

The Layout of the Ecological Circle of “Insurance & Pension Service” in China in the Longevity Era

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Abstract: With the deepening of aging, profound changes are taking place in the population structure. The demand structure of the contemporary elderly is changing from survival to development, paying more attention to the quality of life and spiritual needs, and the pension cycle of the elderly is long-term, dynamic, including physical and psychological. In recent years, China has continued to promote the construction of a multi-level and multi-pillar old-age security system. Old-age finance, as one of the “five major articles”, has become the key work of the financial industry after it was proposed at the central financial work conference. How does the insurance industry play an important role in the development of old-age finance, build the ecological pattern and system of high-quality old-age services under the background of silver economy, and accurately innovate and build a multi-level structure of old-age security guided by the needs of the elderly? It has become an urgent content to be solved. Starting from the current situation of China's pension service system, the demand-side study found that China is facing an increasingly serious problem of population aging, and the supply side grasps the “first year” of high-quality construction of the old-age service system. This paper puts forward some countermeasures and suggestions on the layout of the ecological circle of “insurance & pension service” in China.

Keywords: Insurance; Pension Service; Ecological Circle; Demand Analytic Hierarchy Process

1. The Present Situation of Endowment Service System

1.1 Demad Side: An Increasingly Serious

Aging Population

As the “ballast stone” of the smooth operation of social economy, the high-quality development of population has a far-reaching and lasting influence. In recent years, the negative growth trend of China's total population is obvious. By the end of 2023, the number of elderly people aged 65 and above has reached about 217 million, accounting for about 15.4% of the total population, which has reached a moderately aging society. The birth rate of the population has dropped to 6.4 per thousand. According to statistics, the dependency ratio of the elderly in China is about 21.8% in 2022. Under the dual pressure of the deepening degree of aging and the continuous decline of the birth rate, the old dependency ratio is increasing year by year. (e.g., Figure 1. The proportion of the aged population in China from 2014 to 2023)

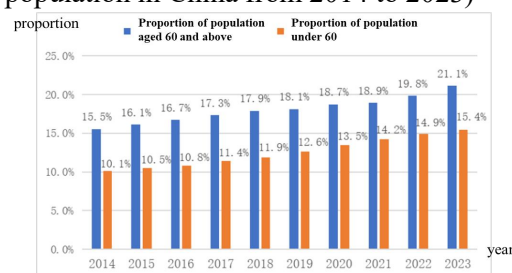


Figure 1. The Proportion of the Aged Population in China from 2014 to 2023

1.1.1 Super aging: the total population forms the “Four Super” aging trends

The continuous rise of the total elderly population [1] has formed the “four super” aging trends of super-large scale, ultra-fast speed, ultra-early stage and ultra-stable structure. First, a very large elderly population. In terms of the total world population, the total number of elderly groups has exceeded the existing stock of 200 million, far more than twice the same index data of India, which ranks second in the world. Second, the development process of aging at a super speed.

Combined with current population structure and the population growth rate over the years, some experts and scholars have proposed that in the next ten years, the total population may climb to 400 million, with an increase of more than 30 million, and the population will double compared with 2023. Third, the aging trend in the ultra-early stage. Focusing on the economic level at the time of population aging in various countries, the United States and Japan entered a moderate aging stage in 2012 and 1994 respectively. Fourth, the super-stable aging structure. At present, the number of elderly groups far exceeds that of children, and there is a big gap in the corresponding dependency ratio. From the perspective of the social burden of each population group, the per capital social expenditure of the elderly group far exceeds that of the children group, which indicates that the economic burden of raising the “old” in our society, and with the further aggravation of the aging degree of our population, its burden will be further deepened.

1.1.2 Regional aging: the pressure on urban “Old Drifters” and rural “Hollowing Out”

With the rapid development of society and the acceleration of urbanization [2], population mobility, as an important feature of modern society, has a far-reaching impact on regional aging. On the one hand, a large number of young workers flow from rural areas to cities, resulting in a relative increase in the proportion of the elderly population in rural areas, and resulting in the phenomenon of “hollowing out” in rural areas. With the passing of the young labor force, the rural population is gradually decreasing, and agricultural production is facing difficulties. At the same time, due to the lag of infrastructure construction and public service level, the attractiveness of villages gradually decreases, which further aggravates the degree of “hollowing out”. This not only affects the economic and social development of the countryside, but also threatens the cultural inheritance and ecological environment of the countryside. On the other hand, in order to take care of their children or grandchildren, some elderly people choose to leave the countryside and enter the city, becoming the “old drifters” in the city. With the intensification of population mobility, the phenomenon of “old drifters” in cities has become increasingly prominent. These elderly people are usually

faced with difficulties in life adaptation, medical security, social activities and so on.

