



Research on Influencing Factors of Intention to Use E-CNY

Empirical Analysis Based on UTAUT Model

Xiaoling Song and Rui Wang^(✉)

School of Business, Beijing Language and Culture University, Beijing 100083, China
songxiaoling@blcu.edu.cn, 308580146@qq.com

Abstract. Central bank digital currency (CBDC) is a digital form of sovereign currency issued by the central bank of a country based on national credit. The e-CNY pilot scene of the Winter Olympics once again demonstrated China's leading position in the field of CBDC, but the promotion of e-CNY still faces many obstacles. From the perspective of the users' side, based on the UTAUT model, combined with the characteristics and related theories of digital currencies, this study constructs a structural equation model (SEM) of factors influencing the intention to use e-CNY, collects data through questionnaires, and uses AMOS26.0 to conduct empirical test. The results show that performance expectancy, effort expectancy, and financial education positively affect users' intention to use e-CNY; perceived risk negatively affects users' intention to use e-CNY. Based on the results, monetary authorities should deeply optimize the functions of e-CNY, simplify operational procedures, improve laws and supervision, and increase publicity and education efforts to promote the popularization of e-CNY.

Keywords: E-CNY · UTAUT Model · Structural Equation Model · Financial Education

1 Introduction

Central bank digital currency (CBDC) is a digital form of sovereign currency issued by the central bank of a country based on national credit [15]. In recent years, due to the rapid development of technologies such as the Internet, blockchain, Internet of Things, 5G and artificial intelligence, the modern economic system has gradually entered the digital economy era. According to the third survey of global central bank digital currency released by the Bank for International Settlements (BIS) in 2020, 86% of the 66 central banks it surveyed have begun to study the issue of CBDC (BIS 2020).

In the context of technical support, the research and development of CBDC has entered the fast lane. The main reason is that the popularization of digital currency can solve a series of problems existing in the traditional credit currency system [13]. First, digital currency can reduce the cost of traditional legal currency issuance [4]. Second, digital currency can make up for the limitations of traditional currencies in terms of payment capabilities. With the rapid development of the economy, the frequency and

amount of market transactions have risen sharply, thus the economic system has increased demand for the convenience and security of currency when implementing its payment function [24]. Although traditional cash is easy to deliver, limited by its face value and physical form, large amounts of transferring will inevitably result in transportation costs, which will form resistance to transactions. Third, some functions of digital currency depend on blockchain technology, which can increase the security of funds, strengthen government's supervision and alleviate the problem of "shadow banking" [8]. Fourth, digital currency can expand the scope of monetary policy and improve the macro-control function of central bank. For example, in the traditional monetary system, it is difficult for central bank to implement negative interest rate policy to stimulate demand. Residents can hold cash to avoid the "punishment" of saving. But with the popularity of digital currency, the cost of holding currency will be unavoidable. The central bank can break through the "zero interest rate" lower bound.

China is the first country in the world to develop and issue CBDC [9, 10]. However, the promotion of China's CBDC, or called e-CNY, still faces challenges from both macro and micro levels [14]. From a macro point of view, digital currency is the key point to seize the dominance of new currencies in the future. The promotion of e-CNY will enhance China's monetary sovereignty and weaken the dominance of the US dollar. This may be constrained by the international environment led by the United States [10]. From a micro point of view, the main problem is the acceptance of users. Due to the popularity of third-party mobile payment, it is easier for users to understand e-CNY, which is also in digital form. But on the other hand, it is difficult for most users to distinguish the differences between e-CNY and third-party payment due to lack of professional knowledge. The long-term usage habits will make users feel resistant to accept e-CNY.

The purpose of this paper is to deal with the micro-level problems. We stand on the users' side and explore the influencing factors of user acceptance of e-CNY. Referring to the Unified Theory of Acceptance and Use of Technology (UTAUT), its extended model, the theory of perceived risk and the theory of individual innovation, a structural equation model was formulated. This new model was then confirmed with data collected through questionnaires. Finally, some policy advice for the promotion of e-CNY was given.

