

# Promoting Age-friendly Finance and Bridging the "Digital Divide"

Baoting Dou\*

School of Business, Hunan University of Science and Technology, Xiangtan 411201, China

\* Corresponding Author

---

**Abstract:** With the rapid development of mobile Internet and artificial intelligence, young and middle-aged people are enjoying the convenience of online shopping, ordering food, buying groceries, transferring money and so on, while at the same time the elderly are suffering from difficulties in payment, traveling, medical care, shopping and so on, which has become a "digital divide" in front of the elderly. According to the data released by the National Bureau of Statistics at the end of 2022, China's population aged 60 and above is 28,040,000, accounting for as much as 19.8% of the total population, of which 209,780,000 are aged 65 and above, accounting for nearly 15%, which means that China is facing the problem of deep aging. Therefore, how to promote the reform of aging and provide financial services suitable for the elderly has become a new opportunity for commercial banks to enhance their market competitiveness and overtake in the "silver economy".

**Keywords:** Age-friendly finance, digital divide, commercial banks, aging population.

---

## 1. Introduction

Population ageing has become the new normal in China and is an important issue that needs to be properly dealt with in China's economic and social development. At the same time, according to the demographic changes predicted by the National Population Development Plan 2016-2030, by 2030, the proportion of people aged 60 years and above in China may approach or even exceed 1/4, and the elderly population will reach its peak in 2055-2060 [1]. In view of this, the 19th National Congress of the CPC, the 14th Five-Year Plan and the Vision 2035 Outline have all made overall deployment and arrangements for population aging. In the field of financial development, the People's Bank of China and other departments have also issued a number of guidance opinions and working guidelines to promote aging financial services, with the aim of improving the satisfaction of elderly customers.

According to Age Club statistics, a small number of elderly customers hold more than 70% of total bank deposits [2]. Although the proportion of the elderly group in the commercial bank customers is not large, but from this part of the group to absorb the funds can give banks and other financial institutions to bring a huge amount of revenue, and this part of the group is facing a serious "digital divide" problem, therefore, to solve the "digital divide" problem of the elderly group has become an urgent task for financial institutions. Therefore, solving the problem of the "digital divide" among the elderly has become a top priority for financial institutions. Meeting the diversified financial needs of the elderly and promoting the development of financial services in the direction of safety and convenience is the fundamental purpose of realizing the ageing transformation of financial services. From the practical experience at home and abroad, it is known that financial institutions should firstly identify the differences in the needs of different customers for financial services, pay attention to the financial consumption habits and financial service needs of elderly customers, and carry out aging-adapted innovation of financial products and services on the basis of fully respecting

the consumption habits of the elderly group [3].

## 2. Financial Needs of Our Older Persons

As China's economy improves, the income level of the elderly has risen significantly. In general, the financial needs of the elderly are gradually diversifying. The financial needs of the elderly include the need for savings, the need for bank finance and the need for diversified services. Among them, the savings demand is mainly due to the elderly daily expenses, old age, to their children to spend and prepare for the emergency and so on the hands of the idle funds deposited in the bank, in this kind of demand the elderly is mainly concerned about their own deposited money in the bank is safe, concerned about their own bank card or passbook inside the balance of the deposits; the elderly's financial needs are mainly the pursuit of the property of the preservation of capital appreciation, pay attention to the rate of return, aversion to risk, pay attention to the financial institution brand, their most purchased products are regular savings and treasury bonds, and they like to compare the yield, risk and liquidity of financial products with those of regular ones, and in terms of subregions, the elderly in urban areas pay more attention to personalized and characteristic financial products targeting pensions, etc., while those in rural areas pay more attention to capital preservation; the elderly, due to their own particularities, are highly dependent on the network outlets, and the diversified service demands mainly refer to the following The diversified service demands mainly refer to the demand for hardware setup of the outlets, the demand for service environment and professional service personnel, and the demand for improvement of financial literacy.

