

# Reviews of ECONJOURNAL-D-22-00090

"Segregation, Education Cost, and Group Inequality"

by Doojin Ryu

## First round of reviews

### Reviewer 1

To my understanding, the paper is an extension of the work by Bowles et al (2014). The authors introduce investment in education in the model by Bowles et al (2014) and show that the higher the cost of investing in education, the higher the level of inequality across groups.

The paper is clear and well written. My major comment refers to the lack of references and the fact that the contribution is not framed at all within the existing literature. The author presents the contribution of the manuscript as novel but does not discuss how and why this differs from the vast literature on segregation and investments in education. In my opinion, the author should extend the introduction and (i) discuss the relevant literature more in depth, (ii) compare the analysis presented in the paper to existing works in the economic literature, and (iii) state clearly what the contribution of the paper is. In addition, I think the author should include some additional discussion on the implications of the model and its results.

### Reviewer 2

This paper discusses the consequences of peer effects and group inequality from the standpoint of the education system, especially the costs to train an individual to be acknowledged as a skilled worker in society. It argues that despite high levels of segregation in a given society, it is possible to achieve a stable symmetric state of skill level across unequal groups when education costs are low. It contains meaningful implications for the inequality literature and current trends in developed nations, such as the rise in standard and cost of becoming a skilled worker.

This theory-centered paper lays out multiple approaches and includes numerous components that may be meaningful for the subject matter. However, I would recommend revising the paper into a more concise one that focuses on a few main points. The following are my suggestions:

1. The conclusions of section 3 and 4 are quite similar while section 3 uses a more simplified and straightforward approach, a uniform ability function, relative to section 4's approach. Section 4 seems to contain complicated expressions that are difficult to understand. In order to add clarity to section 4, the author assumes that parents of the two social groups have similar investment decision preferences (towards the end of page 8). Therefore, rather than using convoluted expressions in section 4, the paper could mainly use the uniform ability function of section 3 to deliver the main idea more concisely.
2. In pages 7 and 8, I would suggest adding or redefining proposition 1 so that it incorporates outcomes when  $\eta$  is between 0 and 1. Additionally, corollary 2 makes  $x^*$  appear irrelevant from B even though  $x^*$  is a function of B.
3. There may be excessive number of figures attached to the paper and this could be reduced to a few that are absolutely necessary.
4. Although the introduction provides interesting implications of this paper, the levels of inequality changing could be supplemented with quantitative statistics of the U.S. and other nations mentioned.
5. I would suggest to mention the change in notation from  $X_h(t)$  to  $X_t$  at the beginning of section 3. It is important that the notation remains consistent throughout the entire paper after this point. It would be helpful to remind the reader of this change in notation through occasional interpretation of the expressions in words. Also, please provide clearer information on parts of the figures, especially what the axes are in a consistent way for all figures.

## Second round of reviews

### Reviewer 1

I appreciate the authors' effort in the revision of the manuscript. I think the paper gained substantially in clarity and soundness. I am happy with the new version of the manuscript, which is very well written. I have a few last minor comments.

1. On page 3, the authors state: "Thus, unlike the abstract model of Bowles, Loury, and Sethi (2014), we elaborate a concrete market structure that encompasses both high- and low-skill complementarity and network effects." I find this sentence a bit blunt, I would soften the wording.
2. The authors refer to college education in Europe as "almost entirely public good" (page 4). I would not label it as public good. It is true that it is typically subsidized and largely accessible to low-income families wrt the US system. However, this does not make it necessarily available for free to the whole population, nor technically non-excludable and non-rivalrous.
3. Given that their model extends that of Bowles et al (2014), the authors should make very clear to the reader where extensions kick in when presenting their model. In the current version, keeping track of differences between this paper and Bowles et al (2014) is not straightforward, also because the authors do not use the same notation as the reference paper.

### Reviewer 2

I thank the authors for their revised submission that addresses all concerns and suggestions I mentioned about the past submission. The paper has overall improved in clarity and organization and is now able to emphasize the importance and interesting implications of this paper.