LAWS OF LARGE NUMBERS FOR TWO TAILED PARETO RANDOM VARIABLES

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Abstract: We sample \( m \) random variables from a two tailed Pareto distribution. A two tailed Pareto distribution is a random variable whose right tail is \( px^{-2} \) and whose left tail is \( qx^{-2} \), where \( p + q = 1 \). Next, we look at the largest of these random variables and establish various Weak and Strong Laws that can be obtained with weighted sums of these random variables. The case of \( m = 1 \) is completely different from \( m > 1 \).

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