Education Involution from Economic Perspective

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Abstract

This paper analyzes the causes and consequences of education involution from a macro-economic perspective. Moreover, based on economic mechanisms and underlying social reality, whether the competition contending more advanced educational resources in education involution is fair is discussed from a micro-economic perspective. Furthermore, the economic impacts and consequences of education involution are analyzed. In addition, the paper also proposes some countermeasures for the both the government and the tertiary educational institutions.

Keywords
Education Involution; Micro-Economics; Income Discrepancies; Tertiary Educational; Macro-economics; Educational Qualification; Economic Growth; Gini Coefficient; Pareto Optimality; Supply-side Policies.

1. Introduction

According to (Jie, Huizhao, & Jia, 2021), [1] educational involution, also described as ‘inside rolling’ in China, is an ongoing competition where no party benefits. Thus, education involution involves a competition of getting the best education offered in a country. For example, in Oxford admission, the education involution scenario is happening due to excess demand for undergraduates in Oxford University, whereas the positions are limited in the university. Hence, the university rations their admissions using the ‘cleverer students first’ criteria in their admission process.

2. Causes

2.1. Peace of economic growth

Economic growth translates to an increase in income and gross domestic production. A slow economic growth or even economic recession reduces the job opportunities available because economic growth is positively related to aggregate demand and the level of economic activities. Hence, slow economic growth reduces the availability of employment for the public. (Pettinger, 2019) The shortage of employment opportunities is therefore enlarged, leading to a higher cost of getting employed, namely the higher thresholds and stricter requirements. As a result, in order to acquire a decently paid job, people are involved a fierce competition where job seekers compete on their skills, quality, qualifications and experiences. The situation in the current labour market highlights the importance of educational qualifications which are increasing deemed by employers as a compulsory requirements to be met.

It is suggested that the ‘Gini coefficient’, an indicator of income discrepancy, tends to be high when an economy is in recession, and it is partially because of the difficulties of getting job placements and higher unemployment rate. (Cowell, 2011).[2] It illustrates that especially during the period when an economy is not prosperous, educational qualifications are of even greater importance for people to acquire a decent income and good living standard, which in turn encourages people’s pursuit for higher and more advanced education qualifications than
competitors. Educational involution is therefore resulted. Furthermore, involution has also triggered the demand for degrees to ascend constantly, which in turn causes the limited educational resources to be more competively contended.

2.2. Population Growth

The world population is increasing annually by around 1.2 percent. According to (Worldometer, 2021), currently the world population is at 7.9 billion with a high birth rate and a relatively low death rate. The United Nations further speculates that the population will reach 10 billion people by 2050.

Due to the soaring population, the fundamental economic problem scarcity is even exaggerated. Under this macro-economic circumstance, the scarcity of educational resources will inevitably be exacerbated as well, so will the fierce competition. The two factors of ever-increasing demand and limited educational resources lead to the economic situation of Pareto optimality. It is suggested that once the available educational resources are used to the optimal level, the remaining resources lead to a situation where the welfare of one student cannot be made better without making the welfare of another student worse (Kalandrakis, 2015).

Facing the severe scarcity, choices have to be made, leading to the satisfaction of the demand of some people instead of all. In order to achieve a better allocation and maximize the effectiveness of resources, universities tend to provide education for those who are considered to be more competitive, outstanding and exceptional. Therefore, the scarcity has caused fierce peer competition, where the students strive to stand out from their peers in order to acquire more privileged education opportunities. The ever-increasing ferocity of competition and strict admission requirements have resulted in educational involution.

3. Fairness of the competition

3.1. Macroeconomic Analysis

The discrepancy in the students’ family income greatly effect children’s educational attainment. Considering the difference in income level of families, competition of education involution tends to be unfair. An increase of fierce competition in the education sector leaves the fewer-income families vulnerable to a lower education level and quality since they are confined by their limit financial resources. Therefore, there is an absence of a fairground for low-income families and high-income families.

