



Correction

## Correction: Vukovic et al. COVID-19 Pandemic: Is the Crypto Market a Safe Haven? The Impact of the First Wave. *Sustainability* 2021, 13, 8578

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The authors would like to make the following corrections to the published paper [1]. The changes are as follows:

(1) To clearly indicate, the authors wish to add a citation in "Section 2. Theoretical Background".

The study by [15] forecasts the impact of COVID-19 will be huge, both economically and socially.

with

The study by [15,16] forecasts the impact of COVID-19 will be significant, both economically and socially.

(2) Replacing the citation in "Section 2. Theoretical Background":

In the study of [16], wavelet methods were applied to examine the impact of COVID-19 on Bitcoin prices.

with

In the study of [17], wavelet methods were applied to examine the impact of COVID-19 on Bitcoin prices.

(3) To clearly indicate, the authors wish to add a citation in "Section 2. Theoretical Background".

By using specifications that can account for structural breaks in GARCH, namely Markov switching GARCH models, the authors of [20] analyzed Bitcoin daily log returns exhibiting regime changes in their volatility dynamics.

with

By using specifications that can account for structural breaks in GARCH, namely Markov switching GARCH models, the authors of [20,21] analyzed Bitcoin daily log returns exhibiting regime changes in their volatility dynamics.

4) Replacing the citation in "Section 2. Theoretical Background":

The study by [21] tested two hypotheses regarding the role of a Tether in the crypto world, especially on Bitcoin.

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with

The study by [22] tested two hypotheses regarding the role of a Tether in the crypto world, especially on Bitcoin.

(5) Replacing the citation in "Section 2. Theoretical Background":

On the other hand, ref. [21] found in their study that Tether has a sizable impact on Bitcoin prices.

with

On the other hand, ref. [20] found in their study that Tether has a sizable impact on Bitcoin prices.

(6) To clearly indicate, the authors wish to add a citation in "Section 2. Theoretical Background"

The study by [37] analyzed the dynamic role of gold as a safe haven and found that investors' behavior can destroy this role in practice.

with

The study by [37,38] analyzed the dynamic role of gold as a safe haven and found that investors' behavior can destroy this role in practice.

(7) Replacing the citation in "Section 2. Theoretical Background":

The analysis by [38] seems to support this finding by applying a VAR-ADCC-BVGARCH (vector autoregressive asymmetric dynamic conditional correlation bivariate generalized autoregressive conditional heteroskedasticity) to the US financial market during the period of 2007–2017, although there is consensus in the literature that gold could be a risk-diminishing instrument against stocks.

with

The analysis by [39] seems to support this finding by applying a VAR-ADCC-BVGARCH (vector autoregressive asymmetric dynamic conditional correlation bivariate generalized autoregressive conditional heteroskedasticity) to the US financial market during the period of 2007–2017, although there is consensus in the literature that gold could be a risk-diminishing instrument against stocks.

(8) Replacing the citation in "Section 2. Theoretical Background":

For example, the authors of [45] suggest a bivariate copula approach for tail risk modeling, the authors of [30] propose a linear bivariate quantile regression (bivariate CoVaR) as the most appropriate model, and [43] (based on the work of [46,47]), used a tail-event driven network to analyze the tail-risk interdependence among 23 cryptocurrencies.

with

For example, the authors of [44] suggest a bivariate copula approach for tail risk modeling, the authors of [44] propose a linear bivariate quantile regression (bivariate CoVaR) as the most appropriate model, and [43] (based on the work of [46,47]), used a tail-event driven network to analyze the tail-risk interdependence among 23 cryptocurrencies.

(9) To clearly indicate, the authors wish to add two citations in "Section 2. Theoretical Background"

According to [53,54], such a model visualizes heteroscedasticity in the dataset.

According to [53–56], such a model visualizes heteroscedasticity in the dataset.

(10) Replacing the citation in "Section 2. Theoretical Background"

This technique was popularized by [55], who found that it is possible to model the relationship between returns and beta for companies that overperform and underperform relative to the mean.

with

This technique was popularized by [53], who found that it is possible to model the relationship between returns and beta for companies that overperform and underperform relative to the mean.

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(11) Replacing the citation in "Section 2. Theoretical Background"

In the study of [56], it was shown that quantile regression is the most appropriate model in the study of the sensitivity of cryptocurrency returns to changes in gold price returns.

with

In the study of [57], it was shown that quantile regression is the most appropriate model in the study of the sensitivity of cryptocurrency returns to changes in gold price returns.

(12) Replacing the citation in "Section 3.2.1. COVID-19 Global Index Construction"

For the present study, we constructed a composite COVID-19 index following [57–59] to answer the fundamental question of how one should measure the effect of COVID-19 globally.

with

For the present study, we constructed a composite COVID-19 index following [58–60] to answer the fundamental question of how one should measure the effect of COVID-19 globally.

(13) Replacing the citation in "Section 3.2.2. Wavelet Coherence"

To study the co-movement between the cryptocurrencies' daily returns, a wavelet coherence diagram was plotted using the "biwavelet" R package, similar to the studies of [60,61].

with

To study the co-movement between the cryptocurrencies' daily returns, a wavelet coherence diagram was plotted using the "biwavelet" R package, similar to the studies of [61,62].

(14) To clearly indicate, the authors wish to delete a citation in "Section 3.2.3. Regressions".

The authors of [62–65] and others extensibly used this method recently to derive the study estimates.

with

The authors of [63–65] and others extensibly used this method recently to derive the study estimates.

(15) To clearly indicate, the authors wish to delete three citations in "Section 5. Conclusions".

Finally, the study does not come to an ultimate consensus on whether the ongoing COVID-19 crisis is a "Black Swan" event [1–5,14] or not [15].

with

Finally, the study does not come to an ultimate consensus on whether the ongoing COVID-19 crisis is a "Black Swan" event [1–3,14] or not.

The authors and the Editorial Office would like to apologize for any inconvenience caused to the readers and state that the scientific conclusions are unaffected. The original article has been updated.

## Reference

1. Vukovic, D.; Maiti, M.; Grubisic, Z.; Grigorieva, E.M.; Frömmel, M. COVID-19 Pandemic: Is the Crypto Market a Safe Haven? The Impact of the First Wave. *Sustainability* **2021**, *13*, 8578. [CrossRef]