

## Study on the Impact of Population Aging on Savings in China



Han Qing<sup>1</sup>, Ren Jingyi<sup>2</sup>, Doris Padmini Selvaratnam<sup>3</sup>

<sup>1,2,3</sup> Bangi, Selanhor UKM

**ABSTRACT:** This study examines the influence of demographic ageing on savings patterns in China. China is facing significant economic issues due to its ageing population, as indicated by the research. These challenges are mostly caused by the rising old-age dependency ratio and longer life expectancy. The study utilizes data from the period of 2010 to 2020 and applies the Vector Autoregressive (VAR) model to uncover the intricate relationship between ageing and savings. Findings indicate that population aging initially suppresses household savings rates but may stimulate them in the medium term due to anticipatory saving behavior. At the social level, the growing number of elderly individuals places a greater strain on the economy, yet the possibility of longer life spans may encourage people to save more. The research offers vital information for policymakers seeking to tackle the economic consequences of a growing elderly population by strategic interventions like legislation that encourage delayed retirement, enhanced social security systems, and ongoing technology innovation.

**KEYWORDS:** Population aging, Savings behavior, Old-age dependency ratio, Life expectancy, Vector Autoregressive model, Economic policy.

### 1.1 RESEARCH BACKGROUND

Population aging, a global social phenomenon, is affecting each of us at an unprecedented rate. Especially in China, the world's largest developing country with a huge population base, the problem of aging is particularly prominent and urgent. As early as the beginning of the 21st century in 2000, China entered the ranks of countries with an aging population, but compared with other developed countries, China faces a more severe challenge - that is, the dilemma of "getting old before getting rich". China's aging problem is not only reflected in the huge elderly population base, but also in its rapid growth rate. At the same time, the uneven development between regions also exacerbates the complexity of this issue. In some economically developed cities, the problem of aging may be more prominent, while in some economically relatively backward areas, the problem of aging may be accompanied by other social problems, forming a chain reaction. With the acceleration of the aging process, China's total dependency ratio has also been rising. This is a trend that cannot be ignored because it directly reflects the major changes in China's social structure. To address this challenge, the Chinese government has introduced a series of policies, such as the two-child policy, in the hope of alleviating the demographic problem. However, the actual effect is not as obvious as expected. The data show that while the total dependency ratio is rising, the child dependency ratio has been declining, meaning that the elderly dependency ratio has increased more than the total dependency ratio.

Undoubtedly, this tendency has exerted significant strain on China's social pension system. As the number of senior individuals grows, there is a rising need for elderly care. However, the availability of resources for elderly care is not keeping pace with this demand. Not only will this exacerbate the financial strain on the nation, but it will also have a detrimental impact on the elderly's quality of life and social welfare. Hence, it is imperative that we confront this challenge head-on, implement efficient strategies to address the issue of aging, and guarantee social cohesion, stability, and enduring progress.

In 2018, the global population of those aged 60 and above was 249.49 million, while the population of individuals aged 65 and

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above was 166.58 million. The share of the old population continues to increase in comparison to the previous year. In the fourth quarter of 2019, the population of individuals aged 60 and above in China reached 253.88 million, marking a growth of 4.39 million compared to the previous year. This age group accounted for 0.25% of the total population, which is equivalent to 18.1%. The population of individuals aged 65 and above was 176.03 million, which represents a growth of 9.45 million, or 0.64%, and accounts for 12.6% of the total population. Based on the census data and projections from demography experts, it is expected that by the mid-21st century, the percentage of individuals aged 60 and above will be 34.1%. Among this group, the percentage of individuals aged 65 and above will be 28.1%, and there is a possibility that the percentage of individuals aged 80 and above could reach 22.36%. Based on this statistics, it is projected that by 2050, the proportion of old individuals would be one in three persons on average. This highlights the need for China to address new demands in terms of pension security and healthcare standards.

