

The Implications of Population Aging for Socio-economic Development

Peiwen Ye^{1,a,*}

¹Yangzhou High School, Yangzhou, China

a. ypw070222@hhu.edu.cn

*corresponding author

Abstract: The severity of population aging profoundly impacts social and economic development over time. This paper analyzes some important factors leading to population aging, their social impacts, and development trends summarizes some strategies that may slow down this social phenomenon and demonstrates some factors that may gradually reduce the effect of population aging and the development reasons for these factors. Some aspects that may promote the intensification of population aging and corresponding solutions are proposed to reduce the negative impact. Conclusion Population aging would have negative influence mostly in the future. However, this social phenomenon will also contribute to the development of the society in some totally new developed parts that may lead to the change of economy of the society. Moreover, population aging will also have influence on a country's culture and politics which might change people's cognition in the future and the country's diplomacy with other countries.

Keywords: Population Aging, Development of Economy, Influence of the Society.

1. Introduction

With the continuous development and progress of society, the aging problem is increasingly serious in the global scope. Population aging refers to the significant increase in the proportion of the elderly population in the total population. When the proportion of the population aged 65 and above in a country or region reaches 10% or 7% (different according to different standards), it is recognized as entering an aging society. The aging population has changed the supply and demand pattern of the labor market. It also poses unprecedented challenges and requirements for consumer demand, industrial structure, social security system, and even the economic strategic planning of the whole country. In the context of an aging society, the labor market is facing the pressure of decreasing labor supply, forcing the economic structure to shift to technology-intensive and service-oriented. Therefore, when the proportion of the population aged 65 and above in a country or region reaches 10% or 7% (different according to different standards), it is recognized as entering an aging society [1].

This study aims to examine the impact of population aging on the direction of development and structural changes in society. The significance of the study of population aging lies in the analysis of its impact on social, economic, and cultural aspects, and how to effectively respond to these challenges. By analyzing data, it is possible to help governments and other decision-making bodies to determine the impact of aging on the social structure, consumption patterns, labor supply, and

culture, and to intervene effectively with the appropriate tools to deal with the hidden problems. At the same time, the social welfare for the elderly will be partially adjusted to the current situation of society to improve the happiness of the people. In the context of population aging, international trade may also be adjusted to meet the needs of society by, for example, importing more medical supplies, healthcare products, and household goods for the elderly.

The significance of this study is to formulate appropriate strategies to cope with the far-reaching impacts of aging on society through statistical data and projections of future trends. With the profound changes in the social structure, the government needs to formulate or adjust a scientific and rational policy framework to effectively deal with a series of social problems arising from it. For example, the appropriate arrangement of funds for social welfare and security. The government should make appropriate arrangements for the funding of social welfare and security to avoid the problem of insufficient funding. At the same time, the study of the aging population will allow for a more appropriate distribution of the labor force so that there will not be a gap in the distribution of human resources or a shortage of resources in the future. Forecasting population aging is important for the formulation of effective social policies, economic strategies, and cultural adaptation measures, which are conducive to harmonious social development and economic growth.

2. Implications of Population Aging for Economic Development

2.1. The Labor Market

The most direct economic impact of population aging is the shrinking supply in the labor market. According to the 2014 national economic data released by the National Bureau of Statistics of China, the working-age population from 16 years old to under 60 years old (excluding 60 years old) in 2014 was 915.83 million, a decrease of 3.71 million from the end of the previous year, accounting for 67% of the total population [1]. As the proportion of the elderly population increases, the labor force participation rate decreases, and the labor market faces the dilemma of the disappearance of the "demographic dividend".

Table 1: China's Population Aging in International Perspective [1].

