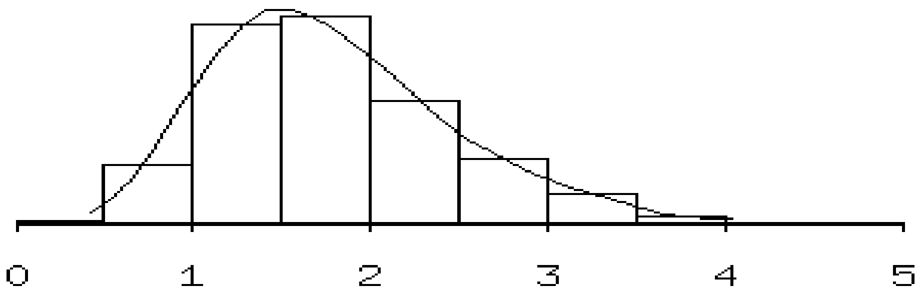
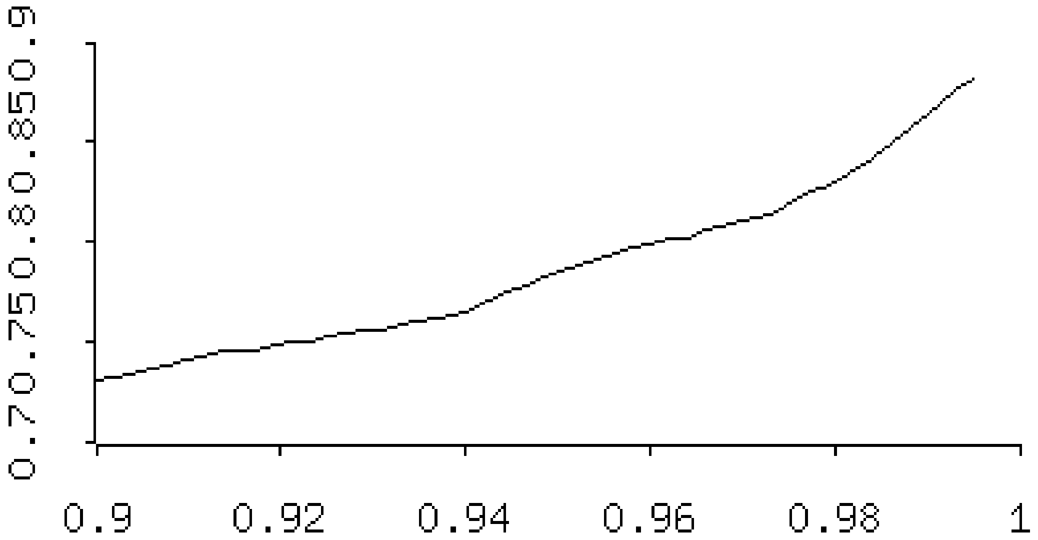
Double Bootstrap Plots

BS Distribution of s^2



Estimated Effects of Perturbing upper Percentile



Comments

- Normal theory interval is [1.1, 4.0]
- Double bootstrap estimates nominal 95% interval [0.8, 3.3] to have coverage 81%.
- Adjust percentiles to improve coverage (B=2000):

$$[s^{2*}_{(.02)}, s^{2*}_{(.995)}] = [0.74, 3.6] \quad \Rightarrow \quad 88\% \text{ coverage}$$