Since the reform and opening up in 1978, China's rapid economic development has attracted worldwide attention, in which the demographic dividend and high savings rate have played a crucial role. The demographic dividend provides China's economy with a huge low-cost labor resource, while high savings become an important source of investment to promote economic development. However, this drive for higher savings is not sustainable.

As a key factor affecting a country's consumption and investment, the change of savings is often closely related to the age structure of the population. As the population ages, we have to delve deeper into the impact of this trend on saving behavior to understand its potential impact on investment and consumption structures. Compared with other countries, the phenomenon of high savings in China has a unique national color. There is a general inclination to accumulate funds for old age, health care, and the future education and living of their children. Besides, as you get older,

Individuals' propensity to save also changes dramatically. As a result, an ageing population inevitably brings fluctuations in savings levels.

The reason why population aging has aroused widespread concern among experts and scholars is mainly because the rapid growth of the elderly population has brought huge pressure to the next generation. This may lead to a decline in social welfare, excessive consumption of resources and lower productivity levels, which in turn hinder the high-quality development of the Chinese economy. To address this challenge, China has also been considering implementing a delayed retirement policy in recent years. However, the impact of this policy is complex and multifaceted, and needs to be coordinated with other measures. Although it has not yet been formally implemented, with the increasing aging of the population, the implementation of a delayed retirement policy has become imperative. At the same time, we can learn from the relevant policies that have been introduced abroad to provide reference for China to formulate more reasonable policies.

### 1.2 Research significance

This article primarily examines the influence of population aging on household saving rate and social saving rate, with a specific focus on the expansion of old-age dependence ratio and the extension of individual life expectancy. Inside the framework of a society experiencing an increase in the proportion of older individuals, the upward trend in the old-age dependence ratio signifies a corresponding surge in the quantity of elderly individuals inside a family who require financial and emotional assistance.

In this case, households' daily consumption and medical expenses for the elderly will increase correspondingly, which tends to squeeze funds that would otherwise be used for savings, which may lead to a decline in household savings rates.

Rising life expectancy, however, opens up another possibility. If adults adjust their saving behavior in response to longer life expectancy, choosing to save more to cope with the increased burden in the future, then this trend should have a positive boost to the household savings rate.

At the societal level, the rise in the old-age dependency ratio and the increase in life expectancy also have a double impact. On the one hand, with the increase of the elderly population to be supported, the economic burden of society and families will increase, which may lead to a decrease in the social savings rate. On the other hand, the prospect of a longer life expectancy in the future may trigger social alertness to the increased burden in the future, which in turn drives up the social savings rate. Therefore, the effects of population aging on savings rates are complex and diverse, and the final outcome depends on the balance between these competing factors. And ageing does not just affect saving behavior; it also has profound effects on levels of investment and consumption, which in turn affect saving.

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The study of the impact of population aging on savings has important reference value for the government to formulate policies to promote investment and consumption. At the same time, such research can also provide strong data support for the formulation of measures to mitigate population aging. In recent years, China has introduced a series of policies to stimulate domestic demand and promote consumption, and the savings rate has also changed. Through in-depth analysis, this paper hopes to explore whether the aging factor plays a role in this process, and what role it plays.

### **1.3 Current situation of China's aging population**

China's population has been rapidly aging over the past decade. Based on the data from China's 2010 Census Data and China's Population Census Yearbook 2020, there has been a substantial increase in the number of individuals aged 60 and above. The total number of elderly people has risen by 86.42 million, and the proportion of elderly individuals in the overall population has also increased by 5.4 percentage points.

In terms of geographical distribution, Shandong, Henan, Jiangsu and other provinces have the highest increase in the elderly population, and these provinces are all populous provinces with a permanent population of more than 70 million. Among them, Shandong saw the most significant increase in the elderly population, increasing by 7.09 million in the decade, becoming the only province in China with an elderly population of more than 20 million. This data fully shows that China's population aging phenomenon is deepening across the country.