### **3. The Current Situation of Aging Finance in China's Commercial Banks**

#### **3.1. Insufficient service support for age-friendly finance leaves older people on the digital periphery**

With the digital transformation of the banking industry, the business of many banks has begun to shift from offline branches to online mobile banking APP operation, and the staff of business branches and offline has been reduced accordingly, the intelligent service has increased, and the manual service has been reduced, but close to half of the elderly people do not know how to use a smartphone or even don't have a smartphone, and their acceptance of the mobile banking APP is relatively low, and when some business can only be operated through the mobile banking APP and financial products need to be purchased through mobile banking APP, the elderly who are used to doing business offline and less capable of accepting new things will be on the verge of digitization.

#### **3.2. Aging financial security needs to be further improved**

With the development of science and technology, new forms of fraud are emerging, the elderly can often encounter illegal fund-raising, illegal money laundering, credit repair, telecom fraud, deposit insurance and other frauds, and become the hardest hit by financial fraud. Due to the poor risk awareness of the elderly, financial knowledge is lacking, there is a general "greedy for small gains" idea, easy to be targeted by criminals, and through the actual fraud cases found that the elderly are really easy to listen to the fraudsters said "high returns". Click on the fraudulent link of the fraudsters, rental, sale, lending bank cards to fraudsters, lightly lead to the leakage of personal information, property caused by huge losses, and seriously cause serious crimes. In response to this form of major commercial banks have taken a series of measures, such as "cut off the card action", the funds fast in and out of the bank card control, transfer withdrawal, etc., but the current form of elderly fraud is still serious, for the elderly financial security needs to be further improved.

#### **3.3. Fewer age-appropriate financial products**

Elderly people have poorer risk-tolerance ability, the vast majority of them are risk averse, have higher liquidity requirements for financial products, and are mainly inclined to capital preservation and products with certain investment returns. At present, the financial products that are widely liked by the elderly are regular savings, large certificates of deposit and treasury bonds, and other financial products are mainly designed for enterprises and young people in the consumer groups, and there are fewer financial products specifically designed for the elderly to invest in the characteristics of the elderly's financial management, which are relatively single in type, and even though some of the financial products have taken into account the needs of the elderly, they can not be purchased due to their age in practice. These products are not widely recognized by the elderly.

### **4. Technology Acceptance Model and the Digital Divide**

In 1989, the American scholar Davis applied the theory of planned behavior and the theory of rational behavior to the field of information systems for explaining the acceptance behavior of users towards information technology, on the basis of which he proposed the Technology Acceptance Model (TAM). The technology acceptance model regards the system design feature variables as external variables, as the initial factors for people to decide whether to use the information system or not. System design features directly determine perceived ease of use, and together with perceived ease of use determine perceived usefulness, and the latter two together determine people's attitude towards using information systems, and this attitude in turn influences people's behavioral willingness to use information systems together with perceived usefulness, and behavioral willingness ultimately determines the use of information systems in practice [5]. Older people's fear of digital finance is in line with the extended theory of Technology Acceptance Model (TAM), which was proposed by Hemill in 2005 based on two key factors, namely, perceived risk and trust, as well as the extended model of TAM, which is based on "security first". In this model, system design features significantly affect perceived risk and trust, and perceived risk affects perceived usefulness. The model delves into the performance of users of security-conscious information systems, their perceived benefits and their willingness to use these technologies, and demonstrates the acceptance of information systems by security-sensitive users. Summarizing the above theoretical analysis, the technology acceptance model is more suitable for comprehensively explaining the financial digital divide problem faced by the elderly, and can theoretically guide the practice of digital financial inclusion.

First, the products and services themselves are the endogenous drivers that attract older people to digital financial inclusion. The technology acceptance model attributes the most important factor influencing user use to usefulness, which for older people is that the business is sufficiently attractive. For example, older people are willing to queue up in branches to buy treasury bonds even on a cold and windy winter day. However, if the elderly can easily buy safe and stable popular investment products at home, and do not have to compete with young people "hand speed", it is a better choice for both the elderly and the bank.

