

# Research on the Social Impact of Aging Problem

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**Abstract.** This essay mainly talk about the more and more serious aging population problem will make a big difference to the social and people's lives. Aging population becomes hotter and hotter in the whole country and even the whole world, and it matters to human beings. Due to the high pressure of the competition nowadays, young people would not like to get marry or even have babies, so it accelerates the aging process. Through finding some data and get the trend of the increasing, this essay works out some reasons and consequence to seek a conclusion. To analyze the trend and the number of old people in China, this paper selects some data from different database and manage to get some reasons and consequence. Producers have lower output and the economy depression occurs while more aging population and purchasing power decrease. In the essay, analysis by the data and the logic will prove the points and consequences. This work is mainly to check the aging rate and to survey the serious problem of the aging population brought and to find some ways to solve it.

**Keywords:** Aging population; medical budget; economy growth.

## 1. Introduction

As people's living standard increasing every year, people's life expectation increasing too. People are living longer due to the high quality of medical technology. As a result, people live longer and longer, the aging problem becomes more and more serious nowadays. It will bring a lot of consequence. For example, older people cannot go to work and it will cause fewer labor force so that the output and the profit of producers will decrease also labors will have lower salary. Fewer people come to work also cause the economic depression. As the times going, people have more pressure on their work and their parents. The competition is more and more serious so that too many people want one job, people cannot get suitable work and they will have economic problem. They do not have the ability to get married or even have babies. At last, new babies are fewer and fewer so the aging problem is serious. Last year, from the research of the government, we can know that the population is increasing negatively. This is not only because people's pressure but also due to the marriage rate so people would not like to have babies and they cannot afford to make the baby have a better life.

There are some data in CSMAR to show the aging problem and the number of old people for every year and the changing trend in different countries. It can show the data directly form the diagram. This population aging research database consists of nine parts: basic population information, labor sample survey data, employment situation, resident income and expenditure, social security, medical and health care, pension services, fertility and pension industry data, as well as supporting policy information related to population fertility and aging. It provides population data of major countries and regions in the world, provinces, cities and counties in China, composition of employment and education level of various industries, supporting medical and health care, social security, pension services and policy support related to population aging, and information and financial indicators of listed companies related to fertility and pension industry.

From the research, we can know that in 2000, the people who are greater than 65 years old in China take up 6.96% and increase to 8.9% in 2010. It reaches 13.5% in 2020. It increases every year with a smoothly curve and the rate becomes faster in 2020. It is over the world average level and ranks at 63. Hong Kong China has a higher rate of 18.20%. The highest rate is in Japan with 28.40%. In China, each provinces have the different rate too. The highest one is Liaoning province with a rate of 17.42%, the lowest one is Tibet which recorded at 5.67%. Many reasons cause this and it will bring a lot of consequence. Young people have to face the big pressure on their family and government also

need to take care of the old people which spend a lot of budget. And more older people will make government to build more facilities for old people. The nursing home has increasing to 4.88 million in China.

## 2. Literature Review

With the continuous increase of the degree of population ageing, the scale of the elderly population, the scale of the empty-nest elderly, the scale of the disabled and semi-disabled elderly, the proportion of the elderly are increasing rapidly, and the demand for elderly care services is soaring [1]. China is facing serious population pressure now. The main characteristics of our population aging are the large size of the elderly population, the rapid aging process, the obvious differences between urban and rural areas, and the continuous improvement in the quality of the elderly population [2]. Old people have higher possibility to get some diseases and have to spend money from government to cure for them. Why has population aging led to a rapid increase in social spending on healthcare resources? A report by the Organization for Economic Co-operation and Development predicts that European population ageing will lead to an increase in age-related social spending from 19 per cent of GDP in 2000 to about 26 per cent in 2050, health and care spending is thought to account for about half of this increase [3]. This is because older people are live longer now.

