

Study on the Mechanism of Elderly Education Promoting the Development of the Silver Economy

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Abstract

With the acceleration of China's population aging process, the proportion of the population aged 60 and above had reached 21.1% by the end of 2023. The silver economy has become an important new driver for high-quality economic development, and its scale is expected to reach 30 trillion yuan by 2035. As a key link connecting the elderly group and the silver economy, elderly education possesses the dual attributes of public cause and industry, and plays a significant role in developing elderly human resources, guiding elderly consumption, and promoting industrial integration.

By analyzing the internal connection between elderly education and the silver economy, this paper systematically deconstructs four core mechanisms through which elderly education boosts the silver economy, namely the human resource development mechanism, consumption guidance mechanism, industrial integration mechanism, and policy coordination mechanism. Meanwhile, it points out the current practical obstacles, such as the disconnection of supply-side resources, insufficient participation on the demand side, and incomplete integration mechanisms. Furthermore, from four dimensions—improving the supply system, activating potential demand, optimizing integration mechanisms, and strengthening policy guarantees—the paper puts forward suggestions on optimization paths, aiming to provide theoretical support and practical references for promoting the coordinated development of elderly education and

the silver economy, as well as proactively addressing population aging.

Key words: Elderly education; Silver economy; Development mechanism; Population aging; Industrial integration

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1. INTRODUCTION

At present, China's population aging process is accelerating continuously. By the end of 2023, the national population aged 60 and above had reached 297 million, accounting for 21.1% of the total population; among this group, the population aged 65 and above stood at 217 million, making up 15.4% of the total. China has fully entered a moderately aging society.

While population aging brings about challenges such as a reduction in labor supply and an increased burden of social elderly care, it has also given rise to a large-scale silver economy market. It is predicted that by 2035, the scale of China's silver economy is expected to reach 30 trillion yuan, and its proportion in GDP will rise significantly, becoming an important new driver for promoting high-quality economic development.

As a key measure to address population aging, elderly education is not only a crucial way to meet the spiritual and cultural needs of the elderly and improve their quality of life, but also an important link connecting the elderly group with the silver economy. The Opinions on Developing the Silver Economy and Enhancing the Well-being of the Elderly, issued by the General Office of the State Council in 2024, clearly incorporates elderly education into the development system of the silver

economy, and emphasizes its important role in developing elderly human resources, guiding elderly consumption, and promoting industrial integration.

However, at present, China's elderly education still faces problems such as insufficient supply, disconnection between the curriculum system and industrial demands, and inadequate integration with the silver economy, failing to fully exert its role in boosting the silver economy.

2. INHERENT CONNECTION BETWEEN ELDERLY EDUCATION AND THE SILVER ECONOMY

2.1 Elderly Education is an Important Component of the Silver Economy

From the perspective of industrial attributes, elderly education has both the nature of a public cause and an industry. It is not only a key part of the national public service system, but also one of the core business formats of the silver economy. According to the "Three-Dimensional Industrial Chain" theory of the silver economy, elderly education falls into the category of "related industries". On one hand, it forms a consumer market by directly providing educational services—such as tuition fees for elderly university courses and purchases of online educational products—thereby directly driving silver consumption. On the other hand, through integration with industries like elderly care services, health care, and cultural tourism, it gives rise to new business formats including "elderly study tours" and "health care + education", expanding the industrial chain of the silver economy.

In terms of market scale, China's elderly education market has huge potential. By the end of 2023, there were over 76,000 elderly universities and schools at all levels across the country, with approximately 20 million registered students. However, this only accounts for 6.7% of the total elderly population, far lower than the coverage rate of over 30% in developed countries. As the new "post-1960s" elderly group gradually enters retirement, their demand for educational consumption has increased significantly. It is predicted that by 2030, the scale of China's elderly education market will exceed 500 billion yuan, becoming an important growth engine of the silver economy.

2.2 The Silver Economy Provides Impetus for the Development of Elderly Education

The rapid development of the silver economy has put forward higher requirements for elderly education and also expanded its development space. On one hand, the diversified elderly needs driven by the silver economy have promoted the extension of elderly education content from traditional leisure and entertainment to fields such as vocational skills, digital literacy, and health management. For instance, to adapt to the trend of smart elderly care, the demand for digital skills training—such as smartphone usage and smart home appliance operation—among the elderly has surged; to support the re-employment of the elderly, the demand for elderly vocational skills training (e.g., community services, cultural inheritance) has increased significantly.