### **1.4 Current situation of household savings in China**

In the decade from 2010 to 2020, the current situation of Chinese household savings has shown a steady increase. According to statistics, the balance of household savings has increased year by year from 47.6 trillion yuan in 2010 to 162.9 trillion yuan in 2020. The growth not only reflects China's continued economic development, but also reflects the steady increase in residents' wealth accumulation. During this period, although affected by global economic fluctuations and changes in the domestic financial market, the savings habit of Chinese residents remained stable, and the savings rate remained at a high level. At the same time, with the intensification of the aging trend of the population, residents' demand for savings in old-age care, medical care and other aspects is also increasing, which further promotes the growth of residents' savings. In general, the current situation of China's household savings from 2010 to 2020 has shown a positive and steady development trend.

## **2. LITERATURE REVIEW**

The classic literature on the effects of population ageing on savings dates back to Leff (1969), who analysed the issue using time series data from 74 countries. His research finds that both the child-dependency ratio and the old-age dependency ratio have negative effects on savings, and predicts that a high proportion of dependents puts pressure on social savings accumulation. However, a shortcoming of Leff's study is that developing countries typically have higher fertility or dependency ratios but lower savings rates, as opposed to developed countries. Because Leff used a mix of developed and developing countries in his analysis, his statistical results may not be reliable enough to explain economic phenomena.

Adams (1971) and Ram (1982) conducted additional study on 74 cross-country cross-sectional data for 1970 and 121 nations over the period of 1970 to 1977. According to their research, the age- and youth-dependency ratios had very little bearing on overall savings. Furthermore, they reject Leff's hypothesis that a high percentage of dependents and private savings can be negatively correlated. Adams claims that a greater dependency ratio could encourage people to put in more effort at work and increase the amount of money that people in working age have saved to cover their future consumption demands. Therefore, a greater dependency ratio would present a chance to boost domestic private saving as opposed to restricting it, and it seems that the dependency ratio has a favorable impact on the amount of saving.

The influence of population aging on savings was only recently studied in China, and most researchers who addressed the topic of population aging's effect on sustainable economic growth also took savings into account. You Junjun and CAI Yuanfei (2017), for instance, conclude that while population aging has a slight beneficial effect on savings, it is unable to counteract the negative effects on economic growth. According to Wang Wei's (2016) research, household savings and population aging have an inverted U-shaped relationship because people save more to maintain their standard of living as life expectancy increases. But as the number of elderly people rises, so does the cost of family pensions, which causes the savings rate to fall. Research by Tang Dongbo (2007), Ma Shucai

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and Song Qi (2015), Zhao Wenzhe and Dong Lixia (2013), and other academics also corroborated the idea that the aging of the population had a detrimental effect on savings and contributed to the drop in the savings rate.

However, some scholars have come to a different conclusion. For example, Yang Sijia (2013), Yang Ying and Lin Huanrong (2013 et al.) found that population aging may promote the increase of household savings, especially with the extension of life expectancy, residents are more inclined to make more preventive savings than before. Liu Shenglong, Hu Angang (2012) and Yuan Ni (2020 et al.) found that the increase of the elderly population has a negative impact on residents' savings, especially on rural personal savings, which is consistent with the theory of life cycle hypothesis.

In summary, researchers have not come to a consensus regarding how population aging affects savings. Some research indicates that the aging population reduces savings, while other research indicates that the aging population may actually encourage savings growth. These studies offer China valuable resources for addressing the issue of aging populations.

### 3. RESEARCH METHODS

#### 3.1 Data source and model principle

##### (1) Data source

This study examines the relationship between household saving rate and population aging using data from China's household saving rate, elderly dependency ratio, and child dependency ratio from 2010 to 2020. The Chinese database and statistical yearbook are the sources of the data.

**Table 1. Variable definition table**

Index name	Variable symbol
Household saving rate	s
Elderly dependency ratio	odr
Child dependency ratio	cdr

##### (2) The model concept

This study uses an empirical model called the vector autoregressive model (VAR) to examine the relationship between rural finance and rural areas. The VAR model has emerged as the most widely used model for the analysis and prediction of several connected economic variables. It is frequently used to predict interrelated time series variables and assess the effects of random disturbance sources on the system. The VAR model's modeling concept is to build a regression model by treating each system's endogenous variable as a function of the variables' lag term.

