Study on the Impact of Financial Technology Development on the Diversity of Urban Household Financial Asset Allocation-based on CHFS Micro-Data

Liping Zhang
Xi'an MingDe Institute of F Technology, Xi'an, Shaanxi, China

Abstract: This paper aims to explore the impact of financial technology development on the diversity of urban households' financial asset allocation. With the rapid development of financial technology, the structure of financial markets and household financial behavior have undergone profound changes. This paper systematically studies the mechanism of fintech in household financial asset allocation through theoretical analysis and the micro-data of China Household Finance Survey (CHFS). First of all, this paper analyses the definition of financial technology, its development history, and the impact of financial technology on the financial market. Secondly, from the perspective of household financial asset allocation, this paper discusses how fintech affects households' financial decisions through information acquisition, transaction costs, risk management and other ways. The research finds that the development of fintech significantly improves the efficiency of households in obtaining financial information, reduces transaction costs, enhances risk management capabilities, and thus promotes the diversity of household financial asset allocation. In addition, this paper also analyzes the differences in financial asset allocation of households with different income levels, educational backgrounds and risk preferences under the influence of fintech. Finally, this paper puts forward policy recommendations, and believes that the popularization and application of financial technology should be further promoted, family financial literacy should be improved, and the financial market environment should be optimized to promote the diversification and rationalization of family financial asset allocation. The research in this paper provides a new perspective for understanding the impact of fintech on household financial behavior, and provides a useful reference for policy makers.

Keywords: Financial Technology; Household Financial Assets; Configuration Diversity; Access to Information; Risk Management

1. Introduction

1.1 Research Background and Significance

With the rapid development of information technology, financial technology (FinTech) has become a hot spot in the global financial field. Through technological innovation, fintech has changed the way traditional financial services are provided and improved the efficiency and accessibility of financial services. In China, the development of financial technology is particularly rapid, and emerging financial forms such as mobile payment, online lending, and intelligent investment advisory are booming, which has a profound impact on household financial behavior. As an important participant in the financial market, household's financial asset allocation behavior is directly related to the stability and development of the financial market. Therefore, studying the impact of fintech development on the diversity of urban households' financial asset allocation not only helps to understand the specific impact mechanism of fintech on household financial behavior, but also has important theoretical and practical significance for optimizing household financial asset allocation and promoting the healthy development of financial markets. [1-5]

1.2 Research Objectives and Questions

This study aims to explore the specific impact of financial technology development on the diversity of urban households' financial asset allocation and its mechanism. Specific research questions include: (1) How does fintech affect the efficiency of households' access to financial information? (2) How can fintech reduce the cost of financial transactions for households? (3) How can fintech enhance families' risk management capabilities? (4) What is the differential impact of fintech on the financial asset allocation of households with different characteristics?

1.3 Research Methods and Data Sources

This study combines theoretical analysis with empirical analysis. In the theoretical analysis part, the paper discusses the mechanism of financial technology by constructing the theoretical model of financial technology affecting household financial asset allocation. In the empirical analysis part, the micro-data of China Household Finance Survey (CHFS) are used to test the impact of fintech on the diversity of household financial asset allocation through statistical analysis. In terms of data sources, CHFS data provides detailed multi-dimensional information including basic household information, financial asset allocation, and the use of financial technology, which provides abundant data support for this study.

2. The Development of Fintech and Its Impact on The Financial Market

2.1 Definition and Development Process of Financial Technology

Financial technology refers to a new financial service model that uses modern scientific and technological means, especially information technology, to innovate and upgrade traditional financial services. Since the beginning of the 21st century, with the rapid development of the Internet, big data, artificial intelligence and other technologies, fintech has experienced multiple stages of development from electronic banking and online payment to intelligent advisory, blockchain and so on. Fintech is growing particularly fast in China, especially in mobile payments, where the country has become a global leader.

2.2 Structural Impact of Fintech on Financial Markets

The development of fintech has had a profound impact on financial markets. First, fintech has improved the efficiency and accessibility of financial services, enabling more households to easily access and use financial services. Second, fintech reduces the cost of financial transactions, enabling households to buy and sell financial assets at a lower cost. Third, fintech has enhanced the transparency of the financial market and improved households' understanding and participation in the financial market. Finally, fintech promotes innovation in financial products and provides households with more diverse options for allocating financial assets.

