



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_10971
Title of the Manuscript:	THE MULTI-FRACTAL SPECTRUM MODEL FOR THE MEASUREMENT OF RANDOM BEHAVIOUR OF ASSETS PRICES RETURNS.
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<u>Compulsory</u> REVISION comments	I do not have any compulsory revision comments. I believe that such application of multi-fractal spectrum model to equity returns is meaningful. Mathematical application is properly conducted and authors could derive meaningful implications from their results.	The aim of this work is to derive an MSM version of the random behaviour of equity returns of the existing ones in literature (see Ugbebor, 2001 and Osu and Okoroafor, 2007) which nobody has thought of.
<u>Minor</u> REVISION comments	• The authors use a term 'stock market price returns'. I interpreted it as stock returns computed from market prices. It would be better to follow finance convention and just call it returns once the authors define how returns are computed. • Page 2, the paragraph containing equation (2) and (3): Authors need not to dedicate half a page to justify the use of log returns in investigating financial assets. Authors could simply state that log returns are used for such and such reasons. • Some notations are not consistent. Sometimes upper and lower cases are interchangeably used. Example: z_t. • I do not understand the role of discretization (page 3). If the objective is to simply show that discrete version exists, I think it is fine. Authors never mention the discrete case later in the paper anyways. It would make more sense to give some justification of the	We agree with the reviewer. We have adjusted the text body to follow finance convention. Equations (2) and (3) are useful for equations (4) and (5). Is been corrected. The objective is just to show that discrete version exists. We are only interested herein in the continuous case. We are working on an extension where we will derive the MSM with



SDI Review Form 1.6

	discrete version. An empirical application of their mathematical investigation with discretely spaced time series could be one of many examples. • Please check the reference list. Some references are missing. For example, Zhang and Rong (2013), page 14. • English could be significantly improved. There are many obvious grammatical mistakes.	the discrete version and establish the comparative effectiveness with the continuous case. An empirical illustration to compare both the MSM for equity returns and those in existing literature will be done. Noted.
<u>Optional/General</u> comments	I should let the editor know that I only assessed the paper based on its contribution in terms of the mathematical application. I overlooked the relevance / significance to the field of finance as BJMCS is mathematical journal. I can offer additional comments from finance perspective upon request. Overall, I believe the mathematical aspect of the paper is well	We love to request for the reviewers comments from finance perspective for future research. Thanks.