

The value implication, practical dilemmas, and optimization paths of the silver economy in the context of active aging—Taking rural elderly care as an example

Tao Tao¹, Qian Gong^{1*}

¹School of Economics, Management and Law, Changchun Normal University, Changchun, China

*Corresponding Author. Email: gongqian@ccsfu.edu.cn

Abstract. With the acceleration of China's population aging process, the issue of elderly care in rural areas has become increasingly prominent. As an emerging economic form, the silver economy can not only meet the practical needs of rural elderly care but also demonstrate great potential in promoting the development of the rural elderly care industry. However, the vertical economic gap between urban and rural silver populations in China still exists. At this stage, the actual role of the silver economy in rural elderly care faces many dilemmas, including insufficient market consumption capacity, supply-demand mismatch of services and products, lack of infrastructure under policy guarantees, and deficiency in the multi-subject coordination mechanism. This paper analyzes the current practical bottlenecks of developing the silver economy for rural elderly care and puts forward suggestions on optimization paths. The study holds that optimizing the rural elderly care system needs to start from three main aspects: improving policy support, supporting industrial development, and guiding the transformation of consumption concepts, so as to realize the coordinated development of the silver economy and rural elderly care and promote the high-quality development of urban and rural areas.

Keywords: active aging, silver economy, rural elderly care

1. Introduction

Population aging is a practical problem faced by countries around the world, and it is also a long-term normal phenomenon and basic national condition of China. Compared with developed countries entering an aging society, China is even facing the dilemmas of "aging before getting rich", "aging without adequate preparation", and "aging without good health". In particular, the gap between urban and rural aging is gradually widening. "The number of urban elderly population will be 139 million in 2030, exceeding the rural elderly population by 23 million; the urban aging rate will be 14.4%, and the rural aging rate will be 23.1%. The gap between urban and rural aging rates will be the largest in 2040, with the urban aging rate reaching 20.6% and the rural aging rate reaching 32% at that time [1]." Obviously, the issue of rural elderly care is an indispensable topic in China's aging society in the era of negative population growth. Population aging affects the demand structure of the whole society, and the "silver economy" has become a sunrise industry to make up for the insufficient capacity of government-provided elderly care, injecting great impetus into economic development. Accelerating the development of the silver economy and fostering new drivers of economic growth have become important contents for improving the efficiency of national governance. At present, the silver economy mainly focuses on cities, and there is still the problem of inefficient empowerment in rural elderly care. Further research is needed on how to integrate functions to realize the coordinated development of "elderly care" and "enjoyable elderly life" in urban and rural areas.

The Third Plenary Session of the 20th Central Committee of the Communist Party of China proposed to "actively respond to population aging and improve the policy mechanism for the development of elderly care services and the elderly care industry [2]". Actively responding to population aging has become a top national strategy on a par with rural revitalization, invigorating the country through science and education, and Healthy China. In January 2024, the General Office of the State Council issued the Opinions on Developing the Silver Economy to Enhance the Well-being of the Elderly, in which the silver economy became the theme for the first time. The Opinions put forward that "the silver economy refers to the sum of a series of economic activities that provide products or services for the elderly and make preparations for the elderly stage. It has the characteristics of a wide range of coverage, a long industrial chain, diversified business forms, and great potential [3]". Vigorously developing the

silver economy, fostering new drivers of economic development, improving the quality of people's lives, and enhancing the well-being of the elderly put forward new requirements and create a new model for actively responding to population aging. At present, the rapid urbanization process has accelerated the outflow of young and middle-aged labor force in rural areas. "The proportion of rural population buying houses in nearby cities and rural children going to school in cities has increased rapidly [4]", which has further deepened the aging degree of the rural population, and the demand for elderly care services has shown an explosive growth. According to the latest national population census data, compared with the data of the sixth national population census, the proportion of the rural population aged 60 and above in the total rural population has increased from 14.98% to 23.81%. In addition, the proportions of rural elderly population aged 60 and above and 65 and above are 23.81% and 17.72% respectively, which are 7.99 and 6.61 percentage points higher than those in urban areas. The aging degree of the rural population has exceeded that of urban areas, resulting in the "urban-rural inversion" phenomenon of aging [5]. The rise of the silver economy provides an important opportunity to address the issue of rural elderly care. The demand in fields such as health preservation, elderly care services, and smart elderly care is growing rapidly, bringing new possibilities for the innovation and optimization of rural elderly care models.

At present, domestic and foreign academic research on the silver economy and rural elderly care mainly focuses on the following aspects:

First, the definition of the silver economy. The concept of the silver economy is broad, and there is no unified international definition. Different countries have different definitions of the connotation of the silver economy at different levels of economic development and different stages of aging, which are constantly evolving. As early as the 1970s, the term "silver economy" first appeared in Japan. In 2008, the European Parliament officially adopted the term "silver economy". In 2014, the Organization for Economic Co-operation and Development (OECD) defined the silver economy as "industries or economic sectors that focus on producing and providing products and services for the elderly" in *Fostering Resilient Economies* [6]. The European Commission proposed in 2015 that the silver economy refers to "all economic activities generated by public and consumer expenditures related to the population aged over 50 [7]". Zeng and Fan defined it as the sum of economic activities that provide products and services around the elderly's clothing, food, housing, transportation, culture, education, entertainment, medical care, and elderly care, covering the elderly care industry and elderly care services. It has the characteristics of comprehensiveness and diversity, age orientation, public economy, and dynamic development [8]. Peng and Chen believed that it mainly refers to the production, supply, consumption, and derivative economic activities of various products and services for the elderly, including the elderly care industry and elderly care services. Its products and services involve all industries and the entire industrial chain, with the nature of public goods and the characteristics of dynamic development [9].

