

## *Article Title*

## *Author Name*

### Response to Reviewers

I would like to thank the reviewers for their comments. They have been very useful in updating the paper. Below, I provide a summary of the changes, in order to help the reviewers in checking the changes that have been made.

#### **Response to Reviewer #1**

**Comment:** Besides the comments in the file, I would only suggest the author take a few lines to discuss the coding and the programming language(s) used to run the simulations (I understand the code was attached, though the reader will not see it). This could be just before discussing the simulation results or in a separate section/table if the author believes there's some worthy topics to discuss about the programming side and some of challenges/solutions that arose while writing the code.

**Response:** There is not really much to say about the coding and programming languages. It is all pretty standard, but I have added the following at the start of the section when the simulation is first discussed.

*“We simulated the system using the Java Programming language. The implementation is straight forward, comprising a number of Java classes, but computer simulations of the system are open to suggestions that the random number generator is not fair.”*

**Comment:** I'd also suggest including one or two of charts showing the simulation results, which could be enlightening to summarize results. I would suggest either some histograms of the distribution of profits, comparing the curves of the different scenarios tested or some other distributional graphs.

**Response:** We have introduced four graphs, which compares three scenarios. Thank you for this suggestion, it does add to the paper.

## Response to Reviewer #2

**Comment:** I added this paragraph

*“In this article, we take a closer look at the simulation. By simulating ...”*

**Response:** Thank you. We are very happy to include this paragraph.

**Comment:** [Paragraph which starts “*Analysis by Downton ...*” and the following paragraph has been reworded.]

**Response:** The revisions do read better and we have retained them. Thank you.

**Comment:** I don't understand this (“*given by adding the two end numbers, in this case 5*”)

**Response:** We have changed this sentence to read “*The amount staked, is given by adding the two end numbers, in this case  $4+1=5$ , so the amount to stake is 5 units.*”

**Comment:** I think it's interesting that even with these many runs, there's still some Monte Carlo error here... May be worth commenting further?

**Response:** We have added an additional comment, just below Table 1:

*“If a reader needs further convincing that they cannot hope for the law of large numbers to help them, consider just one of the simulations ...”*

**Comment:** Does the author have more information on the occurrence of other rare events? It would be fun to know the longest streak of 0's or any number repeating itself.

**Response:** This is a good suggestion, and not something I had thought of doing. I have changed the simulation to capture this data and it is presented in the section where we analyse the other rare occurrences. The inserted paragraph reads:

*“We also tracked how many consecutive occurrences there was of each number. In every one of the 50,000,000 simulations ...”*