



THEORETICAL AND PRACTICAL RESEARCH ON CHINA'S RESPONSE TO POPULATION AGING IN THE NEW ERA

PhD **Zhang Zhe**

National University of Uzbekistan

ORCID: 0009-0005-8626-2013

Abstract. Population aging is an important trend of social development. At present, China is in the largest aging process in history, catching up with or even surpassing the aging speed of Western countries in the rapid evolution, with many pressures and challenges under the complex internal and external environment. China has put forward a series of new theories, new ideas and new strategies on the work of aging, forming a theoretical system with rich connotation, complete system and strict logic, which guides the practice of the Chinese government to deal with population aging. This paper deeply analyzes the relevant theoretical basis, analyzes the current situation, characteristics and causes of China's aging, and summarizes the practice of China's innovative response to aging since 2010, in order to provide valuable experience for the rest of the world to deal with aging.

Key words: Aging, China, New Era, Innovation and Practice.

YANGI DAVRDA AHOLINING QARISHIGA XITOYNING MUNOSABATIGA OID NAZARIY VA AMALIY TADQIQOTLAR

PhD **Chjan Zhe**

O'zbekiston Milliy universiteti

Annotatsiya. Aholining qarishi ijtimoiy rivojlanishning muhim tendentsiyasidir. Hozirgi vaqtda Xitoy tarixdagi eng katta qarish jarayonida bo'lib, G'arb mamlakatlarining jadal evolyutsiyada qarish tezligiga yetib boradi yoki hatto undan oshib ketadi, murakkab ichki va tashqi muhit ostida ko'plab bosim va qiyinchiliklar mavjud. Xitoy qarishni oldini olish bo'yicha bir qator yangi nazariyalar, yangi g'oyalar va yangi strategiyalarni ilgari surdi, boy ma'noga ega, to'liq tizim va qat'iy mantiqqa ega nazariy tizimni shakllantirdi, bu Xitoy hukumatining aholining qarishi bilan shug'ullanish amaliyotini boshqaradi. Ushbu maqola tegishli nazariy asoslarni chuqur tahlil qiladi, Xitoyda qarishning hozirgi holati, xususiyatlari va sabablarini tahlil qiladi va dunyoning qolgan qismiga qarish bilan shug'ullanish uchun qimmatli tajribani taqdim etish uchun Xitoyning 2010 yildan beri qarishga innovatsion munosabati amaliyotini umumlashtiradi.

Kalit so'zlar: qarish, Xitoy, Yangi davr, Innovatsiya va amaliyot.

ТЕОРЕТИЧЕСКИЕ И ПРАКТИЧЕСКИЕ ИССЛЕДОВАНИЯ РЕАКЦИИ КИТАЯ НА СТАРЕНИЕ НАСЕЛЕНИЯ В НОВУЮ ЭПОХУ

PhD Чжан Чжэ

Национальный университет Узбекистана

Аннотация. Старение населения является важной тенденцией общественного развития. В настоящее время Китай находится в крупнейшем процессе старения в истории, догоняя или даже превосходя скорость старения западных стран в быстрой эволюции, с множеством давлений и проблем в сложной внутренней и внешней среде. Китай выдвинул ряд новых теорий, новых идей и новых стратегий в области старения, сформировав теоретическую систему с богатым подтекстом, полной системой и строгой логикой, которая определяет практику китайского правительства по решению проблемы старения населения. В этой статье глубоко анализируется соответствующая теоретическая основа, анализируется текущая ситуация, характеристики и причины старения Китая, а также обобщается практика инновационного реагирования Китая на старение с 2010 года, чтобы предоставить остальному миру ценный опыт борьбы со старением.

Ключевые слова: Старение, Китай, Новая Эра, Инновации и Практика.

Introduction.

Population aging is an important trend of social development and an inevitable result of population transition. Since 2022, the population born during China's second baby boom period has entered the old age period, and the aging population has entered the "fast track" of growth, and China will enter the stage of moderate aging. After 2022, China will enter the second peak of elderly population growth with an average annual growth of nearly 12 million, and the aging problem will gradually show a concentrated outbreak trend (Li, 2015). It is predicted that by 2025, the number of people aged 65 and above will exceed 210 million, accounting for about 15%; By the 2030s, 310 million people will be aged 65 or above in China, accounting for 22.3 percent of the total population. By the middle of this century, the number of people aged 65 or above will reach 380 million, accounting for 27.9 percent of the total population (Mo, 2009).

