

# Real Estate Securities Fair Value

## Overview

GIG Real Estate Securities *Fair Value* is the theoretical supposition of where the up and down securities should be priced in the market given certain underlying information:

- ✚ the corresponding index level at the beginning of the 2-year measurement period
- ✚ the forecast or forecast consensus index level at the end of the 2-year measurement period
- ✚ and the Net Asset Value (NAV) of a pair of an Up security and a Down security

The actual up and down securities may not necessarily trade at the calculated theoretical price based on the investor's forecast, as the market forecast or consensus forecast of the index value may differ from the investor's.

## Calculation

The following formula is used to calculate fair value for Up securities:

$$\text{Fair Value (Up security)} = \text{NAV} * (.50 + (EIVE-IVB)/IVB)$$

The following formula is used to calculate fair value of Down securities:

$$\text{Fair Value (Down security)} = \text{NAV} * (.50 - (EIVE-IVB)/IVB)$$

Where IVB = Index value at the beginning of the measurement period, and

*EIVE = Expected Index value at the end of the measurement period.*

The NAV of a pair of an Up security and a Down security, and the Index Value at the beginning of the measurement period are publicly available to all investors. In particular, they are available on [www.globalindexgroup.com](http://www.globalindexgroup.com).

### Example

Assume the NAV of a pair of an Up security and a Down security = \$40.00 and the Index Value at the beginning of the June 30, 2016 (IVB) is 200.

The investor reviews all of the economists'/analysts' forecasts for the index level on September 30, 2018. The investor's forecast is that the index will be at 210 in September 2018 (EIVE).

Using these example numbers and the formulas above:

$$\text{Fair Value (Up security)} = \$40.00 * (.50 + (210-200)/200)$$

$$= \$40.00 * (.50 + .05) = \$40.00 * .55$$

$$= \$22.00$$

$$\text{Fair Value (Down security)} = \$40.00 * (.50 - (210-200)/200)$$

$$= \$40.00 * (.50 - .05) = \$40.00 * .45$$

$$= \$18.00$$

Note: The sum of the two Fair Values will always equal the NAV. This is due to the Up security and the Down security have the only economic claims on the fund assets.

*"Prediction is difficult, especially about the future."* – Danish proverb

There are dozens of economists, research analysts and brokerage companies who forecast real estate returns into the future. Investors should fully research these forecasts before investing in either Up or Down securities.

Investors who overestimate the ending index value will tend to overpay for Up securities and undervalue Down securities. On the other hand, investors who underestimate the ending index value will tend to overpay for Down securities and undervalue Up securities.