1.1.3 Complex aging: “Multi-Frequency Resonance” between population aging and family miniaturization, informationization, and mathematical intelligence

The phenomenon of “multi-frequency resonance” is formed by the aging of population in China, which is intertwined with many factors such as family miniaturization, informationization and digital intelligence. With the rising proportion of the elderly population, the family structure is also undergoing profound changes. The traditional extended family model is gradually disintegrated and replaced by a miniaturized and core family structure. This change is closely related to the process of urbanization and industrialization, as well as the influence of modern social values and way of life. Family miniaturization makes families face greater pressure and challenges in taking care of the elderly, and it is necessary to find new ways to deal with it. Under the double pressure of social service and public service, the blue ocean value of the pension [3] market will focus more on the aging industry and the demand of the pension market to participate in the family pension in the form of assistance, so as to open up more space for development.

Under the tide of informatization and digital intelligence [4], the means of science and technology have brought a “double-edged sword” to the problem of aging. On the one hand, the deepening of the degree of digital intelligence has further aggravated the phenomenon of the “digital divide” among the elderly. In the elderly group, due to the influence of age, education, skills and other factors, it is often difficult to share the convenience and advantages brought by new technologies, so they are in an inferior position in the digital economy. This “digital divide” not only limits the quality of life and social participation of the elderly, but also may have a negative impact on the physical and mental health of the elderly. On the other hand, through smart devices, big data, cloud computing and other technology segments, we can achieve remote monitoring, health management, life services and other aspects of intelligent support for the elderly. This way of support not only improves the efficiency and quality of services, but also reduces the burden

on families and society.

1.1.4 Longevity aging: a large number of new needs for the aged

In the process of longevity aging, the "healthy aging period" of the elderly population is also gradually prolonged. In the "healthy aging" stage, the elderly group can maintain a good state in terms of physical, psychological and social adaptability, and can enjoy their old age independently.

Healthy aging covers the whole cycle from retirement to dementia and disability, and its time span increases significantly to 20-30 years due to the extension of life expectancy per capita. From the perspective of life cycle, it is generally divided into three life stages. Longevity aging and the extension of "healthy aging" provide more life choices and possibilities for the elderly. They are no longer satisfied with the basic needs of survival, but begin to pursue a higher quality of life, including health, culture, entertainment and other needs. These changes make the traditional pension model has been unable to meet the needs of the elderly, it is necessary to find new ways and services for the elderly.

1.1.5 Structural aging: the pension needs of the post-60 "New Elderly" groups

In the process of longevity aging, the "healthy aging period" of the elderly population is also gradually prolonged. In the "healthy aging" stage, the elderly group can maintain a good state in terms of physical, psychological and social adaptability, and can enjoy their old age independently.

Compared with the post-40s and post-50s, the post-60s were born after the reform and opening up and showed significant characteristics of "era leapfrogging" in terms of wealth accumulation and consumption concept. The rise of this new elderly group indicates that China's pension industry is about to enter the "quality pension era" from the demand side. Since 2020, the post-60s "new elderly" who uphold the new concept of market consumption will gradually enter the old age. It is estimated that by 2025, the post-60s elderly population will exceed 100 million, accounting for 1/3 of the total elderly population. By 2030, this number will be close to 200 million, accounting for half of the total elderly population. Looking forward to 2060, when the scale of China's elderly population reaches its peak, the post-80s, post-90s and

post-00s will become the main consumer groups in the pension market, promoting the market consumption capacity of China's pension industry to continue to rise. Thus, it plays a positive role in promoting the development of pension finance.

1.2 Supply Side: The "First Year" of Grasping the High-quality Construction of the Old-age Service System

1.2.1 National top-level design: a "Qualitative Leap" of the pension service system

In 2013, as the "first year" of the high-quality construction of China's pension service system, the horizontal and vertical coverage of the pension service system has achieved a "qualitative leap". It is proposed that we should continue to pay attention to the diversified demand for the aged, deeply cultivate the supply capacity and level of pension services, and further improve the construction of the old-age health service system with "the combination of medicine and care" as the core. To achieve the integrated construction of high-quality and integrated development of pension services.

Through the evolution of the policy system and the intensive cultivation of the market-oriented system of providing for the aged, a relatively perfect service supply system for the elderly has been formed in China. In the construction of the current pension service system, it covers many core links, such as payment guarantee, service supply and supervision mechanism. Among them, the pension service supply system is particularly critical, focusing on the main body of the pension service supply, refining the service content, deploying supply personnel, and promoting the synergy and integration of related formats and the improvement of infrastructure.

