

$$E_Q\left(\frac{R_n - R_0}{1 + R_0}\right) = 0, \quad E_Q\left(\frac{R_n - r}{1 + r}\right) = 0, \quad E_Q\left(\frac{R_n}{1 + r}\right) = E_Q\left(\frac{r}{1 + r}\right), \quad \frac{1}{1 + r}E_Q(R_n) = \frac{r}{1 + r}, \quad E_Q(R_n) = r$$

$$E[R_n L] - E[R_n]E[L] = \sum_{\omega \in \Omega} P(\omega)R_n L(\omega) - E[R_n]\left(\sum_{\omega \in \Omega} P(\omega)L(\omega)\right) = \sum_{\omega \in \Omega} P(\omega)R_n \frac{Q(\omega)}{p(\omega)} - (E[R_n])\left(\sum_{\omega \in \Omega} P(\omega) \frac{Q(\omega)}{p(\omega)}\right) =$$

$$\sum_{\omega \in \Omega} Q(\omega)R_n - (E[R_n])\left(\sum_{\omega \in \Omega} Q(\omega)\right) = E_Q(R_n) - E[R_n]$$

$$V_t = H_0 B_t + \sum_{n=1}^N H_n S_n(t), \quad G = H_0 r + \sum_{n=1}^N H_n \Delta S_n, \quad R = \frac{H_0 r + \sum_{n=1}^N H_n \Delta S_n}{V_0} = \frac{H_0 r}{V_0} + \frac{\sum_{n=1}^N H_n R_n S_n(0)}{V_0}$$