

$$\int_{t}^{T} \frac{2}{6(t)} dt = (T - t^{*}) \sigma_{1}^{2}(T)$$

$$\int_{t}^{*} \sigma_{1}^{2}(T) dt = (T - t^{*}) \sigma_{2}^{2}(T)$$

$$\int_{t}^{*} \sigma_{3}^{2}(T) dT = (T - t^{*}) \sigma_{1}^{2}(T)$$