

$$0 < s < 1 < 1$$

$$\text{Cov}(Y_s, Y_1) = \text{Cov}(\underline{B_s - sB_1}, B_1 - 1B_1)$$

$$= \text{Cov}(B_s, B_1) - s \text{Cov}(B_1, B_1) - 1 \text{Cov}(B_s, B_1)$$

$$+ s1 \text{Cov}(B_1, B_1) = s - s1 - 1s + s1 = \underline{s - s1}$$