Second, the research on the positive impact of the silver economy on elderly care. The aging problem in rural areas of China is particularly prominent, and the unbalanced development between urban and rural areas has caused the rural elderly care service system to face more challenges [10]. In the context of active aging, the silver economy is regarded as an important way to empower rural elderly care, aiming to improve the quality of life and well-being of the elderly through economic development [11]. The silver economy not only includes markets that meet the diverse needs of the elderly, such as medical and health care, daily care, and entertainment services [7], but also involves fields such as providing employment opportunities for the elderly and promoting their social participation [12]. In rural areas, the development of the silver economy can improve the well-being of the elderly, drive local economic growth, and promote rural revitalization [13].

Third, the research on rural elderly care. First, regarding the demand for rural elderly care services, Meinow et al. conducted a survey on the elderly aged 65 and above in the inner city of Stockholm, and the study showed that economic income and physical health are the main factors affecting the demand for elderly care services [14]. Huang believed that "the demand for elderly care services of rural elderly has shifted from low-level basic survival needs such as food and clothing to diversified high-level needs such as medical care, spiritual culture, legal aid, and day care [15]". Second, regarding the problems existing in rural elderly care services, Zhang believed that China's rural elderly care service system has obvious "fragmentation" characteristics and cannot effectively respond to the increasingly severe elderly care crisis [16]; problems such as the weakening of family elderly care functions, insufficient community elderly care services, limited coverage of social insurance for the elderly, and low efficiency of institutional elderly care services have put rural elderly people in multiple dilemmas [17]. Third, regarding the causes of the problems in rural elderly care, Gao pointed out that they are mainly due to the "urban-rural inversion of the proportion of aging population and the 'urban-rural difference in resource investment' [18]"; Wang and Hai believed that "the decline of the traditional elder system and patriarchy in the social transformation period, the improvement of women's family status, and the dominance of economic rationality" are the influencing factors of the rural elderly care dilemma [19]. Fourth, regarding the national measures to address rural population aging, Dickinson et al. emphasized that responsible subjects such as the government should guide rather than interfere with the elderly's choices, and allow them to grasp the decision-making power of services based on their own development needs [20]. Xu believed that the innovation trend of rural elderly care services is to "improve the three-level elderly care service network connecting counties and townships [21]".

Scholars' relevant research has expanded the content of the silver economy and elderly care, but most studies tend to elaborate from a single perspective. The unique combination of the silver economy and rural elderly care is relatively insufficient and needs further research. From the perspective of developing the silver economy, this paper focuses on rural elderly care

services, combines the current situation of China's rural silver population, and drives the improvement of the elderly care service system through economic development, so as to effectively improve the quality and efficiency of rural elderly care services and realize the improvement of the elderly's well-being and the sustainable development of the economy and society.

2. The theoretical connotation of active aging and the group characteristics of the rural silver population

2.1. The theoretical connotation of active aging

The concept of "active aging" provides a new perspective for countries around the world to address the issue of the elderly population. The introduction of this concept provides a new framework for us to think about how to better face an aging society. The core propositions of this theory include three aspects: First, it emphasizes the importance of health for the elderly, which enables them to maintain a good quality of life. Good physical, psychological, and social interaction conditions are the cornerstones of a healthy life. Second, it is crucial to encourage the elderly to actively participate in social activities, such as various leisure and entertainment programs. In this way, they can not only achieve spiritual satisfaction but also maintain physical health. Finally, participating in these activities also helps them establish social connections and enhance their sense of community belonging. With the development of society, actively responding to aging has become the key. Furthermore, we need to ensure that the living foundation of the elderly is fully protected. The quality of life of the elderly has been significantly improved. Their needs are not only carefully taken care of by family members but also supported by all sectors of society. This progress provides a foundation for the development of active aging.

To promote active aging, we must emphasize the construction of public facilities and cannot ignore the impact of environmental quality on this process. Urban planning, age-friendly design of community facilities, and age-friendly transformation of housing are crucial for improving the quality of life and comfort of the elderly. This requires us to deeply understand and reflect the concept of active aging in architectural design, so as to create a healthy environment conducive to the life of the elderly. At the same time, we also need to establish a social system based on respecting the rights and interests of the elderly to ensure that they can enjoy the due social welfare in the process of social development. To effectively promote active aging, we must give priority to protecting the basic rights of the elderly, and this system should be continuously optimized and improved with social progress. In addition, we also need to recognize that the development of physical and mental health is a key factor in the implementation of active aging strategies. Therefore, while attaching importance to physical health, we cannot ignore the importance of mental health. With the increase of age, many elderly people lack a positive perception of their own elderly role and often feel lost.

In the face of the challenges of elderly life, especially the initial adaptation, we should not ignore the importance of emotional factors. A positive emotional state can better help the elderly enjoy their later life. Individuals who have a positive attitude towards old age are more likely to get out of the family, actively participate in various entertainment activities, and be willing to communicate with others. This process not only improves their acceptance and satisfaction with elderly life.

The concept of active elderly life is an important force to promote the elderly to actively shape their own later life. It encourages them to engage in various social activities with an optimistic attitude, and at the same time supports them to continue self-realization and development in the elderly stage and contribute to social progress. This theory has significant guiding significance for China to address the aging problem and formulate relevant elderly policies.

2.2. The group characteristics of the rural silver population

The rural silver population has both the "common characteristics of the elderly group" and the "characteristics of rural society". The particularity of their physiological functions, psychological needs, and economic capabilities constitutes the logical starting point of the silver economy.