2 Theories and Hypotheses

2.1 UTAUT Model and Related Hypotheses

With the acceleration of modern technological innovation, various new technologies emerge one after another. In order to study which factors affect users' acceptance behavior of new technologies, scholars have proposed applicable technology acceptance models in different fields. However, all of these models have certain limitations by fields and may lack general applicability. Based on previous studies, Venkatesh and Davis [21] integrated the eight models with the greatest theoretical contributions including the Technology Acceptance Model (TAM), and extracted the core explanatory variables through categorization analysis: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC). Among them, Performance Expectancy, Effort Expectancy and Social Influence influence User Behavior (UB) by influencing the

mediating variable Usage Intention (UI), while Facilitating Conditions directly influence User Behavior.

Venkatesh et al. used a questionnaire to collect data from a sample of more than 200 employees from four different units on their willingness to use the new system for empirical analysis, and the results were better than the traditional eight theoretical models. Since then, the UTAUT model has become the most widely used basic model in studying user acceptance intention and acceptance behavior problems, not only because of its relatively simple setup and high explanatory power, but also because of its high compatibility, which allows the model can be extended by incorporating other theories and adding new explanatory variables according to the characteristics of the system. For example, Venkatesh and Davis [20] proposed the UTAUT2 model based on the UTAUT model with three new dimensions of variables. The predictive power of the model was further improved.

In this study, performance expectancy refers to the improvement in quality of life or work efficiency that the use of e-CNY can bring to users, such as reducing payment and settlement time, simplifying the transaction process, and reducing transaction costs. Effort expectation refers to the perceived time and economic costs of using e-CNY, such as whether e-CNY is easy to obtain and whether learning to use e-CNY is easy and convenient for users. Social influence refers to whether users perceive that the social environment will influence their own use of e-CNY, e.g. whether there are a large number of friends, relatives, colleagues and competitors using digital RMB will increase their willingness to accept it. Facilitating conditions refer to the facilities and technical support that users can get when using e-CNY, such as whether there are enough scenarios around them to support the use of e-CNY, and whether they can get help from multiple channels in the process of using e-CNY. Numerous empirical experiences show that performance expectancy, effort expectancy, social influence, and facilitating conditions positively influence users' willingness to use the new technology. In a study of the significant impact of manufacturing firms' acceptance and adoption of industrial Internet platforms, Zheng et al. [30] found that performance expectancy and social influence positively and significantly affect the users' intention. Another study of postal savings SMS service adoption intention, Zhang [27] found that performance expectancy, effort expectancy, and social influence positively affect users' usage intention, and facilitating conditions positively affect users' usage behavior. Based on this, the following hypotheses are proposed:

- H1: Performance expectancy positively influence users' intention to use e-CNY;
- H2: Effort expectancy positively influences users' intention to use e-CNY;
- H3: Social influence positively influences users' intention to use e-CNY;
- H4: Facilitating conditions positively influence users' intention to use e-CNY.

2.2 Perceived Risk Theory and Related Hypothesis

The theory of perceived risk was first developed in psychology, and Bauer first extended the concept to the economic field. Bauer argued that consumers cannot predict whether the outcome of a transaction will be good for them. This uncertainty is risk, which will have an impact on consumers' willingness [3]. Obviously, in the process of technology

acceptance, users are not sure whether using a new technology will bring negative results, which will subjectively create a sense of risk prevention and affect their willingness to use it. Xu [25] found that perceived risk has a significant negative influence on willingness to use in the study of factors influencing intention to use UGC-type smart tourism service platforms. Zhao and Cheng [28] found through empirical tests that perceived risk significantly and negatively influences users' usage intention in the acceptance of online investment and financial behavior. As e-CNY is now in the trial rollout stage, users will consider the security and privacy in the acceptance due to their lack of experience in using it. Therefore, incorporating the theory of perceived risk can help further study the problem of usage intention of e-CNY. Users tend to weaken their intention when they perceive that using e-CNY may bring them losses, and therefore hypothesis 5 is proposed:

- H5: Perceived risk negatively affects users' intention to use e-CNY.