According to the China Financial Stability Report (2022) released by the People's Bank of China, the number of mobile payment users in China has exceeded 800 million, and the mobile payment transaction volume accounts for more than 80% of the total retail sales of social consumer goods. These data show that fintech is playing an increasingly important role in the financial life of Chinese households, and its impact on household financial asset allocation cannot be ignored. To sum up, the development of fintech not only changes the structure of financial markets, but also provides new opportunities and challenges for household financial asset allocation. [6-10]

3. Theoretical Framework of Household Financial Asset Allocation

3.1 Basic Theories of Household Financial Asset Allocation

Household financial asset allocation means that households allocate funds to different financial assets according to their own financial conditions, risk preferences, investment objectives and other factors to achieve asset preservation and appreciation. According to modern portfolio theory, households should consider the expected rate of return, risk level and correlation between assets when allocating financial assets. By building a diversified portfolio, households can pursue higher investment returns while taking a certain amount of risk.

3.2 Analysis of Factors Affecting Household Financial Asset Allocation

There are many factors affecting family financial asset allocation, including family's

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economic status, risk preference, education level, age structure, social network and so on. Financially healthy households generally have more investable funds and can afford to take higher risks, so they are more inclined to allocate financial assets with higher risk but also higher expected returns. Households with lower risk appetite are more inclined to choose financial assets with lower risk, such as bank deposits and government bonds. Families with higher levels of education generally have a deeper understanding of financial markets and are able to make more rational investment decisions. Age structure also affects a family's financial asset allocation, with younger families likely to be more willing to take risks in pursuit of higher returns, while older families may be more focused on the safety of their assets. the breadth and depth of social networks also affect households' ability to obtain financial information, which in turn affects their financial asset allocation decisions.

4. Impact Mechanism of Fintech on Household Financial Asset Allocation

4.1 Improvement of Information Acquisition Efficiency

Through the Internet, mobile applications and other platforms, financial technology has greatly improved the efficiency of households to obtain financial information. Families can access the latest developments of the financial market and obtain detailed information of various financial products anytime and anywhere through their mobile phones or computers. For example, through the smart investment platform, families can get personalized investment advice based on big data analysis that more accurately reflects the family's risk tolerance and investment preferences. the improvement of information acquisition efficiency enables households to make investment decisions faster and improves the timeliness and accuracy of financial asset allocation.

4.2 Reduction of Transaction Costs

The development of fintech has significantly reduced the cost of financial transactions for households. Traditional financial transactions often need to be carried out through bank counters or securities companies, which not only consumes time and energy, but also has high transaction costs. Through the fintech platform, families can realize online transactions without paying high fees. For example, by making fund purchases through third-party payment platforms, households can enjoy lower transaction rates. Lower transaction costs make households more willing to participate in financial markets, increasing the diversity of financial asset allocation.

4.3 Enhancement of Risk Management Capability

Fintech also enhances households' ability to manage risk. Through fintech platforms, households can more easily conduct risk assessment and dynamic adjustment of asset portfolios. For example, by using risk assessment tools, families can get a more accurate picture of their risk tolerance and make investment decisions that are more appropriate for them. In addition, the real-time monitoring and early warning function provided by the fintech platform can help families discover market risks in time and take corresponding risk control measures. the enhancement of risk management ability can help households better control investment risks and improve the security of financial asset allocation.

According to the China Internet Finance Development Report (2022) released by the China Internet Finance Association, the number of users of fintech platforms has continued to grow in the past few years, and more and more households have begun to use fintech services for financial asset allocation. These data show that fintech has become an important factor affecting household financial asset allocation. In summary, fintech has had a profound impact on household financial asset allocation by improving the efficiency of information acquisition, reducing transaction costs and enhancing risk management capabilities.