On the other hand, the industrial integration trend brought by the silver economy has promoted the indepth integration of elderly education with other business formats. For example, elderly care institutions cooperate with elderly universities to provide "integrated care and education" services, and tourism enterprises develop "study tour + education" products, promoting the transformation of elderly education from a single classroom model to a scenario-based and immersive model

The policy support system of the silver economy also provides guarantees for the development of elderly education. In recent years, the state has successively issued policies such as the Elderly Education Development Plan (2016-2020) and the Opinions on Developing the Silver Economy and Enhancing the Well-being of the Elderly, which clearly put forward requirements including expanding the supply of elderly education resources, improving the elderly education system, and promoting the integration of elderly education with industries. These policies provide strong support for the high-quality development of elderly education.

3. MECHANISM ANALYSIS OF ELDERLY EDUCATION PROMOTING THE DEVELOPMENT OF THE SILVER ECONOMY

3.1 Human Resource Development Mechanism: Activating Elderly Human Capital and Alleviating Labor Shortage

By improving the knowledge and skill levels of the elderly group, elderly education promotes the transformation of the "elderly population" into the "economic population", providing human resource support for the silver economy. This is specifically achieved through the following paths:

Enhancing the re-employment capacity of the elderly

For healthy low-age elderly people (60-69 years old), vocational skills training (e.g., community management, housekeeping services, cultural inheritance) is carried out to help them master skills that meet the demands of the labor market. Zhejiang Province launched the "Silver Collar Assistance" Project, which provides special training on rural revitalization and enterprise support for retired cadres and technical personnel through elderly education

institutions. In 2023, this project helped over 100,000 low-age elderly people re-enter the workforce.

Developing elderly volunteer service resources

Elderly education cultivates the awareness and ability of the elderly in volunteer services, guiding them to participate in activities such as community governance, cultural inheritance, and public welfare services. In Japan, "Senior Talent Centers" cooperate with elderly education institutions to train the elderly to engage in volunteer work like community environmental protection and youth tutoring. This not only reduces the cost of social services but also enhances the social value of the elderly.

Inheriting traditional crafts and experience

For elderly people with professional skills or industry experience, "Mentor ship-based" education and inheritance programs are launched, covering areas such as traditional handicrafts, TCM (Traditional Chinese Medicine) health preservation, and enterprise management. These programs support the development of related industries (e.g., cultural and creative industries, health preservation industry). For example, Suzhou University for the Elderly offers courses on intangible cultural heritage (ICH) craft inheritance, training the elderly to become ICH inheritors. This has driven an annual growth of over 15% in the sales volume of local ICH cultural and creative products.

3.2 Consumption Guidance Mechanism: Releasing Elderly Consumption Potential and Optimizing Consumption Structure

By changing the consumption concept of the elderly and improving their consumption capacity, elderly education guides the upgrading of elderly consumption from survival-oriented to development-oriented and quality-oriented, injecting consumption momentum into the silver economy:

Changing consumption concepts

Courses on health management, financial planning, and digital consumption help the elderly establish a scientific consumption concept, reduce irrational consumption, and increase their willingness to consume high-quality products and services. Elderly financial education courses can enhance the elderly's understanding of pension financial management and fraud prevention, promoting their rational participation in the pension financial market. In 2023, the number of participants in China's personal pension system exceeded 50 million, and the scale of elderly financial consumption increased by 20%.

Improving consumption capacity

Digital skills training helps the elderly bridge the "digital divide", enabling them to conveniently participate in services such as online consumption, online medical care, and smart elderly care, thus expanding consumption scenarios. According to the 52nd Statistical Report on

Internet Development in China, the frequency of online consumption among elderly people who have received digital skills training is 2.3 times that of those who have not. Moreover, they are more inclined to purchase services such as health care and cultural entertainment.