At present, China is undergoing the largest aging process in history. It is catching up with or even surpassing the aging rate of Western countries in the process of rapid evolution, and faces many pressures and challenges despite the complex internal and external environment. China has put forward a series of new theories, new ideas and new strategies on aging work, forming a theoretical system with rich connotation, complete system and rigorous logic, which guides the Chinese government's practice in dealing with population aging. The top-level design for coping with population aging has been improved, major laws, policies and systems have been gradually finalized, the material foundation has been further consolidated, various security and service systems have been improved, and a social atmosphere of caring for the elderly has been formed and continuously improved. All these are of great significance for other countries in the world to cope with population aging.

Research Status and Theoretical Basis

2.1 Research Status and Review

Since 2000, with China's entry into the population aging society, scholars have paid more and more attention to population aging, and their understanding of coping with population aging has been constantly improved. The main conclusions focus on the following aspects:

The first is the research on the connotation and essence of population aging. According to the definition of the Demographic Dictionary of the United Nations Population Commission, when the proportion of the elderly in the population increases, we call it population aging. The

statistical caliber of the elderly population generally (Drafting & Li, 2015) includes two kinds: 60 years old and (60+) and 65 years old and above (65+). Population aging is a dynamic process. Zheng Gongcheng (2020) argued that population aging refers to the dynamic change of population structure in which the increase of average life expectancy and the decrease of fertility rate lead to the corresponding increase of the proportion of the elderly in the total population. Yuan Xin and Jin Niu (2020) believed that the essence of the aging problem is an economic problem of "making a cake". How to give full play to national value, realize personal wealth accumulation, promote national economic prosperity, and consolidate a solid foundation for people's livelihood for "sharing the cake" also needs to adhere to the gradual thinking and fully recognize efficiency and fairness (Lin, 2021).

The second is the research on the characteristics and challenges of population aging. "Get old before you get rich" and "get old before you get ready" are the basic characteristics of China's aging population, and also the theoretical basis for understanding the problem of population aging. They are reflected in the weak economic strength, the imperfect system and mechanism for aging, and the unbalanced and inadequate economic and social development. Bao (2020) believed that: first, the degree of population aging continues to increase, and the trend of aging is obvious; Second, the speed of population aging has been significantly accelerated; Third, the urban-rural gap in population aging has widened rapidly; Fourth, regional differences in population aging have widened; Fifth, the speed of population aging deviates from the speed of economic development (Tong, Wang, & Geng, 2015).

In general, the academic research on the aging problem has made some achievements, but there is still room for further research. Firstly, the perspective of population aging research needs to be further expanded; Secondly, the thoughts, theories and policies related to population aging in China need to be sorted out and refined. Thirdly, the practical experience of coping with population aging needs to be summarized and summarized. In this paper, the practice and experience of China are tempered, in order to provide some experience for China and other countries to cope with aging.

2.2 Theoretical Basis of China's Response to Population Aging

First, the theory of population transition. Population transition theory refers to the process of population reproduction from primitive to traditional and then to modern. It proposes that the population transition has gone through the development process from primitive to traditional and then to modern population reproduction type. The original population reproduction type is "high high low" (high birth rate, high death rate, low growth rate), which is the starting point of population transition. The traditional population reproduction type is "high, low and high" (high birth rate, low death rate, high growth rate), which is the initial stage of population transition. This stage is selected by the intervention of marriage, family, medical and health technology level. The modern population reproduction type is "low and low" (low birth rate, low death rate, low growth rate), and the population is at a low level of static and negative growth, due to the change of female fertility concept and the increase of raising cost.

Second, the theory of multiple welfare. Rose, a scholar of the theory of welfare pluralism, argued in his paper "The Same Goal, Different Roles -- The Contribution of the State to the Pluralistic Combination of welfare" that the welfare state can easily lead to the crisis of the welfare state by only relying on the unitary welfare supply subject of the state to solve the welfare problem. The welfare provision should be transformed from a unitary state to a ternary state, that is, a "welfare triangle" composed of the state, the market and the family. The sum of the three constitutes the total social welfare (Tong, Wang, & Geng, 2015). Independent welfare providers will have deficiencies and defects. Only when the three entities join together to learn from each other's strengths and make up for each other's weaknesses, can the whole be greater than the part and its welfare be maximized.

Third, Life cycle theory. In the 20th century, Franco Modigliani and Richard Brumberg of the United States proposed the life cycle theory, which explored the relationship between consumption, income and savings from the perspective of human life cycle. According to the income status of the whole life cycle, people will balance the consumption and saving behavior ability of each stage. It emphasizes that the saving potential of consumers is the main factor that determines the amount of personal consumption expenditure, and individuals should rationally allocate income and wealth from the perspective of the whole life cycle to achieve the optimization and efficient use of resources. Individuals' consumption and saving behaviors have an important impact on families and society, which is an important theoretical basis for analyzing the impact of age structure change on economic growth and coping with population aging.

