

Comparison of Elderly Care Models between China and the United States and the Development Path of China's Silver Economy

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ABSTRACT

This paper discusses the inherent differences in the elderly care systems for older adults in China and the United States, based on how each country structures its pension system, cultural values, and service models. It points out that the existing elderly care mode in China has problems including the unbalanced development of a multi-level security system and an uneven allocation of resources between different areas and between urban and rural regions. To promote high-quality development of the Silver Economy in China, it is imperative to exert more effort at the level of system design, industrial extension, technology innovation, and active measures in the coming stage. In particular, drawing on cases such as the Hainan Free Trade Port, this article further explores the possibility that policy innovation and industrial integration may provide a new pattern for the high-quality and international development of the local elder care industry.

KEYWORDS

Elderly Care Model; Silver Economy; Comparative Study between China and the United States; Institutional Logic; Hainan Free Trade Port; Integration of Medical Care and Elderly Care; Industrialization.

1. INTRODUCTION

In response to the worldwide challenge of an aging society, national approaches differ widely according to their forms of government, economic development levels, and historical and cultural backgrounds. As the largest developed economy and the largest developing economy in the world, the United States (US) and China respectively represent two different approaches to addressing the aging problem. The Chinese model is a state-run social insurance scheme complemented by family care [1]. In contrast, the US experience highlights market efficiency and individual saving [2]. Given national condition of "getting old before getting rich" in China [3], it is urgently relevant for the country to explore a sustainable and high-quality eldercare service supply pathway by studying the differences and similarities between these two models. On the other hand, the regional innovative practice represented by the Hainan Free Trade Port (Hainan FTP) is pioneering forward-leading experience in diversified and high-quality development of elderly care and the Silver Economy in China. To provide a better understanding of this topic, this paper will present the features and differences of the elderly care models in the US and China, along with the existing problems and future directions for the Chinese aging society.

2. MACRO COMPARISON OF PENSION SECURITY SYSTEMS BETWEEN CHINA AND THE UNITED STATES: STRUCTURAL DIFFERENCES

Due to different design philosophies, the proportion of the "three pillars" of pensions varies significantly between China and the US. The first pillar stands for government-backed public pensions, the second pillar means employer-managed occupational pensions, and the third pillar represents individual-based private savings [4]. The fundamental difference between the two countries lies in the pillars upon which their pension systems rely.

The Chinese basic pension insurance, the first pillar, has covered almost the whole population in China. It also serves as the primary source of pensions for the majority of the elderly population and functions as a "ballast stone" [4]. By directly redistributing income, it narrows the income gap and provides benefits to poor families. However, the two-stage network DEA model is used to calculate the efficiency of the pension system, and it is concluded that the model applied in China has a wide coverage, but the stability and long-term sustainability of the system still need further improvement [5]. The reason could be that the second and third pillars are significantly weaker compared to the first pillar, and their total share in the overall set of deposited assets is relatively small [4]. This leaves this portion of the program at greater risk of insolvency and overly dependent upon public subsidies.

By contrast, the US model could be described as being of a "market-based" nature. The first pillar, Federal Old-Age Insurance, functions as a "safety net" that has a relatively low substitution rate. According to Figure 1, this pillar accounts for only 11 percent of total pension assets in the US [15]. Meanwhile, pension wealth accrual occurs largely in the second pillar and the third pillar, which together make up the remaining 89% [Ibid]. Although these data are a decade old, they still could reflect the basic design characteristics of the US pension system. In this framework, most long-term support for American elders is left to firms and households, leveraging the capital market to preserve and appreciate its values [6]. Therefore, the roles of governments in pensions become the most important distinction between China and the US.

