	1400	3302600	-2.5%	1437	1400	2503200	-2.5%	TITAN	3400	576100	-7.5%	3675	3500	473375	-4.8%
INDIGO	6000	362550	2.6%	5848	5800	218250	-0.8%	TRENT	5500	867000	14.2%	4814	4700	366300	-2.4%
INFY	1560	14568400	8.3%	1441	1400	2711600	-2.9%	ULTRACEMCO	13000	127150	5.1%	12370	12200	82100	-1.4%
ITC	420	5868800	1.9%	412	400	4708800	-2.9%	WIPRO	250	12909000	3.8%	241	240	6066000	-0.4%

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

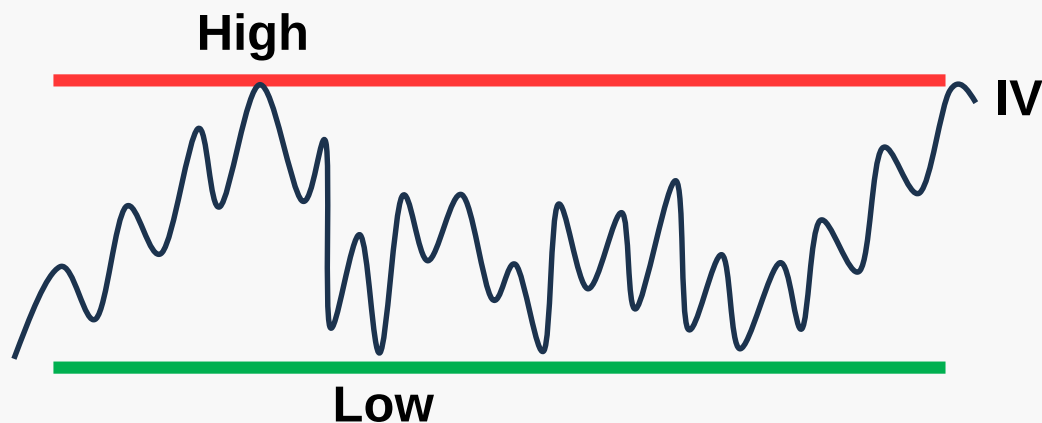
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

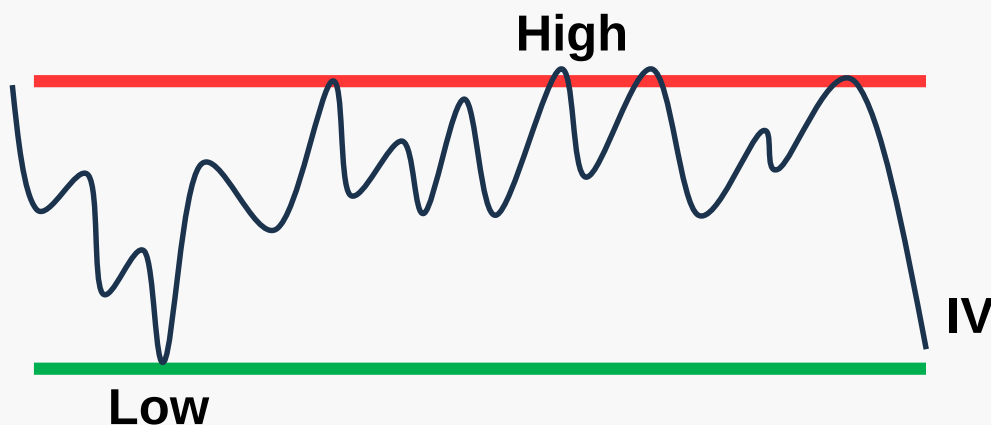
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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, 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

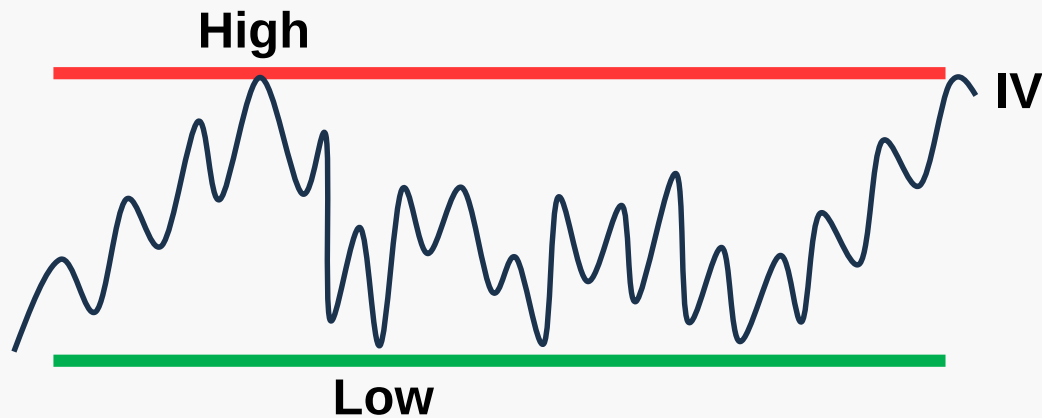


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

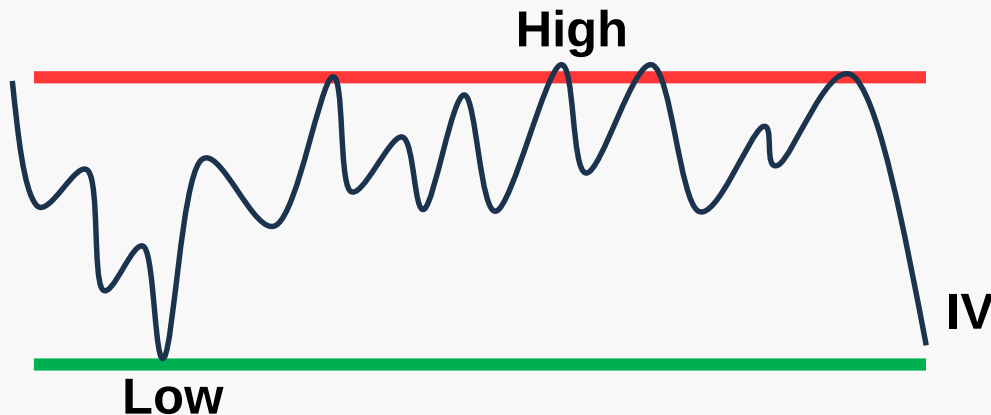


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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