3. Characteristics, Causes and Impacts of Population Aging in China

Since 2010, China has entered a new era, and the degree of population aging has gradually intensified. At the same time, due to the influence of China's previous population policy, China's aging presents different characteristics.

3.1 Characteristics of China's Aging Population

(1) The population has maintained a low growth rate, and the degree of population aging has deepened

Globally, China is the largest developing country with the largest population and the largest elderly population. According to the Statistical Yearbook of the National Bureau of Statistics (2020) and the seventh population census data, as shown in Figure 1, China's total population was only 580 million in 1953, 690 million in 1964, more than 1 billion in 1982, 1.13 billion in 1990, 1.26 billion in 2000, 1.34 billion in 2010, and exceeded 1.4 billion in 2019. In 2020, the total population of China reached 1411.78 million, ranking first in the world. China also has a relatively large elderly population compared with other countries. In 1953, there were 26 million people over the age of 65 in China, accounting for 4.4% of the country's total population. In 1964, the number of people over 65 years old decreased to 25 million, accounting for 3.6% of the total population in China. In 1982, 49 million, accounting for 4.9%; 63 million in 1990, accounting for 5.6%; In 2000, 88 million, accounting for 7.0%. China entered an aging society. Moreover, this trend will become more and more serious, until 2050, China's population over the age of 60 will remain at the level of 400 million, that is to say, on average, one out of every four elderly people in the world lives in China, and the number of elderly people in China is more than the total number of elderly people in developed countries.

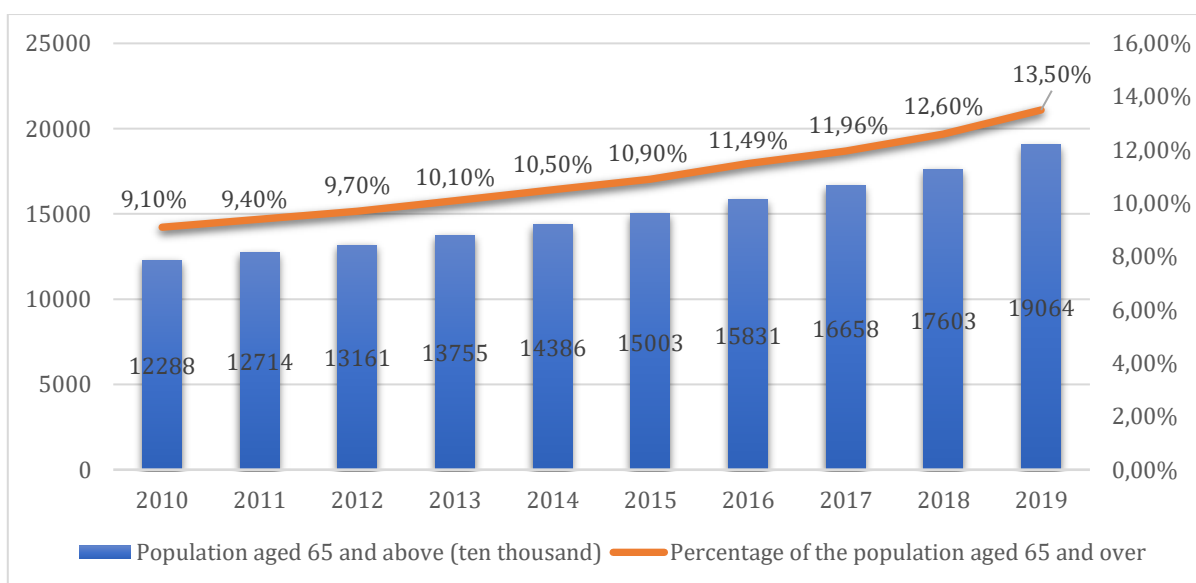


Figure 1 Number and proportion of the population aged 65 and above in China from 2011 to 2020

(2) Population aging started late and developed rapidly

The onset of population aging in developed countries was earlier than that in China. France became the first country in the world to enter an aging society in 1865. It was followed by Sweden in 1890, the United Kingdom in 1931, the United States in 1944 and Japan in 1970. China, on the other hand, only entered the aging society in 2000. France, the first country to start aging, was 130 years earlier than China, and Japan, also in Asia, was 30 years earlier than China. The period from the 2020s to the 1950s was the most serious period of population aging in China, with a growth rate of about 21%. The number of elderly people increased rapidly and the aging of the population accelerated. Looking at the development speed of population aging in the world, the speed of population aging in China is faster than that in other countries with aging populations in the world. It only took 27 years for China's population aged 60 and above to increase from 10 percent to 20 percent of its total population, compared with 140 years for France, 80 years for Sweden and 78 years for the United States. Even Japan, which has the most aging population, took 29 years, which is still two years longer than China.