US	Pillars	Pillar 1: public pension	Pillar 2: occupational pension	Pillar 3: individual pension	Total
	Size (trillion US\$)	2.8	15.18	7.44	25.4
	Share in total assets	11.0%	59.7%	29.3%	100%
China	Layers	Basic pension	Enterprise annuity	Individual tax deferred pension	Total
	Size (trillion US\$)	0.59	0.14	0	0.73
	Share in total assets	80.8%	19.2%	0	100%

Data source: Reports from the MOHRSS (2015), Social Security Administration, US (www.ssa.gov/policy/docs/ssb/index.html), and Brady (2016).

Figure 1. Comparison of the US and the Chinese pension structure in 2015 [15].

3. DEEP INSTITUTIONAL LOGIC ANALYSIS OF THE DIFFERENCES IN ELDERLY CARE MODELS BETWEEN CHINA AND THE UNITED STATES

The structural differences mentioned above are rooted in the vastly different cultural traditions, social systems, and development stages of the elderly care industry between these two countries.

The first difference lies in cultural values and family roles. Under the influence of Confucian filial piety, the Chinese consider the family not only as an emotional unit but also as a basic retirement unit, embodying "raising children for supporting elders" [4], a long-standing tradition that continues to this day. In support of this, approximately 9 out of 10 seniors in China reside with or close to their

offspring, and the rest are cared for by communities or institutions [7]. Researches among only-children's parents in Northeast China shows that most of them prefer family care, which proves how strong the influence of traditional culture is [8]. In contrast, the United States is more of an individualistic, independent nation [20]. Elderly people living alone or in retirement homes are the mainstream, and familial assistance is mainly non-compulsory emotional support. The supply side of elderly care services relies heavily upon market orientation and specialization by social organizations. Thus, traditional family responsibility and individual freedom are the initial profound causes of differences in pension systems.

The social system determines the relationship between the state and the market, leading to differences in the pension system of China and the US. In terms of the relationship between the state and the market, China is a socialist country, and the government has a clear responsibility of "providing support" and "leading" in the elderly care industry [21]. It has rapidly woven a basic elderly care network for the whole population with administrative power. Market forces have been encouraged to intervene in recent years, but remain in a process of exploration and regulation. For instance, the high-end elderly care service industry is seen as an opportunity for the market and is expected to share responsibility and pressure in the elderly care system in China [9]. However, the US firmly believes in the efficiency of the market. The elderly care industry is highly industrialized and financialized, partly due to the urgent need for market intervention in the new wave of retirement, as well as the overwhelming pressure on the healthcare system [10]. The US government mainly provides tax incentives through regulations and rarely directly provides public services. In other words, to cope with the pressures of an aging population, China has developed a government-led social security system, and the relative system in the US is market-based.

China and the United States have different development directions in the integration of medical security and elderly care services. China actively promotes the integration of medical care and elderly care, incorporating healthcare into long-term care institutions and communities to address the challenges of high incidence of chronic diseases and complex nursing care. The 13th Five-Year Plan (2016-2020) requires an increase in the number and quality of official medical institutions, and further encourages the private sector to operate 50% of nursing homes in China [7]. This series of policies reflects the overall approach of the Chinese government to improve overall welfare efficiency through institutional integration. By comparison, the integration of healthcare and elderly care services in the US presents a different perspective. A federal program, "Medicare", provides basic medical and nursing services to citizens over the age of 65, but its coverage and level of protection are limited. More long-term care needs require individuals to purchase commercial insurance through the market or pay for themselves. Although this diversified financing channel provides options, it also leads to fragmented service delivery, and different channels may have conflicting effects [10]. Overall, in terms of pension policies, China emphasizes government coordination and integration, while the US relies more on market mechanisms to share medical pressure.

4. CURRENT SITUATION ASSESSMENT AND CORE CHALLENGES OF ELDERLY CARE MODEL IN CHINA

The construction of the old-age care system in China currently faces development issues and requires hierarchical analysis. China has built the largest basic pension insurance network in the world, which could be seen as a great success [6]. However, under the background of 'high-quality development' and deep demographic change [11], problems persist with the current pension and elderly care system. This section will be divided into four parts: structural imbalance, inequity of service supply, lack of payment ability, and rural-urban disparities in the elderly care system in China.