2.2.1. Physiological characteristics: the symbiosis of labor capacity and health risks

Most rural elderly people still engage in agricultural production, which is a significant feature that distinguishes the rural silver population from the urban silver population. Although they have basic labor capacity, most of them suffer from chronic diseases. "The situation of chronic diseases and disability among the elderly in China is quite severe. The proportion of elderly people suffering from more than one chronic disease is as high as 75%, and the number of disabled and partially disabled elderly people exceeds 40 million, which is expected to be close to 100 million by the middle of this century [22]". This forms the living norm of "working while providing for the elderly". This "labor-dependent health risk" leads to their urgent demand for lightweight agricultural tools, field first-aid equipment, and chronic disease management services, while the high-end intelligent equipment mainly used in cities has low applicability to them.

2.2.2. Psychological characteristics: the interweaving of loneliness and conservative consumption

According to a survey by the Ministry of Civil Affairs, affected by the outflow of young and middle-aged people, the proportion of empty-nest elderly people in China has now exceeded 50%, and in some large cities and rural areas, the proportion of empty-nest elderly people even exceeds 70%. "The main pressure for children to support their parents is not the economic pressure, but the increasing time cost for the daily care of their parents [23]", which makes parents' desire for emotional communication and companionship more intense. However, the coverage rate of cultural and entertainment facilities in rural areas is low, and their spiritual life is limited to visiting neighbors and chatting, and watching TV. In terms of consumption concept, affected by the traditional lifestyle and the high degree of self-sufficiency in daily life, the consumption concept of the rural silver population is relatively conservative. Due to the lack of scientific health concepts and health care awareness, it is difficult to change their consumption concepts, especially regarding the attitude towards elderly care services and elderly care products. However, at the same time, there is also a certain compensatory consumption psychology. "Under the premise of limited total family resources, they have to choose the way of 'benefiting the younger generation' and 'minimum-level elderly care' to support their children or grandchildren to complete identity transformation and class mobility [24]".

2.2.3. Economic capabilities: the significance of income vulnerability and security gaps

According to the calculation of the 2023 Statistical Communique on the Development of Human Resources and Social Security Cause, the average monthly urban pension expenditure per person is 1,019 yuan, while that for urban and rural residents is only 222 yuan [25]. At the same time, in addition to the support provided by children, relevant research shows that with the increase of the pressure of rural family reproduction, the elderly care expectation of rural elderly people has been delayed. Those elderly people with labor capacity have self-support income, which reduces their dependence on their children's elderly care resources. Affected by the fluctuation of agricultural product prices and the decline of labor capacity, the income stability of rural elderly people is poor; at the same time, their participation rate in commercial insurance is low, their savings rate is high, and their ability to resist risks is weak. This economic structure of "low payment capacity and high savings tendency" determines that the rural silver economy must focus on low-cost and practical products and government-subsidized services, and gradually release consumption potential.

3. The value implication of the silver economy in rural elderly care

The silver economy and the development of elderly care are gradually integrated, mainly focusing on the elderly's clothing, food, housing, transportation, medical care, and entertainment, covering many industrial fields. From the economic perspective, with the increase of the elderly population, the demand for related products and services continues to grow, which can stimulate consumption, drive the development of multiple industries, promote employment, and create new economic growth points. From the social perspective, a sound industrial system of the silver economy can improve the quality of life of the elderly, enabling them to enjoy a more convenient, comfortable, and rich life in their later years. This helps to build a harmonious intergenerational relationship, reduce the burden of family elderly care, and at the same time reflect the society's care and respect for the elderly group. For a long time, rural elderly care has basically adopted the family elderly care model and is generally regarded as an ethical issue. "The family system defines the rights and relationships in rural society, which not only shapes the behavioral logic of familism but also nurtures the cultural personality 'under the ancestor's shadow' [26]". However, the elderly care order brought about by the socialization of intergenerational relationships has gradually exceeded the carrying capacity of families. Thus, population aging affects the demand structure of the whole society, making the "silver economy" a sunrise industry to make up for the insufficient capacity of government-provided elderly care and injecting great impetus into economic development. The empowerment of the silver economy to rural elderly care essentially solves the demand derived from the characteristics of the elderly group through market-oriented means, realizing the triple value of "demand adaptation-economic linkage-social coordination", which accurately corresponds to the "health, participation, and security" pillars of active aging.

3.1. Demand adaptation: accurate connection from survival security to development empowerment

To solve the problems of the elderly, we must essentially start from people's livelihood. "In 2023, the market scale of China's silver economy was about 10.5 trillion yuan, among which the market scale of elderly products reached 5 trillion yuan, with an average annual growth rate of more than 25% [27]". "It will exceed 22 trillion yuan by 2030, contributing 8 percentage points to GDP; by 2050, it will grow to 106 trillion yuan, accounting for 33% of GDP, making China the country with the largest market potential of the silver economy in the world [28]". "The aging, disability, and dementia of the elderly population, as well as the miniaturization and nuclearization of family scale and the decline of filial piety culture, have made family elderly care face multiple risks such as economic, service, technical, organizational, and ethical risks [29]". The development of the silver

economy can attract social capital to invest in the field of rural elderly care for the construction and improvement of elderly care service facilities. The improvement of these facilities can provide a more comfortable and safe elderly care environment for rural elderly people and meet their needs in daily care, medical care, cultural entertainment, and other aspects. With the development of industries related to the silver economy, the content of rural elderly care services will also be continuously enriched. In addition to traditional daily care services, diversified service items such as rehabilitation care, health management, psychological comfort, and elderly education will be added, enabling rural elderly people to enjoy more comprehensive and professional elderly care services and improving their quality of life.

