

Single Stock Price Bands

What are single stock price bands?

Recently, to address market events such as the “Flash Crash,” the national stock exchanges, FINRA and the SEC implemented a new marketplace rule designed to prevent erroneous trades and respond to periods of extraordinary volatility. The new rule, known as the *Limit Up-Limit Down Rule*, prevents trades from executing outside of price bands established throughout the day for individual stocks and ETFs. The new rule will be implemented on a rolling “pilot” basis and does not apply to all securities.

How does the rule work?

First, a reference price is continuously calculated for each stock and ETF subject to the new rule. The reference price is based on recent executions in the particular stock or ETF across the markets. Next, price bands above and below the reference price are continuously calculated and updated to determine the range of permitted execution prices for the particular stock or ETF. Trades cannot execute below the *Lower Price Band* or above the *Upper Price Band*.

In addition to preventing executions outside the price bands, the new rule halts (pauses) trading when certain conditions are met. The halts are designed to accommodate fundamental price movements in a stock or ETF. Generally, after 5 minutes, the stock or ETF will reopen pursuant to normal market opening rules.

How are price bands calculated?

The applicable price bands vary based on a number of considerations, including the security involved, the price at which it is trading, and the time of day. Below is a high level summary of the standard price bands. For more detailed information on the applicable price bands, see the reference materials provided below.

Stocks and ETFs	Price Percentages
Priced above \$3.00	5% (stocks in the S&P 500 index, Russell 1000 index, and certain ETFs) 10% (other stocks and ETFs beginning August 2013)
Priced between \$0.75 and \$3.00	20%
Priced below \$0.75	Lesser of \$0.30 or 75%

When will trading be halted?

If certain public quotations for an individual stock or ETF equal the price bands and trading does not occur within the price bands for 15 seconds, trading in the security will be halted for 5 minutes. As an example, if the *Lower Price Band* is \$10.00 and the best “Ask” price is also \$10.00 for a period of 15 seconds, trading will halt for 5 minutes. Conversely, if the *Upper Price*

Band is \$10.00 and the best “Bid” price is also \$10.00 for a period of 15 seconds, trading will halt for 5 minutes.

The market centers will reopen trading according to their standard procedures and new price bands will be established once trading has commenced.

How does the rule impact the display of quotations?

The rule also prevents certain orders from being displayed in the public quotation system. Here is an example:

$$\text{Lower Price Band} = \$95.00 \qquad \text{Upper Price Band} = \$105.00$$

Orders to purchase the stock (Bids) will be displayed up to the *Upper Price Band* of \$105.00. Purchase orders above \$105.00 will be submitted to the markets, but at a price of \$105.00. A purchase order below \$95.00 will be displayed as entered, but would be identified as non-executable.

Conversely, orders to sell the stock (Asks) will be displayed down to \$95.00. Sell orders below \$95.00 will be submitted to the markets, but at a price of \$95.00. A sell order above \$105.00 will be displayed as entered, but would be identified as non-executable.

Where will information about quotes and halts be available?

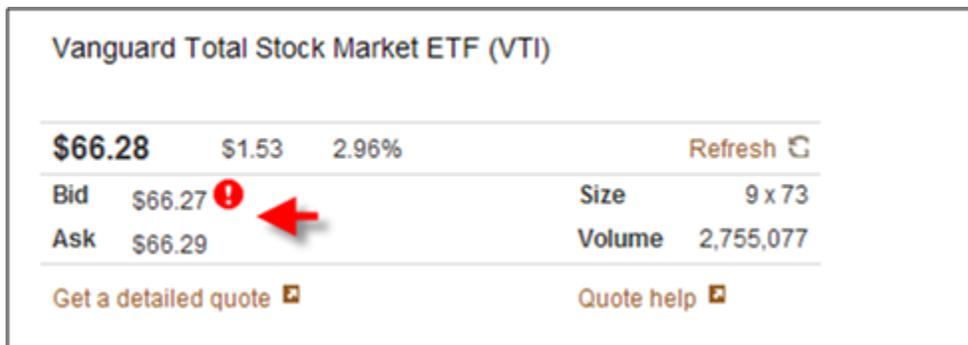
When you select “Get Quote” on the “Trade ETFs or stocks” page of Vanguard’s trade path a  will appear next to all quotes that are outside applicable price bands at the time of the request. Markets move quickly and the bands may change prior to the submission of your order. The fact that a quote is flagged does not mean you cannot place your order; it is simply an additional piece of information for you to consider. For securities that have been halted, a notification will be presented after selecting “Continue.”

If you have questions, please contact a Vanguard representative.

What does this mean for me?

The rule is meant to address extraordinary market volatility, so, generally speaking, you should not experience any significant changes. Nevertheless, the following are some things to keep in mind:

- 1) You may see publically displayed quotations that are not executable. For example, you may see a Bid that is below the *Lower Price Band*. In such a situation, a market order to sell the security may not execute immediately.



Vanguard Total Stock Market ETF (VTI)			
\$66.28	\$1.53	2.96%	Refresh 
Bid	\$66.27 	Size	9 x 73
Ask	\$66.29	Volume	2,755,077
Get a detailed quote 		Quote help 	

- 2) Aggressively priced orders may not display at the price you submit. In volatile situations where a security may be experiencing a fundamental move, you may place aggressive orders outside the applicable price bands that do not execute and will not be displayed at the prices you entered because the market for the security has moved outside the price bands.
- 3) If you have open orders for a security that has been halted, Vanguard will continue to submit your original order (at your original price) in the reopening process. You should monitor outstanding orders via the “Order Status” page on Vanguard.com.

Where can I find additional information?

The above information is a high level summary for your convenience. The *Limit Up-Limit Down* rule is complicated and there are many details to the rule that are not set forth above. You can obtain additional information about the rule at <http://www.sec.gov/news/press/2012/2012-107.htm>