2.3 Individual Innovation Theory and Related Hypothesis

The theory of individual innovation originated from Rogers' diffusion of innovation theory in 1983, which defines innovativeness as a characteristic human quality that measures the ability to make changes before others [18]. Agarwal and Prasad first introduced individual innovation into the technology acceptance model to explain the effect of personal factors on usage intention and usage behavior [2]. In general, the more innovative the group of individuals, the more curious they are about new things, the less resistant they are, and the more willing they are to accept new systems. Through empirical testing, Wang et al. [23] found a significant positive relationship between perceived innovativeness and customers' willingness to accept mobile banking technology. Zhao and Gou [29] introduced individual innovativeness variables in the model and proved through empirical analysis that there is a significant positive relationship between individual innovativeness and users' willingness to accept Internet social lending. In a study of the acceptance and use of a virtual learning environment in China, van Raaij and Schepers [7] found that individual innovativeness affects users' perceived ease of use and thus usage behavior. Based on these studies, we can conjecture that user who are more open to new things will have stronger willingness to accept e-CNY, so hypothesis 6 is proposed:

- H6: Individual innovation positively influences users' willingness to use e-CNY.

2.4 Financial Education and Related Hypothesis

Financial education is an important issue in the process of inclusive financial construction, which refers to the popularity of financial knowledge and the acceptance of users. Sun and Pan [19] point out that the focus of financial education is not only to impart professional financial knowledge to recipients, but also to help them form correct financial concepts and behaviors. In fact, the development of financial industry is largely restricted by recipients' quality in terms of financial knowledge and credit culture status [11]. Micro data were used to empirically analyze the effect of financial training on investors' awareness of self-protection. [6, 22]. The study argued that financial education

can help investors significantly improve their awareness of prevention and the ability to choose financial products. It is inferred that the higher the popularity of knowledge about e-CNY, the more it can enhance the financial literacy of users, which in turn increases their usage intention [26]. Hypothesis 7 is proposed:

- H7: Financial education positively influences users’ intention to use digital RMB.

3 Research Design

3.1 Constructing the Theoretical Model

Based on the UTAUT model, this paper retains the four basic explanatory variables of performance expectancy, effort expectancy, social influence, and facilitating conditions. Supported by relevant theoretical studies, three new explanatory variables of perceived risk, individual innovation and financial education are incorporated into this model to study the influencing factors of users’ willingness to use e-CNY. The basic framework structure of the model is shown in the Fig. 1.

3.2 The Latent Variables and Related Observable Variables

The variables are similar to those of the UTAUT model but given more specific meanings combined with the characteristics of e-CNY. Observable variables are selected for each latent variable and the latent variables and observable variables are shown in Table 1.

3.3 Questionnaire Design

There are two parts in the questionnaire. The first part aims to collect basic information of the user including gender, age, and education. The second part adopts the Richter five-level scale which is often used in domestic and international questionnaire survey to quantify the observed variables needed for the study, so as to facilitate data analysis.

A pre-test was conducted to ensure the reliability of the results by distributing the first questionnaire among classmates, friends and relatives. The results passed reliability and validity tests but some questions have low correlation with latent variables. Therefore we modified the questionnaire in terms of the correlation, redundancy and accuracy of the expression.

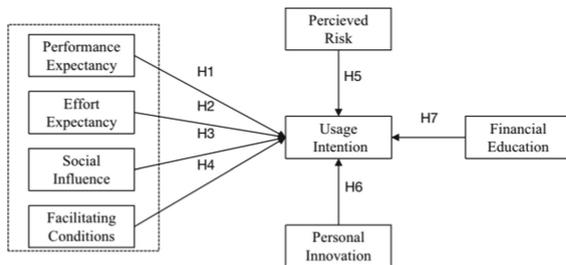


Fig. 1. Research model.

Table 1. The latent variables and observable variables.

latent variable	Observable variables
PE [1]	PE1. e-CNY is useful in my life or work.
	PE2. Using e-CNY will save my time in transactions and payments.
	PE3. Paying with e-CNY can reduce the carrying of cash or credit card.
	PE4. Using e-CNY can streamline my workflow to improve my productivity.
EE [5]	EE1. e-CNY is easy to obtain.
	EE2. Learning how to use e-CNY is easy.
	EE3. The cost of learning how to use e-CNY is low.
	EE4. The process of using e-CNY is simple.
SI [12]	SI1. The opinions of people who are important to me affect my willingness to use e-CNY.
	SI2. Some of my relatives and friends are using e-CNY and they think I should too.
	SI3. My colleagues or supervisors will have a positive perception of me when they know I am using e-CNY.
	SI4. I think the future work or life environment will force me to use e-CNY.
FC [17]	FC1. I have enough money and facilities to use e-CNY.
	FC2. I have enough knowledge to use e-CNY.
	FC3. I can get help and support when using e-CNY from financial workers or online service.
	FC4. Many transactions and settlements can be completed by using e-CNY.
	FC5. The development of the Internet attracts me to use e-CNY.
PR [16]	PR1. The digital currency technology is immature.
	PR2. There is a possibility of account asset theft while using e-CNY.
	PR3. Using e-CNY may leak my personal information.
	PR4. It's easier to get scammed in transactions while using e-CNY.
	PR5. Using e-CNY can lead to losses due to operational errors.
	PR6. The use of e-CNY cannot be protected by the state and government.
	PR7. I believe that losses suffered during the use of e-CNY cannot be recovered as soon as possible.
PI	PI1. I like to try some emerging things, such as e-CNY.
	PI2. When people recommend me to try new things, such as e-CNY, I will not be very resistant.
	PI3. Among my colleagues/friends/family members, I am more willing to try something new, such as e-CNY.