3.2. Economic linkage: a two-way cycle to activate the endogenous development momentum of rural areas

First, the silver economy covers many industries and fields, such as the manufacturing of elderly products, elderly care services, elderly tourism, and elderly finance. Its development in rural areas will create a large number of job opportunities, including direct jobs such as staff in elderly care institutions and salespersons of elderly products, as well as indirect jobs such as production, transportation, and distribution personnel of related products. This helps to solve the employment problem of the rural surplus labor force and increase farmers' income. At the same time, it can also attract some migrant workers to return to rural areas to participate in the development of the rural elderly care industry. These people bring back advanced concepts, technologies, and funds from cities, thereby driving the upgrading and transformation of related industries in rural areas and injecting new vitality into rural development. Second, it promotes the development of emerging industries such as rural e-commerce and logistics, and enhances the vitality and competitiveness of the rural economy. Third, with the improvement of the income level of rural elderly people and the transformation of their consumption concepts, their consumption demand for elderly products and services will also continue to increase. The development of the silver economy can better meet this part of the demand, release the consumption potential of rural elderly people, promote the prosperity of the rural consumer market, expand the space for economic development, consolidate the foundation of the rural economy, and promote the high-quality transformation of the rural aging society.

3.3. Identity and belonging: alleviating family conflicts and social pressure

The silver economy is conducive to resolving the elderly care risks brought by population aging. In rural areas, the traditional family elderly care model is facing many challenges, such as the increase of empty-nest elderly people due to their children's migration for work and the weakening of family elderly care functions. The development of the silver economy provides more elderly care options for rural elderly people, enabling them to rely on social elderly care services to a certain extent to meet their own needs, thereby reducing the burden of family elderly care and alleviating family conflicts and social pressure caused by elderly care issues. The development of the silver economy can create more opportunities for rural elderly people to participate in social activities, enabling them to better integrate into society and realize their own value. This not only helps to improve the life satisfaction and happiness of the elderly but also is conducive to promoting communication and exchange between generations, enhancing mutual understanding and trust between generations, building a more harmonious intergenerational relationship, and maintaining the stability of rural society. The development of the silver economy requires the integration of various resources in rural communities, such as human, material, and financial resources, which will promote cooperation and mutual assistance between rural community members and enhance the cohesion and sense of belonging of the community. Rural elderly people are important inheritors of rural culture. The development of the silver economy can provide more platforms for rural elderly people to display and inherit rural culture, such as holding elderly folk activities and setting up rural culture inheritance classes. Through these activities, not only can the spiritual and cultural life of rural elderly people be enriched, but also excellent rural culture can be inherited and carried forward; at the same time, by carrying out various elderly cultural, entertainment, and sports activities, the cultural life of rural communities can be enriched, a positive and upward community atmosphere of respecting and caring for the elderly can be created, and the harmonious development of rural society can be promoted.

4. The practical dilemmas of the silver economy in rural elderly care

4.1. Dilemmas in product and service supply: urban-rural adaptation mismatch and professional capacity gaps

According to the statistics of the National Working Committee on Aging, "there are more than 60,000 kinds of elderly products worldwide, while the market supply in China is only about 2,000 kinds [30]". "The satisfaction rate of the total service demand of the elderly in China is only 15.9%, and 84.1% of the elderly's service demand has not been met [31]". At present, the R&D and promotion paths of silver economy products show an obvious urban orientation. The product design mostly focuses on the lifestyle of urban elderly people, which is relatively convenient, concentrated, and dominated by leisure scenarios. In terms of

function setting and price positioning, the living habits and actual needs of rural elderly people are not fully considered, resulting in a serious disconnect from the actual situation in rural areas. Rural elderly people need products more suitable for rural labor and living environments, but the supply of products with simple functions and affordable prices is relatively insufficient. Some high-end products with complex functions are expensive, exceeding their affordability. This "inadaptability to local conditions" leads to a shortage of products that truly meet the daily needs of rural elderly people, inhibiting the endogenous momentum of the market. In addition, rural areas are relatively scattered, the product sales channels are not perfect, and infrastructure such as logistics and distribution is relatively weak, resulting in poor timeliness and convenience of product supply. The two ends of the market are unbalanced, making it difficult to form a benign supply-demand cycle, affecting the rural elderly people's access to silver economy products, and hindering the rooting and expansion of the silver economy in rural areas.

The quality and quantity of rural elderly care services are seriously insufficient. The content of home-based elderly care services is relatively single, mainly focusing on simple daily care and emergency support. The supply of diversified home-based services such as meal assistance, cleaning assistance, and bathing assistance is insufficient, and there is a huge gap in professional care and rehabilitation services urgently needed by the elderly who are advanced in age, living alone, or disabled. The supply of spiritual and cultural services in rural areas is insufficient, and the supply of elderly cultural and entertainment activities and psychological comfort services is far from meeting the demand. At the same time, there is a shortage of professional personnel in rural elderly care services. According to the Survey Report on the Status of Elderly Care Service Talents, 65.9% of elderly care service talents are in urban areas, while only 34.1% are in rural areas [32]. The number of professional elderly care institutions in rural areas is extremely small. Even if there are some homes for the elderly, their service quality and professional level are relatively low, and the quality of service personnel is uneven. Some nursing staff have not received professional nursing training and lack professional knowledge and skills in elderly care, medical and health care, psychological counseling, etc., so they cannot provide professional care services for disabled and partially disabled elderly people. Daily care and health care cannot be guaranteed in a timely and effective manner, and safety accidents and health problems are more likely to occur, affecting the quality of service supply.