1.2.2 The cycle of pension industry: enterprises move towards scale during the period of expansion

According to the evolution of the pension industry, its development stage can be subdivided into budding period, growth period, expansion period, mature period and stable period. At present, China's healthy pension industry is in a period of expansion. In this stage, the pension industry not only shows a more rapid growth momentum than the previous development stage, but also pays more attention to standardization and high-

quality development compared with the development period at the same time of high-speed expansion. The operation model of the industry has also gradually infiltrated into the capital market.

1.2.3 Old-age assets financing: the channels of emphasizing assets are smooth, but the ways of neglecting assets are lack.

In view of the actual situation of China's debt financing environment, for heavy assets projects, the bond financing process can make use of land, real estate and other fixed assets as collateral, and then enhance the credit rating of the project, so as to ensure that the financing channels are relatively smooth. However, for the pension projects of leased properties, in the initial stage, the funds are mainly used for decoration and upgrading, equipment procurement and personnel recruitment, but due to the instability of expected income and the lack of corresponding assets that can be mortgaged or pledged, it is relatively difficult to finance. Although in recent years, some commercial banks try to provide small-scale loans with the accounts receivable generated by the old-age service cooperation as pledge, but this model has not been widely used. The light assets pension project also requires a large amount of investment from the operators, which is undoubtedly a serious challenge to the project operators, and it also indirectly raises the barriers to entry of the light assets care service industry, which is not conducive to the increase in the supply and quality of pension services in this field.

1.2.4 Endowment service supply system: "Key Link" of commercial insurance enabling endowment service system

In the current framework of China's pension service system, it covers three core areas: payment guarantee, service supply and supervision and management.

2. The existing problems in Old-age service system

2.1 The Development of Pension Industry is Facing Historical and Conceptual Obstacles

In the process of the development of the pension industry, the legacy of history and conceptual bondage constitute a significant obstacle.

First, the fuzziness of industry boundaries makes the division of competitive and non-

competitive areas difficult, and the degree of market participation is not enough, thus affecting the clear definition and healthy development of the pension industry. Second, private institutions are obviously limited in financial assistance, the allocation of land resources and the establishment of medical insurance service points and are unable to form an effective competitive situation with public institutions. Third, the industry management structure is still decentralized, multi-headed management situation, the lack of a unified and efficient supervision mechanism. In addition, the vague understanding of welfare pension and non-public economy in society also hinders the process of socialization and industrialization of pension services to a certain extent. The traditional concept of emphasizing accumulation and neglecting consumption generally exists among the elderly, which is difficult to change fundamentally in a short period of time, which directly restricts the growth of consumption in the elderly market, thus affecting the sustainable development of the pension industry.

2.2 The Supply Structure is Unreasonable and the Quality of Pension Service is Uneven

In view of the structural problems existing in the pension service industry, its irrationality is mainly reflected in three aspects: First, the proportion of home community pension and institutional pension is out of balance, and most of the resources are concentrated in the home community to support the elderly. On the other hand, the supply of institutional pension is relatively scarce, which leads to the difficulty of moving in for the elderly with institutional pension will. Secondly, there is a significant gap in pension services between urban and rural areas, and the facilities and quality of pension services in urban areas are better than those in rural areas, which makes it difficult for the elderly in rural areas to enjoy high-quality pension services. Finally, the differentiation of pension services between high-end and low-end is highlighted. High-end services are expensive, and the threshold is high, while low-end services have poor quality and security risks. This makes the middle-income elderly face difficulties in choosing elderly care services, and it is difficult to find

suitable service options.

2.3 The Exploration and Utilization of the Human Resources of the Elderly are Insufficient

Specifically, old-age service workers are generally faced with the plight of low social status, low income and low academic qualifications. In addition, there is a significant imbalance between the supply and demand of educational resources for the elderly, the utilization rate of human resources for the elderly is relatively low, and there is a lack of systematic and sound policy support and guarantee mechanism. Together, these problems lead to the high mobility of talents, high labor intensity and high average age in the industry.

3. Countermeasures and Suggestions on the Layout of the Ecosystem of “Insurance & Pension Service” in China

3.1 Top-Level Design: Building A New Pattern of Platform Service Endowment Ecosystem

Under the tide of digitization [5] and Internet commercialization, insurance companies are actively exploring the construction of a service-oriented pension innovation model with the platform as the core. After in-depth study, it is found that although some leading insurance companies have initially tried to operate on the platform, in view of the current aging process and policy environment, its business model is still mainly focused on the provision of insurance products and customer rights and interests. A complete business closed loop and management system has not yet been formed. Compared with the large-scale and mature commercial operation of capital payment of insurance products, the current model still has more room for development. Therefore, this paper proposes a solution to build a “smart pension service platform”. The purpose of this platform is to integrate the scattered resources of pension service providers, to establish links with pension service users directly, or to connect their high-quality customers through cooperation with insurance companies. Through the fine operation of the platform, it is expected to achieve efficient matching between supply and demand, and then promote

the tripartite value of customers, insurance companies and service providers.