Spurring new consumption demands

The integration of elderly education with other industries drives the growth of related consumption demands. For instance, elderly study tour courses promote "education + tourism" consumption. In 2023, the scale of China's elderly study tour market exceeded 30 billion yuan, with an average annual growth rate of 35%. Health management courses drive the elderly's consumption of physical examinations, rehabilitation equipment, and health-preserving products, with the related market scale growing by 18% annually.

3.3 Industrial Integration Mechanism: Promoting Business Format Innovation and Improving the Silver Economy Industrial Chain

As a link connecting multiple industries, elderly education promotes the extension of the silver economy industrial chain and business format innovation through in-depth integration with industries such as elderly care services, health care, and cultural tourism:

"Integrated Care and Education" Model: Elderly care institutions cooperate with elderly education institutions to offer courses on culture, health, and skills while providing daily care services, thereby improving the quality of elderly care services. For example, Taikang Home Elderly Care Communities have established elderly universities, offering nearly 100 courses. The participation rate of elderly residents reaches over 85%, driving a 20% premium on elderly care service fees.

"Integrated Medical Care and Education" Model: Medical institutions cooperate with elderly education institutions to provide educational services such as health knowledge popularization, chronic disease management, and rehabilitation training, promoting the extension of medical services to prevention and rehabilitation. For example, Peking Union Medical College Hospital has cooperated with elderly universities to launch "Chronic Disease Management Courses". For elderly participants, the chronic disease control rate has increased by 15%, and medical expenses have decreased by 10%.

"Cultural Tourism + Education" Model: Tourism enterprises and elderly education institutions jointly develop study tour products, combining scenic spot visits with cultural learning and skills training. For example, Ctrip launched the "Senior Study Tour Program", designing routes around themes such as historical culture and ICH inheritance. In 2023, this program served over 500,000 person-times and drove a 25% growth in elderly tourism consumption.

3.4 Policy Coordination Mechanism: Connecting Institutional Systems and Optimizing the Development Environment

Through coordination with policies related to the silver economy, elderly education promotes the formation of a "policy-education-industry" linkage pattern, creating a favorable environment for the development of the silver economy:

Improving the standard system: Elderly education institutions participate in formulating standards related to the silver economy (e.g., qualifications for elderly care service personnel, standards for aging-friendly products), enhancing the standardization level of the industry. For example, the National University for the Elderly, in collaboration with industry associations, formulated the Service Standards for Elderly Education, promoting the alignment of standards between elderly education, elderly care services, and health management.

Strengthening policy implementation: As important carriers for policy publicity and implementation, elderly education institutions help the elderly understand and enjoy policies related to the silver economy (e.g., elderly care subsidies, medical security, consumption discounts). For example, community elderly schools carry out "Policies Entering Communities" activities to assist the elderly in applying for long-term care insurance and subsidies for aging-friendly home renovations. In 2023, the national coverage rate of households with aging-friendly renovations increased to 12%, and the policy benefit rate rose by 30%.

Promoting policy innovation: By investigating the needs of the elderly, elderly education institutions provide references for the formulation of silver economy policies. For example, Shanghai University for the Elderly found through a questionnaire survey that the elderly have a strong demand for the "time bank" mutual elderly care model. Relevant suggestions were incorporated into local silver economy policies, promoting the full coverage of "time banks" in 16 districts of Shanghai.

4. PRACTICAL OBSTACLES IN ELDERLY EDUCATION PROMOTING THE DEVELOPMENT OF THE SILVER ECONOMY

4.1 Supply-Side Shortages: Disconnection Between Educational Resources and Industrial Demands

Low Resource Coverage: The distribution of elderly education resources in China is uneven, with a shortage of resources in rural and remote areas, and a prominent "difficulty in securing enrollment" phenomenon in urban areas. By 2023, the number of rural elderly schools accounted for only 35% of the national total, far lower

than the proportion of rural elderly population (40%); the average admission rate of urban elderly universities was less than 50%, and the admission rate for some popular courses was only 10%.

Outdated Curriculum System: Existing courses are mainly focused on leisure and entertainment (such as calligraphy, dance, and vocal music), accounting for over 70%. In contrast, courses closely related to the needs of the silver economy—such as vocational skills, digital literacy, and health management—account for less than 30%, failing to meet the elderly's needs for reemployment and smart living.