The VAR model's structure is as follows: all endogenous variables in the system are employed as functions of their respective lag values to build the model.

Typical VAR model form:

$$z_t = \sum_{i=1}^A A_i z_{t-i} + U_t$$

Where  $z_t$  represents the n-dimensional column vector composed of the observation values of the t period;  $A_i$  is the n\*n coefficient matrix;  $U_t$  is an n\*1 matrix composed of random error terms. Where the random error term  $u_i$  ( $i=1,2, \dots, n$ ) is a white noise process and satisfies  $E(u_{it} u_{jt})=0$  ( $i,j=1,2, \dots, n$ , and  $i \neq j$ ).

#### 3.2 Test of the unit root

To determine if the time series data is stable, use the unit root test. "Pseudo-regression" is the term used when the regression findings are skewed and the data is not reliable enough to meet the minimal requirements of regression. Concurrently, the co-integration test is predicated on the results of the unit root test. The co-integration test can only be performed if the data are in the same sequence. In this work, the ADF test is mostly used. After logarithms on the data of resident savings rate, population aging, and child dependence ratio are taken, the following is the outcome of the ADF unit root test on variables LNS, LNODR, and LNCDR.

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**Table 2. Results of ADF unit root test**

sequence	variable	ADF test value	1% critical value	5% critical value	10% critical value	p-value	conclusion
Primitive sequence	LNS	-1.832932	-5.295384	-4.008157	-3.460791	0.6157	unstable
	LNODR	1.852418	-5.295384	-4.008157	-3.460791	0.9999	unstable
	LNCNR	-0.620533	-5.52186	-4.107833	-3.515047	0.9423	unstable
First difference sequence	LNS	-1.481089	-5.52186	-4.107833	-3.515047	0.7580	unstable
	LNODR	-3.419721	-5.835186	-4.246503	-3.590496	0.1229	unstable
	LNCNR	-0.81884	-4.420595	-3.259808	-2.771129	0.7630	unstable
Second-order difference sequence	LNS	-2.757965	-2.937216	-2.006292	-1.598068	0.0135	stable
	LNODR	-4.287687	-4.803492	-3.403313	-2.841819	0.0177	stable
	LNCNR	-4.181921	-4.803492	-3.403313	-2.841819	0.0200	stable

The ADF test findings show that at the significance level of 5%, the null hypothesis cannot be rejected for the logarithmic sequence of resident savings rate, population aging, and child dependence ratio data when the ADF test values under the original sequence and the first-order difference series are considered. The logarithmic sequences of the household saving rate, population aging, and child dependency ratio statistics with unit root, as well as their original sequence and first-order difference series, are all unstable. Following the second-order difference of data on household saving rate, population aging, and child dependence ratio, the ADF test values, at the 5% significant level, reject the null hypothesis. The statistics for the resident saving rate, population aging, and child dependence ratio have a steady second-order difference sequence without a unit root. Consequently, the population aging, resident saving rate, and child dependence ratio data are second-order difference stable data, meeting the co-integration test requirements.

### 3.3 EG cointegration test

A statistical depiction of the long-term equilibrium relationship between non-stationary economic variables is provided by the cointegration test. A situation known as cointegration describes this condition. While many economic variables are unstable, if certain economic indicators are connected by certain economic systems, they will have a long-term consistent trend because of the effect of common elements. The data on household savings rate, population aging, and child dependence ratio are tested in this study using the Johansen co-integration test. The test results are displayed in the table that follows.

**Table 3. Results of cointegration test**

Null hypothesis	eigenvalue	Rank trace statistics	5% critical value	p-value
None *	0.998944	92.72785	35.19275	0.0000
At most 1 *	0.771096	24.19382	20.26184	0.0136
At most 2 *	0.611294	9.449307	9.164546	0.0441

It can be observed that there are two co-integration relationships among household savings rate, population aging, and child dependency ratio based on the original hypothesis that the test values of "no co-integration relationship," "no more than one co-integration relationship," and "no more than two co-integration relationships" are all greater than the critical value of 5%.

