Referee Report on "Does land market have an impact on green total factor productivity? A case study on China"_land-1199601

This paper analyzes the impact of land market on urban GTFP and explores the regulatory effect of the innovation investment level and the infrastructure investment level on land market which based on the panel data of 271 cities in China from 2004 to 2016 Following the analysis, the authors argued that: First, land market restrains the improvement of urban GTFP, whether analyzed from the dimension of land transfer price or land transfer scale, and the influence degree varies in different dimensions. Second, there is regional heterogeneity in the inhibition effect of the land market on urban GTFP. Third, the level of innovation investment and the level of infra-structure investment have significantly different regulatory effects on the impact of land market on urban GTFP; the level of innovation investment aggravates the inhibition effect of urban GTFP by the land market, while the infrastructure investment level weakens this inhibition effect. It is an interesting paper. However, I have the following specific concerns.

Major Concerns and Comments:

1. This study uses panel data, so panel regression should be used. However, the author stated that the main measurement method is OLS (line 271). I am not sure whether the regression method used by the author is panel OLS. The author should explain clearly.

2. Before 2.2 Methods, it is recommended that the author should add a section of data source and description, and use the table to display it. The authors should explain briefly.

3. In Ling 291, the author pointed out that βi is an individual fixed effect, and it seems that the estimation method in this article is the fixed effect model of Panel OLS. The author should explain why the random effect model is not used. I think it should be that the estimated coefficient or explanatory power of the fixed effect model is better, but the author should still explain.

4. In 2.4 Measure of GTFP, the author uses SBM-DEA (GML index) as the GTFP index (line 343 to 347). At the same time, use lnGTFP as the interpreted (dependent) variable (Table 6, page 10). GTFP descriptive statistics processed with GML index should be displayed. At the same time, whether the GTFP

processed by GML index can be estimated with Panel OLS, the author may have to think in detail. Is it appropriate to use Panel Probit? Or use both at the same time and compare the estimated results. It can increase the contribution of this article.

5. The author uses the data from 2004-2016. As China's inflation is relatively serious, whether price deflation should be used, the author should consider.

Minor Comments:

1. Some typos should be corrected. For example, in page 3, line 134, "level, However,…" should be "level. However,…"; line 135, "(regions of China, It is …" should be "regions of China. It is …". The authors should carefully check the symbols and spelling.

Evaluation:

For the above reasons, I believe that the current situation in this article is not suitable for publication in this journal. I encourage authors to make submissions after making appropriate corrections.