Review for 11-03-16

Comparison of the <u>timing</u> of returns:

$$\bar{t} = \frac{\sum_t t R_t}{\sum_t R_t}$$

$$\bar{d} = \frac{\sum_t t \nu^t R_t}{\sum_t \nu^t R_t}$$

(Macauley) <u>Duration</u>

Susceptibity of $P(i)$ to changes in i:

$$\bar{\nu} = -\frac{P'(i)}{P(i)} = \nu \bar{d}$$

<u>Volatility</u>

(Modified Duration)

$$P(i+h) \doteq P(i)\left[1 - h\bar{\nu}\right]$$