At the same time, the demand for medical and health services continues to expand and the utilization rate of medical and health services continues to rise, which has a direct impact on the expenditure of medical and health population ageing. According to the Sixth Health Service Survey of our country, the prevalence rate of chronic diseases in the elderly is high, and the prevalence rate of multi-diseases in the elderly population is high, with 23.5%. 8% of the elderly suffered from two or more chronic diseases [4]. As a result, government have to take out its limited budget to cure for these old people, and it will cause economic depression. Feyrer's empirical study made use of transnational data to examine in detail the impact of demographic structure change on the growth of total factor productivity. The results also found that population aging led to the slowdown of the growth of total factor productivity and became an important reason for the slowdown of per capita output growth [5]. Also, aging population too much cause less labor in the labor market. The demographic dividend is undoubtedly one of the most important factors driving China's rapid economic growth, but China's demographic structure has undergone significant changes in recent years, and the "Demographic dividend" is rapidly disappearing, population ageing has become a huge challenge to the sustainable and healthy development of the Chinese economy [6]. However, young people have to compete with other people so their pressure stop them to have babies. At present, the conception and behavior of our residents have changed greatly, and it is very difficult for the fertility rate to rise.

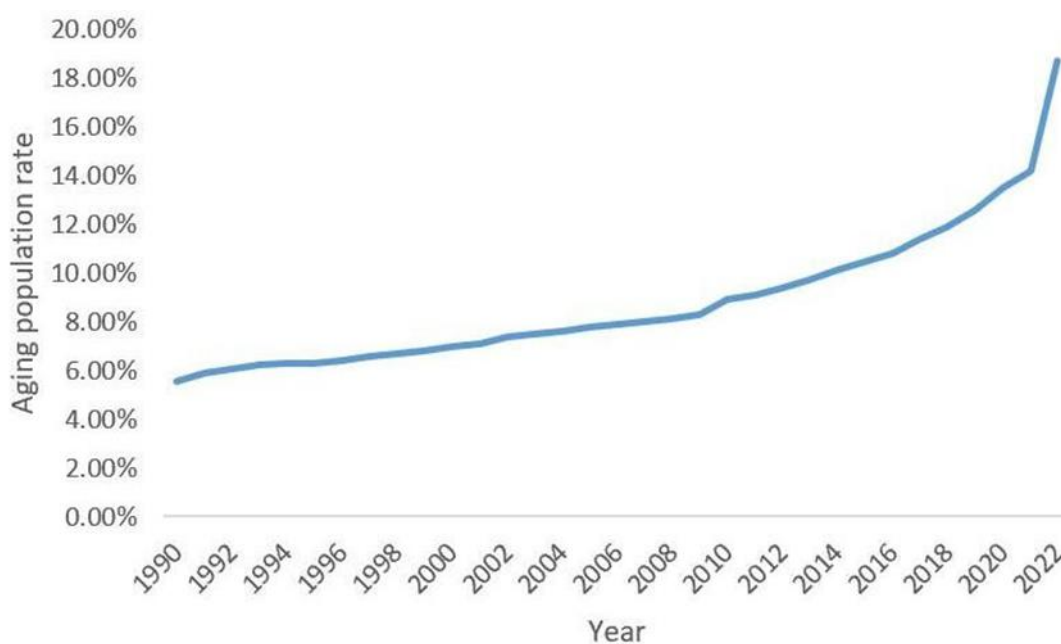
The population has entered a state of inertial contraction, the demographic structure tends to 'inverted pyramid', the population aging trend is irreversible [7]. This study predicts that China's population will reach a stable negative growth level after the 1970s, and the negative growth rate is twice that of the United Nations. China is likely to experience the fastest negative population growth and the largest population contraction [8]. However, old people can help us on some parts of the work, for example, Ladd and Murray point out that, population ageing drives economic growth, population ageing increases life expectancy, reduces child-rearing preferences, and focuses attention on individual productivity gains, thus raising the productivity of the whole society [9]. Old people work longer and they have more experience so they can do the work well with fewer errors. In conclusion, the arrival of the population aging has brought severe challenges to our socialist modernization drive, the shortage of material condition, the shortage of labor force and the aggravation of social burden all bring the disadvantageous influence to the social development [10]. People can learn from these opinions that many experts concludes that aging problem can bring a series of social problem like too much budget on old people's medical care and the pressure of young people and the economy of the country.

