



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_35737
Title of the Manuscript:	ON THE IMPACT OF CONSUMPTION ON AN INVESTOR'S STRATEGY UNDER STOCHASTIC INTEREST RATE AND CORRELATING BROWNIAN MOTIONS
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
<p>(1) The author has to acknowledge that he did self-plagiarism and must show his commitment for fairness and professionalism in the research work and that this will not happen again. His response was passive as if nothing occurred knowing the seriousness of the issue. Anyway!!! I leave it to the Senior Editor, because it has to deal with the integrity of the journal!</p> <p>(2) The author has to introduce his work {33 & 34} in the introduction as previous research completed.</p> <p>(3) Case 1: has to only show the result and not the whole process because it has been published somewhere else. So, he has to say: "Adopting the formulation by Ihedioha [33], which assumes that an investor trades two assets in an economy continuously riskless asset (bond) and a risky asset (stock), and letting the price of the riskless asset be denoted by $P(t)$ with a rate of return $r(t)$ which is stochastic and driven by the Orinstein-Uhlenbeck model. Then after a series of mathematical manipulations, the following is obtained: for any policy π, the total wealth process of the investor follows the stochastic differential equation (SDE)</p> $dX^\pi(t) = \pi(t) \frac{dP_1(t)}{P_1(t)} + [X(t) - \pi(t)] \frac{dP(t)}{P(t)} - (\vartheta + \theta - d)\pi(t)dt. \quad (1)$ <p>Which leads to</p> $dX^\pi(t) = \{[(\mu + d) - (r(t) + \vartheta + \theta)]\pi(t) + r(t)X(t)\}dt + \lambda\pi(t)dZ_2(t). \quad (2)$ <p>Suppose the investor has a utility function $U(\cdot)$ which is strictly concave and continuously differentiable on $(-\infty, +\infty)$ and wishes to maximize his expected utility of terminal wealth, then his problem can therefore be written as</p> $\max_{\pi} E[U(X(T))] \quad (3) \quad \text{subject to (2).}$ <p>This work assumes a probability space (Ω, \mathcal{F}, P) and a filtration $\{\mathcal{F}_t\}_{t \geq 0}$, and uncertainties in the models are generated by the Brownian motions $Z_1(t)$ and $Z_2(t)$.</p> <p>(3) Since the next case is dealt with more assumptions, then it is left as is.</p>	

Reviewer Details:

Name:	Hussin Jose Hejase
Department, University & Country	Faculty of Business Administration, Al Maaref University, Lebanon