(continued)

Table 1. (continued)

latent variable	Observable variables
FE	FE1. I know the form and content of e-CNY.
	FE2. I know the policies and regulations for using e-CNY.
	FE3. I know how to protect my rights while using e-CNY.
	FE4. I can identify some illegal acts related to e-CNY.
	FE5. I often learn knowledge about e-CNY.
	FE6. I can protect my rights while using e-CNY.
UI	UI1. I am willing to learn how to use e-CNY.
	UI2. I am willing to start using e-CNY after the promotion.
	UI3. I will use e-CNY in the future when there are more and more scenarios where e-CNY can be used.
	UI4. I would recommend using e-CNY to my friends and relatives.

4 Empirical Analysis

4.1 Data Collection

In order to enhance the accuracy of the data and achieve the purpose of the study, the questionnaires were distributed in both online and offline formats. The offline questionnaires were distributed in Beijing and Suzhou, both of which are pilot cities for e-CNY. The target group is mainly teachers and students of Beijing Language and Culture University and Soochow University as well as the surrounding residents. A total of 120 offline questionnaires were distributed (60 each in Beijing and Suzhou), and 120 valid questionnaires were collected. The online questionnaire was distributed mainly through social platforms such as postings and QQ groups, covering people of all ages, different education levels and different occupations as much as possible. A total of 120 online questionnaires were distributed, and 105 valid questionnaires were collected.

A total of 225 valid samples were collected through questionnaire distribution, and the effective rate was 93.75%. Statistical results are shown in Table 2.

We can see that the gender distribution of the sample is nearly even, the age group is concentrated between 18 and 30 years old, the education background is mostly bachelor and above, most of the occupation are students. An explanation is that the distribution areas are mainly located in or around universities. 40% of the users in the sample live near the e-CNY pilot. The results are in line with our expectation and indicate that two crucial factors (educational background and pilot city) are taken into account.

4.2 Data Analysis

There are multiple explanatory variables in the research which are all latent variables that require observable variables for estimation which will lead to measurement errors. Besides, correlations exist among the variables. Thus we formulate a structural equation model which can effectively address the issues above.

Table 2. Statistical analysis of the sample

Sample statistical characteristics	Classification	Frequency	Percentage
Gender	Male	98	43.56%
	Female	127	56.44%
Age	Under 18 years old	2	0.89%
	18–30	157	69.78%
	31–40	26	11.56%
	41–50	32	14.22%
	51–60	8	3.56%
Educational background	Junior high school and below	15	6.67%
	High School	12	5.33%
	College	25	11.11%
	Undergraduate	75	33.33%
	Master's degree and above	98	43.56%
Career	Company employees (those who work in general affairs)	17	7.56%
	Workers	11	4.89%
	Laborers engaged in agriculture, forestry, animal husbandry and fishery	9	4%
	Self-employed	8	3.56%
	Private business owners	1	0.44%
	Students	137	60.89%
	Other	42	18.67%
There is a e-CNY pilot around your residence and you know it	Yes	90	40%
	No	135	60%

4.2.1 Reliability Test

Reliability refers to the stability and reliability of the measurement questions corresponding to the observable variables, which is reflected by the correlation of the measurement questions under the same latent variable. Reliability is often measured using the Cronbach's alpha coefficient, and it is generally accepted within the academic community that a Cronbach's alpha coefficient value of 0.7 or higher can indicate that the reliability of these measurement questions is acceptable. The results are as follows (Table 3).

