

The Impact of Educational Development on the Economy in China and the United States

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Abstract. For a long time, investment in education and economic development has been the focus of attention in education and economics, since the 19th century, investment in education in the West, has been recognized by professionals as one of the indispensable elements to promote economic development, this study will analyze and compare the differences between China and the United States in education, the strengths and weaknesses of the two countries' direct education, and its how it affects and promotes its economic development, and research for the investment in education in China and the U.S., its share of GDP and the relationship between the per capita GDP of each country to compare. It confirms the conclusion that education promotes economic development and that China's investment in education has a higher rate of return than that of the United States. Finally, it also points out how China can improve the existing education environment, and how to improve some of the current education policies that are not fully in line with the development of the times, in order to actively and effectively promote China's economic development in the long term.

Keywords: Education; China-US comparison; economic growth.

1. Introduction

1.1. Background of the Study

Since the reform and opening up of new China, China's economy has been developing rapidly, and manpower as an important factor of capital, has a pivotal role in economic development, and education is the foundation of manpower, only high-quality and high-efficiency education will cultivate talents to promote the development of the economy.

The United States as the world's only superpower, its population is 25 percent of China, but the United States of America's comprehensive national strength, military power, scientific and technological power, stronger than China, obviously these are inseparable from the outstanding talent, and strong human resources to support the United States of America the development of these industries, to sum up, the cultivation of talent can not be separated from the education, and China attaches great importance to the development of education, the "Modernization of China's education" 2035 for the current stage of China's education. 2035" for the current stage of China's education put forward eight general concepts, as well as ten strategic tasks, the state attaches importance to the development of education, indicating that education is to realize the great rejuvenation of the Chinese nation is an important part of education is also an indispensable part of each person.

1.2. Literature Review

Wu Anchun [2000] showed that contemporary knowledge has become the most basic resource in the economy and the most central element of production, thus education has been directly involved in the operation of the economy and become a new growth point for economic development [1]. Zhang Surong [2003] believes that the modern scientific and technological revolution in the West and the establishment of the capitalist mode of production have promoted the development of education, and the economic value of education has become increasingly prominent [2]. Li Fangjing [2013] studied the financial education expenditure affects economic growth through multiple paths, empirically analyzed the pulling effect of total financial education expenditure on economic growth, and the impact of financial education expenditure on economic growth based on spillover effect [3]. Meng Xiaolei, Sheng Pei [2023] showed that after China's reform and opening up, China's education

began to form the education industry with economic attributes, the pursuit of industrial efficiency as a form of development of industrial revenue, the education industry began to flourish [4]. It can be seen that many studies have only studied a single country and have not compared the two countries. This paper will study the differences between China and the United States in the way of education, as well as the weaknesses of education in China, and propose solutions and implementation matters.

2. Education Development and Economic Growth

2.1. The Education Development in China

When it comes to Chinese education, there are several key features: long study time, many tests, strict supervision at school and home, which will lead to the students do not develop a good habit of independent learning, because the long time by the external forces in the promotion of student learning, so the longer the time, the more students will be averse to learning. China's exam-oriented education relies heavily on long hours of closed teaching and rote memorization. [After students graduate, more than 80% of the theoretical knowledge they have learned is basically useless, and this knowledge is quickly forgotten. Due to the lack of life education, skills education, moral and legal education. When these students enter the society, they have difficulty in adapting to the society in terms of character, conduct, communication, ability, etc. They are also prone to illegal and criminal behaviors of illegally seeking personal interests by any means [5].

China's exam-oriented education, especially the poor quality of higher education has wasted the hard-earned money of the people, especially the families of migrant workers and disadvantaged groups, worn out the beautiful youth of students, stifled the talent and creativity of the students, buried the optimistic, lively and curious nature of the students, struck down the self-confidence of most of the children, and buried the children's destiny and future.