3.2. Factor endowment

Different regions and nations have different accessibility levels of resources. Some regions are adversely affected by climate, geographic limitations or historic reasons; while others are affected by governance and policies. Therefore, some regions in a state are more privileged in terms of schools' accessibilities while others are less privileged. For instance, some regions are more developed with profound social welfare, attracting more well-educated personnel. The students in those regions are more likely to acquire higher attainment than other less developed regions. As a result, the more developed regions tend to have a better opportunity for education than the less developed regions. Therefore, the competition of education involution is unfair, in the regions’ development perspective.

4. Impacts of Education Involution

With an increase in education involution competition where the struggle for communal and economic resources is intensified, there is increased pressure and anxiety in the education systems. Although students are exhausted in this competition, they can only unceasingly devote
more effort to gain competitiveness. However, the increasing effort is not yielding better returns because the resources are limited and not increased as students’ resources.

Regarding the trend of involution, it is not rare to see students in eighth grade, for example, learning and taking assessments that are initially oriented towards college scholars. The name of college scholars itself associated the description of ‘elite’ in the 1980s. By contrast, at the moment, advanced education qualifications turns out to be another round of exclusiveness sorting as a monotonous criteria.

Also, education involution contending tertiary education opportunities imposes pressure on the more primary educational institutions, for example, primary schools and junior high schools. Considering that primary education is the foundation for more advanced qualifications, the demand for primary education also soars, leading to the situation where primary educational constitutions are exceeding their capacities, especially in the nations where primary education is made compulsory. In this case, the inefficiency of the resource consumption is reduced and the return from the resources will be diminishing (Fein, 2019).

5. Measures for Education Involution

5.1. Micro-Level

The universities could change the general education system. Then, it should work with the government to ensure the education system in a state considers different abilities that people possess. The primary reason is that a diverse education system will reduce the competition in a particular field so that people could spread their effort into abilities or skills, like arts and music, instead of just trying to dive deeper in academy endlessly. For instance, a university should come up with programs that teach the theory part of education and also considers those students that are gifted differently and practically. As a result, every child will have more equal opportunity in the education system, without rationing opportunities using single assessment system in which they might be less advantage, as in the case of Oxford admission.

The counter-measure to cope with the unfairness is to consider the discrepancy in students’ family background and economic prosperity of their nations or regions. One example is the policy adapted by Chinese Ministry of Education granting students from underdeveloped areas up to 30 marks for their college entrance exam, especially for Tibetan students who are generally from mountainous regions lack of the educational resources.

5.2. Macro-level

The government should strive to decrease income inequalities by ensuring a fair income distribution in the country. For instance, the government should create more job opportunities for the unemployed to ensure increased income sources. Hence, education involution will be decreased since most people will afford better education opportunities locally and outside the world.

Again, the government should strive to increase the supply of higher educational institutions through supply-side policies, allowing more students to acquire tertiary education. The increased supply of the placement in universities would alleviate the shortage and thus reduce the level of competition. For instance, the government could subsidize tertiary educational institutions to allow them to accommodate more students with less restrictions and rationing of admissions.

6. Conclusion

The fundamental problem behind educational involution is scarcity; while the major driving force is the fiercer competition caused by the combined effect of the ever-increasing world
population and inadequate economic development. Therefore, the competition for limited educational resources seems inevitable and insolvable. However, the competition tends to be unfair due to the discrepancy in their accessibility to, for example, tutoring, interest-oriented classes and the so-called ‘elite education’, which will make them less competitive or less ‘clever’ than their peers for university admission assessments. Moreover, the unequal economic development in different regions also exacerbates the unfairness. Under the increasingly fierce competition, the anxiety and pressure of students increased without corresponding returns, leading to diminishing returns of input. People’s endless pursuit of more advanced qualifications and degrees also make primary educational institutions overloaded, leading to a lower efficiency of resource consumption. As for the countermeasures, the universities could adapt a more diverse and versatile education system which would spread the fierce competition over more fields instead of assessing applicants according to a monotonous criteria. At the same time, governments could alleviate the scarcity by subsidizing educational constitutions to increase the supply of educational opportunities.

References