

## How Delayed Retirement Initiatives and Social Health Insurance System Affect China's Elderly

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**ABSTRACT:** The challenges brought by global aging make countries begin to pay attention to and pay attention to the role of deferred retirement initiatives. At present, China's social medical insurance system has not been reformed, and the retirement age policy formulated in the 1950s obviously does not meet the needs of China's economic development. China is in urgent need of a new delayed retirement policy. In this paper, using 2014 CLHLS data, the study found that working age affects the health of the elderly, and there is a negative correlation between age and health. According to the findings, the social medical insurance system has a favourable impact on the health of the elderly, and there is no direct evidence that it can reduce the mortality rate. The social health insurance system and the proposal to postpone retirement interact with one another.

**KEYWORDS:** Delayed Retirement, Social health insurance, Elderly people, Health, Delayed retirement proposal

### I. INTRODUCTION

International standards indicate that the country has become an ageing society when those over 60 make up 10% of the overall population and those over 65 make up 7% of the whole population. As the nation with the greatest elderly population, China is experiencing a rapid ageing of its people, and because China has implemented a strict family planning policy, the arrival of retirement will have a significant impact on the size of the labor force and the burden of supporting the elderly. In this context, China's population growth and economic expansion will result in new circumstances, policy factors and old-age medical security and other factors will also have a profound impact on retirement behavior. The legal retirement age does not rise in tandem with the average life expectancy of the populace as a result of economic growth and ongoing income improvements. The legal retirement age in China is currently 60 years for male employees, 55 years for female cadres, and 50 years for female employees. In China, the burden of supporting the working-age population is getting heavier and heavier, which makes it more and more urgent to prolong the working cycle. The delayed retirement policy will have an important impact on China's social economy, social welfare and security. In recent years, the postponement of retirement has been included in the Chinese government's planning report for many times. The long-term goal of 2035, which is stated in the 14th Five-Year Plan for National Economic and Social Development of China, it is required to "comprehensively consider factors such as the extension of average life expectancy, the acceleration of population aging, the increase in years of education, and changes in the labor force structure, and follow the principles of small-step adjustments, flexible implementation, classified advancement, and overall consideration." Delay the legal retirement age gradually and encourage the full use of human resources. However, due to the wide coverage of delayed retirement and a large number of people involved, unreasonable policy implementation may aggravate social contradictions. Therefore, the policy of postponed retirement has not been widely used. So far, only some Chinese provinces, such as Jiangsu and Shandong provinces, have launched plans to delay retirement.

The social medical insurance system is a crucial tool for safeguarding the wellbeing of the elderly. Due to the variety of insurance kinds that make up China's health insurance system, its benefits to the elderly and the level of protection for the elderly are different. The social and economic standing of China is constantly rising, the state attaches great importance to the development of medical and health undertakings, and the fundamental medical insurance system is always improving. The basic medical insurance for urban and rural residents, the basic medical insurance for urban workers, the new rural cooperative medical system are the three basic medical insurance systems in the society. The range and variety of medical insurance coverage in China have grown consistently since 2003. In addition to Government Medical Insurance (GMI) and Urban Employee Basic Medical Insurance (UEBMI), which were implemented before the reform of the health care system, the government has deployed the New Rural Cooperative Medical Insurance (NRCMI) implemented in 2003 and Urban Resident Basic Medical Insurance (URBMI) implemented in 2007. After the above-mentioned reform of the medical system, China has recently reached full coverage of medical insurance. Since 2016, the idea of combining urban resident basic medical insurance (URBMI) and the New cooperative

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medical scheme (NCMS) has been floated in some cities in order to create urban rural resident basic medical insurance (URRBMI), which would provide beneficiaries with health insurance benefits regardless of where they reside (Zhang et al., 2016).

In addition, China implements the system of "pay more, pay less". With the increase of the delay in retirement, the number of years for citizens to pay pension will increase, and they can receive more pension after retirement. With the deepening of aging, China is gradually promoting the coverage of all kinds of social health insurance.