2.2. The Education Development in the U.S

The American education and learning methods focus on the following guidelines: freedom, independence, independent learning, emphasis on understanding and practicality. Teachers value the opinions expressed by students and even encourage students to have the freedom and right to refute their teachers. One of the basic ideas in American education is that education is not dead, that it is not for students to grasp a static set of knowledge, but to teach them to continue to improve their understanding through understanding, thinking, and creativity, and then to go on to develop new knowledge [6]. Such a form of education is good at inspiring students' creativity, is more able to bring out the full potential of the best people, and is more suitable for the rapid development of science and technology in the twenty-first century, but there is a potential problem with such a system, that is: average students or students without self-confidence may be more low self-esteem in comparison. Therefore, another aspect that American education emphasizes is that it does not make zero-sum comparisons, but is guided by morality and religion, with the goal of pursuing happiness, so that students can establish the goal of "the best of themselves", thus making them more confident. American education does not rank or give negative feedback, but encourages individualized success and progress for each person. This approach balances the overall education without making it purely elitist, and allows more of what would be called "average students" in China to learn and realize their potential.

2.3. The Education's Contribution to China's Economy

The impact of education on China's economy is very important and can be summarized in the following five points: The first one is optimization of human resources. Education provides a high-quality workforce that enables China to be competitive in the global marketplace. Well-educated people are better able to adapt and innovate, driving the economy forward. The second one is technological innovation and industrial upgrading. Education fosters innovative thinking and technical skills, providing talent support for technological innovation and industrial upgrading. The

development of higher education institutions and research institutes also promotes scientific research and technological progress. The third one is labor productivity enhancement. Education improves the skill level and professionalism of workers, thus increasing labor productivity. This helps to improve the efficiency and competitiveness of enterprises and boosts economic growth. The fourth one is entrepreneurial and innovative atmosphere. Education fosters entrepreneurial spirit and innovative awareness, and encourages people to pursue entrepreneurial opportunities and innovative development. This helps promote the development of new industries and the optimization of economic structure. The fifth one is consumption upgrading and service industry development. Education raises people's income level and consumption ability, promoting consumption upgrading and service industry development. Education also provides more employment opportunities for the service industry.

To summarize, China's education has played an important role in promoting economic development. By cultivating high-quality talents, promoting technological innovation, raising labor productivity and facilitating industrial upgrading, Chinese education has made positive contributions to sustained economic growth and sustainable development

2.4. The Education's Effect on the U.S Economy

To take the U.S. higher education analysis, summarized in the following five points. First, it improves the quality of talent. U.S. higher education is one of the main ways to cultivate and improve high-level talent. The proportion of students with undergraduate degrees and above in U.S. colleges and universities is about 35% of the national population, which is the highest in the world. In addition, U.S. higher education provides students with a wide range of learning and experiential opportunities, including extracurricular practices, research programs, international exchanges, etc. These experiences can broaden students' horizons and improve their overall quality. These high-quality talent reserves for the high-end development of the U.S. economy provides strong support. Second, it cultivates innovative talents. U.S. higher education focus on cultivating innovative spirit and ability of talents. U.S. colleges and universities to carry out a wide range of scientific research and innovation activities, not only for students to provide opportunities, but also for economic and social development provides a steady stream of technology and innovation. At the same time, many U.S. colleges and universities have established close cooperative relationships with enterprises, research institutions and other organizations, transforming academic achievements into commercial products and promoting economic development and social progress. Third, it promotes scientific and technological development. U.S. higher education is an important force for promoting scientific and technological innovation and development. Colleges and universities have a large number of scientific research institutions, laboratories and academic resources, and are committed to promoting the development of science and technology, society and culture in all aspects. At the beginning of the 20th century, U.S. higher education in scientific and technological innovation, theoretical research and application of the development of the leading position, and has become an important force to promote the development of global scientific research. Fourth, it promotes the employment. U.S. higher education provides students with a wealth of career development services and resources, including career counseling, internships and employment, corporate recruitment and so on. In terms of employment outcomes, the employment rate of graduates of U.S. colleges and universities is quite high, with diverse employment opportunities in a wide range of fields, including science and technology, finance, law, healthcare, and the arts. The support and cultivation of this field also provides important guidance and protection for the promotion within the economy. Fifth, it attracts international talents. U.S. higher education has the world's most competitive talent resources and quality educational resources, attracting tens of thousands of international students and helping the United States build an international knowledge community. In addition, the arrival and employment of international students have provided the United States with human resource security and support for economic development.

