

# ***The Imbalance in Home-based Elderly Care in China: Niche Market Opportunity and Lessons from Japan***

**Yuzhong Chen<sup>1,a,\*</sup>**

<sup>1</sup>*Jinan University-University of Birmingham Joint Institute, Jinan University, Guangzhou, Guangdong, 511443, China*

*a.chenyz0075@stu2020.jnu.edu.cn*

*\*corresponding author*

**Abstract:** In recent years, there has been a profound shift in the demographic structure in China, with an increasingly severe trend towards aging. This study employs a comparative analysis based on recent data from China and other 26 countries to highlight the unique features of China's aging society. Despite having a similar trend of declining birth rates as developed countries, China's elderly dependency ratio is higher than that of developing countries. This phenomenon will inevitably impact the Chinese value of filial piety, while also presenting an opportunity for the development of the elderly market, particularly in home-based care. However, due to the nascent stage of China's elderly care market, significant gaps still exist. To address this, the paper adopts Japan as a case study and highlights favorable measures that Japan has implemented which may be considered opportunistic for future home-based care market in China. Finally, feasible suggestions are provided to address the imbalance between supply and demand in the home-based care market.

**Keywords:** home-based care, elderly population, aging society, imbalance

## **1. Introduction**

Aging has emerged as a significant global development trend and a common issue due to the continuous increase in life expectancy and decline in fertility rate worldwide. China, being one of the largest developing countries, is also facing this challenge. The severity of aging in China is already high and is expected to continue to deepen in the next three decades. With the largest population in the world, China's elderly demographic has a considerable base grows rapidly. Moreover, social phenomena such as the empty nest syndrome and a declining dependency ratio have become increasingly prevalent, posing significant challenges to the well-being and quality of life of senior citizens.

Home-based care is a service that provides social and medical assistance to elderly individuals in their homes and is carried out by professional caregivers, their decedents, or solely seniors themselves. This service is particularly popular among the elderly population in China, largely due to the influence of traditional Chinese values that prioritize filial piety. With the increase in consumption potential and life expectancy, the requirements of the elderly for care have become more personalized and diverse. As a result, the demand for various forms of assistance, including daily care, rehabilitation therapy, and psychological counseling, is on the rise.

From the perspective of the supply side of home-based care, it can be classified into three categories by the providers: family, government, and social or business organization. Traditionally, elderly

care services in China were primarily provided by families. However, in recent decades, the family structure in China has undergone significant changes, with increased demographic mobility, the rise of the only-child family, and an increase in the number of widowed elderly individuals. Aging also poses challenges to the main body of the government. If the government continues to act as the main supplier, it will face serious financial burdens and inefficient resource allocation. As for the market-led elderly services, it is challenged in terms of both quantity and quality compared to the market in developed countries.

Given the demographic changes and inadequate supply, the home-based care market presents a promising business niche. However, the gap in this market is expected to widen in the near future. To address this pressing issue, this paper draws on the experience of Japanese and proposes strategies to tackle this challenge.

## **2. Literature Review**

### **2.1. Elderly Care Demand**

Wang finds that the current service supply is inadequate in meeting the needs of the elderly, due to insufficient understanding of the factors influencing the elderly's needs, which makes it difficult to provide targeted elderly care services. In addition, economic factors such as pension savings do not significantly affect demand [1]. Using the Logit model and government micro-survey data, researcher suggests that older age, being female, having a higher level of education, not living with children, and having health problems are all factors that contribute to a stronger demand for home-based elderly care [2].

Moreover, multiple studies using survey methods have found that disadvantaged elderly, including the disabled, empty-nester, and elderly bereaved of their only child, have a more diverse demand for care services within the elderly population, particularly in terms of psychological and cultural aspects [3, 4].

### **2.2. Home-based Care Supply**

Xu et al. employed spatial autocorrelation analysis to examine the spatial distribution pattern of home-based care services supply in China. Their findings reveal an increase in the supply intensity of home care services, but the total supply remained insufficient. While the coverage rates of different types of service supply rose, the development was uneven [5]. Guo conducted a comparative analysis of the practices of home-based elderly care services in China and foreign countries. The analysis highlights that the development of this service requires the introduction of a market mechanism and the participation of numerous professional institutions and intermediary organizations. Additionally, the development process and operating mechanism of home care services must be subject to government regulations [6]. In a recent study, the subject of elderly care service providers is considered by Luo. The study suggests that while certain resources may be appropriate for the government to provide as public goods, a broader range of services catering to the needs of the elderly should be defined as quasi-public goods and provided by the market. However, given the elderly's nuanced and specific demands for differentiated services, allowing a single institution to conditionally hold a natural monopoly may be suboptimal [7].