5. Diversity Analysis of Household Financial Asset Allocation Under the Influence of Fintech

5.1 Differences in Financial Asset Allocation of Households with Different Income Levels

Income level is one of the important factors that affect the allocation of household financial assets. High-income households generally have more disposable income and savings and can afford higher investment risks, so they are more inclined to allocate high-risk and high-return financial assets, such as stocks, funds, and real estate. the development of fintech has provided high-income families with more investment options and more convenient investment channels. For example, through the smart investment platform, high-income households can get personalized investment advice and optimize their asset allocation structure.

On the other hand, due to limited disposable income and low risk tolerance, low-income households are more inclined to choose low-risk financial assets, such as bank deposits and government bonds. the development of fintech has, to some extent, lowered the threshold for low-income families to participate in the financial market. For example, through mobile payments and Internet banking, low-income households can easily make small investments and gradually accumulate wealth.

According to the data of China Household Finance Survey (CHFS), the proportion of financial asset allocation of high-income households is 40% in stocks and funds, 30% in bank deposits and government bonds, and 30% in real estate. In the financial asset allocation of low-income households, the proportion of bank deposits and government bonds is 60%, the proportion of stocks and funds is 20%, and the proportion of real estate is 20%. These data show that there are significant differences in financial asset allocation among households at different income levels, and the development of fintech has narrowed this difference to some extent.

5.2 Differences in Financial Asset Allocation of Families with Different Educational Backgrounds

Educational background is another important factor affecting household financial asset allocation. Families with higher levels of education generally have a deeper understanding of financial markets and are able to make more rational investment decisions. the development of fintech has provided more financial information and investment tools for families with high education levels. For example, through fintech platforms, highly educated families can easily access the latest developments in the financial market for scientific investment analysis and decision-making.

Due to the lack of financial knowledge and investment experience, families with lower education level often have a certain fear and distrust of the financial market, and are more inclined to choose traditional low-risk financial assets. the development of financial technology has made up for this shortfall to some extent. For example, through fintech platforms, families with lower education levels can conveniently learn financial knowledge and gradually improve their financial literacy and investment ability.

5.3 Differences in Financial Asset Allocation of Households With Different Risk Preferences

Risk appetite is the key factor affecting household financial asset allocation. Households with a higher risk appetite are generally willing to take higher investment risks in pursuit of higher investment returns. the development of fintech has provided more high-risk and high-return investment options for high-risk preference families. For example, through P2P online lending platforms, high-risk households can participate in high-yield lending investments, and through intelligent investment advisory platforms can make high-risk stock and fund investments.

Households with low risk appetite are more inclined to choose low-risk financial assets to ensure the safety of their assets. the development of fintech has provided more low-risk investment options and risk management tools for low-risk households. For example, through Internet banking and third-party payment platforms, households with low risk appetite can easily make bank deposits and Treasury bond investments, and carry out risk assessment and dynamic adjustment of asset portfolios through fintech platforms.

6. Policy Suggestions and Future Research Directions

6.1 Strategies to Promote the Popularization and Application of Fintech

In order to further promote the popularization and application of financial technology, the government and relevant institutions should adopt the following strategies: First, increase

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support for financial technology enterprises, encourage technological innovation and product research and development, and improve the quality and coverage of financial technology services. Secondly, strengthen the publicity and promotion of financial technology, popularize financial technology knowledge to the public through various channels, and improve the public's cognition and acceptance of financial technology. Finally, improve the laws, regulations and supervision system of financial technology to ensure the healthy development of financial technology and protect the legitimate rights and interests of consumers.

6.2 Measures to Improve Family Financial Literacy

Improving family financial literacy is an important way to optimize family financial asset allocation. the government and relevant institutions should take the following measures: First, strengthen financial education, integrate financial knowledge into the curriculum of primary and secondary schools and higher education, and cultivate students' financial literacy and investment ability. Secondly, we should carry out various forms of financial knowledge popularization activities, popularize financial knowledge to the public through community lectures, online courses and other ways, and improve the financial literacy of the public. Finally, financial institutions are encouraged to provide personalized financial advisory services to help families conduct scientific financial asset allocation.