Through the previous analysis, it is not difficult to find that American higher education plays a very important role in promoting economic development, advancing science and technology, and improving the quality of talents. Although faced with an increasingly competitive international education market and funding constraints, the prosperous development of American higher education and its relationship with the economic structure still has considerable dimension and depth.

3. Compative Analysis of Education Development in China and the U.S

3.1. The differences

Education in China and the U.S. is inherently different, and the following five points will summarize the differences in education between China and the U.S. For the education system, China's education system is relatively centralized, led by the government, and implements a unified curriculum and examination system. The U.S. education system is relatively decentralized, with states and districts having a certain degree of autonomy and greater flexibility for schools and educational institutions. For the educational goals, Chinese education focuses on the transfer of knowledge and students' test scores, emphasizing the mastery of subject knowledge and basic skills. American education, on the other hand, pays more attention to cultivating students' creativity, critical thinking and problem-solving skills, and emphasizes students' all-round development. For the teaching methods, China's teaching methods are more traditional, focusing on the teacher's teaching and students' acceptance. American teaching methods emphasize student participation and interaction, encouraging independent learning, cooperative learning and practical inquiry. For the evaluation, China's education evaluation mainly relies on test scores, especially the college entrance examination, which has an important impact on students' further education and employment. Moreover, education evaluation in the U.S. pays more attention to students' comprehensive ability and personal development, including academic performance, project work, community service and other aspects. For the extracurricular activities, Chinese education focuses on students' academic performance, with relatively few extracurricular activities. American education, on the other hand, focuses on the overall development of students and encourages students to participate in a variety of extracurricular activities, such as clubs, sports, arts, etc., to cultivate students' interests and specialties.

3.2. The Role of Chinese-style Education in China's Economy

The following are five aspects of Chinese-style education in China's economic market. The first one is supply of human resources. The Chinese-style education system has cultivated a large number of high-quality laborers, providing abundant human resources for China's economic market. These educated people are equipped with high subject knowledge and professional skills and are able to meet the needs of different industries. The second one is technological innovation and industrial upgrading. Chinese-style education emphasizes the cultivation of students' scientific literacy and innovation ability, providing talent support for technological innovation and industrial upgrading. The development of higher education institutions and research institutes also promotes scientific research and technological progress. The third one is increased labor productivity. Chinese-style education focuses on students' learning and test scores, fostering diligence and hard work among laborers. This has helped to increase labor productivity and boosted the efficiency and competitiveness of enterprises. The fourth one is entrepreneurship and innovation. Chinese-style education focuses on students' mastery of subject knowledge and basic skills, and fosters entrepreneurship and innovation. This helps to promote entrepreneurial activities and the development of new industries. The fifth one is social stability and economic development. Chinese-style education focuses on students' discipline and collective consciousness, fostering a sense of social responsibility and teamwork. This helps maintain social stability and provides a favorable social environment for sustained economic development [7].

It is important to note that Chinese-style education also faces some challenges, such as over-emphasizing test-taking education and a lack of creative thinking and practical skills. Therefore,

China has also been carrying out educational reforms to promote education in a more comprehensive, innovative and practice-oriented direction to better meet the needs of the economic market.

3.3. The Role of American-style Education in the U.S. Economy

The following are a few aspects of American-style education in the U.S. economic market. The first one is innovation and Entrepreneurship. American-style education focuses on developing students' creativity, critical thinking and problem-solving skills. This type of education encourages students to think independently and innovate, fosters entrepreneurship and innovation, and provides talent support for entrepreneurial activities and the development of new industries. The second one is technological innovation and scientific research. American-style education focuses on science education and research, producing scientists, engineers, and technologists. The development of higher education institutions and research institutes has provided strong support for technological innovation and scientific research, promoting technological progress and industrial upgrading. The third one is supply of human resources. The U.S.-style education system has cultivated a large number of high-quality laborers, providing abundant human resources for the U.S. economic market. These educated people have a wide range of knowledge and skills, and can adapt to the needs of different industries. The fourth one is job creation. American-style education focuses on the holistic development of students and produces professionals in a variety of fields. This provides support for various industries, creates job opportunities, and promotes the development of the economic market. The fifth one is development of the service industry. An American-style education emphasizes the development of communication skills, teamwork, and leadership. This helps to promote the development of service industries, such as finance, consulting, health care, education and other fields, which provides more employment opportunities and growth points for the economic market [8].