### **2.3. The Imbalance of Elderly Care Service**

The imbalance between supply and demand in the elderly care service market has become a common problem in many developing countries [8, 9]. Regarding this, existing studies on solutions to this problem have largely focused on government governance considerations, such as legal guidance or

increased expenditure on elderly care services [10, 11]. However, as the aging population continues to deepen, it will inevitably become an increasingly burdensome issue for the government. And the value of private enterprises in addressing this issue has not been fully considered. Based on the analysis of the supply-demand relationship in the elderly care service market, the paper contends that this presents a significant opportunity for enterprises. This research will provide guiding recommendations to facilitate private enterprises to effectively contribute to the provision of high-quality elderly care services.

### 3. Home-based Care Market in China and Policy Implications from Japan

#### 3.1. Aging with Chinese Characteristics

China confronts a complex and intertwined set of economic and social challenges during its ongoing transformation and development. These challenges have given rise to an aging society with unique Chinese characteristics.

The elderly population in China is vast and exhibits a persistent growth trend. According to Figure 1, the proportion of the population aged 60 showed a take-off trend and is expected to double from 2020 to 2050. Meanwhile, the old-age dependency ratio in China is lower than that of developed regions, and it is considerably higher than the world average and other developing regions, such as Africa and countries in Southeast Asia, as shown in Figure 2. In addition, it can be seen from Figure 3 that the proportion of children aged 0-14 in the total population of China is catching up with developed countries, including the United States, the United Kingdom, France, and Sweden, which serves as a catalyst for the ongoing shift of Chinese society towards an aging population.

China's rapidly changing population structure presents an opportunity for the development of the silver economy, with the elderly population expected to become the main consumer group in the future. Home-based elderly care services, closely linked to traditional Chinese values, are expected to become the most prosperous industry within the silver economy.

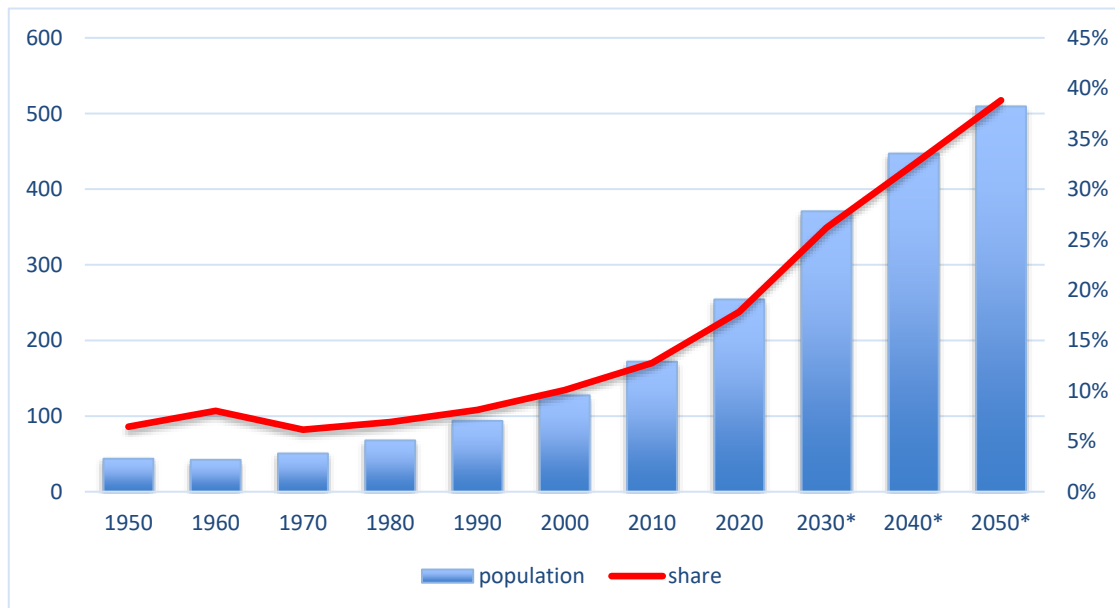


Figure 1: Population (in Millions) and share (%) of people aged 60 and above in China from 1950 to 2050. Data Source: UN DESA; National Bureau of Statistics of China.

