

## The Impact of Education on Income in China

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**ABSTRACT:** Education plays a pivotal role in individual and societal development, enhancing employability, productivity, and overall well-being. This paper delves into the impact of education on income in China, examining the relationship between educational attainment and earning potential. Utilizing human capital theory as a theoretical framework, the paper presents empirical evidence demonstrating a positive correlation between education level and income. Further, it explores factors influencing this relationship, including education quality, labor market demand, and individual characteristics. The paper concludes by highlighting policy implications, emphasizing the importance of continued investment in education, promoting early childhood education, expanding vocational training, addressing education equity, and encouraging lifelong learning.

**KEYWORDS:** education, income, China, empirical analysis, policy implications

### 1 INTRODUCTION

Education stands as a cornerstone of individual and national progress, fostering knowledge, skills, and competencies that empower individuals to thrive in a dynamic world. China, a nation undergoing rapid economic and social transformation, has recognized education as a driving force behind its remarkable growth. This paper investigates the impact of education on income in China, shedding light on the relationship between educational attainment and earning potential.

Human capital theory provides a robust theoretical framework for understanding the education-income nexus. According to this theory, education serves as an investment in human capital, augmenting an individual's productive capacity and earning potential. Individuals with higher levels of education are more likely to acquire skills and knowledge that are in demand in the labor market, leading to higher wages and better job opportunities.

Understanding the impact of education on income has profound implications for individuals, policymakers, and society at large. For individuals, insights from this study can guide educational and career choices, helping them achieve better financial outcomes. For policymakers, the findings can inform the design of more effective educational policies and funding allocations, aimed at reducing income inequality and promoting social mobility. For society, a deeper understanding of the education-income relationship can contribute to broader economic development and social equity.

### 2 LITERATURE REVIEW

#### 2.1 The relationship between education level and income

A substantial body of empirical evidence indicates a positive correlation between education level and income. For instance, Li Shi and Zhou Minghui (2020) employed data from the China Household Income Survey (CHNS) in 2011 and 2015 to demonstrate that an individual's wage income is significantly enhanced by their level of education. Wang Yongli and Zhu Xiaoming (2021) utilised data from the Urban Household Survey of China in 2016 and 2018 to ascertain that for each additional year of education, the average personal wage income increases by 10%.

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### **2.2 Impact on Career Choice**

Education broadens an individual's understanding of the professional landscape and potential career paths. Exposure to various disciplines can stimulate career interests and help individuals identify suitable options aligned with their skills and aspirations (Fang et al., 2020). Additionally, the knowledge and skills acquired through education can equip individuals with the necessary foundation for specific career paths (e.g., engineering degree for engineering careers).

### **2.3 Impact on Career Acquisition**

Education enhances employability by increasing competitiveness in the labor market. Individuals with higher levels of education possess a broader range of KSAs (knowledge, skills, and abilities), making them more adaptable and attractive to potential employers (Li et al., 2010). Research by Cai & Liu (2016) demonstrates a positive correlation between educational attainment and employment rates. Furthermore, certain educational credentials, such as university degrees, may be required for specific occupations, acting as a barrier to entry for those lacking the necessary qualifications.

### **2.4 Impact on Career Advancement**

Education equips individuals with the knowledge and skills necessary to thrive in their chosen careers (Xie & Hu, 2013). Individuals with higher levels of education demonstrate greater problem-solving abilities, critical thinking, and communication skills, which are essential for career advancement. Research by Fang et al. (2020) indicates that higher educational attainment is associated with faster promotion rates and higher salaries.

### **2.5 Other factors**

Exploring how economic fluctuations and industry trends affect the relationship between education and career outcomes in terms of labor market conditions (Cai&Liu, 2017).

In terms of geographical location, considering economic development or industry concentration, investigate potential differences in the impact of education in different regions of China (Liu&Li, 2019).

In conclusion, understanding the multifaceted relationship between education and income in China requires a comprehensive approach. By considering various theoretical lenses, emerging trends, and moderating factors, future research can contribute to creating a more robust and adaptable education system that equips individuals with the knowledge, skills, and adaptability to thrive in the ever-evolving Chinese and global job market.

## **3 METHODOLOGIE**

### **3.1 Data analysis**

The collected quantitative data will be analysed using statistical software in order to calculate the correlation between variables and to conduct regression analysis in order to reveal the relationship between education and career development. Qualitative data will be subjected to content analysis, with the objective of extracting key themes and patterns. This will be done in order to cross-validate the results with those obtained from quantitative research.