The primary structural challenge is the imbalance in the development of the multi-level social security system. The excessive dependence on the first pillar has not fundamentally changed, while the weakness of the second and third pillars is significant [12]. This structural imbalance has created

multiple constraints, on the one hand, limiting the income level and consumption ability of Chinese elderly, making it difficult for them to meet the growing demand for diversified services [9; 12]. On the other hand, it also indirectly limits the room for expansion of the elderly care service market [7]. Hence, weaknesses in the supplementary pillars limit the emergence of a strong elderly care system in China.

Service supply also has obvious structural contradictions in the elderly care system. It is significantly difficult to have a bed in the high quality of public or inclusive elderly care institutions because of high demand for its quality and low price, creating an overall shortage of fundamental service provision [22]. Although governments encourage the private sector to run half of China's elderly care homes and beds [7], the poor performance of privatized enterprises. Some market-oriented institutions, especially those built by real estate, have high vacancy rates due to the high positioning and remote location, which means that "overall shortage and local surplus" is present, which exacerbates a mismatch of supply with demand [23]. Therefore, the current construction of the elderly care system requires simultaneous attention to the optimization of the supply structure and effective integration with the market.

The third barrier of the elderly care system is related to low funding capacity. According to Figure 2, the overall replacement rate of residential pensions has fallen considerably, showing a wide difference between 2002 (nearly 65%) and 2021 (approximately 40%) [12], with a cumulative decrease of over 23 percentage points over the past 20 years. This unfavorable trend has placed a heavy burden on the sustainable development of the industry. In the meantime, the long-term care insurance system is still in the preparation stage and has not yet formed widespread coverage. For most elderly people and their families, they lack both sufficient economic capacity and the willingness to use market-oriented professional care [6; 12]. The insufficient payment ability may make it difficult for elderly care institutions to form a stable and sustainable business model, thereby hindering the healthy development of the entire industry.

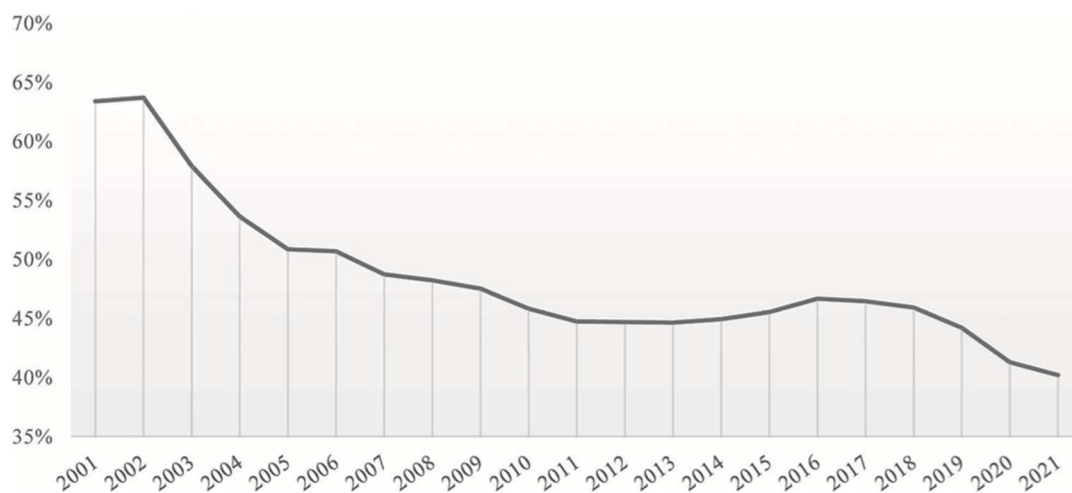


Figure 2. Historical Trend of Replacement Ratio from 2001-2021

There is a significant gap in the elderly care system between urban and rural areas. In comparatively developed areas, the Chinese government has implemented a high-quality and distinctive elderly care service system based on specific policies and local resources such as those of the Hainan FTP [9]. While cities benefit from special resources, rural areas may face completely different challenges. The shortage of nursing service supply, coupled with the continuous weakening of the traditional support function of families for the elderly, has put rural elderly people in a dilemma of dual lack of economic

