



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_11644
Title of the Manuscript:	Comparison of Mamdani and Sugeno Fuzzy Inference Systems for prediction (with application to prices of Fund in Egypt)
Type of the Article	Original 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.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (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)
<u>Compulsory</u> REVISION comments	The paper presents a fuzzy inference system (FIS) based prediction model for funds in Egypt, considering both Mamdani and Surgeon fuzzy systems: 1. The organization of the paper should be improved, mainly in terms of numbers of sections (the last paragraph in introduction claims for other section numbers). 2. The state-of-the-art is very variable and should be confused to the reader. In fact, the systems reviewed are FIS models; but they are not related to the one that is expected in the paper (forecasting funds). Please, consider rewriting the state-of-the-art with FIS models for predicting historical or times series data. 3. The section III (Mamdani vs. Surgeon), the second word "Mamdani" in the first paragraph is mistaken. It should be "Sugeno". Also, this comparison is very slightly. I recommend extending the comparison between both methods. It should be great to include a comparative chart of both methods highlighting the characteristics required to the paper. 4. Section IV and V (Application of Mamdani FIS and Surgeon FIS) are written without organization. First of all, the description of the proposed prediction	This part has been organized The whole paragraph has been edited



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	model is required, highlighting the methodology and the experimental design, because it is difficult to understand the whole process. Also, include a paragraph describing how the historical data of the funds in Egypt is composed, and what are the problems in these data that require the attention of FIS models against other prediction models (regression, artificial neural networks, NARX models, etc.). Finally, the fuzzy knowledge base or the fuzzy rules implemented in this application is missing. Remember that the description of the proposal should be written in a way that the experiment could be reproduced. 5. Explain all Tables while citing within the text, because it is very difficult to understand the information they are presenting. 6. Results and conclusion section does not represent sufficient evidence that the selected prediction model is better than others. Include graphs comparing the actual values against predicted values to give an overall result of models. Separate the results from conclusion, and add a deep discussion why Surgeon models are better than Mamdani, in this particular case. Contrast this information with the state-of-the-art. What do you suggest to researchers when dealing with prediction models particularly for funds.	A research into comparing the multiple ways of prediction is still being carried out This part has been improved
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<u>Minor</u> REVISION comments	The idea of predicting funds with FIS based models is interesting and highly appreciated in artificial intelligence field. However, the paper must present enough evidences that these models are preferred over other well-known prediction models such as: nonlinear regressions, artificial neural networks, grey prediction models, NARX models, etc. The inclusion of a general description of fuzzy inference systems should make the paper more understandable to general readers. Include a real conclusion summarizing the application, revisiting the selected prediction model after all these experiments, and propose future work.	
<u>Optional/General</u> comments	Consider that when a fuzzy inference system application is reported, the information that must be included are the following: inputs (as you did), outputs (as you did) and fuzzy rules (missing). However, the set of fuzzy rules are normally very large, thus a description of a prototypal fuzzy rule is presented or a fuzzy surface.	