Weak Teaching Staff: The teaching staff in elderly education is dominated by part-time teachers (accounting for over 60%), with a shortage of professional teachers (e.g., teachers specializing in digital skills and health management). Additionally, there is a lack of a systematic teacher training system, leading to uneven teaching quality.

4.2 Demand-Side Constraints: Insufficient Participation Willingness and Capacity of the Elderly Group

Low Participation Willingness: Traditional concepts hold that elderly education is "useless" or "a waste of money," and some elderly people have a resistant attitude toward educational consumption. Surveys show that only 28% of the elderly have the initiative to participate in elderly education, among which the participation willingness of rural elderly (15%) is significantly lower than that of urban elderly (35%).

Limited Payment Capacity: There are differences in the income levels of the elderly in China, and rural elderly people and groups without pensions have weak payment capacity. In 2023, the per capita disposable income of rural elderly people in China was only 45% of that of urban elderly people, which restricted their consumption of paid educational services.

Barriers from the Digital Divide: Approximately 45% of the elderly face varying degrees of digital barriers, making it difficult for them to conveniently participate in online elderly education or obtain educational and consumption information through digital platforms. This restricts their participation in new business formats such as smart elderly care and online consumption.

4.3 Inadequate Integration Mechanism: Insufficient Synergy with the Silver Economy Industry

Lack of Cross-Departmental Collaboration: The management of elderly education involves multiple departments, including education, civil affairs, and health commissions. The problem of "fragmented management by departments" exists, and there is a lack of a unified coordination mechanism, making it difficult to promote the integration of elderly education with industries such as elderly care services and medical health. For example, in some regions, due to complex departmental approval

procedures for cooperation between elderly care institutions and elderly universities, the implementation cycle of cooperative projects can be as long as 6-12 months.

Low Market Participation: Elderly education is mainly dominated by government-led public welfare, with insufficient participation of social capital. In 2023, private institutions accounted for only 20% of China's elderly education market, and most of them were concentrated in first-tier cities. Private elderly education institutions in rural areas were almost non-existent, resulting in educational supply being unable to meet diverse needs.

Lack of Evaluation System: There is a lack of an evaluation mechanism for the promoting effect of elderly education on the silver economy. It is impossible to quantify the role of elderly education in human resource development, consumption guidance, and industrial integration, which affects the accuracy of policy support and resource investment.

5. PATH SUGGESTIONS FOR OPTIMIZING ELDERLY EDUCATION TO PROMOTE THE DEVELOPMENT OF THE SILVER ECONOMY

5.1 Improve the Supply System: Enhance the Adaptability of Elderly Education to Industrial Demands

Expand Resource Supply

Promote the extension of elderly education to communities and rural areas, and use idle schools, community service centers, etc., to build elderly education stations, achieving full coverage of elderly education stations in urban and rural communities by 2030. Develop online elderly education, build a national public service platform for elderly education, integrate high-quality curriculum resources, and lower the threshold for elderly participation. For example, promote the "National University for the Elderly + Local Branches" model to realize the national sharing of curriculum resources.

Optimize the Curriculum System

Increase the proportion of courses in vocational skills (e.g., community services, e-commerce operations), digital literacy (e.g., smartphone usage, fraud prevention), and health management (e.g., chronic disease prevention and control, rehabilitation training). By 2030, the proportion of relevant courses should be increased to more than 50%. Collaborate with enterprises related to the silver economy (such as elderly care institutions, health enterprises, and tourism companies) to develop customized courses. For instance, cooperate with health and wellness enterprises to launch "Health and Wellness Caregiver Training Courses" and work with tourism companies to develop "Study Tour Tutor Training Courses".

Strengthen Teacher Team Construction

Attract retired teachers, industry experts, and college

graduates to join the elderly education teacher team, and establish a "Silver Talent Pool". By 2030, the coverage rate of professional teachers should reach more than 80%. Incorporate elderly education teacher training into the vocational skills training system, set up special training funds, and regularly conduct training on teaching capabilities and industry knowledge to improve the professional level of teachers.

5.2 Activate Demand Potential: Enhance the Participation Willingness and Capacity of the Elderly Group

Strengthen Publicity and Guidance

Through media, community publicity, and other channels, spread the concepts of "lifelong learning" and "active aging with contributions", and showcase cases where elderly education helps the elderly re-enter the workforce and improve their quality of life to enhance participation willingness. Select typical examples such as "Elderly Learning Models" and "Silver Pioneers" to play an exemplary role and stimulate the elderly's enthusiasm for participation.