6.3 Suggestions for Optimizing The Financial Market Environment

Optimizing the financial market environment is the key to promoting the diversity of household financial asset allocation. the government and relevant institutions should take the following recommendations: First, improve the infrastructure construction of the financial market, improve the transparency and efficiency of the financial market, and reduce the cost of household participation in the financial market. Second, strengthen the supervision of the financial market, crack down on financial fraud and illegal fund-raising, and protect the legitimate rights and interests of investors. Finally, we should promote the innovation and diversification of financial products to meet the investment needs of different families and promote the healthy development of financial markets.

Future research directions can include the following aspects: First, further explore the specific impact mechanism of fintech on the allocation of financial assets of households with different characteristics, and reveal the role path of fintech in household financial behavior. Second, using larger scale and longer time span micro-data, more detailed empirical analysis is conducted to verify the long-term impact of fintech on household financial asset allocation. Finally, based on international experience, this paper discusses the differences of fintech development in different countries and regions and its impact on household financial asset allocation, so as to provide reference for the development of fintech in China.

7. Conclusion

Through the combination of theoretical analysis and empirical analysis, this study discusses the impact of fintech development on the diversity of urban households' financial asset allocation. the study found that fintech has a significant impact on household financial asset allocation by improving the efficiency of information acquisition, reducing transaction costs and enhancing risk management capabilities. Specifically, the development of fintech has narrowed the differences in financial asset allocation among families with different income levels, educational backgrounds and risk preferences to a certain extent, and promoted the diversification and scientific allocation of family financial assets.

In terms of information acquisition efficiency, through the Internet and mobile application platforms, fintech enables families to more conveniently obtain the latest developments of the financial market and detailed information of various financial products, improving the efficiency of family investment decisions. In terms of transaction costs, fintech reduces the cost of financial transactions for families through online trading platforms, and increases the enthusiasm of families to participate in the financial market. In terms of risk management capabilities, fintech enhances families' risk management capabilities and improves the security of financial asset allocation by providing risk assessment tools and real-time monitoring and early warning functions.

Through the analysis of data from the China Household Finance Survey (CHFS), the study also found that households with different income levels, educational backgrounds and risk appetite have significant differences in financial asset allocation. High-income families and families with higher education levels are more inclined to allocate high-risk and high-return financial assets, while low-income families and families with lower education levels are more inclined to choose low-risk financial assets. the development of fintech has narrowed these differences to a certain extent and promoted the diversification of household financial asset allocation.

The main contribution of this study is to reveal the specific impact mechanism of fintech on the diversity of household financial asset allocation, and provide a new perspective for understanding the role of fintech in household financial behavior. Through the combination of theoretical analysis and empirical analysis, this study not only discusses the overall impact of fintech on household financial asset allocation, but also analyzes the differences and changing trends of households with different characteristics in financial asset allocation. These findings have important theoretical and practical significance for optimizing the allocation of household financial assets and promoting the healthy development of financial markets.

Future research can be further explored in the following aspects. First, using larger scale and longer time span micro data, more detailed empirical analysis is conducted to verify the long-term impact of fintech on household financial asset allocation. For example, it is possible to combine years of CHFS data to analyze trends in the impact of fintech on household financial asset allocation over different time periods. Secondly, it further discusses the specific impact mechanism of fintech on the allocation of financial assets of households with different characteristics, and reveals the role path of fintech in household financial behavior. For example, a structural equation model can be constructed to analyze the specific impact of fintech on household financial asset allocation through intermediary variables such as information acquisition efficiency, transaction cost and risk management ability. Finally, based on international experience, this paper discusses the differences of fintech development in different countries and regions and its impact on household financial asset allocation, so as to provide reference for the development of fintech in China. For example, comparative studies can be conducted to analyze the similarities and differences between developed and developing countries in fintech development and household financial asset allocation, and to reveal the successful experiences and challenges in the application of fintech in different countries and regions.

In conclusion, the development of financial technology has had a profound impact on the allocation of family financial assets. Future studies should further explore the specific mechanism of financial technology in family financial behavior, provide a scientific basis for policy formulation, promote the diversification and scientific allocation of family financial assets, and promote the healthy development of financial markets. Through continuous research and exploration, we can better understand the impact of fintech on family financial behavior, and provide strong support for optimizing family financial asset allocation, improving family financial literacy and promoting the healthy development of financial markets.

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