4.2. Dilemmas in infrastructure: backward hardware construction and insufficient function utilization

First, the shortage of elderly care facilities. Affected by economic, geographical, and population distribution factors, the construction of elderly care facilities in rural areas is backward. Many rural areas lack basic elderly care facilities such as village-level or regional day care centers. Some built facilities have low utilization rates due to insufficient maintenance funds and shortage of staff. Public homes for the elderly in towns and townships also face many difficulties in operation, such as financial constraints and outdated facilities. Some even face the risk of closure, making it difficult to meet the elderly care needs of rural elderly people.

Second, the weakness of medical infrastructure. The infrastructure of medical and health care in rural areas has long been in a weak link. The hardware equipment is outdated. Routine inspections can barely be maintained, but once it involves the accurate diagnosis of complex diseases, the limitations of the existing equipment are fully revealed. The elderly often need to go to distant urban hospitals for inspections and treatment, which consumes additional time, energy, and money.

Third, the lack of drug supply. Some special drugs for the treatment of chronic diseases in the elderly are difficult to obtain in rural medical institutions, and need to be purchased in towns, counties, or even cities. In terms of medical insurance, although policies continue to tilt towards rural areas and the scope and proportion of reimbursement have gradually increased, there is still a gap in the security level compared with cities. New diagnosis and treatment technologies and specific drugs are mostly outside the reimbursement framework. The self-paid part increases the economic pressure on rural elderly people. The demand for health and elderly care is reduced due to medical shortcomings, which also puts a "shackle" on the development of the silver economy in the field of rural elderly care and medical coordination.

4.3. Dilemmas in the consumer market: dual constraints of weak purchasing power and suppressed consumption willingness

At present, the income gap between urban and rural residents is still large. "In 2023, the per capita disposable income of urban residents was 51,800 yuan, which was 2.39 times that of rural residents (21,700 yuan)" [33]. On the one hand, the income sources of rural elderly people mainly include agricultural production and support from children. With the increase of age, their labor capacity declines, and agricultural output decreases. The fluctuation of agricultural product prices also makes their income unstable. At the same time, children have high economic pressure, and the support they can provide is limited. In addition, the amount of rural pensions is relatively small, which makes the overall income level of rural elderly people low and their consumption capacity limited.

On the other hand, rural elderly people have a low level of cognition and acceptance of financial products such as commercial insurance. In their view, savings are the "magic weapon" to deal with birth, aging, illness, death, natural disasters, and man-made

disasters. Even if they have a little surplus money, they consider hiding it at home or depositing it in a bank for a fixed term to make profits through interest. Due to the lack of modern financial planning concepts and the lack of knowledge on how to make funds "active" and realize value preservation and appreciation through reasonable investment channels, their consumption capacity is further weakened, which is difficult to support the consumption of silver economy-related products and services, and hinders the vigorous development of the silver economy in the field of rural elderly care. Affected by traditional concepts, rural elderly people have a relatively conservative consumption concept. Rural elderly people adhere to the creed of "living within one's means and being thrifty in managing the family", and regard consumption as a last resort when necessary, rather than a choice to improve the quality of life. They are accustomed to a thrifty life, focusing on the practicality and price of products. Their acceptance of non-essential and enjoyable silver economy products and services, such as elderly tourism and high-end elderly care services, is low, and their consumption willingness is not strong, which largely limits the expansion of the silver economy in the rural market.

4.4. Dilemmas in social support: single policy tools and low efficiency of multi-subject coordination

The government's policy support for the development of the rural silver economy is insufficient, with both scarce support policies and lack of guidance. The tax preferential policies are not clear, and there is a lack of special tax reduction and exemption measures for the rural elderly care industry, which increases the cost of enterprises and social organizations participating in rural elderly care services. The subsidy policies are not perfect, and the subsidies for the development of rural elderly care products and the construction of service facilities are limited, making it difficult to attract social capital to invest in the rural silver economy.

Among the series of national elderly care policies, there are more policy contents on infrastructure construction and service provision, but the policy support for mobilizing social organizations is insufficient. This is also the reason why the enthusiasm of rural social forces to participate in elderly care services is not high. It is reflected in the fact that enterprises invest less in the field of rural elderly care. Although some rural enterprises with economic strength have a sense of social responsibility, they hold a wait-and-see attitude towards participating in rural elderly care services and do not give full play to their advantages in funds, technology, management, and other aspects. Social organizations also face problems such as shortage of professional talents and difficulties in fund-raising in rural elderly care services. The insufficient capacity of social organizations makes it difficult for them to operate continuously and stably in the process of providing elderly care services, and it is impossible to form a diversified social elderly care service pattern.

5. The optimization paths of the silver economy in rural elderly care

5.1. Accurate supply-demand matching and improving the product and service ecosystem

5.1.1. Customizing adaptive products and unblocking supply channels

Organize cross-departmental research teams, and combine the efforts of multiple departments such as civil affairs, health, and agriculture and rural affairs to conduct comprehensive surveys in rural areas focusing on rural labor, daily living, and health needs. Form a detailed demand database for enterprises' R&D reference, and guide enterprises to design and produce practical and affordable products such as portable agricultural assistive tools, simple home health self-test equipment, and energy-saving and warm home supplies according to the characteristics of the rural environment and consumption preferences. Integrate the existing commercial resources in rural areas, build a multi-level product sales network relying on supply and marketing cooperatives, e-commerce service stations, and rural convenience stores, unify logistics and distribution standards, optimize the planning of distribution routes, and use big data to predict demand and intelligent warehousing for allocation to ensure timely and accurate product delivery. At the same time, establish a product quality traceability and after-sales feedback mechanism, set up village-level service points, and solve problems such as product quality disputes, returns, and exchanges on the spot to protect the rights and interests of rural consumers.