(3) The geographical distribution of population aging is uneven, and the gap between urban and rural areas is widening

China has a vast territory, marked differences in regional development and unbalanced and inadequate development. The economic development in the eastern region is faster than that in the western region, and that in the coastal region is faster than that in the interior and border areas. The aging process of China's population also shows obvious regional differences. As shown in Table 1.

Table 1.

Proportion of Elderly Population Aged 65 and Above in China as a Whole and by Region (%)⁹⁵

Regions	Specific gravity	Area	Specific gravity	Region	Specific gravity	Area	Specific gravity
Nationwide	13.50	Shandong	15.13	Beijing	13.30	Fujian	11.10
Liaoning	17.42	Anhui	15.01	Zhejiang	13.27	Yunnan	10.75
Chongqing	17.08	Hunan	14.81	Inner Mongolia	13.05	Hainan	10.43
Sichuan	16.93	Tianjin	14.75	Shanxi	12.90	Ningxia	9.62
Shanghai	16.28	Hubei	14.59	Gansu	12.58	Qinghai	8.68
Jiangsu	16.20	HEBEI	13.92	Guangxi	12.20	Guangdong	8.58
Ji Lin	15.61	Henan	13.49	Jiangxi	11.89	Xinjiang	7.76
Heilongjiang	15.61	Shaanxi	13.32	Guizhou	11.56	Xizang	5.67

Among the provinces, municipalities and autonomous regions in China, only Tibet has not entered the population aging society. Entering the new development stage, the new urbanization process is accelerating, and the urbanization rate is greatly increased. The developed eastern coastal areas will once again welcome the inflow of young and middle-aged labor and children from the central, western and northeastern regions. The aging degree in the eastern and coastal areas will be effectively alleviated, and the aging degree in the western and northeastern regions will be increasingly high. The uneven regional distribution of China's aging population will become more and more obvious.

(4) Population aging is ahead of modernization, from "getting old before getting rich" to "getting old while getting rich"

In terms of the degree of aging and the international per capita GDP, in 2019, the elderly aged 65 and above accounted for 12.6% of the total population in China, and China's per capita GDP was US \$10,000, while the elderly aged 65 and above accounted for 12.6% of the total

⁹⁵ Data are from China National and Regional Statistical Yearbook

population in the United States, Japan and the Republic of Korea in 1990, 1992 and 2015, respectively. Their per capita GDP was about US \$24,000, US \$30,000 and US \$27,000, respectively. By the middle of this century, China's population aged 60 and above will reach a peak of more than 400 million people, accounting for about 31 percent of the total population, and enter the stage of high-level aging. However, its per capita GDP can only reach the level of the current moderately developed countries, which indicates that the contradiction between China's aging process and economic and social development and modernization will last for a long time. In 2019, 18.1 percent of China's population aged 60 or above ranked 57th in the world. China's per capita GDP has reached 10,000 US dollars, ranking 72nd in the world, and dropped to around 30 according to the coordination index between population aging and economic development. As a result, China has moved from "getting old before it gets rich" to "getting old while getting rich" (Li, 2020).

3.2 Causes of China's aging population

(1) Root cause: rapid economic and social development

In the early days of the founding of China, the population structure belonged to the young population structure, and there was no aging phenomenon. The state's attention to the aging of the population lagged behind. Under the guidance of the idea of "strength in numbers", the family planning policy was not implemented, which led to the birth peak in the mid-1950s and the mid-1960s. The first baby boom occurred from 1950 to 1958, with an average annual birth rate of 21 million. From 1962 to 1975, the average annual number of births during the second baby boom was 26.28 million. Since 2010, the elderly of the first baby boom have entered the old age period, and the people of the second baby boom will also enter the old age period, which has greatly promoted the aging of the population. After the tremendous development after the reform and opening up, China has undergone earth-shaking changes and its economy has developed rapidly. Since the reform and opening up, the GDP has risen from 367.87 billion yuan in 1978 to 101.3567 billion yuan in 2020, an increase of 275 times. In the first 30 years of reform and opening up, the average annual GDP growth rate was about 9%, which can be called a miracle in the history of world economic development. China's per capita GDP rose from 385 yuan in 1978 to 71,828 yuan in 2020, and the birth rate dropped from 18.25 per thousand in 1978 to 8.5 per thousand in 2020. The natural population growth rate dropped from 12 per thousand in 1978 to 1.45 per thousand in 2020. The rapid development of the economy and the abundance of the material foundation have led to the rapid development of the aging population. In some areas with a relatively high population aging in China, such as Shanghai, Jiangsu and Zhejiang, they are some areas at the forefront of reform and opening up, with a high level of economic development and a high degree of aging.

