

The UNIVERSITY of NORTH CAROLINA
at CHAPEL HILL

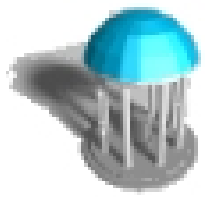
STOR 155 Introductory Statistics

Lecture 15: Sampling Distributions for Sample Means



Review

- **Sampling distribution for a sample count:**
 - Binomial experiments
 - Binomial distribution
 - Normal approximation
 - Continuity correction
- **Sampling distribution for a sample proportion:**
 - Exact calculation via binomial distribution
 - Normal approximation **No** continuity correction
- **How about a sample mean?**



Diversification

- A basic principle of investment is that diversification reduces risk.
- That is, buying several securities, (for example stocks), rather than just one, reduces the variability of the return on an investment.
- The following figures show two distributions of returns in 1987.