and emotional support [13]. Given this background, the formulation of rural elderly care strategies should be grounded in reality and explore feasible paths suitable for rural areas. For instance, the "embedded elderly care" model implemented in cities integrates community medical care, entertainment, and other resources, blends professional elderly care services into the community, and creates a "15-Minute Elderly Care Service Circle" [14]. This attempt may not only help narrow the gap between urban and rural elderly care, but also provide reference for meeting the unique needs of elderly people in rural areas.

5. ANALYSIS OF THE FUTURE DEVELOPMENT PATH OF THE SILVER ECONOMY IN CHINA

Building a Silver Economy is an inevitable option to tackle the problems brought by an ageing population. The "Silver Economy" is a policy concept targeted by scholars and policy makers in response to population aging [15]. It refers to an industrial classification that provides goods or services for older adults through market-based methods, involving a wide range of industries such as manufacturing, distribution, services, and so forth [15]. This concept is also reflected in the latest Five-Year Plan (2026-2030) of China, which proposes to explore a development path with Chinese characteristics, seeking a balance between fairness and efficiency, and between market and government. With this goal, the development path could be advanced from four interrelated dimensions: institutional optimization, industrial expansion, technological empowerment, and market cultivation.

5.1. Optimize Institutional Design and Strengthen the Foundation of Pension Finance

Improving the institutional design is significant, which aims to fully leverage the functions of different pillars in the multi-level pension system. The high proportion of the first pillar has led to shortcomings in the development of enterprise annuity and personal account pension [6; 7]. A feasible approach to address this issue is to consolidate the basic guarantee function of the first pillar while appropriately reducing its burden, and transferring some resources to the second and third pillars. Specific measures may include increasing the upper limit of the deduction of enterprise annuity costs from taxable income, and expanding the supply range of personal pension products [12]. Meanwhile, promoting the establishment of a unified long-term care insurance system covering the whole country may also become an important supplement to the multi-level pension system in China [Ibid]. This system aims to meet the special care needs of the elderly population and compensate for the shortcomings of income-based pensions in terms of care security. By standardizing financing channels and service models, long-term care insurance will provide stable financial support for this vulnerable group, striving to be fully promoted during the 15th Five-Year Plan period [15; 24], and thus building a more balanced and sustainable multi-level pension structure under the background of the Silver Economy[16].

5.2. Develop a Diversified Silver Economy through Multi-dimensional Policy Initiatives

The Chinese government has formed a clear strategic framework to promote the construction of the elderly care service system from multiple dimensions. In terms of the integration of medical care and elderly care, policies focus on strengthening the collaborative mechanism between medical and health institutions and elderly care service providers, establishing a smooth referral system, and strengthening systematic training for professional nursing staff [17]. In terms of innovative elderly care formats, the combination of tourism and gerontology has been actively promoted, such as "migratory bird style elderly care" and "cultural themed elderly care" [17; 25]. Taking Hainan FTP

as an example, the region relies on platforms such as Boao Lecheng International Medical Tourism Pilot Zone, and utilizes unique natural resources and special policies to cultivate a distinctive "medical+tourism" elderly care brand, effectively stimulating the vitality of the domestic demand market [17; 26]. Furthermore, in terms of technological and facility upgrades, the construction of intelligent elderly care service facilities and accessible housing has been highly valued. It proves that the government encourages enterprises to develop and produce various elderly-friendly assistive devices and wearable products, and integrate relevant technologies into real estate development to jointly create a high-quality plus elderly-friendly living environment. In short, the above strategic measures support and promote each other in a coordinated manner, forming a systematic policy framework for China to address population aging while developing the Silver Economy.