### 3.4 Determining the ideal quantity of lag times

Various criteria or test statistics can often select different ideal lag times. We can apply the "majority rule" in this situation, which states that the latency criterion that is supported by more than half of the available judgment criteria is probably the best option.

**Table 4. Selection of optimal lag periods**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	65.36280	NA	3.69e-12	-17.81794	-17.84113	-18.10446

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1	96.20329	26.43471*	1.14e-14*	-24.05808	-24.15081	-25.20415
2	779.6835	0.000000	NA	-216.7667*	-216.9290*	-218.7723*

The best lag order for the VAR model is order 1, based on the information criterion of LR, FPE, AIC, SC, and HQ.

### 3.5 Granger test outcome

Whether a variable in a VAR model can be used to increase the prediction power of other pertinent variables is how the Granger causality test is commonly viewed. Consequently, rather than "causality" in the true Chinese sense, the essence of "Granger causality" is a "prediction" link.

Variable X is thought to be the Granger cause of variable Y if the prediction effect of variable Y under the condition that the past information of variables X and Y is included is better than the prediction effect of Y only by the past information of Y, that is, if variable X helps to explain the future change of variable Y. The foundation for developing a VAR model to examine the relationship between variables is the idea that Granger causality might reflect the presence and direction of equilibrium causality between variables in a long-term state. The test results are displayed in the table that follows:

**Table 5 Granger causality test results**

Null hypothesis	F- Statistics	p-value	conclusion
LNODR does not Granger Cause LNS	5.16644	0.0572	Reject null hypothesis
LNS does not Granger Cause LNODR	1.05968	0.3375	Accept null hypothesis

Based on the Granger test findings provided above, the test value for the initial hypothesis "LNODR does not Granger Cause LNS" is 5.16644. This result leads to the rejection of the original hypothesis at a significant level of 10%. Therefore, it can be concluded that LNODR is the Granger cause of LNS. Population aging is the primary factor that influences the resident saving rate.

### 3.6 Results of VAR model estimation

The table below displays the findings of the VAR estimation on the stationary series of data related to the resident saving rate, population aging, and child dependence ratio:

**Table 6. VAR estimation results**

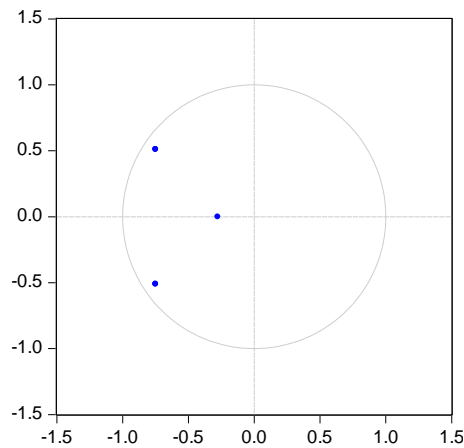
	D(LNS,2)	D(LNODR,2)	D(LNCDR,2)
D(LNS(-1),2)	-0.411614 (1.55845) [-0.26412]	-0.051814 (0.38926) [-0.13311]	-0.137693 (0.84984) [-0.16202]
D(LNODR(-1),2)	1.736054 (11.1587) [ 0.15558]	0.800618 (2.78716) [ 0.28725]	3.680839 (6.08496) [ 0.60491]
D(LNCDR(-1),2)	-1.754285 (3.39483) [-0.51675]	-0.694768 (0.84794) [-0.81936]	-2.162972 (1.85123) [-1.16840]
C	0.005917 (0.05110) [ 0.11579]	0.006621 (0.01276) [ 0.51871]	0.000897 (0.02787) [ 0.03219]
R-squared	0.148468	0.185138	0.302433
Adj. R-squared	-0.490180	-0.426008	-0.220743



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The scientific importance of the VAR model can only be achieved when it is stable. If the VAR model exhibits instability, it renders subsequent testing infeasible and diminishes the scientific significance of the VAR model. Consequently, the stability test of the VAR model is conducted initially.