### 3. Method

All data from this paper comes from the website which was counted by National Bureau of Statistics. Most data is from CSMAR and Government get the data by demographic census one by one through the volunteering work. It is the best way to count the total number of a large population base background. China do this work every ten years and it will show the number to all people in the world. This paper choose some data from the website like the aging population rate in China from 1990 to 2020 and the countries which have the highest tenth aging population rate in the whole world to compare the rate with that of China and the average level. Also the increasing number of old people's homes and beds will be shown in this paper and I combine them into a graph to display the relationship between the increasing number of beds and homes for older people in China. This paper will show the work in the following parts.

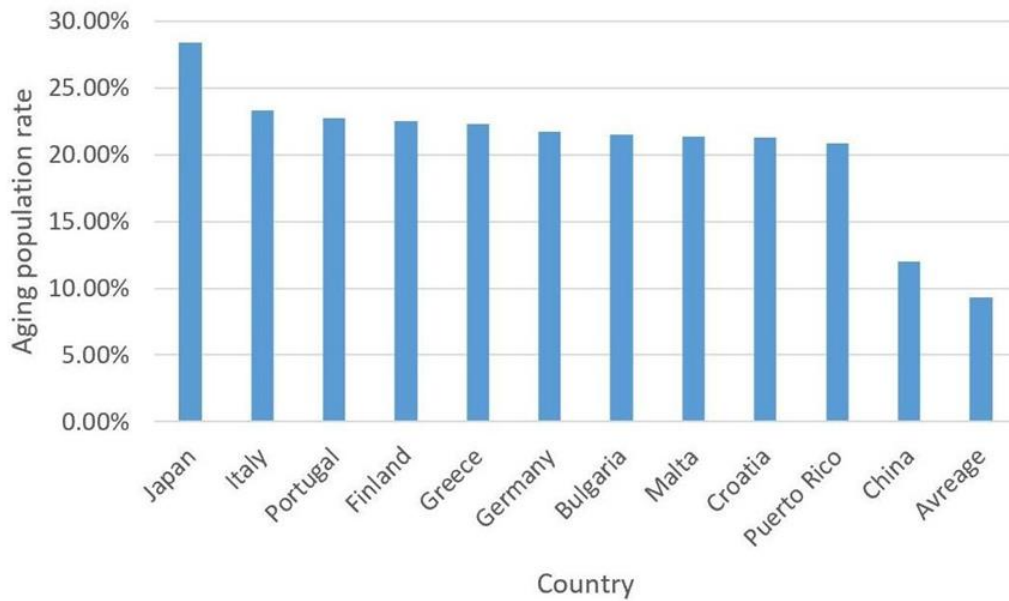
### 4. Results and Discussion

As the graph shows, through the gradient we can know that the trend is increasing faster in the later years. Concrete figures were obtained from the census. In figure 1, the x-axis is the year and the y-axis is the aging population rate in China. The graph can show the increasing trend clearly. In 1990, China only had 5.57% old people and it increased smoothly to 6.96% in 2000 and recorded at 8.9% in 2010. However, it increased significantly to 13.5% in 2020 and it is still increasing fast in 2021 reach 14.2%. It is the first time that China's aging population rate higher than 14%, as figure 1 shows.



