

Reviews of ECONJOURNAL-D-23-00191R2

Panel Technical Efficiency of Korean Companies in the Energy Sector based on Digital Capabilities

Round 1

Reviewer 1

Comments:

*The novelty of the paper should be clearly presented and compared with existing studies.

*There are some grammatical errors and typos.

*Summarize the abbreviations in a table for the convenience of the reader

*The literature studies should be extended and updated. The following papers can be discussed. -<https://doi.org/10.1016/j.epsr.2022.108251>, -
<https://doi.org/10.1109/ECAI54874.2022.9847313>

*The readability of paper should be improved.

Reviewer 2

Dear Authors

Please correct the following:

1- Add the methodology in the abstract section.

2- The introduction needs to be rewritten.

3- Research data should be standardized. In statistics, the numbers are not consistent with each other. For example, you compare the return on assets with R&D; They are widely distributed. Authors can equalize these numbers by dividing them by total assets.

4- The contribution of the article should be rewritten and strengthened.

5- The impact of the role of Covid-19 in this research should be highlighted.

6- Authors can use the following articles to enrich the research literature:

<https://doi.org/10.22105/riaj.2023.384254.1366>

<https://doi.org/10.22105/jfea.2022.326644.1199>

<https://doi.org/10.22105/jarie.2021.308815.1388>

<https://doi.org/10.1108/MD-01-2022-0120>

<https://doi.org/10.22105/riaj.2022.360989.1335>

Round 2

Editor

The introduction section does not clearly define the objectives and importance of the research. A clear statement of purpose is needed.

The literature review is superficial and could be expanded to cover more recent studies on efficiency analysis of new entrants/startups across different industries.

The methodology used needs refinement. More advanced stochastic frontier methods could provide better insights considering longitudinal effects over time.

The description of variables and data sources is inadequate. Clear operationalization and justification of inputs/outputs is required based on established literature.

Questions:

What is the time period of data collected?

How representative is the sample of the overall population?

What assumptions are made regarding the distribution of inefficiency effects?

What tests are performed to verify the model specifications?

Formulas:

The efficiency formula/model used is not clearly specified. Please provide the equations/formulas used for stochastic frontier analysis.

How are the technical, pure technical and scale efficiencies calculated and compared? Showing the relevant formulas would strengthen understanding.

Round 3

Editor

Since this revision strengthen the manuscript and improve its overall quality, this paper can be accepted as publication.