5.1.2. Enriching service connotation and improving professional quality

Education planning and reform should pay attention to the structure and quality of the elderly care service team. The education department, in conjunction with the human resources and social security department, guides vocational colleges and technical schools to set up characteristic majors in rural elderly care services, with targeted enrollment, targeted training, and targeted employment. The curriculum system is closely linked to the actual needs of rural areas, incorporating content such as agricultural care and folk cultural activity organization. Regularly organize in-service elderly care service personnel to participate in online and offline mixed training, invite industry experts to provide on-site guidance and distance teaching, and issue professional

qualification certificates after passing the assessment to improve the quality and service capabilities of the personnel. The competent departments formulate standardized norms for rural elderly care services, clarify the service processes, quality indicators, and staffing standards for all links of home-based, community-based, and institutional elderly care, and promote standardized development with standardization. Encourage social forces to participate in rural elderly care services through innovative models such as chain operation and brand trusteeship, introduce high-quality urban resources and advanced management experience, optimize service details in combination with rural customs, and create a diversified, professional, and characteristic elderly care service supply pattern.

5.2. Consolidating the infrastructure foundation and strengthening the basic guarantee function

5.2.1. Rational layout of elderly care facilities and strengthening operation and maintenance management

Local governments play a leading role, and coordinate multiple departments such as civil affairs, planning, and finance to scientifically formulate the construction plan of elderly care facilities based on factors such as rural population density, aging degree, and geographical location, include them in the key project library of rural revitalization, and actively strive for multiple funds such as higher-level transfer payments, special bonds, and social donations to ensure sufficient construction funds. Establish a special fund for the operation and maintenance of elderly care facilities, which is used exclusively for daily maintenance of facilities, equipment renewal, staff salary guarantee, etc., to ensure normal operation. In the functional design of the facilities, integrate multi-functional modules such as daily care, medical and health care, cultural entertainment, and spiritual comfort to create a "one-stop" comprehensive elderly care service venue that meets the diversified needs of rural elderly people.

5.2.2. Upgrading medical infrastructure and optimizing medical insurance policies

Increase financial investment in the hardware of rural medical and health institutions, regularly update and replace basic diagnosis and treatment equipment, introduce intelligent chronic disease management systems and telemedicine consultation equipment, and break the urban-rural barrier of medical resources. Improve the rural drug supply guarantee mechanism, establish a county-level drug distribution center, and use information technology to realize dynamic monitoring of drug inventory and intelligent replenishment to ensure the continuous supply of commonly used drugs and chronic disease drugs. The medical insurance department continues to optimize policies, gradually narrow the gap between urban and rural medical insurance reimbursement, include more new diagnosis and treatment technologies and specific drugs in the scope of rural medical insurance reimbursement, simplify the procedures for off-site medical treatment registration and settlement, and realize real-time online reimbursement. Explore the coordinated and complementary model of medical insurance and commercial health insurance, launch customized health insurance packages for rural elderly people, strengthen the bottom-line function of medical security, and reduce the burden of medical treatment.

5.3. Optimizing resource allocation and enhancing consumption support capacity

5.3.1. Consolidating the economic foundation and expanding consumption potential

The practical driving force for the prosperity and development of the silver economy is to break the constraints on the consumption of the elderly population and improve the purchasing power of the elderly group. In view of the fragile income structure of rural elderly people, it is crucial to strengthen the agricultural support system from the policy level. Cooperate with the agriculture and rural departments and scientific research institutes to accurately connect with the actual situation in rural areas, promote agricultural new technologies that are highly adaptable and easy to operate, and help the elderly stabilize agricultural output and improve product added value. At the same time, build a green channel for urban-rural agricultural and sideline product connection, reduce losses in the circulation link, ensure the stability of the sales price of agricultural products, and consolidate their main source of income. On this basis, gradually improve the overall level and payment standard of rural pensions, and adjust them dynamically with reference to the price index and regional economic growth rate to alleviate economic pressure and release consumption space. In view of the lack of financial knowledge, the financial regulatory department, in conjunction with grass-roots community organizations, carries out regular financial literacy promotion activities. Customize financial popularization courses that are in line with the cognitive level of rural areas, and popularize the characteristics and operation logic of elderly financial products through village radio broadcasts, cultural auditorium lectures, and other forms. Guide financial institutions to innovate product design, such as elderly savings products with small initial deposits, stable returns, and flexible deposits and withdrawals, and assign exclusive financial advisors to provide regular on-site services in rural areas to formulate adaptive plans one-on-one, stimulate the vitality of funds, and empower consumption upgrading.

5.3.2. Changing consumption concepts and guiding market trends

The market is the engine for the silver economy to empower rural elderly care. Studies have shown that the "retirement-consumption puzzle [34]" is not significant among the elderly who are single, over 70 years old, and retired voluntarily. Therefore, it is very important to establish a good consumption environment, relieve worries, and encourage rural elderly people to dare to consume and be willing to consume. Give play to the demonstration effect of rural opinion leaders, tap the typical cases of rural elderly people who take the lead in trying new elderly care products and services, share their personal experience stories, and spread them through rural social networks. At the same time, use new media platforms to expand the scope of publicity, produce short videos and graphic content to show the examples of the silver economy improving the quality of life, integrate rural cultural elements and life scenarios to narrow the psychological distance and break the barriers of consumption concepts. The government sets up a special guidance fund to provide price subsidies or point redemption discounts for rural elderly people to purchase rigid-demand products such as rehabilitation equipment and elderly education courses, reducing the trial threshold. Carry out the selection activity of "Pioneer Village for Elderly Consumption", and reward villages with active participation and a strong consumption atmosphere with public facility construction to stimulate the group's follow-up consumption enthusiasm and cultivate the domestic demand market of the rural silver economy.

