

## COMPARISON THEOREMS FOR SMALL DEVIATIONS OF WEIGHTED SERIES

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*Abstract:* weighted series and obtain more refined versions of the known comparison results. In particular, the following consequence is obtained immediately from Theorem 2.1 of the paper.

Let a positive random variable  $X$  belong to the domain of attraction of a stable law with an index greater than one and let its distribution function be regularly varying at zero with an exponent  $\beta > 0$ . If  $\{X_n\}_{n \geq 1}$  are independent copies of  $X$ , and  $\{a_n\}$  and  $\{b_n\}$  are positive summable sequences such that  $\sum_{n \geq 1} |1 - a_n/b_n| < \infty$ , then as  $r \rightarrow 0^+$

$$\mathbf{P}\left(\sum_{n \geq 1} a_n X_n < r\right) \sim \left(\prod_{n \geq 1} b_n/a_n\right)^\beta \mathbf{P}\left(\sum_{n \geq 1} b_n X_n < r\right).$$

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