**Fig. 1** Aging population rate in China

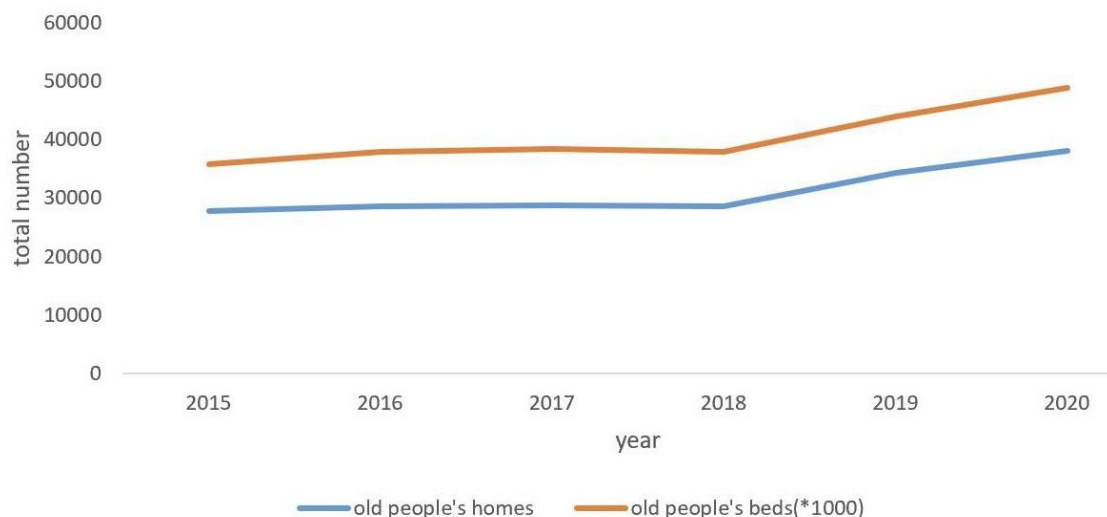
And in all over the world, Japan has the most aging population with the rate of 28.40% in 2020. Italy, Portugal, Finland, Greece, Germany, Bulgaria, Malta, Croatia, Puerto Rico all had the high aging population with the rate over 20%. We can see that developed countries are often facing the aging population than those developing countries. This is because people in those developed countries are high educated. They know the pressure and the consequence of having babies. Also, developed countries do not need to have more young workers to produce products and they have enough money to maintain the economy increase without depending on output and export. Comparing to the world average level, the aging population rate is 9.32%, China ranked at 63th with 11.97% old people in the whole country, as figure 2 shows.



**Fig. 2** Aging population rate in some countries

In the figure 2, the graph shows the aging population rate in the tenth highest countries. It has surpassed the world average level so much pressure will fall onto China. In China, each province has different rate of aging population. Liaoning has the highest rate of aging population with 17.42% and the following group are Sichuan, Jiangsu, Jilin, Anhui, Tianjin and Hebei. Their aging population rate are all higher than 14%. The lowest rate is Tibet because of the high altitude and the location of the border of China which only recorded at 5.67%. Guangdong also has more young people and only has 7.76% old people. This is because many graduates want to go to Guangdong to find a job. Guangdong is located in the south of China and it is very rich because of the ports and the river transportation. Moreover, Hong Kong and Macau are located near Guangdong so the account float freely. Aging population will bring a lot of consequence and problem for China. Too many old people cause the social pressure increase a lot. For example, factories have less workers because of the low birth rate and fewer new worker supply. Producers cannot produce too much products so they have fewer profit. As a result, producers cannot offer too many wages for the workers so workers (young people) have fewer income. Their living standard and purchasing power will decrease so they cannot afford to get married or even have babies. This situation will cause birth rate low for a long time.

At the same time, people are getting older so aging population increase. However, older people have worked for many years and they have much experience. They can work efficiently and have fewer errors comparing to young people. The productivity will increase and the quality of the products will be high. However, older people do not have too much strength, they cannot work for a long time and they may get sick frequently. This will cause producers have fewer output and profit so government have fewer tax revenue. As a result, government have less budget and they can only spend little on infrastructure or medical care. The economy will depression. More and more aging population lead to more pressure on government. For example, government have to spend more money on medical care and pension. At the same time, because of the lower birth rate, producers cannot employ more young workers. Also, workers have fewer wages and the purchasing power decrease. Government has less tax revenue from corporation tax and sales tax. So, it is difficult for government to improve the economy by government spending only. There is also some data about the old people's homes and beds form CSMAR and try to find out the similar of the trend. In figure 3, I will analysis the different and similar parts of the trend in increasing numbers of old people's homes and beds. We can see the number of the house of old people were built during the year 2015-2020, as figure 3 shows.