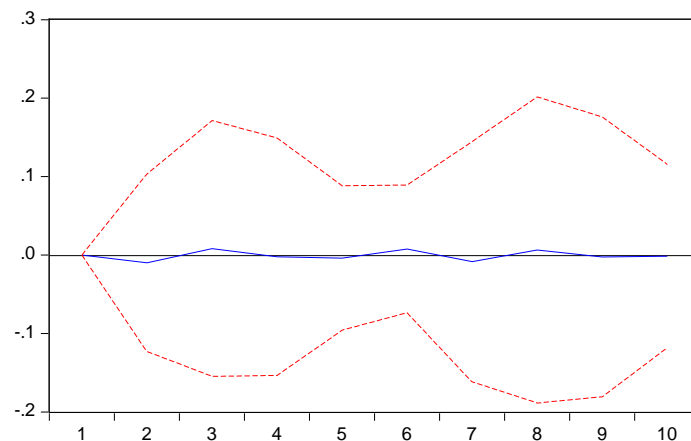
This research examines the stability of the VAR (1) model using the widely utilized AR root graph. The VAR model is considered stable if all the eigenroots of its equation lie within the unit circle. The graphic below demonstrates that all points are within the unit circle, confirming the stability of the VAR (1) model.



**Figure 1 AR root diagram**

### 3.7 Analysis of impulse response functions

The impulse response function is a tool that may effectively represent the dynamic impact pathway of one variable's influence on another variable. An analysis using pulse response function was conducted on the stationary series of data for resident saving rate, population aging, and child dependency ratio. The specific results may be seen in the picture below:



**Figure 2 Image of impulse response function**

The pulse response images clearly demonstrate that population aging has a restraining effect on the household savings rate in both the short and long term, while it has a stimulating effect in the medium term.

### 3.8 Examination of observed outcomes

Analysis using a VAR model demonstrates the enduring correlation between data on household savings rate, population aging, and child dependency ratio. Specifically, the effect of population aging on household savings rate is inhibitory in the short term, but it will have a promoting effect in the medium term. Furthermore, the variation in the household savings rate can be partially attributed to the demographic shift towards an aging population. This highlights the intricate relationship between population aging and its impact on household savings behavior. These conclusions are mutually reinforcing and offer a thorough analysis and insight into the influence of population aging on the household savings rate.

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### **4. POLICY RECOMMENDATIONS**

China's present population aging scenario exhibits large-scale and rapid characteristics. The National Bureau of Statistics released data showing that by the end of 2023, there were 296.97 million people in the country who were 60 years of age or older, making up 21.1% of the total population. Of those, 216.76 million were 65 years of age or older, making up 15.4% of the total population. In addition, Yuwa Population's "China Population Forecast Report 2023" "Middle Plan" predicts that China will become a super-aging society with a population of over 20% by 2030, continue to grow quickly to reach roughly 36.2% in 2060, and then maintain a level of roughly 46% in 2084 and beyond.

#### **4.1 Implement the gradual retirement delay policy**

##### **4.1 Enact the policy of gradually extending the retirement age.**

Enforcing a progressive policy of delaying retirement has become an essential measure to address the difficulties posed by China's aging population. China's existing retirement policy is outdated as it was formulated in 1978 and does not account for the large rise in average life expectancy. Consequently, the original retirement age is no longer appropriate given the current population dynamics. The implementation of the retirement delay policy not only helps mitigate the adverse effects of population aging on the economy but also fosters economic development.