(2) The direct cause: the improvement of medical and health care level and the improvement of security system

In the early days of the founding of New China, the average life expectancy of our population was 39 years for males and 42 years for females. In 1981, it was 66.28 years for men and 69.27 years for women. In 2010, the sixth census data showed that men were 72.38 years old and women 77.37 years old. In 2020, the seventh census data showed that the average life expectancy in China was 77 years old, 73.64 years old for males and 79.43 years old for females. It is estimated that by 2050, China's average life expectancy will be 85 years. Therefore, the level of medical and health care has a significant impact on the development of aging. In order to ensure Chinese residents' rights to health care, the Chinese government has formulated a series of policies and systems since the beginning of the last century. In recent years, the medical insurance system has been reformed, and the medical insurance system for urban employees and the rural cooperative medical insurance system have been established. 95.3 percent of urban residents and 98.3 percent of rural residents are covered by various types of medical insurance. Among them, 99.9 percent of the elderly eligible for the new rural

cooperative medical insurance system are covered by the new medical insurance system, effectively ensuring people's safety.

(3) Indirect reason: the acceleration of urbanization process

In China, urbanization has expanded to urbanization, and the rural population has shifted not only to cities but also to small towns, realizing the process of non-agriculture and citizenization. The speed and scale of China's urbanization amaze the world. In 2000, the level of urbanization was only 35%. According to the sixth census data, from 2000 to 2010, China's urban population increased by 207 million, while the rural population decreased by 133 million, and the urbanization rate of the population increased by 13.5 percentage points. A huge amount of rural population has been transferred to urban areas, leaving a large number of elderly people left behind. According to the seventh census, the urban population is 901.99 million, accounting for 63.89 percent, while the rural population is 509.79 million, accounting for 36.11 percent. Compared with the sixth census data, the urban population increased by more than 230 million, up 14.21 percentage points. The rural population decreased by more than 160 million. 2) In the past two decades since the beginning of the new century, the urbanization process has been accelerating and the aging population has been increasing simultaneously.

(4) Subjective reason: the change of fertility concept

With the improvement of education level, the fertility intention has also changed. At the beginning of the founding of the People's Republic of China, the illiteracy rate was as high as 80 percent, and the nine-year compulsory education in the new era covered 100 percent of the population. In 2018, the enrollment rate of senior high schools reached 88 percent, and the gross enrollment rate of higher education rose from 2.7 percent in 1978 to 48 percent in 2018. On the one hand, good education enables people to accept advanced and scientific ideas, give up traditional and backward feudal ideas and ideas, and form a healthy conception of fertility. According to relevant studies, the degree of adult education is negatively correlated with fertility rate. Generally speaking, the higher a woman's education level is, the less affected by the traditional "raising children for old age" and "having more children and more happiness", and the lower her willingness to give birth. On the other hand, children's education is an important part of the family expenditure. The extension of the time limit of education, the improvement of talent requirements, and the cost of family education have greatly increased, which makes the families who are willing to bear children have their will but not their ability. At the same time, the opportunity cost of family childbearing increases, which leads to the decrease of wage income and the increase of leisure cost. Even if the two-child policy is fully liberalized, there are still not many families who are willing to have a second child. After the introduction of the "single two-child" policy, there are 11 million families eligible for childbearing, and only 1.069 million families apply for childbearing, and only 470,000 couples actually have a second child. In addition, the mortality rate is negatively correlated with the education rate. Science is the primary productive force, and education continues to provide talents for science. Good education can cultivate more high-quality talents, which is more conducive to creating social wealth, thus improving people's living environment and medical and health conditions, prolonging people's average life expectancy and aggravating population aging. In a word, the change of fertility intention promotes the process of population aging.

