

Review of: "A connection between Gompertz diffusion model and Vasicek Interest Rate model"

Peter K. Asante¹

¹ University of Texas at El Paso

Potential competing interests: No potential competing interests to declare.

The author's goal in this work is to establish a connection between the Gompertz diffusion model and the Vasicek interest rate model using stochastic and Itô's calculus.

The work is well structured, the title clearly captures the goal of the work, and the abstract is concise and straight to the point.

Methodology:

Models, equations, and proofs are well presented. Mathematical formulations and steps are consistent with established theorems and/or definitions.

Some revisions for the authors.

1. The introduction should include a background of the research question as well as relevant conclusions from the literature. Additionally, authors should include definitions or examples where necessary for technical terms used (example: stochastic calculus) to make the work more accessible to a general audience.
2. Review the article to correct grammar and punctuation.
3. Reference list could be longer as there is a lot of literature on these models. At least 15 references would be acceptable.
4. The conclusion could be more elaborate. Authors should give context for the work and how their findings are relevant to the research community. Additionally, are there future research directions that build on the findings in this work?