

$$L = \sum_{t=1}^T \log \left[\frac{p}{\sigma_n} \cdot \exp \left(-\frac{1}{2} \frac{(R_t - \mu_n)^2}{\sigma_n^2} \right) + \frac{1-p}{\sigma_b} \cdot \exp \left(-\frac{1}{2} \frac{R_t^2}{\sigma_b^2} \right) \right] - \frac{a_n}{2} \cdot \log(\sigma_n^2) - \frac{a_b}{2} \cdot \log(\sigma_b^2) - \frac{b_n}{2\sigma_n^2} - \frac{b_b}{2\sigma_b^2}$$

$$a_n = 5.544$$

$$a_b = 5.544$$

$$b_n = 5.544$$

$$b_b = 27.72$$

$$L = \sum_{t=1}^T \log \left[\frac{p}{\sigma_n} \cdot \exp \left(-\frac{1}{2} \frac{(R_t - \mu_n)^2}{\sigma_n^2} \right) + \frac{1-p}{\sigma_b} \cdot \exp \left(-\frac{1}{2} \frac{R_t^2}{\sigma_b^2} \right) \right] - 2.772 \cdot \log(\sigma_n^2) - 2.772 \cdot \log(\sigma_b^2) - 2.772 \cdot \frac{1}{\sigma_n^2} - 13.86 \cdot \frac{1}{\sigma_b^2}$$