## II. ARTICLE REVIEW

### A. The present situation of China's population

China's population data was just provided by the National Bureau of Statistics. Since 2022, China's population has experienced negative growth, as well as high growth in the elderly population. In terms of age composition, the working-age population aged 16-59 accounts for 875.56 million, or 62.0% of the total population. 280.04 million individuals aged 60 and up, or 19.8% of the total population, includes 209.78 million people aged 65 and up, or 14.9% of the total population. According to the United Nations "population Ageing and its Socio-economic Consequences" classification standards established in 1956, When the proportion of those aged 65 and up in a country or region exceeds 7% of the total population, the country or region is facing ageing. The World Assembly on Ageing in Vienna determined in 1982 that senior persons aged 60 and up amounted for more than 10% of the total population, and the country or territory was deemed to have entered an ageing society. As a result, China has entered an aging society, and it is necessary to delay the retirement proposal and the promulgation and implementation of the retirement policy.

### B. Deferred retirement policy

The gradual delayed retirement system currently in use in China is based on the need to adjust to the trend of population ageing, as well as the need for more effective human resource development and more equal and sustainable social security promotion. With China's huge growth in life expectancy and overall health improvement, the present statutory retirement age of 60 for male workers, 55 for female cadres, and 50 for female workers is already low. According to the Chinese National Bureau of Statistics, at the end of 2022, China's population will decrease by 850,000 compared with the end of the previous year. Simultaneously, the ongoing decline in the working-age population will have a greater impact on employment, finance, and social security systems. The Chinese government faces a significant difficulty in dealing with the new scenario and new problems, as well as formulating and implementing appropriate remedies.

Regarding the implementation of China's delayed retirement policy, Wu Y, Xu C and Yi M (2022) stated that the Ministry of Human Resources and Social Security has already proposed that men's retirement age be raised by one year every six years, and women's retirement age be raised by one year every three years, so that both men and women can retire at the age of 65 by 2045.

### C. Medical insurance system

China's social medical insurance system is made up of two parts: comprehensive medical insurance and social medical insurance. A comprehensive medical insurance system is a multi-tiered medical security system that includes basic medical insurance as the primary component and other types of supplemental insurance and commercial medical insurance (social medical insurance) as supplements. And social medical insurance is the insurance that units and individuals participate in voluntarily, and the insurance premium paid is operated by insurance institutions, when significant diseases emerge, certain medical expenses can be obtained. Distinct health insurance benefits have distinct implications on the health of the elderly. The expansion of the retirement age improves the working life and years contributed by workers. There is some evidence to suggest that delaying retirement age has a favourable impact on the pension system. (Wang et al., 2013; Hao and Wang, 2017).

Xie Y, Sun X and Yang S. (2021) used the pension replacement rate to reflect the differences in workers' living standards before and after retirement. According to National Bureau of Statistics data from 2000 to 2018, China's pension replacement rate has been lower than 55% since 2004, and shows a downward trend. According to Zheng's report (2019), the cumulative balance of the basic old-age insurance fund for urban workers across the country will peak in 2027, be exhausted by 2035, and then run into a deficit. This situation makes it urgent for China to delay the implementation of the retirement policy.

### D. Effects of delayed retirement and social medical insurance system on the health of the elderly

In a review of other relevant literature, one is a research paper by Nobel laureate Dr. Leo Esaki, which states that the age at which people are most creative is about 32. The doctor also pointed out that as a person gets older, his creativity decreases with age (Leo Esaki, 2002). As a result, there have been many articles that have concluded that delaying retirement will reduce life expectancy. There are papers, for example, that look at the influence of raising the retirement age on health, using official data from practitioner certification diagnoses based on the International Classification of Diseases (ICD-2018) between 10 years and 2009. The findings indicate that raising the retirement age has a detrimental influence on health outcomes (Barschkett et al., 2022). However, with the development of society and the times, there are a large number of literatures about the health benefits of delayed retirement. A number of studies have found that "age" can improve emotional health and physical health (Richard W. Johnson, 2009), even if other factors remain the same, and the health of the elderly is the main influencing factor. In order to

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determine whether retirement has a direct impact on old age health and the causal relationship, the quotation of early retirement window is used to measure retirement. Also discovered that early retirement has no negative impact on men's health (Coe, N., & Lindeboom, M, 2008). Because the results in the literature on the impact of retirement on the health of the elderly are mixed and the relationship between the two is contradictory, and in the study, it has been found that the relationship between retirement and health depends on retirement age, retirement reasons and retirement time. (Jokela et al., 2010), so we still need to explore constantly according to the changes of the times and the economy.

