

Summary

- In the method of maximum likelihood, the point estimators are obtained by maximizing the likelihood function
- Likelihood function is a product of density functions of n independent observations drawn from the population
- Maximum likelihood estimates are more efficient than estimates obtained by the method of moments
- Under certain conditions both the estimators are asymptotically normally distributed as the sample size tends to infinity and consistent
- The least-squares method and various approaches for combining errors or calculating weighted averages, etc. can be derived or justified in terms of the maximum likelihood approach
- Maximum likelihood estimation is used for a wide range of statistical models
- Maximum-likelihood estimators can lack asymptotic normality and can be inconsistent if there is a failure of one (or more) of the regularity conditions

