$-\hat{\sigma}_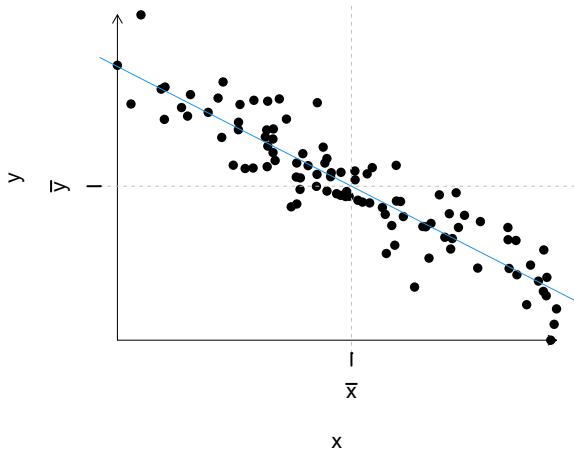X\hat{\sigma}_y < \text{cov}(x, y) < 0$ — $\text{cov}(x, y) = -\hat{\sigma}_X\hat{\sigma}_y$