

# Reviews of ECONJOURNAL-D-24-00143R1

Cleaner production: Analysis of the role and path of green finance in controlling agricultural non-point source pollution

## Round 1

### Reviewer 1

This study evaluates the impact of green finance on controlling agricultural non-point source pollution in China, utilizing the entropy value method and mediation effect model to assess the pollution control efficacy and intervention mechanisms of green finance. The advent of green finance (GF) reshapes financial systems towards sustainability. Prompted by China's commitment to green development, this research investigates how GF influences the control of agricultural non-point source pollution (ANPSP) to address pressing environmental challenges and contribute to sustainable agricultural development.

The study evaluates the impact of green finance (GF) on agricultural non-point source pollution (ANPSP) control and emission reduction in 30 Chinese provinces from 2005 to 2021. The research employs the entropy value method and the unit survey inventory method to evaluate the levels of green finance development and ANPSP. A mediation effect model is utilized to empirically assess the pollution control efficacy of green finance and elucidate the mechanisms underlying its influence.

The study constructs a GF index and assesses emissions from seven categories of agricultural non-point source pollutants using the inventory method. Utilizing panel data from 30 Chinese provinces from 2005 to 2021, the study applies panel fixed effect and intermediary effect models to assess the impact and influence mechanisms of GF on industrial pollution emissions from a multi-dimensional perspective. This paper sums that GF notably suppresses ANPSP, which achieves pollution control and emission reduction in ANPSP through environmental regulation (ER) and land transfer. Heterogeneity analysis indicates that GF's effect on ANPSP is significant and positive only in regions with low economic development.

Reviewer's Comments:

#### 1. Literature Contributions:

To make your literature review more comprehensive, it's recommended that you expand on the references you already have and include key studies by Gong et al. (2022) and Fu et al (2023). These works are particularly relevant

and can provide valuable insights that will enhance the Literature review in your paper.

## 2. Conclusion:

Please consider suggesting ideas for future research in your conclusion that will lay a strong foundation for further exploration and discussion. Could your research method be applied to different political systems? Are there any variables that are insignificant in China's political system but could potentially contribute to understanding other political systems?

## Conclusion:

The paper is well-structured, and addressing these comments will enhance its overall quality.

## Reference:

Xu, G., Fu, C., Huang, Q., & Lin, M. (2022). International Political Uncertainty and Climate Risk Premium. Available at SSRN 4122678.

Fu, C., Lu, L., & Pirabi, M. (2023). Advancing green finance: a review of sustainable development. *Digital Economy and Sustainable Development*, 1(1), 20.

## Reviewer 2

- 1.The entire text needs to be further refined from the beginning to enhance the readability of the article.
- 2.Consider enhancing the robustness test by replacing explanatory variables and dependent variables.
- 3.Further consider adding heterogeneous groupings to enhance comparative analysis between different groups, and reflect on the economic implications presented by different groups.