Second, simplicity and ease of operation are important means of promoting the participation of older persons in digital inclusive finance. The second important factor in the technology acceptance model is ease of use. The digital capabilities of older people are weaker than those of younger groups, and how to design digital inclusive financial products that are more suitable for older people has not been considered enough by banks and other financial institutions in the past. Existing product design is often considered from the perspective of maximizing the straight-through rate or process completion rate. Elderly clientele are not active in the digital space and are often overlooked by product designers, ultimately leading to an awkward situation where older people find it difficult to use the product even if they are willing to do so.

Finally, peace of mind is a fundamental safeguard to promote the participation of older persons in digital financial

inclusion. As an external variable in the technology acceptance model, although it is not the strongest driving factor, it has a "one-vote" effect. Once older people feel insecure during the online process, coupled with their previous rejection, they will almost certainly give up using digital financial products.

## **5. Measures by Commercial Banks to Promote Age-friendly Finance**

### **5.1. Building an ageing-friendly service system to enhance the sense of accessibility for the elderly**

Establishing an exclusive ageing-adapted service system for the financial needs of elderly customers, and providing preferential treatment for the elderly to the greatest extent possible. In response to the daily high-frequency financial service needs of elderly customers, corresponding preferential policies have been adopted, such as reducing or waiving the annual fee for bank cards, SMS change alerts, interbank transfer fees, etc., and providing value-added services such as consumption concessions from neighboring merchants, door-to-door financial services and health checks.

The branch is the main place for financial institutions to provide financial services for elderly customers, the branch should optimize the aging service environment, provide elderly customers with presbyopia glasses, wheelchairs, umbrellas, medical first aid kits and other basic facilities, while retaining the cash service window, smooth green consultation channel, laying non-slip mats [7], set up a "senior citizen service zone in the lobby" and configure comfortable sofas and pillows to facilitate the waiting of elderly customers, and at the same time, provide elderly groups with love service card, fill in the service card for the elderly in need of home address, emergency contact person and their contact information, carry for emergency, install service call devices in self-service equipment, special seats to facilitate the elderly to call with one key, and continuously improve the level of convenience of financial services for the elderly customers. It also installs service call devices in self-service equipment and special seats to facilitate one-touch calling by the elderly, so as to continuously improve the level of financial service facilitation for elderly customers.

Formulating standardized service procedures and relevant emergency plans for group halls for the elderly and special clients. First of all, strengthen the training of branch service personnel, in addition to the training of relevant financial professional ability, should also carry out professional training, such as first aid knowledge training and the elderly psychology assessment, so that branch service personnel in providing services for the elderly, can quickly grasp the service needs of the elderly, for the psychological changes in the elderly customers timely change of the communication mode, to better realize the personalized service. Secondly, we will triage the elderly customers entering the branch in a timely manner, take the initiative to understand the needs of the elderly customers, designate specialists to provide financial services for the elderly customers, clearly inform the customers of their responsibilities and rights during the process of handling the business to ensure that the services are compliant and considerate, and the process is meticulous and standardized, and at the same time, we will make regular return visits to the elderly customers with good

communication skills, and take the initiative to adopt "door-to-door" services for the elderly customers who are unable to move on the premise of prudent and compliant. We also make regular visits to elderly customers with good communication skills and take the initiative to provide door-to-door services for elderly customers with mobility disabilities under the premise of prudent compliance.

### **5.2. Create age-appropriate financial products and improve the senior product system**

To develop special financial service products for the elderly according to the financial needs and risk-tolerance ability of the elderly at different levels at this stage, to innovate the subscription amount, product term, risk level and capital preservation rate of the existing financial products in the market, and to create a comprehensive service program integrating products such as deposits, wealth management, insurance, fund investment, etc., as well as to provide supportive rights and interests for the characteristics of the elderly customers, and to take into account a balance of flexibility and profitability of the products. At the same time, when innovating age-appropriate financial products, the company should be vigilant about the safety of the products and guard against illegal financial activities.