Several other nations have already implemented the delayed retirement policy many years ago. By studying their reform experiences and considering China's specific circumstances, we may propose a delayed retirement policy that is suited for our country. Nevertheless, the policy of postponing retirement may appear uncomplicated, but in reality, it necessitates the modification and restructuring of the entire social and economic framework, which may require the implementation of additional pertinent policies. Consequently, we can gradually enhance the strategy of delaying retirement and adopt a gradual method to increase the retirement age. In order to guarantee the successful execution of the policy and the consistent progress of society, it is important to take into account many factors throughout the implementation phase, such as shifts in the job market, enhancements to the social welfare system, and the well-being of the older population. In order to effectively implement the delayed retirement policy, it is imperative for the government, businesses, and all sectors of society to collaborate and tackle the challenges posed by the aging population. This collaboration is essential for promoting sustainable and robust economic growth.

##### **4.2 Improve the social old-age security system**

Even though China has begun implementing social pension insurance policies, the majority of the population still prefers to rely on family pensions, and the country's participation rate in social pension insurance remains low. Moreover, the pension insurance schemes in rural and urban areas varies significantly. Superior old-age insurance services are frequently available to employees in urban areas; in rural areas, however, basic medical insurance is the only option available, and the old-age insurance policy has not been properly implemented, leaving the senior lives of farmers unprotected.

Consequently, the social security system must to be expanded and gradually shaped to encompass the entire labor force, both in urban and rural regions. This involves improving the rural old-age insurance policy to ensure that rural inhabitants can receive the same old-age security benefits as urban ones. In order to guarantee that a greater number of individuals can utilize the social endowment insurance system, it is imperative to enhance policy publicity and promotion, along with increasing awareness and participation rates. It is also essential to increase investment in the construction of basic senior care facilities and to elevate the grade of elderly care services in order to ensure that the elderly may obtain high-quality elderly care services and experience happy and healthy lives in their later years.

In conclusion, broadening the scope of the social pension insurance program and creating and enhancing a cohesive social security framework in both urban and rural regions are critical steps toward resolving China's pension security issue and are unavoidable prerequisites for achieving the comprehensive building of a modern socialist nation.

##### **4.3 Continue to promote technological innovation**

The continuous promotion of technological innovation is an important measure to solve the problem of population aging and labor shortage. In the face of the decline of human capital may bring about the reduction of output level, it has become a top priority to accelerate the pace of technological innovation and replace human resources with technology. To this end, it is necessary to further



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relax the entry threshold for innovation, encourage the broad masses to participate in innovation activities, and provide a higher level of fiscal, tax and financial support for innovation. In addition, the establishment of a complete legal system, favorable policy guidance, continuous investment in scientific research, a relaxed social environment and an unimpeded information platform can fully mobilize the enthusiasm for innovation and promote the continuous development of technological innovation.

In order to protect innovation achievements, we should also define and protect the proprietary rights of innovation achievements through legislation and other means, establish a mechanism for the use, compensation and return of innovation achievements, further expand the profit margin of innovation, and encourage more enterprises and individuals to actively invest in technological innovation. Only by continuously promoting technological innovation and improving production efficiency can we better meet the challenges of an aging population and labor shortage, and achieve sustained and healthy economic development and comprehensive social progress.

### 4.4 Improve the quality of the labor force

The development of a strong innovation ecosystem and increased industry-university-research collaboration are imperative in addition to quickening the rate of technical innovation. The government ought to boost funding for universities and research institutions, incentivize businesses to invest more in R&D, and stimulate the translation and practical implementation of scientific and technological advancements. Simultaneously, the establishment of an open innovation platform is necessary to foster collaboration and exchanges among innovators across many domains, as well as expedite the dissemination and promotion of scientific and technological advancements.

Talent introduction and training are also very important. In addition to encouraging young students to actively participate in scientific and technological innovation, we should place a high value on developing a team of talents with an inventive spirit and practical skill.

At the same time, we will actively introduce international advanced scientific and technological talents and teams, strengthen international cooperation and exchanges, learn from and absorb advanced foreign scientific and technological concepts and methods, and promote the improvement of China's scientific and technological innovation level.

In short, continuing to advance technological innovation is essential to meet the challenges of an aging population and labor shortage. Through measures such as strengthening industry-university-research cooperation and optimizing personnel policies, we will promote the sustainable development of technological innovation and provide solid technical support for achieving high-quality economic development and all-round social progress.

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