

# Frequently Asked Questions

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## 1. What is India VIX?

India VIX\* is India's first volatility Index which is a key measure of market expectations of near-term volatility.

## 2. How is India VIX computed?

India VIX is computed by NSE based on the order book of NIFTY Options. The best bid-ask quotes of near and next-month NIFTY options contracts which are traded on the F&O segment of NSE are used for computation of India VIX.

## 3. What does India VIX signify?

India VIX indicates the investor's perception of the market's volatility in the near term i.e. it depicts the expected market volatility over the next 30 calendar days. Higher the India VIX values, higher the expected volatility and vice-versa.

## 4. What is the value of India VIX?

In the year 2013 the India VIX values were in the range of 13 to 32. Since India VIX signifies volatility, the values will be computed upto 4 decimal places as market participants may like to analyse impact on prices due to small changes in volatility.

## 5. How India VIX helps investors?

Volatility implies the variation in price of a financial instrument. Thus when the markets are highly volatile, market tends to move steeply up or down and during this time volatility index tends to rise. Volatility index declines when the markets become less volatile. Volatility indices are sometimes also referred to as the Fear Gauge because as the volatility index rises, one should become careful as the markets can move steeply into any direction. Investors use volatility indices to gauge the market volatility and make their investment decisions.

## 6. Is India VIX similar to that of market indices like NIFTY?

Volatility Index is different from a market index like NIFTY. NIFTY measures the direction of the market and is computed using the price movement of the underlying stocks whereas India VIX

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measures the expected volatility and is computed using the order book of the underlying NIFTY options. While Nifty is a number, India VIX is denoted as an annualized percentage.

#### **7. Who started the concept and computation of VIX first?**

VIX was first introduced by the Chicago Board of Options Exchange (CBOE) as the volatility index for the US markets in 1993 and it was based on S&P 100 Index option prices. The methodology was revised in 2003 and the new volatility index was based on S&P 500 Index options. CBOE also introduced VIX futures in 2004 and options in 2006.

#### **8. Is India VIX methodology similar to CBOE VIX?**

India VIX uses the computation methodology of CBOE, with suitable amendments to adapt to the NIFTY options order book using cubic splines methodology, etc.

#### **9. What shall be the use of futures on India VIX?**

India VIX derivatives can be used to hedge the risk of market volatility. Participants can use India VIX futures for portfolio diversification and for volatility trading.

#### **10. Can all types of participants trade in India VIX futures?**

Equity investors, mutual funds may use India VIX futures to hedge or diversify the equity portfolio. Options traders may use India VIX futures for hedging the vega risk or take exposure on volatility.

#### **11. What are the key product specifications of India VIX futures?**

The contract symbol is INDIIVIX and 3 weekly futures contract shall be made available for trading. The contracts shall expire on every Tuesday. The tick size is 0.25. The contract specification can be downloaded from [www.nseindia.com](http://www.nseindia.com)

#### **12. How is price quoted for India VIX futures?**

For ease of trading the India VIX futures price shall be quoted as expected India VIX index value \*100. If trader wants to buy 1 contract of India VIX futures at 18.1475, then the price to be quoted shall be Rs.1814.75. The contract value shall be Rs.10,88,850. {No. of contracts (1) \* Lot size (600) \* Quoted price (1814.75)}

(Note: Lot size is assumed to be 600 for this example. Exchange shall subsequently inform the lot size through circular)

### 13. What is the impact of 1 tick change on India VIX portfolio?

The underlying India VIX has a tick value of 0.0025 and the futures on India VIX has tick value of 0.25. Using the above example change in 1 tick will have following impact.

	India VIX Value	India VIX Futures Price	Contract Value
<b>Current Price</b>	18.1325	1814.75	Rs.10,88,850
<b>1 tick change</b>	18.1350	1815.00	Rs.10,89,000
<b>Impact</b>	0.0025	0.25	Rs.150

As it may be seen, change in 1 tick will change value of 1 contract of India VIX futures by Rs.150

### 14. Why do India VIX futures have 3 weekly contracts?

Indian markets are observed to predict expected volatilities for up to two months (60 days). India VIX futures represent expected volatility over the next 30 calendar days from the expiration of the contract. Three weekly India VIX futures contracts will predict the volatility till 51 (21 + 30) days from the current date.

### 15. Why does India VIX futures contract expire on Tuesday?

On the last Tuesday that is thirty days prior to the last Thursday of the next month, the Nifty option expiring in exactly 30 days, accounts for all of the weight in the India VIX calculations. India VIX value on this day will project expected volatility over the time period that mirrors the time period of derivative contracts on Nifty..

### 16. What is the settlement mechanism for India VIX futures?

Like other equity derivatives contract, India VIX futures shall be marked-to-market (MTM) on a daily basis. The MTM shall be netted along with other equity derivatives contract at the clearing member level. The contracts shall be cash settled.

### 17. What is the settlement price for India VIX futures?

The daily settlement price of India VIX futures shall be the weighted average price for last 30 minutes of the respective futures contract. If the contract does not trade, then theoretical futures price shall be used for computation.

The final settlement price will be the closing value of the India VIX index on the expiry day. The closing value of the India VIX index is the average of the index values for last 30 minutes of trading.

### 18. Is there any additional infrastructure cost for the trading member to trade in India VIX futures?

The contracts on India VIX futures shall be available for trading in the F&O segment of NSE. Therefore all members of NSE F&O segment shall be able to transact in India VIX futures. The margins shall be blocked from the deposits placed in the F&O segment.

**19. Where can one get historic values for India VIX??**

NSE disseminates India VIX on a real time basis. Historical data can be obtained from- [http://www.nseindia.com/products/content/equities/indices/historical\\_vix.htm](http://www.nseindia.com/products/content/equities/indices/historical_vix.htm). The historic values of India VIX are available from March 02, 2009.

**20. Where can I get a brief write up on computation method of India VIX?**

NSE has a brief write up on the method in its web site. Please visit [http://www.nseindia.com/content/vix/India\\_VIX\\_comp\\_meth.pdf](http://www.nseindia.com/content/vix/India_VIX_comp_meth.pdf)

**21. Where can I get a detailed write up on India VIX methodology?**

NSE has a detailed write up on the method in its web site. Please visit [http://www.nseindia.com/content/vix/white\\_paper\\_IndiaVIX.pdf](http://www.nseindia.com/content/vix/white_paper_IndiaVIX.pdf)

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