On the other hand, some studies have also found that social health insurance affects retirement and old health. According to the World Health Organization, protecting people from the financial burden associated with medical costs while reducing the harm of disease to the elderly is one of the main goals in the process of social development and health system construction. According to Johnson, R. W., Davidoff, A. J., and Perese, K (2003), the expense of social health insurance has reduced the retirement rate of full-time wage and salaried workers aged 51 to 61 significantly. According to the simulation, every \$1,000 increase in the net present value of health insurance premiums reduces the risk of early retirement by 0.17% for men and 0.24% for women (Johnson et al., 2003). The intimate relationship between health insurance and employment in the United States may cause workers to postpone retirement until they are eligible for health insurance at the age of 65 (Nyce et al., 2013).

### III. EMPIRICAL ANALYSIS

#### A. sample

This paper uses the biomarker data sets of the China Longitudinal Health and Longevity Survey (CLHLS) in 2014, gathered by the National Institute of Development of Peking University's Research Centre for Healthy Ageing and Development (CHADS) and the Chinese Centre for Disease Control and Prevention (CDC). In these studies, Chinese CDC local network doctors examined participants and collected 2471 samples from people over the age of 45 and other young age groups. The biomarker data set includes approximately ten markers for routine blood / urine testing as well as blood biochemistry assays. This collection's demographic data include age and gender. The variables used in this paper are age and Plasma albumin biochemical tests, and random sampling. The reason for choosing these two variables is that in China, the population retirement policy is at 60, and if delayed retirement is to be carried out, it will be increased on the basis of 60, so it is mainly based on the sample of people aged 60 and above. and these old people are selected in the context of a job. Plasma albumin is one of the most important proteins in human plasma, accounting for 40% and 60% of the total plasma protein. It is synthesized by hepatic parenchyma cells and its half-life in plasma is about 15-19 days. Plasma albumin plays a leading role in maintaining the colloidal osmotic pressure of the human body, because the molecular weight of albumin is small but the density is high, it can enhance the adsorption of water, and the data collected from plasma albumin are more comprehensive and have no missing results. more stable than other blood tests. Among them, the number of valid samples over 60 years old is 1547, and there is no missing value.

#### B. Analysis

This study uses SPSS 27 and related literature analysis, and uses the method of multiple regression analysis in SPSS, as well as the method of literature combination, multiple regression analysis is used to investigate the effect of independent variables on dependent variables. This paper mainly discusses the impact of delayed retirement on the health of the elderly and the impact of social security system, with the same goal. This paper will also investigate the relationship between social medical insurance and elderly health, as well as the impact of social medical insurance on delayed retirement.

### IV. RESULT

**Table 1. Descriptive Statistics**

Descriptive Statistics		N	Minimum	Maximum	Mean	Std. Deviation
validated age		1547	60	90	78.510	7.681
Biochemistry test:	Plasma albumin, g/L	1547	30	51.599	43.291	3.379
Valid (listwise)	N	1547				

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**Table 2. Multiple Regression**

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.362 <sup>a</sup>	0.131	0.131	4.06917215033797	1.775