It should be noted that American-style education also faces some challenges, such as uneven educational resources and high cost of higher education. As a result, the United States is also continuously reforming education and striving to improve the quality and equity of education in order to better meet the needs of the economic market.

3.4. The Returns of Education in China and the U.S.

Calculation of the data shows that education can indeed infer economic growth, and for every 1% increase in the ratio of education expenditure to GDP in the United States, the per capita GDP will rise by 2.5967%, while for every 1% increase in the ratio of education expenditure to GDP in China, the per capita GDP will rise by 2.6311% (see Figure 1) [9].

This shows that if China and the United States at the same time invested 1% of education expenditure, China's per capita GDP rose more than the United States per capita GDP rose, so in order to be able to promote the development of the economy, catching up with the United States of America's economic level, China can strengthen the investment in education, so as to promote the growth of China's economy [10].

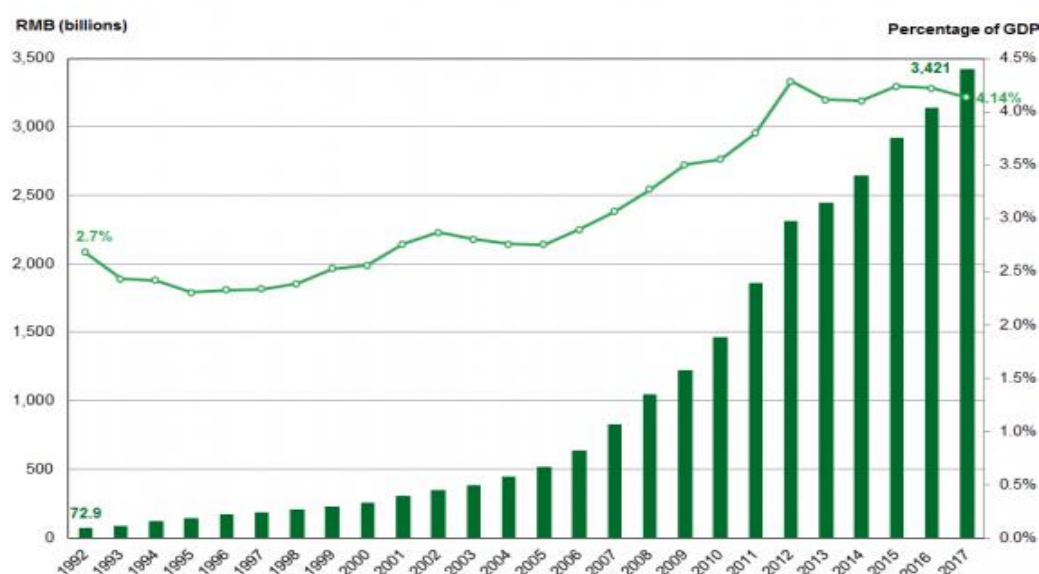


Fig. 1 The proportion and growth rate of education expenditure in the U.S [9]

4. Conclusion

Through the elaboration of the article and data analysis concluded that education will promote economic development, and China's return on investment in education is to be higher than the United States return on investment in education is to be higher than the return on investment in education in China, and the paper analyzes the high return on investment in education for two reasons, one is China's natural advantages, China has a huge population base, through education investment to cultivate and enhance human capital, can release the demographic dividend, promote economic growth, and the second is that China's education has a large population base, through education investment to cultivate and enhance human capital, can release the demographic dividend, promote economic growth. economic growth, and the second is the direction of China's education. China's education system focuses on cultivating practical and vocational skills to meet the huge market demand. Although China's ROI on education is relatively high, it is important to note that the impact of education on economic development is a complex process, which is affected by a variety of factors. In addition, the assessment of ROI on education also needs to take into account other factors, such as the quality of education, employment opportunities, and the innovation environment. Therefore, it is not possible to simply attribute a high or low return on investment in education to the education system of a particular country, but rather the combined impact of several factors needs to be taken into account.

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