Improve the Payment Mechanism

Implement tuition fee reductions or exemptions for rural elderly and low-income elderly, and include elderly education in the scope of personal pension consumption, allowing the use of personal pensions to pay for educational expenses. Encourage private institutions to launch differentiated products and form a "inclusive + high-end" pricing system to meet the needs of different income groups.

Bridge the Digital Divide

Offer basic digital courses such as "Smartphone Usage" and "Online Consumption" in communities and elderly schools. By 2030, the coverage rate of digital skills training for elderly people over 60 years old should reach more than 50%. Promote the aging-friendly transformation of online education platforms and educational apps, simplify the operation interface, and add functions such as voice interaction and large fonts to improve the convenience of use for the elderly.

5.3 Improve the Integration Mechanism: Promote the Coordinated Development of Elderly Education and the Silver Economy

Establish a Coordination Mechanism

Set up a leading group for the integrated development of elderly education and the silver economy, composed of departments such as education, civil affairs, health, and culture and tourism. Establish a regular consultation mechanism, simplify the cooperation approval process, and promote the rapid implementation of projects. Launch pilot programs in regions with developed silver economies such as the Beijing-Tianjin-Hebei Region, the Yangtze River Delta, and the Guangdong-Hong Kong-Macao Greater Bay Area to explore integrated models such as

"integrated care and education", "integrated medical care and education", and "cultural tourism + education", and form replicable experiences.

Guide Market Participation

Provide preferential policies such as tax reductions, venue subsidies, and financing support for social capital participating in elderly education, and encourage enterprises and social organizations to establish elderly education institutions or participate in curriculum development. Build a "elderly education + industry" docking platform to promote cooperation between elderly education institutions and silver economy enterprises. By 2030, cultivate more than 100 demonstration-oriented integrated enterprises.

Improve the Evaluation System

Construct an evaluation index system for elderly education to promote the development of the silver economy, covering dimensions such as human resource development (e.g., re-employment rate), consumption guidance (e.g., education-driven consumption growth), and industrial integration (e.g., number of integrated projects). Conduct regular evaluation work and release evaluation reports to provide a basis for policy adjustments and resource investment, ensuring that the promoting role of elderly education in the silver economy is accurate and effective.

5.4 Strengthen Policy Guarantee: Build a Comprehensive Support System

Accelerate the introduction of the Elderly Education Law to clarify the status, rights and responsibilities, and safeguard measures of elderly education, providing a legal basis for the integrated development of elderly education and the silver economy. Establish a special fund for elderly education, expand the scale of financial investment, and at the same time guide the participation of social capital and charitable funds to form a diversified fund guarantee system. Learn from the experience of developed countries such as Japan and Germany, introduce advanced elderly education models and curriculum systems, and at the same time promote the internationalization of China's experience in the integration of elderly education and the silver economy to enhance international influence.

6. CONCLUSION

The coordinated development of elderly education and the silver economy is a crucial pathway to address population aging and drive high-quality economic development. Through four core mechanisms—human resource development, consumption guidance, industrial integration, and policy coordination—elderly education provides human resource support, consumption momentum, business format innovation, and environmental guarantees for the silver economy. In turn, the development of the silver economy expands the space and provides impetus for the advancement of elderly education.

Currently, the role of China's elderly education in boosting the silver economy still faces challenges such as insufficient supply, constrained demand, and inadequate integration. To fully unleash the driving effect of elderly education, targeted measures are required, including improving the supply system, activating potential demand, enhancing integration mechanisms, and strengthening policy guarantees.

Looking ahead, with the emergence of the "post-1960s" new elderly group, the consolidation of policy support, and the deepening of market participation, elderly education will integrate with the silver economy on a broader scale and at a deeper level. This integration will provide critical support for China to proactively respond to population aging and foster new economic drivers, ultimately achieving the dual-win goal of realizing "active aging with access to learning, contribution opportunities, and joyful living" (lao you suo xue, lao you suo wei, lao you suo le) and promoting the high-quality development of the silver economy.

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