The results show that the Cronbach coefficients of each latent variable are greater than 0.7 and most of them are greater than 0.8, which proves that the model has high reliability.

Table 3. Results of reliability analysis.

Latent variable	Number of items	Cronbach's alpha
PE	4	0.904
EE	4	0.876
SI	4	0.733
FC	5	0.830
PR	7	0.903
PI	3	0.863
FE	6	0.899
UI	4	0.913

Table 4. Results of validity analysis.

Variables	KMO value	Variables (cumulative) degree of explanation (%)	Bartlett's sphericity test for significance
PE	0.834	78.463	0.000
EE	0.819	73.659	0.000
SI	0.689	56.119	0.000
FC	0.827	60.124	0.000
PR	0.888	63.394	0.000
PI	0.726	78.573	0.000
FE	0.861	66.725	0.000
UI	0.831	79.414	0.000
Overall	0.901	70.267	0.000

4.2.2 Validity Test - Exploratory Factor Analysis

Validity is used to measure the ability of observable variables to accurately reflect latent variables, and generally includes three dimensions: content validity, criterion validity, and construct validity. This study focuses on the analysis from the dimension of construct validity. In a structural equation model, a commonly used method is Exploratory Factor Analysis (EFA), and the prerequisite for using this method is to pass the KMO sample test and Bartlett's spherical test, and the preliminary results of the validity analysis are shown in Table 4.

The academic community agrees that a scale has good construct validity and can be further analyzed when the KMO values of variables and the overall sample are greater than 0.7. According to the results, all the variables meet the conditions except for the variable social influence which is slightly below the standard value, so it is acceptable to use the factor analysis method in this study.

Different from our hypothesis, the rotated component matrix shows that 7 components were extracted (the original hypothesis was 8). The individual innovation questions were all categorized in the usage intention component, the facilitating conditions questions FC3, FC4, FC5, and the social influence question SI4 were categorized in the usage intention component, but the correlation was weak, the remaining questions were extracted as same as the original hypotheses.

4.2.3 Model Modification

Integrating the results of the exploratory factor analysis with the reality, we can modify our model and delete corresponding hypotheses.

Classify individual innovation as usage intention. A reasonable explanation is that the questions of individual innovation are similar in content to those of usage intention, which are all measure the user’s acceptance of e-CNY.

Remove the variable of facilitating conditions since the questions FC3, FC4 and FC5 were categorized in the usage intention component with small correlation coefficient (all less than 0.6). Besides, in a structural equation model, a latent variable requires at least two observed variables for estimation. The facilitating conditions only correspond to two questions FC1 and FC2 and both of their correlation coefficients are not high (0.656 and 0.590). Thus it is advisable to exclude the effect of facilitating conditions. Such a modification is also consistent with the UTAUT model, in which facilitating conditions directly affect usage behavior without mediating variables. We didn’t consider usage behavior in our model since e-CNY is not widely promoted till now, thus the low correlation between filicitating conditions and usage intention is reasonable.

Delete the question SI4 since it was categorized in the usage intention component, with small correlation coefficient (0.517).

The modified model was drawn by AMOS 26.0 as Fig. 2.

The modified model fitness metrics are shown in Table 5.

It can be seen that all the indicators are within the acceptable range, among which CMIN/DF and RMSEA are good thus the modified model is well adapted.

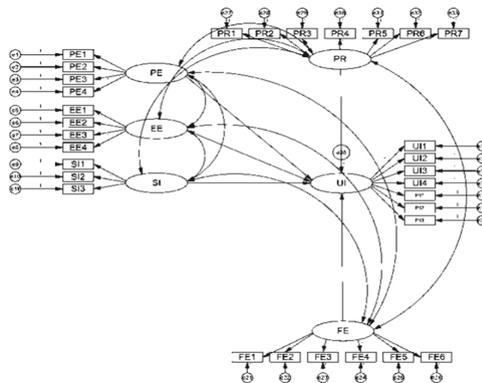


Fig. 2. The modified model.

Table 5. Indicators of model fitness.