(5) Objective reason: the implementation of family planning policy

China's family planning policy has a lot to do with the decline of fertility rate. After the founding of the People's Republic of China, the Chinese population experienced a demographic transition, especially after the first and second baby boom. Faced with a large and rapidly growing population, the state implemented the family planning policy to control the population quantity and improve the quality of the population. In July 1971, The State Council approved and passed the Report on the Work of Family Planning. Since then, the state has incorporated population growth control into the national economic development plan. In the 1970s, it also

put forward the strategy of "late, thin and few". In September 1980, the Chinese government issued an Open Letter to All Communist Party Members and Members of the Communist Youth League on the Issue of Controlling China's Population Growth, advocating a "one-child" policy in which couples are allowed to have only one child. In 1982, family planning was established as a basic state policy and written into the Constitution. With the vigorous promotion of the family planning policy, the fertility rate dropped rapidly, from 18.25 per thousand in 1978 to 8.50 per thousand in 2020, and the natural population growth rate was 12 per thousand in 1978 to 1.45 per thousand in 2020. Obviously, the implementation of the family planning policy has led to a decline in the birth rate and China has entered the ranks of countries with low fertility rate. In 2022, China ushered in the era of negative population growth for the first time.

3.3 Impact of China's aging population on the economy

Keynes proposed that the population problem is a major economic problem. Population aging will affect economic development in all aspects. Population aging will reverse the consumption structure, increase the burden of economic operation, change the structure of labor resource allocation, and affect industrial development.

(1) Reverse the consumption structure.

Expanding domestic demand and boosting consumption is a long-term economic strategy for China's economic development. Marx once pointed out that consumption determines production. The aging population is the consumer. With the rapid development of population aging, consumption has increased significantly in terms of total amount. However, the income level of the elderly population is at a medium and low level, the elderly live with diseases in their remaining life, and the medical consumption expenditure is large. The total consumption capacity and consumption demand of the elderly are far lower than that of the young and middle-aged people. The demand and consumption habits of young and middle-aged people are different from those of the elderly. Young and middle-aged people are the main force of economic consumption, and their habits of real estate demand, tourism consumption, education consumption and advanced consumption far exceed the consumption level of the elderly. With the development of aging population, the decrease of children population and the increase of elderly population will inevitably lead to the shortage of effective demand. The young and middle-aged population with strong consumption capacity is decreasing, and the consumption structure is changing. Even if the elderly population increases part of the consumption, the overall demand for national consumption is difficult to maintain a continuous upward trend.

(2) Increasing the burden on the economy

With the socialized reform of the social security system in the 1980s and 1990s, population aging has been rapidly promoted, and the social burden of coping with population aging has become more and more heavy. Due to the increase of the elderly population, the level of pension expenditure will rise sharply, which will greatly increase the government's public expenditure, which will lead to the decline of government savings. There is a phenomenon of "empty account" running in individual pension accounts, which reached 3.1 trillion yuan in 2013. Since 2005, the proportion of pension fund expenditure in GDP has continued to increase. In 2015, pension fund expenditure for urban workers accounted for 2 percent of GDP, and by 2018, it had accounted for 4 percent of GDP. The growth rate of China's pension fund income has been slower than the growth rate of expenditure. We increased the burden on government finances, with government subsidies exceeding one trillion yuan in the past decade. We will change the structure of labor allocation. Labor resources are an important factor in production. The aging population has led to an absolute reduction in the number of workers in the total population, and the labor-intensive industries developed by relying on cheap labor have lost their advantages. The competitive advantage of low cost of labor has gradually disappeared, and enterprises have the problems of "labor shortage" and "labor difficulty". The decline of

labor force will inevitably lead to changes in the relationship between supply and demand in the labor market, and change the structure of labor resource allocation.

(3) It will affect industrial development

Population aging affects the primary, secondary and tertiary industries. China's primary industry, agriculture, has not been fully modernized, and some rural areas still use traditional farming methods. Due to the superposition of urbanization and aging, young and middle-aged people in rural areas flow into cities and towns, and most of the remaining people are elderly and women. The agricultural economy has become an aging economy, and rural areas mainly rely on the elderly for agricultural production. A large number of fertile land has been abandoned in some villages, which has little impact on the country's food reserves at present, but is still worrying in the long run. Due to the internal aging of the labor force, the secondary industry mainly requires young labor force, and the shortage of young labor force has a great impact on the adjustment of economic mode and industrial upgrading. In an aging population society, more and more elderly people need to be supported, and the pension demand has become an important part of the economic demand, which promotes the development of the pension industry and related services, and the silver economy will become a new economic growth point.