The data will be collected through surveys. It is recommended that surveys be conducted in order to collect data from a representative sample of individuals with varying educational backgrounds and career experiences.

Secondary data analysis will be conducted. It is recommended that existing datasets from government agencies, educational institutions, or research organisations be utilised in order to examine trends and patterns related to education and career outcomes.

### **3.2 OLS hypothesis**

Ordinary Least Squares (OLS) is the most common choice when the underlying assumptions of the model are met (linearity, homoscedasticity, normality of errors, etc.).

Dependent variables: career development outcomes, such as employment status, income level, job satisfaction, or career development. This analysis employs income levels as a proxy for career development outcomes.

The independent variable is: The level of education attained by the respondents.

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## 4 RESULTS AND DISCUSSION

### 4.1 Data

The data comes from the 2021 micro survey database of the China Comprehensive Social Survey, and 147 sets of sample observations were obtained by excluding individuals with missing values in key variables.

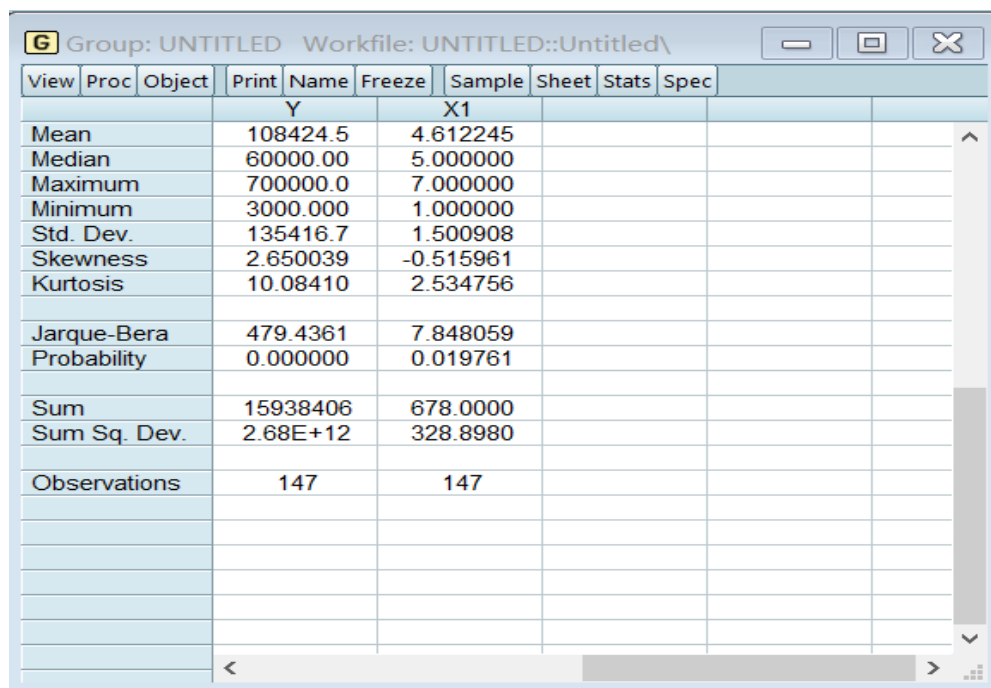
Education level: Referring to the research results of domestic and foreign scholars, the highest education level is converted to the specific years of education, as shown in Table 1

**Table 1**

Education level	Equivalent Education Level
Illiteracy/Semi Illiteracy and Never Attended School	1
Primary School	2
Junior high school	3
High school/vocational high school	4
College	5
Undergraduate	6
Graduate or above	7

### 4.2 descriptive statistics

This chart presents the basic statistical descriptions of two variables, annual income and education level, helping us understand the distribution characteristics of the data and whether it conforms to a normal distribution.



**Figure 1**

### 4.3 Regression result analysis

The coefficient of independent variable X1 is 18845.18, the standard error is 7327.360, and the corresponding t-statistic is 2.571892, The p-value is 0.0111. This indicates that X1 is significant at a significance level of 5%. This result indicates that the independent variable X1 is statistically significant, with higher education levels leading to higher income.