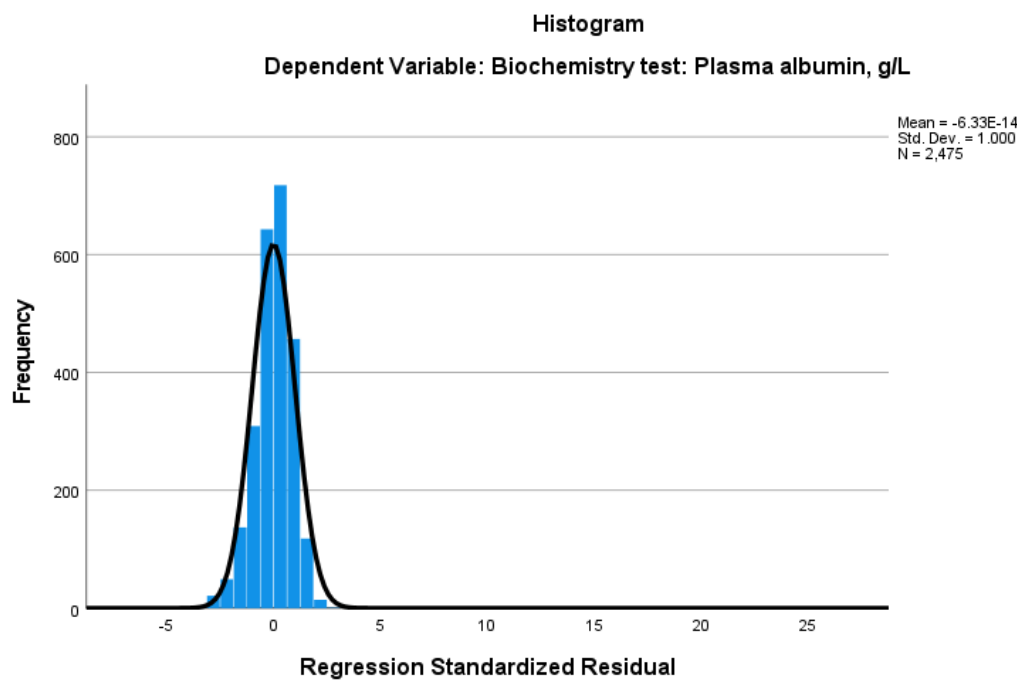
a. Predictors: (Constant), validated age

b. Dependent Variable: Biochemistry test: Plasma albumin, g/L

### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	53.942	0.606			88.968	0.000		
	validated age	-0.135	0.007	-0.362		-19.338	0.000	1.000	1.000

a. Dependent Variable: Biochemistry test: Plasma albumin, g/L



**Figure 1. Histogram**

## V. DISCUSSION

### A. Result

In the Table 1 describing the statistics, in terms of the number of cases, there are a total of 1547 samples with no missing value. Among them, 878 were males and 669 were females. The minimum and maximum values show the difference between the two, the maximum age is 90, the minimum is 60, the maximum is 51.599, the minimum is 30, and there are no filing errors. The average values are 78.510 and 43.291 respectively, which do not exceed the maximum and minimum values, and the average values are not too high or too low, and are not very concentrated. The standard deviation reflects the degree of discreteness of the data set, which is divided by the maximum value minus the minimum value by the standard deviation. The result is not over-concentrated and the degree of discretization meets the requirements.

According to the Table 2 Model Summary b table and the Coefficients a table, the R<sup>2</sup>mm working age can explain 13.1% of the Plasma albumin situation, significantly less than 0.05. Therefore, the working age can affect the Plasma albumin, and the working

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age has a negative impact on the Plasma albumin, which means that the older the age, the lower the Plasma albumin. DW is 1.775, less than 2, the independence of the sample passed. VIF is less than 5, so there is no collinearity. According to the Figure 1 histogram, the residual obeys the normal distribution. Finally, the working age has an impact on the health of the elderly, and the older the age, the lower the health of the elderly. According to the conclusions of relevant experts, there are three main reasons for the low Plasma albumin. The first is malnutrition and low food intake, which leads to low albumin. The second is due to chronic diseases, such as chronic hepatitis, nephropathy, cachexia, resulting in low albumin. Finally, malignant tumors are severe consumptive diseases that can lead to low albumin. And experts have confirmed that high Plasma albumin has no effect on health.

### **B. Social Medical Insurance system and the Health of the elderly**

According to the literature and reality, it is concluded that medical insurance itself is complex and has multi-dimensional results. Similarly, the health level itself is also extremely complex and pluralistic. Different health variables will get different research results. Furthermore, the study discovered that medical insurance can clearly improve the health status of the elderly (Wang Xinjun and Zheng Chao, 2014). For example, in related experiments, Card David (2008) designed to measure the impact of the expansion of insurance coverage on the health of the elderly, and concluded that the expansion of insurance coverage helps to improve self-reported health, but there is no statistically significant impact on mortality. Similar results have been obtained in Liu's related research. A multiple linear regression model of the elderly's health level is constructed in the literature, and it is discovered that the health level of the elderly with medical insurance is not necessarily higher than that of the elderly without medical insurance. However, whether or not urban workers have basic medical insurance can considerably predict the health of the elderly (Xiaoting, L. I. U. 2014). In Li's article, we also get the differences in the effects of different insurance systems on the health of the elderly (Li, J., & Yuan, B, 2022). Therefore, many studies have shown that the social health insurance system can predict the health of the elderly, and there is no direct evidence that it can reduce mortality.