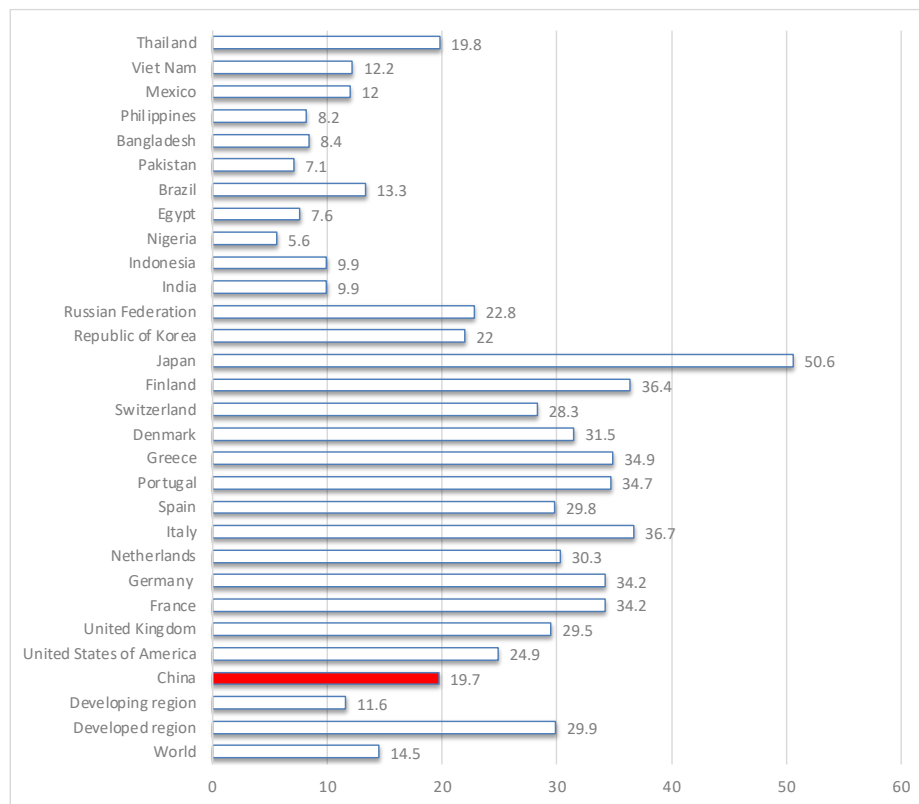


Figure 2: Old-age dependency ratio (%) in China and other 26 countries in 2020. Data Source: UN DESA; National Bureau of Statistics of China.

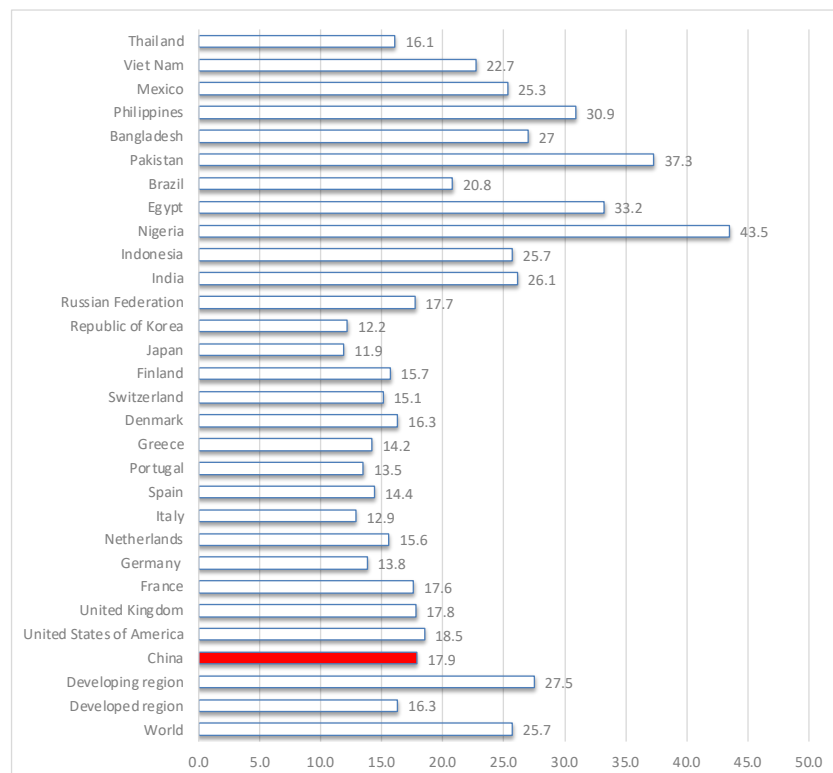


Figure 3: Proportion of children aged 0-14 (%) in China and other 26 countries in 2020. Data Source: UN DESA; National Bureau of Statistics of China.

### 3.2. Present State of Demand and Supply of Home-based Care

The home-based care industry in China is currently facing significant gaps in financial resources, human resources, and service content.