Indicators	Acceptable range	Good	Value in the model
CMIN/DF	(3,5)	(1,3)	2.291
GFI	[0.7,0.9]	(0.9,1]	0.778
AGFI	[0.7,0.9]	(0.9,1]	0.738
RMSEA	[0.08,0.10]	< 0.08	0.077
NFI	[0.7,0.9]	(0.9,1]	0.813
CFI	[0.7,0.9]	(0.9,1]	0.884

Table 6. Results of path analysis

Paths	Unstandardized path coefficient	Standardized path coefficient	P-value
PE --> UI	0.311***	0.332	0.000
EE --> UI	0.258**	0.281	0.004
SI --> UI	0.022	0.027	0.764
PR --> UI	-0.111*	-0.151	0.012
FE --> UI	0.186**	0.186	0.010

Table 7. Hypothesis testing results

Research Hypothesis	Test results
H1: Performance expectancy positively influence users’ intention to use e-CNY.	Established
H2: Effort expectancy positively influences users’ intention to use e-CNY.	Established
H3: Social influence positively influences users’ intention to use e-CNY.	Not Established
H5: Perceived risk negatively affects users’ intention to use e-CNY.	Established
H7: Financial education positively influences users’ intention to use digital e-CNY.	Established

4.2.4 Path Analysis and Hypothesis Test

The path coefficient and significance are shown in Table 6, and the modified hypothesis test results are shown in the Table 7.

5 Conclusions and Outlook

5.1 Conclusions

Based on the UTAUT model, this paper introduces perceived risk, individual innovation and financial education and then constructs a model on the influencing factors of e-CNY usage and adoption. 245 questionnaires were used as data for empirical testing and we find that performance expectancy, effort expectancy, and financial education have significantly positive effects on usage intention of e-CNY, perceived risk has a significantly negative effect on usage intention of e-CNY. There is no significant relationship between social influence and usage intention of e-CNY in this study and an explanation is that e-CNY is only available in a few places thus it is difficult for users to actually measure the impact of other people's usage on themselves.

5.2 Policy Recommendations

Some recommendations are proposed to promote the popularization of e-CNY.

Firstly, monetary authorities should give full play to the two advantages of e-CNY which are "legal" and "digital" to optimize the functions. Compared with traditional banknotes, e-CNY is supposed to have the characteristics of fast speed, large amount, and wide application, etc. Besides, compared with private digital currencies such as WeChat change and Alipay balance, e-CNY should demonstrate its legal status and the government should improve relevant laws and regulations to enhance the security.

Then, it is advisable to increase the acquisition channels of e-CNY and reduce the difficulty of using the operating system.

Furthermore, the generation of e-CNY expands the currency system of renminbi and also brings new risks, which requires the monetary authorities to improve relevant regulations and supervision so that users can establish trust and then integrate e-CNY into their lives just like traditional currencies.

Finally, an innovative point of this study is the introduction of financial education. The government should increase the publicity of financial knowledge and improve users' financial literacy through TV advertisements, online self-media, offline publicity, posters, financial institutions' promotion, and additional pilots, thereby enhancing users' intention.

5.3 Limitations and Outlook

We selected a large number of young people and highly educated people as the survey subjects to enhance the reliability of the questionnaire results. Such a method may lead to a deviation between the research and the reality where there are many inclusive groups who lack knowledge about e-CNY. In addition, the sample size is not enough which may have an impact on the accuracy of the study results.

Subsequent research can be improved by: 1) reducing the difficulty of the questionnaire under the condition of ensuring the quality, so that samples can be collected in a wider range; 2) referring to new theories and extracting new variables; 3) considering moderating variables that have a significant impact on the model and doing multi-group analysis.

Acknowledgments. This research project is supported by the National Social Science Foundation Project “Multi-dimensional research on the comparative evaluation and enhancement mechanism of financial inclusion under digital empowerment” (Project No.: 21BJL087).