5.4. Pooling social efforts and building a multi-subject coordination pattern

5.4.1. Strengthening policy attraction and stimulating capital investment

The relationship structure and resource allocation of multiple governance subjects such as the government, society, and market in the supply of elderly care services determine the effect of rural elderly care governance. Among them, the government plays a crucial leading role as the builder of the rural elderly care service system and the promoter of the silver economy. It improves the efficiency and effectiveness of coordinated governance by improving the legal environment and is responsible for optimizing the allocation of rural elderly care resources by using policy tools as a lever. First, it is necessary to continuously promote and improve the legislation related to the social welfare, economic income, and medical insurance of the elderly group to optimize and standardize management. Second, the tax department should refine the tax preferential policies for the rural elderly care industry, provide value-added tax reductions and exemptions and corporate income tax preferences for enterprises engaged in the R&D and production of elderly care products and the operation of elderly care services, and exempt land use tax for land used for elderly care facilities to reduce operating costs. The financial department establishes a full-chain subsidy mechanism covering product R&D, facility construction, and service operation, and accurately allocates subsidy funds according to indicators such as project scale, service quality, and social benefits to stimulate the enthusiasm of social capital.

5.4.2. Stimulating corporate responsibility and empowering social organizations

Enterprises should give full play to their role as market entities, actively carry out market research, promptly grasp the changing characteristics of the demand structure of the rural silver population, cultivate characteristic brands, and enhance market competitiveness. At the same time, the government establishes an incentive mechanism for enterprises to participate in rural elderly care, sets up the "Outstanding Contribution Award for Rural Elderly Care", provides honorary recognition and preferential policy support, builds a platform for matching the supply and demand of enterprises and rural elderly care, and guides enterprises to give full play to their advantages in funds, technology, and talents to deeply participate in rural elderly care through industrial support, service donations, and technology output. For example, technology enterprises donate intelligent elderly care equipment, and agricultural enterprises help increase the added value of agricultural product sales. In addition, the government should encourage social organizations to participate in the rural elderly care service process, provide them with necessary resource support, and enable them to better assume public welfare responsibilities. The civil affairs department takes the lead in building an incubation base for social organizations, provides basic support such as free office space, equipment and materials, and project planning training for social organizations engaged in rural elderly care, helps them connect with government-purchased service projects and charitable fund resources, cultivates their independent "blood-making" capacity and sustainable service capacity, and gathers the wisdom and strength of multiple subjects to jointly build a high-quality ecosystem for rural elderly care.

6. Conclusion

As China enters a "moderately aging" society, rural areas face severe challenges due to the deepening aging degree and the weak elderly care service system. The weakening of the traditional family elderly care function, coupled with the insufficient supply of resources such as funds, facilities, and services, makes it difficult to meet the needs of the rural elderly population in terms of

health, economy, and spirit, forming the social problem of "difficulty in providing for the elderly". At the same time, the rise of the silver economy provides an important opportunity to alleviate the rural elderly care dilemma. As an emerging economic form, the silver economy not only provides more opportunities for the elderly group to participate in social and economic activities but also improves the efficiency and quality of rural elderly care services by promoting the innovation of elderly care service models and optimizing resource allocation. In this context, exploring the combination path of the silver economy and rural elderly care has important theoretical significance and practical value. The empowerment of the rural elderly care by the silver economy is not only an important means to solve the current elderly care problem but also an important path to realize the coordinated development of the rural economy and society. In the future, through further policy pilots and empirical research, we will explore the best practice model for the combination of the silver economy and rural elderly care. At the same time, we will pay attention to regional differences in policy implementation to ensure that rural elderly people in remote areas can also enjoy high-quality elderly care services.