Fourth, China's innovative approach to cope with the aging society in the new era

4.1 Improve the rule of law and health public policy system for the elderly

In order to comprehensively protect the legitimate rights and interests of the elderly, China promulgated and implemented the Law of the People's Republic of China on the Protection of the Rights and Interests of the Elderly in 1996. With the development of the economy and society and the intensification of the aging trend, the state revised it again at the end of 2012, revising many new contents, making it one of the most revised laws since the founding of the People's Republic of China. In 2013, the newly revised Law of the People's Republic of China on the Protection of the Rights and Interests of the Elderly was formally implemented. Since then, the active response to the aging population has been incorporated into the national law and has become the will of the state. Subsequently, it was revised again in 2015 and 2018, which is a leap forward in China's elderly security work in the process of rule of law, and is the legal basis for China to actively respond to population aging in the new era.

The combination of medical care and elderly care is a new way of providing for the aged, which organically combines medical care and elderly care resources. It is also named as the integration of medical care and elderly care, which is a way of further integration and common development of management, service and talent. China's national and local policies on the combination of medical care and elderly care take into account both demand and supply, and provide multi-dimensional incentives and support for the combination of medical care and elderly care. The details are shown in Table 2.

4.2 Explore new pension models with Chinese characteristics

With the improvement of economic conditions and the change of the migration of working areas, more and more elderly people need a large number of services such as family care and spiritual support, which makes the original family pension mode cannot fully meet the needs. The views and modes of pension follow the change and innovation of The Times, and various modes are intertwined, interconnected and integrated, and develop together. Various models are interwoven, interconnected and integrated, and developed together. New models such as community home care, combination of medical care and health care, mutual assistance, housing care, and smart care have been promoted.

Table 2.

**Special Policies for the Combination of Medical Care and Elderly
Care were Issued for the First Time**

Topics	Policy name	Issuing agency	Time of Posting
Guidance	A guideline on promoting the integration of medical and health care and elderly care services	The State Council	October 18, 2015
Division of key tasks	Notice on printing and distributing the division of Labor plan for integrating medical care and elderly care	National Health and Family Planning Commission	April 17, 2016
Service organization license	Notice on the licensing of medical and nursing service institutions	Ministry of Civil Affairs, National Health and Family Planning Commission	April 8, 2016
Selection of pilot units	Notice on the selection of national pilot units combining medical care and elderly care	Ministry of Civil Affairs and National Health and Family Planning Commission	May 17, 2016
Pilot units identified	Notice on determining the first batch of state-level pilot units for combining medical care with elderly care	Ministry of Civil Affairs and National Health and Family Planning Commission	June 16, 2016
Monitoring efforts	Notice on monitoring the combination of medical care and elderly care	Ministry of Civil Affairs and National Health Commission	2017
Institutional approval and registration	Notice on the Examination and approval and registration of institutions combining medical care and elderly care	The National Health Commission, the State Administration for Market Regulation and the National Administration of Traditional Chinese Medicine	May 27, 2019
"Call for Experience Promotion	Notice on the collection and promotion of typical experience in the combination of medical care and elderly care	National Health Commission	June 25, 2019
Pushing deeper	Opinions on further promoting the development of combining medical care with elderly care	National Health Commission, Ministry of Civil Affairs, National Development and Reform Commission, Ministry of Finance, Ministry of Education, etc	Oct 23, 2019
List of typical experiences	The list of typical experiences in the combination of medical care and elderly care in China	National Health Commission	December 12, 2019
Institutional Service Guide	Notice on the issuance of guidelines on Institutional services for the Integration of medical care and elderly care (trial)	National Health Commission, Ministry of Civil Affairs, National Administration of Traditional Chinese Medicine	December 23, 2019
epidemic prevention and control	Notice on further improving the prevention and control of COVID-19 in institutions that combine medical care with nursing care	The State Council	February 17, 2020
Pilot agencies identified	Notice on determining the first batch of pilot institutions for remote collaborative services combining health care and nursing care for the elderly	National Health Commission	August 28, 2020
Improving service quality	Notice on improving the service quality of medical and elderly care institutions	National Health Commission and National Administration of Traditional Chinese Medicine	December 3, 2020

(1) Community home care model

Community home-based care for the aged is a socialized service operation mode based on family as the core, relying on community and professional service institutions, through government purchase of services, social participation, and undertaking by non-governmental organizations. The service forms mainly include door-to-door service and neighborhood mutual assistance in the community, and the service contents include life care, medical care, psychological comfort and so on.

In China, the community home care model has achieved rapid development since 2010. By 2020, China had 421,000 community service stations and 28,000 community service centers. The number of community old-age care institutions and facilities increased from 19,000 in 2014 to 291,000, and the number of community mutual aid old-age care facilities also increased from 40,000 in 2014 to 147,000.

