Dear Editor,

We want to thank the EPJB and the referee who read our paper and suggest important corrections to our work. Please find enclosed the revised manuscript "Price response functions and spread impact in correlated financial markets" by J.C. Henao-Londono et al.

The following are the corrections of the three points the referee recommend us to improve.

- As such, the study is for the stock price data for a particular year (2008), though the analysis is very detailed and impressive. However, no justification is given for the choice of the year, nor there is any comparison with similar data for other years. Since the world financial market, in particular that of the U.S., experienced a major housing bubble and consequent market crashes in the 2000s, a justification of the correlation study particularly for one year in this period is needed.

  We add the following paragraph in Section 2:

  "This paper specifically addresses methodical aspects related with the price response functions and spread impact in correlated financial markets. Therefore, we chose the year 2008 to clarify the methodical aspects we wanted to analyze. We plan to extend our results in a future paper using different years for comparing the price response functions and spread impact."

- Perhaps the authors should compare their observations regarding correlations reported in related studies for this period; see e.g., Local Gaussian correlations in financial and commodity markets, by Q. Nga Nguyena et al., European Journal of Operational Research, Volume 285 (2020), Pages 306-323, which investigates the increased correlations between commodity and U.S. financial markets from 1992 to 2017 under a non-linear framework and studied the impact of several several significant events that shaped the 2000s.

  We add the following paragraph in Section 3.3:

  "In Ref. [29], they analyzed local Gaussian correlations in financial and commodity markets. They found a breakpoint the 08/2008. The increased comovements between commodities and financial markets are more critical after the breakpoint both in the magnitude of correlations, especially in the left tail."

  And the following paragraph in Section 4.3:

  "A special situation occurs when financial and commodity markets are analyzed to find correlations as shown in Ref. [29]. In this analysis a breakpoint in 08/2008 is found, where, before and after the point, the results are qualitatively different. However, our work is only focused in correlated financial markets. Our price response functions in average, have the same behavior despite the time of the year."

- Also the authors may indicate the physics part in their study.

  We add the following paragraph in Section 1:

  “Complex system analysis considers the behavior of a system with many elements that may interact between them. Due to the dependencies, relationships, competitions, or other interactions among their parts, complex systems are systems whose behavior is intrinsically difficult to model. In our work, we use financial markets. Financial markets are obvious candidates to be treated as a complex systems: they contain multiple agents of different types that compete for finite resources. The agents also interact in such a way that generate the properties and dynamics of financial markets.”

We expect our corrections fulfill the expectations of the referee and clarify all the concepts that were not completely clear in the original manuscript.

Sincerely,

Juan Camilo Henao Londono