Fertility situation under the universal two-child policy of China, 2017-2021			
Year	Additional births (10,000)	Total births (10,000)	Total fertility rate
2017	339.9	2019.9	1.97
2018	436.8	2188.6	2.09
2019	402.8	2077.3	2.04
2020	352.8	1935.8	1.96
2021	160.2	1689.1	1.77

Table 1 show that there were 212.42 million people aged 60 and above in China in 2014, accounting for 15.5% of the total population, 0.6 percentage points higher than that in 2013, of which the population aged 65 and above accounted for 10.1% of the total population. This not only slows down the potential of economic growth but also may lead to rising labor costs and affect the international competitiveness of enterprises. Secondly, as the cost of human resources increases significantly, enterprises will invest more funds in technology to cope with the obvious shortage of labor. Enterprises will require high-quality labor, which will lead to more population and social and economic obstacles. As the number of retired employees has increased significantly, the company's budget for pension has also increased so that it can spend less money on other key projects, such as

technology and product research and development, market development, investment projects, etc. This will slow down the improvement of people's quality of life, reduce the amount of money available for discretionary spending, and ultimately reduce the overall consumption power of residents. From the perspective of long-term development, the aging of the population will not only have a certain impact on domestic consumption, but also weaken the consumption potential of domestic consumers [2]. At the same time, urban-rural differences will also be amplified. Urban aging is generally more serious than in rural areas. With the acceleration of the aging process of the population, the proportion of the elderly population in urban areas is increasingly exceeding that in rural areas, which has led to an obvious shortage of urban labor markets. At the same time, the labor force in some rural areas is attracted by richer employment opportunities and higher wages in urban areas and has moved to cities in succession. This trend not only aggravates population mobility but also profoundly affects the distribution pattern of the labor force nationwide, resulting in significant differences in labor resources between urban and rural areas. A one-time sampling survey of the elderly population in China's urban and rural areas shows that 75.6% of the elderly in cities feel secure in their lives, while only 55.6% in rural areas [3]. To sum up, it is necessary to balance the level of the elderly in different regions.

2.2. The Impact of Consumption Patterns and Capacity to Consume

With the increase in the proportion of the elderly population, consumption patterns and capacities have changed significantly. On the one hand, the demand for consumption structure of the elderly population has shifted to the direction of health, interest, experience, etc., and the trend of consumption upgrading is obvious. This change reflects the pursuit of the elderly to improve their quality of life and the society's exploration of their consumption potential. For example, the elderly have increased demand for health products such as antibiotics and calcium tablets, and have a high interest in experiential consumption such as tourism, culture, and entertainment, all of which mark the upgrading of consumption mode. On the other hand, the consumption ability of the elderly population also shows certain characteristics, and its consumption ability and willingness have a certain particularity. For example, they cannot participate in strenuous exercise and have specific requirements for some medical devices. These restrictions will greatly reduce the consumption capacity of the elderly, which will lead to the decline of the overall consumption level of society. Secondly, the increase in the elderly population may provide more jobs such as nursing, housekeeping, and other service industries, thus reducing the number of unemployed people to a certain extent. The tourism industry will also benefit from the fact that the elderly have more leisure time and choose to travel. Airlines will also provide more routes to encourage the elderly to buy tickets, thus increasing the passenger flow. In addition, international trade may need to be adjusted to import more daily necessities for the elderly to achieve a supply balance. In the short term, rising aging will strengthen the negative wealth effect of fiscal spending and crowd out private consumption. Government investment expenditure will increase the marginal productivity of production factors, attract investment and promote enterprise development, which will lead to increased labor demand, increase labor productivity, increase wage rate, increase household income, promote social output and consumption, and the consumption level will reach positive and continue to grow [4].

2.3. Industrial Structure

Population aging has a dual role in the transformation of industrial structure. With the aggravation of population aging, the aging of the working-age population leads to lower labor productivity, which is not conducive to the upgrading of industrial structure. It is difficult for the aged labor force to adapt to the requirements of industrial upgrading, and structural unemployment prevails, which ultimately

lowers the level of labor productivity of the whole society and hinders the transformation and upgrading of industries. Secondly, population aging will lead to an increase in the old-age dependency ratio, increase the burden of old-age pensions for families, squeeze the resources of young people's education investment, and affect the quality of the labor force for industrial development. At the same time, population aging will also increase the government's expenditure on social security for the elderly, which will increase the government's financial burden and may limit the R&D investment of enterprises, affecting their technological progress and innovation capacity. However, with the increase in life expectancy per capita, medical and recreational industries related to the elderly still need to be developed and improved. Aging is both a challenge and an opportunity for China. China should actively address the problem of population aging, develop new industries for the elderly, accumulate sufficient pension funds, and support the construction of modern industries. Technology companies can develop new products, such as healthcare products, to benefit more elderly people. Nursing companies can recruit more employees to meet the needs of the growing number of older people in society. Due to the improvement of the medical and health level, the average life expectancy is increasing, which encourages people to increase the investment in education, extend the years of education, and increase the accumulation of human capital. The accumulation of human capital promotes the industry to go higher [5].