(2) The model of combining medical care and health care with elderly care

The mode of medical care and health care combined with pension is the combination of medical care and pension for the elderly, and the integration of medical care with home care, community care, institutional care and other pension modes. It is the development and innovation of the traditional pension concept, promotes the functional upgrading of the pension mode, realizes the comprehensive coverage of medical security and support services, and improves the quality of residents' old age life. It promotes the realization of the goal of having medical care for the sick and providing for the elderly. In 2016, the National Health and Family Planning Commission and the Ministry of Civil Affairs identified the first and second batches of 90 state-level pilot units combining medical care and elderly care. Driven by the national policy of combining medical care with elderly care, many cities have carried out the model of combining medical care with elderly care in practice. From the actual situation of the integration of medical care and elderly care in various cities, it can be summarized as medical institutions to expand elderly care services, elderly care institutions to expand medical services, and the integration mode of medical institutions, elderly care institutions and communities.

(3) The mode of mutual support for the elderly

Mutual support for the aged, that is, the elderly out of voluntary and familiar groups, or the elderly partner for the aged, is a new exploration of community home care service. The elderly who participate in mutual care have similar characteristics such as lifestyle, living habits, personality and values. They live together, accompany each other and help each other, so as to meet the needs of daily care and spiritual care. The mode of mutual assistance for the aged usually consists of home-based neighborhood mutual assistance, mutual assistance happiness home and other forms. Home-based neighborhood mutual aid is mainly based on community volunteer service, and a volunteer team for the young elderly is established. The young elderly serve the elderly, and those with strong mobility serve the weak mobility. In the form of pair assistance, the home-based neighborhood mutual aid regularly provides door to door services for the elderly in need. Mutual assistance welfare home is a "group pension" way, the collective will be idle site into a welfare home, to achieve collective construction, centralized living, self-security form.

(4) Housing for the aged mode

Housing pension model, born in the West, is also known as reverse mortgage, refers to the elderly use their own housing to obtain pension living expenses. Reverse mortgage refers to that the elderly use their own houses to mortgage the property rights of the houses to financial institutions, and these institutions make a comprehensive evaluation on the current value and future value growth of the houses, as well as the life expectancy of the elderly. According to the assessed price of the house owned by the elderly, excluding expected depreciation and interest paid in advance, and calculated according to the average life expectancy, the value of the property owned by the elderly is apportioned to the expected life of the elderly, and the cash is paid to the borrower on an annual or monthly basis until the death of the borrower. After the

death of the elderly, the right to use the house owned by the elderly will be recovered by the financial institution, which makes it feasible for the borrower to spend the sales money of the house owned by the elderly in advance during his/her lifetime.

(5) Smart pension model

With the development of big data, cloud computing, artificial intelligence and other science and technology, emerging science and technology are integrated into the pension model, and smart pension has become a new trend of pension development. Smart pension is based on modern science and technology, the use of information technology to use the network and China's home, community, institution three pension methods combined, to establish a diversified channel three-dimensional service platform, the establishment of a new social pension service mode. In November 2017, the Ministry of Civil Affairs of China, the Ministry of Industry and Information Technology and other departments issued the "Notice on the Pilot Demonstration of smart health Pension application". 53 enterprises, 22 towns and 19 bases have been used as smart health pension demonstration enterprises, demonstration streets and towns, demonstration bases. The smart old-age care model has developed rapidly.

4.3 Improve the development mechanism of education for the elderly

Education for the elderly is a comprehensive social education that advocates lifelong learning in practice and takes public cultural facilities and service facilities for the elderly as the carrier. In September 2012, the National Office on Aging jointly issued the Opinions on Further Strengthening the Construction of culture for the Elderly, proposing that "cultural and education departments should integrate education for the elderly into lifelong education and community education systems, strengthen leadership and unify planning." In 2015, the Law on the Elderly will increase government investment and encourage social participation in running universities for the elderly as one of the important revision contents. By 2022, China will have at least one university for the elderly in a city at or above the county level, and more than 80,000 universities (schools and learning centers) for the elderly at all levels, with more than 14 million registered students. China will build 29 provincial-level open universities for the elderly, providing offline training for 3.5 million people and online training for 80 million people. There are 221 universities and colleges that are members of the Third-Age University Alliance. Education and learning centers for the elderly have been set up in 216 cities (prefectures), 689 counties (cities and districts), 4,856 townships (streets) and 26,698 villages (communities).

At the same time, based on traditional values, Chinese society advocates the mode of caring for the elderly, encourages people to provide convenient and flexible work opportunities for the elderly, and gradually extends the retirement age, which provides strong support and guarantee for the social and economic development of the aging population.

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