### **5.3. Enhancing digital empowerment and bridging the "digital divide"**

In response to the needs of the elderly for mobile financial payments, strengthen technological empowerment and continuously improve the convenience and security of payments. Banks should develop a "senior version" of mobile banking APP, with the system automatically recognizing senior customers over 60 years old and switching to the "senior version" of mobile banking. The APP should reconstruct the interface, reduce the number of opening screen advertisements, simplify the functions, and build the core functions required by senior customers. The APP should reconstruct the interface, reduce open-screen advertisements, simplify functions, and build the core functions required by elderly customers, such as the minimalist mode, the use of large fonts, easy-to-recognize icons, and the construction of one-key help and voice announcement. Provide upgraded telephone banking line services for the elderly, automatically identify the age of customers by their cell phone numbers, reduce the link to manual services, provide one-key direct access to manual customer service, and provide timely and warm online financial services for the elderly. Offline, it has carried out ageing reforms to the smart machines in its branches, constantly upgrading them to provide the elderly with a customized service system with eye-catching fonts that is simple and easy to operate, so as to promote the upgrading of its financial services in the direction of being "senior-friendly".

### **5.4. Strengthening cooperation with the community and exploring "public welfare and finance" community financial services with special characteristics**

Financial institutions should strengthen cooperation with communities and explore "public welfare and finance" community financial services. They should actively cooperate with public welfare organizations to hold community public welfare activities, build a resource-sharing platform and

promote the active participation of merchants from all walks of life to diversify the forms of customer service and create a new force for community integration, such as a series of activities to "learn financial knowledge", "health with a date", "promote the spirit of Lei Feng", "public welfare clinic" and so on. "These activities not only enrich the recreational life of the elderly, enhance their health knowledge, and help them adapt to the development of the times, but also help to continuously meet the needs of the elderly for quality financial services. Meet the needs of the elderly for quality financial services and enhance the influence of financial institutions.

### **5.5. Strengthening financial literacy campaigns to protect the legitimate rights and interests of older persons**

Taking advantage of the "3.15 Financial Consumers' Rights Day", it has widely carried out thematic publicity activities to popularize some practical financial knowledge in daily life, and to address the hotspots of telecommunication fraud, RMB cash collection and payment, illegal fund-raising, and illegal financial advertisements that the elderly often encounter at this stage. The publicity was carried out by means of senior citizen posters, publicity brochures, and long illustrations, etc. During the activities, we meticulously and patiently explained and answered the questions of the elderly, and enhanced their awareness of the prevention of financial violations. In order to prevent unused bank cards from being utilized by lawbreakers, and in conjunction with the current requirements of the "card-breaking" work, publicity efforts should be stepped up for the elderly, and elderly customers should be urged to destroy their unused bank cards in a timely manner. In view of the low risk prevention awareness of the elderly and their lack of understanding of fraudulent means, we

should strengthen risk tips for large-value transfers and remittances by elderly customers and accurately verify the account information of the recipients, so as to protect the financial security of the elderly to the greatest extent possible [7].

## **Acknowledgment**

Natural Science Foundation.

## **References**

- [1] Z.N. Hou, Y. Wang and X.T. Wang: Pension finance: logical framework, dynamic developments and practical paths, *Journal of Modern Finance Guide*, Vol. 10 (2022), p.27-30.
- [2] X.T. Wang, S.W. Sun and Z.N. Hou: Adaptive retrofitting helps elderly clientele cross the "digital divide" , *Journal of Modern Commercial Banking*, Vol. 15 (2023), p.43-45.
- [3] Y.J. Zhang: Banks should do a better job of "age-friendly" financial services in the digital era, *Journal of Chinese Businessman*, Vol. 11 (2023), p.80-81.
- [4] Y.H. Han, S.T. Tan and H. Cheng: From "digital divide" to "digital dividend": optimizing the path of industrial policies to cope with population aging , *Journal of Gannan Normal University*, Vol. 44 (2023) No.2, p.107-114.
- [5] X.W. Mei and P. Bian: Crossing the financial digital divide in older age groups, *Journal of China Finance*, Vol. 10 (2022), p.23-24.
- [6] F. Zhang, C.W. Chen and Y.H. Han: Population ageing in the development of the digital economy: how to cross the digital divide, *Journal of Gannan Normal University*, Vol.42 (2021) No.4, p.118-122.
- [7] D.Y. He: Accelerating age-friendly reforms to make senior financial services more welcoming, *Journal of China Rural Finance*, Vol. 19 (2021), p.58-59.