### **C. The postponement of retirement proposal and social medical insurance system**

China will implement the proposal to postpone retirement in 2025, and the new policy's adoption will have an influence on social health insurance. There are three reasons. The first is the impact of the new policy and the old system. With the arrival of the new policy, no policy makers can accurately predict what will happen in the future, because the delayed retirement policy has led to a longer working life and more physical protection for many people. It remains to be seen if China's traditional social medical insurance system can adjust to the new policy's impact. The second is the change of social life. Due to the influence of the new policy, the atmosphere and life of the whole society have changed, and the entire society is a large environment that will influence and lead to the development of the social medical insurance system. Finally, there is a change of mind. During the family planning period in China, the state encouraged people to have fewer children, but today, because of the aging population, the state begins to encourage more children and encourage the elderly to work. The rising fertility rate and the growing number of old people have added new strains and problems to the social health insurance system.

The social medical insurance system, on the other hand, has an impact on the delayed retirement policy. The following are three reasons: First, the adaptability of the social medical insurance system to the new policy will influence policy implementation. At this point, the social medical insurance system adheres to the conventional model, and when the new policy is implemented, it will collide with the present model's social medical insurance system, because China's social medical insurance system is massive and solid. Therefore, if the policy does not adapt, the government and society will consider whether the deferred retirement policy will continue. The second is the hindrance to the policy by the beneficiaries of the social medical insurance system. People who enjoy social medical insurance will come out to protest the continued implementation of the new policy because they have no benefits as a result of the new policy's implementation and the re-use of the old social medical insurance. Finally, there is the related question of whether the two can be balanced. When the social health insurance system seriously affects the delayed retirement policy, whether the government will change the social health insurance system or change the new policy, one of them is deep-rooted and the other has no foundation. It is also worth looking forward to whether the Chinese government can balance the change and innovation of the two. To sum up, the social health insurance system and the plan to postpone retirement have an impact on each other

### **D. Concerns about the delay in retirement**

First, the employment pressure of young people and laid-off workers is on the rise. Some young people worry that delaying retirement will squeeze the rising space of young and middle-aged employees and increase the burden of work. Second, delaying retirement will shorten the family time of the elderly and may affect the public's desire to have children. Third, some members of the public believe that delaying retirement requires enterprises to pay higher labor costs for their elderly employees, increase the operating burden of enterprises, and reduce operational efficiency, resulting in the phenomenon of "overstaffing". In addition, some members of the public also talked about the impact of the delay in retirement on individual expectations of social endowment insurance.

### VI. CONCLUSION AND SUGGESTION

#### A. Conclusion

The influence of the delayed retirement initiative and the social health insurance system on the health of the year is discussed in this study. Late retirement not only weakens the health of the elderly, but also affects the social medical insurance system, which plays a key role in predicting and reminding the health of the elderly, and is also the key to the smooth implementation of the delayed retirement initiative. However, due to the large-scale increase in the aging population, the Chinese government must implement the delayed retirement policy, which requires the government to formulate and plan how to implement the policy to reduce the impact on the health of elderly workers. Also how to optimize the social health insurance system to coincide with the implementation of China's delayed retirement policy.

#### B. Suggestion

In view of China's national circumstances, the following suggestions for implementing the delayed retirement strategy, the optimization of the social medical insurance system, and other pertinent measures are as follows: Flexible retirement: As the delayed retirement policy involves too many people, the formulation of the policy should take into account the interests of different social groups. Flexible retirement policy, as a policy adopted by many countries, can meet the different requirements of different groups for retirement age. At present, there are still some workers in China who are worried about delaying retirement, and the retirement system of flexible retirement combined with voluntary choice can effectively reduce the resistance caused by delayed retirement. Flexible retirement policies can be formulated mainly for retirement age and occupation. First of all, in terms of age, it can be stipulated that the retirement age will be chosen by the labor resources within 5 years according to the legal retirement age. Simultaneously, by tying the retirement age to the number of pensions, for those who choose to extend the age, the pension will be increased by a certain proportion to encourage workers to choose a later retirement age. The second is to make a distinction in the professional crowd, for some jobs with high physical strength, because their average health level is lower than that of other industries, after meeting a certain number of years of working age, they can appropriately advance their retirement age. for those who choose to extend the retirement time, take a higher proportion of pension.