**Fig. 3** Number of old people's beds and homes from 2015-2020

In figure 3, there are two lines which show the increasing of the old people's homes and beds from 2015 to 2020. Through the data I got, I combine them in one graph to show the similarity of the trend. Due to the magnitude of the numbers are different so I change the unit of the number with old people's beds. The unit of the old people's beds is (1\*1000). In 2015, there were 27753 homes for old people. The trend was increasing year by year which was recorded at 38158 in 2020. From 2019, the rate of increasing increased more quickly than before. Nearly 5000 homes were built every year. More aging population and more pressure on young people lead to the young people send their parents to the old people's home. As a result, government have to spend more money to build more homes for old people. And as the number of old people's homes increase, the beds of the old people were increasing too. From 2015, 3.582 million of beds was built for old people in China. Until 2020, there were 4.882 million of beds for old people. The trend was similar as that of the old people's homes. It increased quickly from 2018 to 2020. These two graphs and the data also tell us the situation of the aging population in China is increasing faster and faster nowadays.

Figure 3 shows that more old people's homes are built, more old people's beds exist. The increasing trend are similar too. From the data above, it can be seen clearly that old people were lonely nowadays because they need to go to the old people's homes to stay with other old people to find some warm. This also means that young people were more concentrated on their work and had less time to stay with their families. Their parents felt lonely and moved to the old people's homes. As a result, nobody can take care of the kids so young people would not like to have babies too. In many families, old parents take care of their grandsons and granddaughters instead of parents, this is one of the reasons which cause family conflict. Children and parents do not know each other that well so they will have many different ideas and children do not want to listen to their parents too.

## 5. Conclusion

In conclusion, aging population increase will bring some serious problem but there is some good influence too. First, aging population make more pressure on young people and government. They have to take care of older people and spend more money on medical care department. It will influence the infrastructure construction and other departments process. Young people have more pressure not only on competition but also on supporting aged. It will lead to a low birth rate and low marriage rate. Fewer new babies are born make more pressure on producers and the whole country. Number of new babies decrease means that there are fewer labors in the market and too many old people cannot go to work so the output will decrease. Economy will depression during this process. We can only solve this by increasing the birth rate. However, as the social pressure increase, people would not like to have babies. So this problem has existed for a long time. Second, as aging population increasing every

day and the trend is increasing faster and faster in the recent years, more old people need to get medical care. Also, old people are living longer and longer nowadays. They will get some serious disease when they getting older and they have to go to the hospital for curing.

In China, older people do not need to spend all money for their disease because government will help them to pay for the medical fee. It will cause more budget deficit on government. Government's budget is limited every year, they have to find a better way to spend the money to help the economic growth which is government's goal. So if too many old people are waiting for the medical fee and medical construction, government will not have more money on other fields and it will stop economic growth too. Aging population do not like to spend money on some shopping mall to buy what they want will lead to lower purchasing power so that country will experience economic depression.

Third, developed countries often have more aging population than those of in developing countries. This is because young people would like to go to the developing countries to find jobs. In developing countries, there will always be more jobs and more potential because they are still developing. Young people can get stable and more motivation work with stable salaries in these countries. However, in developed countries, the infrastructure and other facilities have built completely in many years ago. Workers in developed countries are experienced and high educated. The work they do have high barrier so young people with low educated are difficult to enter. As a result, developed countries cannot attract more young people to come to their countries to find jobs. Also, people in developed countries are often high educated and they know the consequence and influence after they having babies so the birth rate will maintain low in developed countries. The aging population rate will increase due to the low birth rate and fewer immigrations. Finally, more older people will decrease the rate of economic growth and bring more pressure on government and young people.

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