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Equation: UNTITLED Workfile: UNTITLED::Unt...									
View	Proc	Object	Print	Name	Freeze	Estimate	Forecast	Stats	Resids
Dependent Variable: Y									
Method: Least Squares									
Date: 05/24/24 Time: 23:37									
Sample: 1 147									
Included observations: 147									
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
C	21505.95	35528.41	0.605317	0.5459					
X1	18845.18	7327.360	2.571892	0.0111					
R-squared	0.043628	Mean dependent var	108424.5						
Adjusted R-squared	0.037032	S.D. dependent var	135416.7						
S.E. of regression	132885.7	Akaike info criterion	26.44588						
Sum squared resid	2.56E+12	Schwarz criterion	26.48656						
Log likelihood	-1941.772	Hannan-Quinn criter.	26.46241						
F-statistic	6.614630	Durbin-Watson stat	1.866177						
Prob(F-statistic)	0.011120								

Figure 2

### 4.4 Average annual income and education level

According to Figure 3, it indicates a significant positive correlation between education level and average wage.

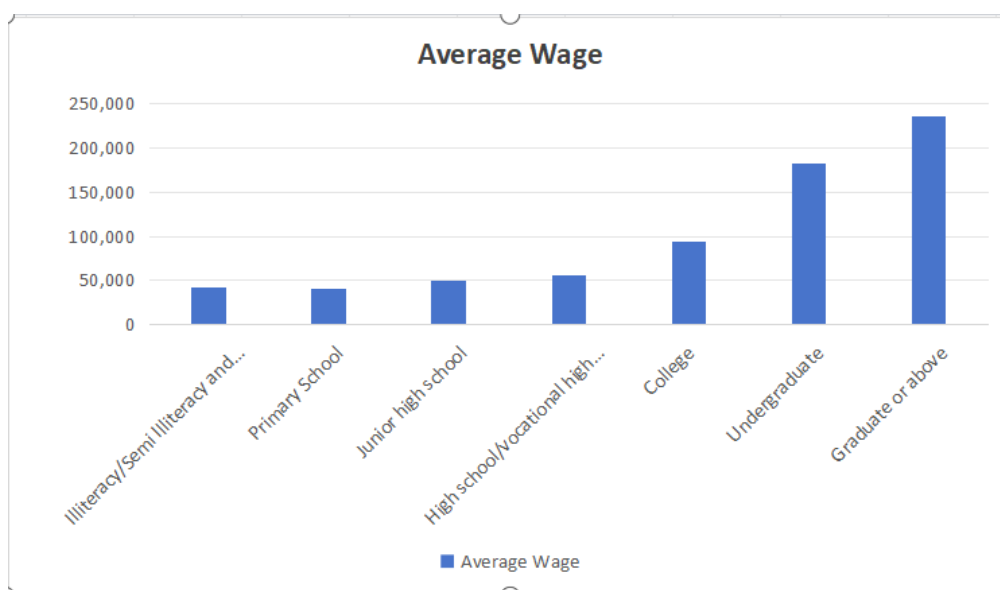


Figure 3

## 5 POLICY IMPLICATIONS AND CONCLUSIONS

### 5.1 policy implications

The investment of resources in the field of education is of paramount importance. The data serves to illustrate the significance of government investment in education at all levels. Increased funding can facilitate greater access to quality education, reduce the incidence of dropout, and enhance the curriculum's relevance to labour market demands.

The field of early childhood education is of particular interest in this context. Investment in early childhood education programmes can equip children with foundational skills and knowledge, which may subsequently lead to higher educational attainment and future earnings. Supporting vocational training programmes and skill development initiatives can equip individuals with the specific skills

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needed by a changing job market. Such initiatives can result in the creation of a more skilled workforce and the improvement of employment opportunities for those lacking traditional college degrees.

**Education Equity** It is imperative that policies address the inequalities in educational outcomes that are observed based on socioeconomic background, location, and other factors. This may entail the allocation of targeted funding, the establishment of scholarship programmes, and the provision of educational support services for disadvantaged communities.

Policies should facilitate and endorse lifelong learning opportunities, enabling individuals to refine their skills and knowledge throughout their careers.

### 5.2 CONCLUSIONS

The positive correlation between educational attainment and income serves to reinforce the view that education is a significant factor in economic mobility and social well-being. Higher education is associated with greater earning potential, which may contribute to improved living standards for individuals and families.

The development of human capital is a key factor in economic growth. An increase in educational attainment contributes to the development of a more skilled and productive workforce, which can positively impact economic growth.

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