Financially, the pension fund gap is rapidly increasing due to the combination of several factors, including an aging population, low payment rates, and increasing pension benefits. Based on actuarial models, this gap is projected to reach a staggering 30.27 trillion yuan by 2035, with a remaining gap of up to 28.15 trillion yuan, despite government subsidies. However, some scholars predicted that these subsidies will only be available until 2023, and the gap is expected to further widen thereafter [12].

In terms of human resources, there is still a huge gap in elderly care nursing staff. According to a report on the development of the elderly care service market provided by iResearch, there are only 322,000 elderly care nursing staff in China, and the gap is at least 1.7 million [13]. At the same time, due to social awareness, salary levels, and work intensity, there has been a phenomenon of low education levels and inadequate skills among elderly care nursing staff. Apart from that, labor costs, difficulties in optimizing pricing systems, and limited profitability limit the industry's willingness to recruit workers, which further drives down the existing level of nursing assistant in elderly care labor market.

Service content gaps are particularly pronounced for elderly individuals with special needs. According to data from the National Health Commission in 2021, out of China's 254 million elderly people, 190 million have chronic diseases, and there are over 40 million disabled or semi-disabled elderly people. However, there are only slightly over 500,000 elderly care nursing staff in China. Even in first-tier cities, the situation remains unfavorable. Overall, training home caregivers and strengthening potential service providers are currently pressing issues.

### 3.3. The Case Study of Japanese-style Home-based Care

Japan is a heavily aging country that has entered the third stage of global population aging. Meanwhile, influenced by the Confucian culture akin to China's, Japan has long been investigating the realm of home-based care for the elderly. On balance, the home-based care in Japan is characterized by pluralism and specialization.

To provide quality elderly care services, Japan established a comprehensive policy system and dedicated to improving the treatment of elderly care personnel. In 1987, Japan enacted the "Social Welfare and Care Worker Act" and improved the qualification certification system. In 2018, the "Law to Improve the Treatment of Care Workers to Ensure the Reserve of Caregivers" was promulgated to promote the enhancement of the salary and treatment of care workers and encourage more people to engage in the elderly care industry.

Japan also encouraged diverse entities to participate in community elderly care which is essential for enhancing care service quality. The government funds social organizations such as welfare associations and social welfare corporations to participate in care services. The long-term care insurance system provides financial support to allow elderly care enterprises to participate. Additionally, the government encourages university students and volunteers to participate in elderly life assistance in the community.

As early as 2006, Japan adopted the Integrated Community Care Systems (ICCS) to provide long-term care for the seniors at home. It is an efficient way to provide optimal intervention programs by making full use of various medical resources in the region such as open clinic, hospital, pharmacy, care facility, etc. ICCS has allowed many elderly Japanese to age gracefully at home rather than being institutionalized.

More recently, Japan has been promoting the idea of “Society 5.0” which emphasizes the use of emerging technologies like artificial intelligence (AI), robotics and IoT to better support its aging population. For elder care within Society 5.0, three approaches are utilized: (1) connecting and sharing medical data among users in a network; (2) offering remote medical care practice services; (3) employing AI and robots in care facility rooms to promote community independence. Notably, Japan began its Society 5.0 endeavor by developing robots to serve as caregivers for the elderly and implementing telehealth, encompassing virtual consultations, remote monitoring, and other digital healthcare delivery methods.

### **3.4. Policy Suggestions for China**

#### **3.4.1. Improving the Quality and Professionalism of Elderly Care Workers**

China’s current domestic service industry can provide relatively sufficient low-end services, but there is a shortage of high-end services. For the elderly, there are great individual differences in both physiology and psychology. Not only do they need basic living care, but more are mental and psychological problems. Only professional nursing staff can be better qualified for this job and meet the differentiated needs of the elderly. Therefore, the lack of a large number of high-quality service personnel is the bottleneck of China’s home care system.

#### **3.4.2. Establishing a Sound Market Fundraising System**

Compared to Japan’s commercial elderly care market, the overall Chinese home care market has relatively few scaled and chain enterprises. The shortage of funding is a pressing and critical issue in the elderly care industry. To establish a sound fundraising system within the market, it is important to have a variety of investment options available to investors. This can be achieved through broadening the investment range of enterprise annuity funds and diversifying the variety of elderly care fund investment. Additionally, the creation of cooperation mechanisms between the government, non-profit organizations, and enterprises can also contribute to a sound market fundraising system, such as combining home-based elderly care funds with charitable causes.