2.4. Pension and Social Security Systems

The aging population will increase the government's expenditure on social security for the elderly population and increase the government's financial burden. In 1978, China's expenditure on retired workers from the state was 1.73 billion yuan, rising to 38.89 billion yuan in 1990 and 408.86 billion yuan in 2003. Medical expenses increased from 7.62 billion yuan in 1990 to 27.13 billion yuan in 2003. In the 1990s, China's social security cost also reached 13% of GDP and has stabilized at about 5% in recent years [6]. Although the consumption demand of the elderly population is low, with the development of the social economy and policy support, the consumption potential of the elderly population is gradually rising. For example, improving the supporting rules and systems of individual pension investment-related funds and developing professional pension financial products have stimulated the consumption capacity of the elderly population to a certain extent, thus promoting the flow of funds in society. The traditional retirement system is facing challenges and needs to be reformed to meet the needs of the aging population. This includes measures such as raising the retirement age and adjusting the pension level. Ensure the fairness and sustainability of the retirement system while ensuring the welfare of the elderly. To meet the challenge of population aging, the social welfare system needs to be reformed and improved accordingly. This includes adapting to the pension reform, strengthening the input of medical care resources, and providing opportunities for the elderly to participate in society, to better meet the needs of the elderly.

2.5. Savings and Investments

Increased population aging is generally accompanied by a decline in the savings rate. Declining savings rates have a direct impact on the sources of financing for investment. Increased household and individual expenditures on old-age and health care reduce the funds available for investment, thereby discouraging investment activity. At the same time, the increase in the aging population poses a great challenge and puts greater pressure on government fiscal expenditures. An increase in the elderly population may lead to a slowdown in domestic economic growth, as an increase in the elderly population may reduce consumption and investment, thereby affecting the overall economic activity of the country. Such a slowdown could lead to a depreciation of the domestic currency, thereby affecting the exchange rate. In addition, older populations usually prefer to purchase more stable and

safer investment instruments, such as bonds and structured deposits. This may lead to a reduction in demand and market activity in the stock market, further affecting the country's economic performance and exchange rate stability. The impact of population aging on exchange rates is multifaceted, including the potential for slower domestic economic growth and currency depreciation, as well as the need for financial institutions to adapt to the changing needs of the older population for financial services. The combination of these factors may pose new challenges to national economic and exchange rate policies. In response to population aging, some countries have introduced pension reforms and strengthened pension insurance and services. These measures require more attention in terms of fund-raising and investment and may have a certain impact on the foreign exchange market. In addition, with the growth of the elderly population, the social demand for financial services will also increase, banks and other financial institutions need to adapt to these changes and provide more personalized and customized financial products and services. Banks and other financial institutions need to adapt to these changes and provide more personalized and customized financial products and services. In the face of the problem of population aging, countries have also taken certain measures. For example, the Chinese government has issued the Opinions of the General Office of the State Council on Developing the Silver Economy and Enhancing the Well-being of the Elderly, aiming to actively cope with the aging of the population through the development of the silver economy, cultivate new momentum for economic development, and improve people's lives. It aims to actively address the aging of the population by developing the silver-haired economy, cultivating new energies for economic development, and improving people's quality of life. The measures include expanding meal assistance services for the elderly, expanding home assistance services for the elderly, developing community convenience services, and optimizing health services for the elderly, to promote the scale of the silver economy, standardization, clustering, and branding of the silver-haired economy. Some countries have responded to the problem of labor shortage caused by population aging by increasing the employment rate of the elderly. For example, the United Kingdom has successfully responded to the social and economic problems brought about by aging through measures such as delaying the retirement age, community health services for the elderly, and the use of international immigrants. The United Kingdom plans to delay the retirement age to 70 years old, and through relevant laws and policies, encourage the elderly over 55 years old to continue to participate in the workforce, to alleviate the difficulties in pension payments and labor shortage [7]. Moreover, monetary policy may affect interest rates by boosting demand for assets such as housing. The elderly have a high net worth and are not very sensitive to monetary policy, thus weakening the effect of monetary policy [8].

