

The Dependent Bootstrap Procedure

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Abstract.

The asymptotic probability for the deviations of dependent bootstrap means from the sample mean is obtained, without imposing any assumptions on joint distribution of the original sequence of random variables from which the dependent bootstrap sample is selected. A nonrestrictive assumption of stochastic domination by a random variable is imposed on the marginal distributions of this sequence.

Key Words: Dependent bootstrap; Bootstrap means; Asymptotic probability for deviations; Exponential inequalities; Strong law of large numbers.