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Estimating the risk of large investments using Hurst-Kolmogorov dynamics in interest rates

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Economies of scale, which minimize the cost of the unit, are vital for the prosperity of the society and the progress of civilizations. In order to achieve economies of scale, large investments have to be made. However, investments contain always a risk. An important evaluation of the investment's risk could be done by interest rates. In this study, we update our recently presented methodology from utilizing Markov assumptions and instead for the timeseries generation algorithm, we employ a stochastic model following the Hurst-Kolmogorov dynamics . The updated methodology is applied for interest rates in various historical periods and compared with the Markov-based one.