2.6. Fertility Rate

As the proportion of elderly people increases, the proportion of young people (especially those of childbearing age) in the total population will decrease accordingly. The aging society is often accompanied by the miniaturization and core of the family structure, that is, the family size becomes smaller, and the family structure tends to be simple. Such changes may reduce fertility intentions and behavior within families, as family members balance caring for the elderly and raising children. With the development of the economy and the improvement of living standards, young families are facing greater economic pressure. The rising costs of education, health care, housing and more have made many families more hesitant to decide whether to have children. An aging society may exacerbate the economic pressure, as the government needs to invest more in old-age care and social security systems. At the same time, more and more young people are beginning to focus on personal development and quality of life, rather than traditional family structure and fertility concepts. They may be more inclined to have fewer or no children in pursuit of a freer, more personalized lifestyle. An ageing society may lead to a shift in social values towards greater emphasis on the rights and well-being of

the elderly. This change may affect young people's reproductive decisions to a certain extent, making them pay more attention to the care and old-age care of the elderly rather than reproductive issues. An aging society means that more elderly people need to be supported and taken care of, which increases the burden of supporting families and society. For younger families, more time and resources need to be devoted to caring for the elderly, which can crowd out resources and energy they would otherwise devote to parenting. The government encourages birth by adjusting and improving the birth policy. For example, increasing maternity subsidies, strengthening maternal health services, expanding maternity insurance coverage, etc., but this will increase the financial burden on the government and increase the likelihood that other social needs will not be covered.

3. Conclusion

Population aging is a social phenomenon caused by multiple factors such as declining fertility rate and increasing average age of the population. It is a complex and serious social problem that needs the joint efforts of the government, society, and individuals to deal with. Measures such as improving policies and systems, optimizing service systems, and promoting economic transformation and upgrading can actively respond to the challenges of population aging and promote long-term stable social development. The government can take the following measures. First, the country needs to improve the elderly care service system, strengthen the supply of home-based, community, and institutional elderly care services, and improve service quality. Secondly, people should promote the reform of the old-age insurance system, increase financial input, and improve the multi-level old-age insurance system. By complementing the weak points of elderly health services, people will increase financial support for the elderly in extreme poverty and special service institutions, support the transformation of public training and nursing institutions into institutions that combine medical care with nursing care, give priority to complementing the gap just in need of public welfare services, further optimize the elderly health service system, promote daytime care, mutual aid pension Visiting care and other services can improve the quality of life of the elderly, meet their spiritual needs, and ensure that the elderly have a sense of security, dependency. and happiness. At the same time, people should encourage fertility and increase the fertility rate by reforming the family planning policy, increasing fertility subsidies, strengthening maternal health care, and other measures. In addition, it also focuses on promoting the social participation of the elderly, promoting the supply of elderly education and spiritual and cultural products, and promoting the construction of an elderly-friendly society and a city. Aging has a dual impact on economic growth. On the one hand, labor shortage may lead to a decline in labor productivity and a slowdown in economic growth. On the other hand, the increase in the elderly population has also led to new market demand, such as the silver economy, aging services, etc., which has brought new growth points for related industries. However, overall, aging has a more significant weakening effect on economic vitality, and problems such as limited consumption capacity and declining overall savings rate have restricted economic development. With the increase in the elderly population, the demand for elderly care services has risen sharply. This includes home care, community care, and institutional care. The demand of the elderly for medical care, life care, spiritual comfort, culture, and entertainment is increasingly significant. To meet these needs, society needs to invest more human, material, and financial resources to improve the elderly care service system. At the same time, the pressure on the medical security system also increases, which requires optimizing resource allocation and improving service efficiency.

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