On the one hand, in the integration of insurance and pension services, it is suggested that the client should build a value bridge between pension and insurance through the platform model, so as to promote the two-way transformation between insurance customers and platform users. For different ecological [6] customer groups, insurance companies can adopt fine customer selection and service sales strategy. For the high-end customer group, insurance companies focus on excellent experience and unique high-end services, committed to providing high-level and professional health care services, while using scarce resources and family advice as sales strategies. On the other hand, the middle-end customer group pursues high-quality and diversified service experience, and expects to obtain community-centered and radiant home-based old-age service. Insurance companies guarantee service quality and enrich product matrix, combined with gridded visits and sales strategies to stimulate interest in health care to meet their needs.

On the other hand, the product side can skillfully combine insurance products with pension services to meet the individual needs of different customer groups and achieve more comprehensive service coverage through the coordination of service supply and the main insurance industry. The innovative model of “insurance products & value-added services” integrates pension services into policy value-added services, so as to attract customers to buy insurance products. At the same time, insurance companies establish cooperative relations with various service institutions to provide a series of high-quality pension value-added services for the elderly. Under the mode of “insurance products & service products”, insurance companies make a deep integration of insurance products and service products and clarify their respective service responsibilities by signing contracts with selected quality service organizations. In this way, the insured will enjoy a higher proportion of reimbursement when using the nursing services provided by the contract service machine and can also enjoy an exclusive discount if they buy the service from the contract service organization alone.

3.2 Supply Structure: To Realize the Optimal Allocation of Dual Resources of “Medical Treatment & Pension”

The combination of medical care and nursing is an innovative old-age service model, and its core is to combine medical resources and old-age resources. Relying on medical care as a solid backing, rehabilitation as an important support, so as to achieve a seamless connection between medical care and pension and comprehensive care. This service model aims to closely combine professional medical technology with daily life materials, rehabilitation training, maintenance and recuperation, in order to create a more comprehensive, meticulous and warm pension environment for the elderly. In the practice of the combination of medical and nursing care, the insurance industry [7] plays an important role. It is suggested that in the future, through the combination of capital investment and strategy, we should actively promote the construction of the old-age service system with the combination of medical care and maintenance. Especially in the field of institutional pension, most insurance companies tend to add small medical and rehabilitation facilities on the basis of the existing pension institutions, and build a trinity operation model of medical treatment, rehabilitation and pension. This integration model not only fully meets the needs of the elderly, but also significantly improves the operational efficiency and economic benefits of pension institutions.

In the exploration of the community pension model, in addition to adding medical services, it is suggested to adopt the mode of synchronous planning, co-construction and sharing between medical and health service institutions and the pension community, so as to deepen the practice of the combination of medical care. Insurance companies should actively participate in it, through investment in the construction of integrated service institutions, to provide one-stop medical pension services for the elderly in the community, so as to meet their diversified pension needs. Aiming at the home pension model, the insurance company can take advantage of technology to launch wearable devices [8], smart home and other solutions to provide remote health monitoring and timely medical services for the elderly at home. In

addition, the scope of services can be expanded to introduce services such as family doctors and students or long-term care workers, so as to provide more convenient and professional medical and nursing support for the elderly at home.

3.3 Talent Construction: Insurance Science and Technology Team Empowers Wisdom to Provide Differentiated Services for the Aged

Intelligent pension has become a new concept of old-age service, which aims to provide intelligent, efficient and low-cost services for the elderly at home, communities and nursing machines. This pension model covers many aspects, such as home health care, personalized health management, Internet health consultation, life care and the informationization of pension institutions. In the future, it is suggested that we should continue to dig deep into the field of insurance science and technology to make it play a more key role in intelligent pension. Through the sensor network system, information platform and other technical means to provide real-time monitoring, fast response and personalized care and other services for the elderly, so as to realize the materialization, interconnection and intelligence of pension services [9]. For example, intelligent devices can monitor the health status of the elderly and provide timely early warning and provide personalized health management programs. At the same time, Internet platforms can also provide services such as health advice and social interaction. Compared with the traditional nursing model, intelligent pension can more accurately capture the needs of the elderly and provide more appropriate services. With the continuous development and improvement of this industry in the future, intelligent pension [10] will get more social attention and recognition, and the prospect is very broad. In the future, with the integration and development of information technology and intelligent pension service, smart pension will provide for the elderly.

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