References

- [1] National Task Force on Strategic Research on Responding to Population Aging. (2014). *National report on strategic research on responding to population aging*. Hualing Press.
- [2] Communist Party of China Central Committee. (2024). Decision on further comprehensively deepening reform and advancing Chinese-style modernization. *China Industry & Economy*, 15, 22-41.
- [3] General Office of the State Council. (2024, January). *Opinion on developing the silver economy to enhance the well-being of the elderly*. https://www.gov.cn/zhengce/zhengceku/202401/content_6926088.htm
- [4] Xia, Z. Z. (2023). Exploration of multiple paths for counties to actively respond to rural population aging under the rural revitalization strategy. *Guizhou Social Sciences*, 7, 144-151.
- [5] Ministry of Civil Affairs of the People's Republic of China. (2024, October 11). *2023 national bulletin on the development of elderly undertakings*. <https://www.mca.gov.cn/n156/n2679/c1662004999980001751/content.html>
- [6] Butt, S. A., Suran, S., Pappel, I., Smærup, M., Krimmer, R., & Draheim, D. (2023). A digital collaborative platform for the silver economy: functionalities required by stakeholders in a multinational baltic sea region project. *Digital Government: Research and Practice*, 4(2), 1-20.
- [7] Zhao, X. D., & Chen, L. Z. (2022). A study on the impact of population aging on the quality of economic development. *Journal of Shanxi University (Philosophy and Social Sciences Edition)*, 5, 31-40.
- [8] Zeng, H. Y., & Fan, X. W. (2019). Further stimulating the silver consumption market. *Macroeconomic Management*, 10, 33-38.
- [9] Peng, X. Z., & Chen, Q. (2022). A discussion on China's silver economy. *Social Security Review*, 4, 49-66.
- [10] Liu, X. M., Yu, J. Q., & Liu, Y. R. (2024). Analysis of differences in the allocation structure of urban and rural elderly care resources and optimization paths. *Rural Economy*, 10, 89-99.
- [11] Lin, Y. (2023). Serving the country's major strategies and promoting the healthy development of elderly care finance. *Economist*, 12, 11-13.
- [12] Wen, F. A. (2021). Rural mutual elderly care: Historical evolution, practical dilemmas, and development paths. *Journal of Northwest A&F University (Social Sciences Edition)*, 1, 105-113.
- [13] Wang, W., & Liu, Y. L. (2020). Integration and diversified construction of rural elderly care service system. *Journal of South China Agricultural University (Social Sciences Edition)*, 1, 103-116.
- [14] Meinow, B., Kåreholt, I., & Lagergren, M. (2005). According to need? Predicting the amount of municipal home help allocated to elderly recipients in an urban area of Sweden. *Health & Social Care in the Community*, 4, 366-377.
- [15] Huang, J. H. (2019). Changes in the supply of rural elderly care services: A 70-year review and prospect. *Journal of China Agricultural University (Social Sciences Edition)*, 5, 100-110.
- [16] Zhang, C. C., Giles, J., & Zhao, Y. H. (2015). Evaluation of the policy effect of the new rural social endowment insurance: Income, poverty, consumption, subjective well-being, and labor supply. *China Economic Quarterly*, 1, 203-230.
- [17] Jin, N., & Yuan, X. (2024). High-quality development of the silver economy: Population foundation, strategic orientation, and path selection. *Hebei Academic Journal*, 2, 158-166.
- [18] Gao, M. (2022). Population aging in rural China: Key impacts, response strategies, and policy construction. *Journal of Nanjing Agricultural University (Social Sciences Edition)*, 4, 8-21.
- [19] Wang, J., & Hai, L. J. (2019). Between tradition and modernity: Intergenerational imbalance, young women's power seizure, and the weakening of family elderly care. *China Youth Study*, 3, 60-64.
- [20] Dickinson, H., & Glasby, J. (2010). "Why partnership working doesn't work": Pitfalls, problems and possibilities in English health and social care. *Public Management Review*, 6, 811-828.
- [21] Xu, T. Y., & Zhang, Y. H. (2021). Ideas and measures for actively responding to rural population aging during the "14th Five-Year Plan" period. *Reform*, 10, 31-40.
- [22] Yuan, X., & Jin, N. (2020). "Crisis", "opportunity" and response: The aging society in the era of negative population growth in China. *Journal of Fujian Provincial Party School of the Communist Party of China (Fujian Administration Institute)*, 1, 29-37.
- [23] Li, Y. P. (2021). Rural "daughter-supported elderly care" from the perspective of family politics and its formation mechanism. *Journal of Nanjing Agricultural University (Social Sciences Edition)*, 1, 1-10.
- [24] Wang, J. W. (2021). Subjectivity-oriented governance of rural aging society: Practical logic and path construction. *Journal of Yunnan Minzu University (Philosophy and Social Sciences Edition)*, 4, 74-85.

- [25] Ministry of Human Resources and Social Security of the People's Republic of China. (2024, June 17). *2023 statistical bulletin on the development of human resources and social security undertakings*. https://www.mohrss.gov.cn/xxgk2020/fdzdgknr/ghtj/tj/ndtj/202406/t20240617_520366.html
- [26] Hsu, F. L. K. (2001). *Under the ancestors' shadow: Kinship, personality, and social mobility in rural China*. Nantian Book Co., Ltd.
- [27] Ministry of Industry and Information Technology of the People's Republic of China. (2024, January 22). *Ministry of Industry and Information Technology: The scale of China's elderly products market reached 5 trillion yuan in 2023*. <https://rss2.bjd.com.cn/content/s65ade400e4b0f6c5abd51224.html>
- [28] Li, L. Y., & Li, L. (2020). Constructing a positive aging policy system to release China's elderly demographic dividend. *Chinese Public Administration*, 8, 21-25.
- [29] Bai, W. J. (2021). Risk identification and governance of family elderly care. *Social Security Review*, 4, 104-117.
- [30] Anonymous. (2019, May 19). *Release of the research report on the consumption and demand willingness of the elderly from the demand-side perspective*. https://www.sohu.com/a/314980952_120066847
- [31] Song, J. (2020). Silver consumption is a powerful engine for China's economic growth. *People's Tribune*, 21, 36-38.
- [32] China Research Center on Aging. (2023, April 1). *Survey report on the status of elderly care service talents in China*. Research Center on Aging. <http://www.crca.cn/index.php/67-data-resource/publish/879-2023-05-05-13-37-34.html>
- [33] National Bureau of Statistics of the People's Republic of China. (2024, February 29). *National Bureau of Statistics: The per capita disposable income of national residents was 39, 218 yuan in 2023*. http://news.cnr.cn/native/gd/20240229/t20240229_526612677.shtml
- [34] Wang, S. H., & Li, F. Y. (2021). Consumption structure, demand characteristics, and behavioral decision-making of China's elderly group. *Beijing Social Sciences*, 8, 119-128.