5.3. Strengthen Technology-driven Development to Promote New Models of Smart Elderly Care

Technological research and development could provide important support for addressing the shortage of human resources in elderly care services and correspondingly improving the efficiency of it. Emerging information technologies such as the fifth generation mobile communication technology (5G), the Internet of Things (IoT), Artificial Intelligence (AI), and big data are becoming key forces driving the development of intelligent elderly care in the Silver Economy [18; 19]. The application of these technologies is reflected at multiple levels. In the context of home care, wearable devices and home health monitoring devices could achieve contactless perception, timely reminders, and assist the elderly in taking care of their health, and then effectively reduce the burden of home care [20]. Moreover, in terms of disease prevention, speech recognition and motion recognition technologies based on artificial intelligence can help with early detection and intervention of diseases such as Alzheimer's disease [10]. Also, technology could optimize the allocation of medical resources, and remote medical services extend the high-quality resources of central hospitals to communities and even households, promoting the balanced distribution of medical resources. In addition, intelligent scheduling and tracking tools may improve the efficiency of institutional operation and management [19]. To conclude, the fundamental purpose of technological development is to serve humanity and enable the elderly to share the benefits of technological progress.

5.4. Cultivate Mature Markets, Guide Consumption Upgrading, and Create Regional Models

The development of the silver market in China requires joint efforts from both the supply and demand sides. On the supply side, the government regulates market order and guides consumers to make rational choices by formulating industry service standards and demonstration project catalogs [21; 23]. For instance, the health department has formulated a three-year action plan to coordinate and cultivate the health and elderly care industry of Hainan FTP [17; 25], and has clarified development goals and implementation paths. At the demand level, developing new consumption models such as "elderly housing" and "retirement financial products" could help transform passive savings into active consumption, effectively unleash the savings potential held by the elderly, stimulate their consumption willingness, and activate the Silver Economy. At the same time, market segmentation and differentiated development are also important indicators for measuring market maturity. Hainan FTP plans to develop Boao Lecheng International Medical Tourism Pilot Zone and, through its own high-quality tourism resources, has created a unique high-end "medical+tourism" elderly care model [17; 26]. Thus, the practice in Hainan FTP may demonstrate that by providing rights to local policy innovation to stimulate market vitality, it could promote the development of the Silver Economy in a higher quality way.

6. CONCLUSION

In conclusion, the differences in pension systems between China and the United States are originated in their distinct cultural traditions, social systems, and development paths. The market-oriented elderly care model in the US utilizes the efficiency of the capital market and the flexibility of individual choices, but it also comes with the risk of fragmented services and uneven protection of the elderly. In contrast, China has embarked on a government-led, family-based, and multi-level development path, achieving widespread coverage of basic pension insurance in a short period of time and achieving remarkable achievements that have attracted worldwide attention. However, with the acceleration of population aging and the overlapping of the national conditions of "getting old before getting rich", the elderly care system of China meets challenges such as structural imbalance, uneven supply, insufficient payment ability, and urban-rural gap. The solution to address these problems could not simply replicate the American model or rely entirely on traditional paths. It should be based on local practices and explore a comprehensive development path that balances fairness and efficiency, government and market, tradition and modernity of Chinese society.

In the future, the improvement of the elderly care system in China and the development of the Silver Economy present a clear strategic direction. At the industrial level, unleashing market vitality is crucial for promoting the coordinated development of various business models such as medical and elderly care integration and elderly tourism. Innovative practices in regions such as Hainan FTP should be taken as a guide to cultivate differentiated and high-quality elderly care service brands. On the aspect of technology, it is crucial to accelerate the research and application of intelligent technologies in the field of elderly care, and then to alleviate the shortage of human resources and improve service efficiency and accessibility. From the perspective of demand, it is necessary to stimulate the consumption potential of the elderly population through policy guidance and market cultivation, forming a virtuous cycle of supply and demand interaction. The coordinated promotion of the above four dimensions collectively points to a clear goal of China, which is to build a more balanced and resilient multi-level elderly care model in the development process of the Silver Economy.

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