

Reviews of ECONJOURNAL-D-23-00210R1

Does the adjustment of industrial structure restrain the income gap between urban and rural areas

Round 1

Reviewer 1

Summary: The paper investigates empirically whether industrial structure adjustments and labor mobility influenced the urban-rural income gap in China over the period from 1990 and 2019. The authors find that industrial structure adjustments increase the gap between urban and rural regions, while labor mobility helped to decrease it.

General evaluation: The paper addresses an interesting topic, which has received quite a lot of attention in the literature. The focus on China brings in a new twist into this literature, but the paper needs to argue more forcefully and convincingly why (and what) the focus on China contributes to our existing knowledge about labor mobility and structural change on the rural-urban growth gap. One argument might be that the developments in China have been particularly dynamic over the period examined in the study, but there are surely other factors playing a role as well. The paper has many interesting features, and I particularly like that the paper presents a theoretical model in Section 2, which is brought to the data in section 3. The paper has the potential to eventually provide an interesting contribution to the literature, but I think that a profound revision is necessary to develop this potential. Below I describe my main concerns and suggestions.

COMMENTS

(1) Contribution to the literature: The paper is almost entirely silent about the strands of literature it contributes to. There are previous papers examining the relationship between labor mobility, structural change, and income gaps. These papers and the key learnings of the present paper over the existing work should clearly be described in the manuscript. In particular, as mentioned above, it is important to describe what the focus on China contributes. I suggest adding a discussion about the paper's contribution at the end of the introductory section or in a separate section.

(2) English language and proofreading: I think that the manuscript would benefit from careful English proofreading, as I spotted numerous grammatical issues and typos in the text (too many to list them in this report). Most importantly, however, the text should be made more precise, as I had to read many paragraphs several times in order to understand what the authors are trying to say. I think that many paragraphs of the manuscript can be streamlined, and the description can be made more precise and clearer.

(3) The theoretical model: Although I am not an expert on the type of model presented in the paper, I found it quite reasonable. However, I have some minor points that I think should be addressed:

- a. Is the model aimed to provide a general description about the economic mechanisms or is it specifically designed for the Chinese context? I assume the former is the case. Then I would suggest including a brief description on how it related to the specific case of China (which is investigated in the paper) and why the focus on China is ideal to studying the predictions of the model empirically.
- b. In its current form, the empirical analysis seems to be quite detached from the theoretical model. Hence, I suggest deriving the empirical specification more rigorously from the theoretical framework.
- c. There must be related models studying similar effects. Section 2 on the theoretical framework, however, does not refer to any previous paper or model. How does the model relate to previous ones? What is really new and which parts are based on prior work? These important questions should be addressed in the revision of the manuscript.

(4) The empirical analysis: Regarding the empirical analysis, I have a number of comments and suggestions:

- a. Section 3.1.1 needs to be re-written, it is hard to understand what, exactly, the authors are doing here. What is the “intensity of reconfiguration of the total employment”? There are many terms that require more precision or discussion.
- b. I also think that the term “quality of the industrial structure adjustment” requires additional explanation. While I think that the measure in Equation (23) is reasonable, the description of what qua_{it} really measures should be strengthened.
- c. The index in section 3.1.3. should be transferred into a numbered equation, just as in the other sections.
- d. Section 3.2.: What are “interpreted variables”? The critique of the Gini index in this section is also a bit vague and should be strengthened. It is true that the Theil index has some favorable features, but its use could be motivated more convincingly.
- e. I think it is reasonable to include the control variables discussed in section 3.3., but here I wonder how these variables relate to the theoretical model? If the paper aims to study this model, it should also present results that are closely related to the model. The paper could then argue that there are confounding factors that one needs to address and reestimate the parsimonious model using additional controls. Examining how the results change when including these models is also of interest to better interpret the empirical findings.
- f. The parameter λ in Equation (25) needs to be a vector, given that X should be a matrix. This should be described in Section 3.5. (e.g. by using bold face for the parameter and the matrix).

- g. Sections 4.3 to 4.5 are way too lengthy given the additional insights gained from the analyses presented there. While I think that the analysis covered in these sub-sections make sense, I think the text can be shortened considerably.
- h. The description of data sources in section 3.4. is incomplete. The paper lists some of the sources, but it never describes which data series come from which source. This should be described in much greater detail. Also, it unclear to me what, exactly, the Theil index measures, which towns are included, which regions are included, where does the data come from, is the index computed by the authors or by someone else etc.
- i. Why is the number of observations missing in all empirical results tables?
- j. What do the results mean for the theoretical model? A discussion on this point should be added in section 5.

(5) There are many imprecise statements in the paper, and some are wrong: Already in the introduction, there are many statements that are imprecise or wrong. I recommend going carefully through the paper and correcting all statements that are far-fetched and too general in nature or that are not supported by the empirical results of this (or other) paper(s). Here are a few examples:

- a. First Sentence: "The most important problem facing developing countries is the social gap between the rich and poor". I think it is highly debatable whether this is really the case.
- b. Second sentence: "Historical development has proven that the most effective method of narrowing the gap between the rich and poor is to expand labour mobility and narrow the income gap between urban and rural areas through the effect of reconfiguring labour in different sectors." This is a very strong statement, but no reference is provided. Also, what about income redistribution via the tax and transfer system? Would that not also be quite effective if the goal would only be to reduce income differentials?
- c. Also first page: "With the deepening of market-oriented reform, the government has become aware of the increasingly uneven distribution of wealth among members of society". Which government is meant here? Why did the reforms result in "the government" to realize income gaps?
- d. There are many more similarly imprecise statements, which should be re-written