#### **3.4.3. Building a Multi-party Collaborative Home-based Care System**

In the Chinese elderly service market, private firms face constant market pressure due to government subsidies for nursing homes. As the pension gap continues to widen, it is crucial to not only promote personal pension plans but also encourage private enterprises to participate in the market and foster healthy competition. Moreover, the macro framework for home-based pension services has already been established. However, it is essential for governments at all levels to actively guide non-profit organizations and other social forces such as volunteers to participate in home-based pension services.

#### **3.4.4. Leveraging Technology for Smart Elder Care Service**

By leveraging information technology, intelligent products, and information service platforms as auxiliary tools, the integration of Internet, cloud platforms, and mobile Internet technologies with the elderly care industry can be achieved through network information technology. This integration can meet the diverse and multi-level needs of elderly individuals.

## **4. Conclusion**

Due to the one-child policy implemented in the 1970s and the rapid economic progress achieved in recent years, China has entered an aging society in a relatively short period and is experienced



accelerated development. It is anticipated that the elderly population will become the main consumer group in the future. However, China's home-based elderly care market currently faces several challenges, including insufficient funding, talent, and specialized services.

Japan serves as a reference case, providing insight into solutions for China's elderly care market. Recommendations to improve the labor and financial markets related to home-based services, optimize service providers, and leverage the potential of intelligent elderly care services have been provided. By doing so, China can create a prosperous elderly care market that not only meets the needs of its aging population but also contributes to the country's overall economic development.

While the development of home-based care services should gradually become more diversified from a social development perspective, it is crucial to effectively define the responsibilities of each subject to achieve complementarity and coordination. Moreover, although Japan has more experience with an aging population and related policies, China must consider its unique characteristics and regional disparities. Given China's significant regional disparities, an approach of experimenting with home-based care services in first-tier cities, followed by gradual promotion to other regions, could be an effective strategy. However, given that China will enter a severe aging society in 2035, addressing this issue urgently is of essence. Therefore, resolving the elderly care problem in less developed and remote areas as well as expanding the coverage of relevant services are critical challenges that need to be tackled in the coming future.

## References

- [1] Wang Q. Demand for home-based care services in urban communities and its influencing factors - Based on the national urban elderly population survey data. *Population Research*, 2016, 40(1): 98-112.
- [2] Wang M. Research on the imbalance between supply and demand of community home care services and its influencing factors. *Oriental Forum: Journal of Qingdao University*, 2022, 177(5): 127-137.
- [3] Du P, Sun J, Zhang W, et al. The pension needs of the elderly in China and the status quo of family and social pension resources - Based on the analysis of the follow-up survey of China's elderly society in 2014. *Population Research*, 2016, 40(6): 49-61.
- [4] Zeng L. Imbalance of supply and demand of services for the elderly with special difficulties and its governance - Investigation and analysis based on the perspective of demand management. *Zhongzhou Academic Journal*, 2022, 306(6): 52-61.
- [5] Xu T, Zhao Q, Chen Y, et al. A study on the temporal and spatial differences in the supply of home-based elderly care services in my country - Based on the longitudinal data of CLHLS (2008-2018). *China Health Career Management*, 2022, 39(3): 170-172+195.
- [6] Guo J. International comparison and reference of home care model. *Social Security Research*, 2010, 8(1), 29-39.
- [7] Luo J. The governance mechanism of home-based elderly care in urban community under the background of deep aging. *Journal of Shanghai Jiao Tong University: Philosophy and Social Science Edition*, 2021, 29(4): 63-70+129.
- [8] Felix J. Silver economy: Opportunities and challenges to Brazil adopt the European Union's strategy. *Innovation: The European Journal of Social Science Research*, 2016, 29(2): 115-133.
- [9] Reshetnikova L, Boldyreva N, Perevalova M, et al. Conditions for the growth of the "silver economy" in the context of sustainable development goals: Peculiarities of Russia. *Journal of Risk and Financial Management*, 2021, 14(9): 401.
- [10] Ma J, Gao C. The generation of demand for long-term care services for the elderly, the imbalance between supply and demand and governance ideas - Taking Jiangsu Province as an example. *Journal of Yunnan University for Nationalities: Philosophy and Social Sciences*, 2022, 39(6): 76-84.
- [11] Liu W, Li A. Practical difficulties and countermeasures faced by the development of home care services in my country. *Dongyue Tribune*, 2022, 43(9): 96-103.
- [12] Zhang L, Wang Z, Liu Q. Analysis and countermeasures of pension gap in China under the background of population aging. *Fudan Journal: Social Science Edition*, 2023, 65(1), 138-149.
- [13] iResearch. 2022 research report on the development of China's commercial elderly Services Market, Report from iResearch, 2022.