

# The Impact of Education Funding on High School Enrollment Rate<sup>\*</sup>

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## Abstract

Different countries have different education system. In China, almost all schools are public schools. Education funding is provided by the government. Students in China can enjoy 9 years free education, including attending primary and junior high school. Whether or not a student can be accepted by high school is very essential because that is the only way for most of them to take the College Entrance Exam and study at a college or university in the future. This research paper investigates the effect of education funding on high school enrollment rate in China by using a panel dataset of 31 provinces during 2005 to 2017. In this paper, I am going to use a fixed effect model to analyze whether the education funding would have a significant effect on high school enrollment rate. At the same time, the results of this paper could also provide some advice based on my finding.

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# 1 Introduction

Education funding provided by the government is very important to be well spent in order to improve the educational level for each country. In China, almost all schools are public schools which are funded by the government. It is very essential to properly distribute education funding to each level of schools. Taking The Academic Test for the Junior High School Students is the only way for students to attend high schools after their nine-year compulsory education. This is also very important because attending high school is also the only way for students to take the Colledge Entrance Exam which can determine whehter they can go to colleges or universities. In this research paper, I will focus on whether the education funding would affect the high school enrollment rate.

In this section, I will provide more details about:

- how the government distributes education funding in China
- education systems in China
- comparision of education system between different countries.
- data resource and method I am going to use.
- main results
- structure of this paper.

## 2 Literature Review

Education funding has been a very popular topic. Many researchers are doing research on the relationship between education funding and other factors, such as GDP growth and higher education development. However, there are not many papers talking about the relationship between education funding and high school enrollment rate. The main reason might be that different countries have different education systems.

I am still working on collecting more papers on this topic.

In this section, I will provide more details about:

- research on education funding and completion rate in different countries
- research on education funding and completion rate specifically in China

## 3 Data

This research paper investigates the effect of education funding on high school enrollment rate in China by using a panel dataset of 31 provinces during 2005 to 2017. I collect the dataset from multiple resources, including National Bureau of Statistics of China, CNKI database, and CEinet Statistics Database. ?? contains summary statistics.

In this section, I will provide more details about:

- how I calculate funding per pupil
- how to estimate total student number
- how I clean the dataset

## 4 Empirical Methods

In this section, I will provide more details about steps:

- Run Pearson and Spearman test to see the relationship between each variable.
- Run a Hausman test to determine which model I am going to use.
- Run either Two-Way Fixed Model or Fixed Effect Model.
- Run robust test to see if results are robust.

$$Enrollment_{it} = \alpha_0 + \alpha_1 EF_{it} + \alpha_2 X_{it} + \varepsilon, \quad (1)$$

where  $Enrollment_{it}$  is high school enrollment rate for province  $i$  in year  $t$ , and  $EF_{it}$  is education funding at province  $i$ , while  $X_{it}$  are other control variables. The parameter of interest is  $\alpha_1$  which indicates the percent of effect of education funding on high school enrollment rate.

## 5 Research Findings

In this section, I will provide more details based on my result from Fixed-Effect model:

- how much education funding has effect on high school enrollment funding
- positive or negative
- how to explain the effect

## 6 Conclusion

In this section, I will provide more details about

- background of this topic
- result of this topic
- meaning of this topic
- advice on how to properly distribute education funding based on my finding.

## **References**

Since I am still working on literature review, I will list all my refereces here once I am done with it.