Raising the retirement age for women gradually: Because the existing retirement age for female workers is too low, even if it is raised from 50 to 55, it will still be lower than the retirement age for males. If the legal retirement age is directly raised to 60, it will be difficult to get social support if the adjustment is too large. We recommend that the government raise the statutory retirement age to 60 and 65 for women and men. The extension of the legal retirement age for males to 65 is consistent with Chinese national conditions and other nations' regulations. Small adjustments are easily accepted by society. Gradually raising the retirement age for women also helps to weaken institutional discrimination and inequality, and can effectively promote the fair distribution of social income.

Social medical insurance system: The operation of Urban Employee Basic Medical Insurance (UEBMI) is closely related to the degree of population aging. The medical expenses caused by longevity continue to rise as the population ages, posing new obstacles to the functioning of the urban vocational medical insurance fund. The decline in youth employment has also resulted in a drop in the income of urban vocational medical insurance funds. The strategy of delaying retirement age is beneficial to the medical insurance fund's long-term operation, but it will not relieve the medical insurance fund's payment pressure for urban workers in the long run. According to the findings of the study, the social medical insurance system has a favorable impact on the health of the elderly due to the policy of delaying retirement age. Our suggestions on urban occupational medical insurance in China in the future are as follows: on the one hand, we should improve the operation mode of urban workers' medical insurance fund and make necessary flexible adjustments according to different occupational categories and employees' own reality. On the other hand, we should accelerate the improvement of the comprehensive matching of the medical insurance fund for urban employees and provide accessible medical care for the elderly. Increase the check-up for common, frequently-occurring and chronic diseases of older workers in the physical examination of employees, and take into account the health status of employees in the post setting. Strengthen the adjustment of fertility policy, improve residents' fertility desire, and raise the number of working population in the future to deal with the payment pressures of an ageing population structure. At the expenditure level, we will further optimize the mode of payment of health insurance to avoid the unreasonable increase of medical expenses.

In addition, the state should also regulate and professionally manage the fund to ensure the investment income and efficiency of the fund. Therefore, China should consider all aspects of the pension model in the future. First of all, to ensure that the government as the main body of the basic old-age insurance, mainly to solve the basic health and pension problems of the elderly, to solve the problem of heavy financial burden and regional imbalance. The second is to strengthen the enterprise annuity with employees as the main body to solve the problem of small scale and coverage. Finally, we should vigorously develop commercial old-age insurance and savings old-age insurance with individuals as the main body, and give full play to its supplement to old-age insurance and multiple protection for the health of the elderly under the protection of basic medical care and old-age insurance.

Other relevant suggestions: In the aspect of employment for the elderly, we have to expand the employment opportunities for the elderly and defend their employment rights and interests. The government will strengthen vocational training and employment

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recommendation for the middle-aged and elderly, step up efforts to eliminate employment discrimination, provide more job opportunities for older workers, and promote the full use of human resources. To publicize and popularize laws and regulations for elderly workers and protect their legitimate rights and interests in practical work.

Contemporary society is more concerned with the health of the elderly, ignoring their consumption needs in education and entertainment to a certain extent. In the aspect of education, to address the elderly's educational needs, we should boost our investment in universities. In terms of entertainment and consumption, the government should optimize the industrial structure, give consideration to the elderly's consumption needs, increase relevant supporting facilities, and provide a suitable consumption environment for the elderly.

At the moment, due to the drop in China's fertility rate, and a certain amount of population growth is required to ensure the economy's viability, China's long-term policy orientation should be to encourage fertility when life expectancy increases substantially in the future. The government should promote the matching of delayed retirement policy and fertility policy, provide fertility subsidy policy, increase the fertility rate and then increase the supply of labor force.

Although the delayed retirement policy has been piloted in various provinces and cities, the modification of China's delayed retirement policy is still in the experimental stage, and will be implemented nationwide on the basis of the pilot results in the future. Or make corresponding changes in line with the conditions of other provinces and cities. In the future, when putting forward institutional ideas and implementation plans, China should give full play to its strengths and circumvent its weaknesses, put forward more detailed plans, and extend the retirement age in a reasonable way, with the main purpose of improving people's living standards and promoting social stability and healthy economic development.

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