

UPPER BOUNDS FOR THE EXPECTED JEFFERSON ROUNDING UNDER
MEAN-VARIANCE-SKEWNESS CONDITIONS

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Abstract: For the class of nonnegative random variables with given mean, variance, and skewness and support bound, we present a sharp upper bound for the expectation of rounding due to the Jefferson rule. The result gives an estimate for average extra gains due to rounding down payments. Arguments of four-dimensional geometric moment theory implemented in the proof provide tools for refined evaluations of rates of convergence of probability distributions and positive linear operators.

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