

ANALYSIS OF THE IMPACT OF CHINA'S POPULATION AGING ON LABOR SUPPLY

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Abstract: This paper analyzes the impact of population aging trends on the supply of labor in my country from the perspective of labor economics, and analyzes the current situation of population aging and labor supply in China through data analysis of China's demographic statistics. Then, corresponding countermeasures were proposed in three aspects: improving the age structure of the population, increasing the labor participation rate of the elderly population, and improving the quality of labor supply.

According to the National Bureau of Statistics of China, there were 113.07 million people aged 65 or above in China in 2009, accounting for 8.47% of the total population, which indicates that China entered an aging society in 2009. With the deepening of aging, the scale, proportion and age structure of the labor force will undergo a series of changes, which will have a certain impact on the supply level of labor force, and then affect the sustainability and stability of economic and social development. With the deepening of population aging, the proportion of the elderly population in the total population will continue to rise, leading to a gradual decline in the growth rate of labor force, a gradual decline in the proportion of working-age population, and a gradual decrease in the scale of labor supply. The research results of many domestic and foreign literatures also confirm this conclusion.

In the process of population aging, the proportion of working-age population in the population age structure decreases, and at the same time presents the characteristics of low proportion of young children and high proportion of elderly population. Based on the population data from the National Bureau of Statistics of China and the World Bank, this paper further clarifies the current situation of China's aging population and labor supply level. In 2019, China's population aged 65 and above accounted for 12.6%, with a per capita GDP of only US \$10,000. According to the data of the World Bank, the per capita GDP of the United States, Japan and South Korea is more than 24,000 US dollars when the proportion of the elderly population aged 65 or above reaches 12.6%, and China is more prominent in getting old before getting rich. In 2019, China's working-age population reached 811.04 million, marking the largest labor supply in history. At the same time, the dependency ratio of the total population will be 41.5% in 2019.

Judging from the demographic dividend period when the dependency ratio is less than or equal to 50%, China will still be in the "window period of population opportunity" with a relatively light population burden for some time to come. However, it must be noted that with the rapid growth of population aging, China's total population dependency ratio has been rising year by year in recent years, and the window period of demographic dividend is short. China must seize the time to formulate effective response plans.

During the period from 1990 to 2020, the average participation rate of China's total labor population was 73.5%. The historical highest value of this data appeared on December 1, 1990, reaching 79.1%, and then decreased year by year. The historical lowest value appeared on December 1, 2020, reaching 67.5%, indicating an obvious downward trend.

The implementation of China's family planning policy, as well as the heavy pressure of education, medical treatment and real estate, have greatly changed people's views on childbearing, and the child-bearing willingness of the school-age population is low. Even though the "two-child" policy was implemented in 2016, the birth rate is still declining. In 2019, 14.65 million people were born in China, 580,000 fewer than in 2018, and the birth rate was 10.48 per thousand, the lowest since 2000 and below the warning line. The change and development of population is not only reflected in the increase and decrease of the number, but also in the change of the age structure within the population. The change of the age structure of the population will affect the change of the working-age population and the change of the proportion of the working-age population, thus bringing changes to the quantity of labor supply and the internal structure. The smaller the proportion of juvenile population, it is not conducive to the subsequent supply of working-age labor. It is urgent for China to liberalize its family planning policy, but some experts or departments are concerned that the full implementation of the family planning policy will lead to a sharp rebound in the fertility rate, leading to repeated delays in the implementation of the family planning policy. The elderly labor force has rich experience and knowledge accumulation, and the extension of life expectancy and the improvement of health condition of the elderly population make the elderly population continue to contribute to the economic development. To make full use of and develop the elderly human resources, first of all, it is necessary to provide policy guarantee for the development of the elderly human resources. For example, we should implement the policy of delaying retirement for the elderly as soon as possible, further improve the protection of the rights and interests of the elderly in reemployment, and establish anti-discrimination policies for the elderly in employment. Secondly, it is necessary to build a reasonable mechanism to encourage supporting policies, so that the investment and return of the

elderly labor force can match, and encourage the elderly population with the ability and physical conditions to continue to participate in economic activities to play a role.

With the development of science and technology, the shortage of labor supply in the future is not only reflected in the quantity, more important is to improve the quality of labor supply. On the one hand, further improve the lifelong education system. The system of lifelong education in China lags behind that in developed countries, and should be improved in many aspects, such as incentive and guidance system, learning resource and service system, investment and financing system, quality evaluation system, etc. On the other hand, we should enhance the effective labor supply. In order to adapt to economic transformation and upgrading and high-quality development, it is necessary to further enhance vocational education and provide lifelong vocational skills training system throughout the whole process of study and career for all workers. This can alleviate the structural contradiction of skills shortage to a certain extent and improve total factor productivity.