References

1. Abowd G., Dey A.K. & Brown P. Toward a better understanding of context and context-awareness, *Lecture Notes in Computer Science*, 1999, pp. 304–307.
2. Agarwal R., Prasad J. The antecedents and consequents of user perceptions in information technology adoption [J]. *Decision Support Systems*, 1998, 22(1): 15–29.
3. Bauer R. A. Consumer Behavior as Risk Taking. *Dynamic Marketing for a World*, 1960, pp. 389–398.
4. Chen Hua, Gong Xiaokang. Research on the digital currency of the central bank of China[J]. *Academic Exchange*, 2021(02):118–131.
5. Davis F. D., Venkatesh V.. A critical assessment of potential measurement biases in the technology acceptance model: three experiments, *International Journal of Human Computer Studies* 45.1(1996):19–45.
6. Du Zhengzheng, Li Yunfeng, Yan Bin. Does financial education benefit investor protection? [J]. *Securities Market Herald*, 2017(06): 43–49.
7. Erik M. van Raaij, Jeroen J.L. Schepers, The acceptance and use of a virtual learning environment in China, *Computers & Education*, Volume 50, Issue 3, 2008, pp. 838–852.
8. Huang Minxue. Market development and operation mechanism of digital RMB [J]. *People’s Tribune*, 2021(19):78–81.
9. Huang Yiping, Huang Zhuo. The digital finance development of China: present and future [J]. *China Economic Quarterly*, 2018,17(04):1489–1502.
10. Huang Yiping, Tao Kunyu. Revolution of digital finance in China: experience, impacts and implications for regulation [J]. *International Economic Review*, 2019(06):24–35+5.
11. Jiao Jinpu. The importance of building an inclusive financial system[J]. *China Finance*, 2010(10):12–13.
12. Key Poutssttchi. Conditions for acceptance and usage of mobile payment procedures, *The Second International Conference on Mobile Bussiness*, 2003: 201–210.
13. Liu Kai, Li Yu, Guo Mingxu. A literature review on the research and development progress of central bank digital currency in major economies and its impacts on the economic system, *Studies of International Finance*, Vol. 6, 2021.
14. Liu Kai. and Guo Mingxu. Issuing motivation and design of central bank digital currency and policy implications for China, *International Economic Review*, No. 3, 2021.
15. Liu Xiaoxin. The current situation, development trend and regulatory policy of global legal digital currency, *People’s Tribune*, No. 24, 2021.
16. Martins C., Oliveira T., Popovic A.. Understanding the Internet banking adoption: a unified theory of acceptance and use of technology and perceived risk application, *INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT*, 34. 1(2014): 1–13.
17. Niina Mallat. Exploring consumer adoption of mobile payments-a qualitative study, *Journal of Strategic Information Systems*, 2007, 16(4): 413-432.
18. Rogers E.M. *Diffusion of innovation* [J]. New York, 1983.
19. Sun Tongquan, Pan Zhong. Financial education in the construction of inclusive finance, *China Finance*, No. 10, 2014.
20. Venkatesh V., Thong, J.Y., Xu X. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178.

21. Viswanath Venkatesh, Michael G. Morris, Gordon B. Davis, Fred D. Davis. User acceptance use of information technology: toward a unified view[J]. *MIS Quarterly*, 2003, 27(3): 425–478.
22. Wang Jing, Hu Guohui. The evaluation of the development of China's inclusive finance and the analysis of factors [J]. *Financial Forum*, No. 18, 2013.
23. Wang Lei, Wei Wenfei, Li Juchao. The factors to influence customer's adoption of mobile banking, *Financial Forum*, No. 11, 2013.
24. Xing Yan. The effectiveness and realization of inclusive finance: review and enlightenment[J]. *Studies of International Finance*, 2015(11): 24–36.
25. Xu Ruoran. Research on user behavior of smart tourism service platform in UCG mode - based on UTAUT model, *Research on Economics and Management*, No. 42, 2021
26. Zhang Xun, Wan Guanghua, Zhang Jiajia, He Zongyue. Digital economy, financial inclusion and inclusive growth[J]. *Economic Research Journal*, 2019, 54(08): 71–86.
27. Zhang Yu. Study on service adoption behavior based on UTAUT model: a case on the SMS service of postal saving, *Modern Economic Science*, No. 37, 2015.
28. Zhao Baoguo, Cheng Yinghui. Research on factors influencing the acceptance behavior of individual users of online investment and finance, *Research on Financial and Economic Issues*, No. 8, 2016.
29. Zhao Baoguo, Gou Jiankang. Determinants of intentions to use Internet social lending, *Journal of Beijing University of Posts and Telecommunications(Social Sciences Edition)*, No. 5, 2016.
30. Zheng Yonghua, Sun Yanming, Zhu Jianhua. Research on influencing factors of intention to use individual Internet platform: based on improved UTAUT model, *Science and Technology Management Research*, No. 14, 2020.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

