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## **Yuan Digitalization and Its Impact on People's Republic of China**

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### **ABSTRACT**

Yuan Digitalization is under the main focus of modern financial world, with wide range of options about its beneficial influence on Chinese society or claiming Chinese officials to displace US Dollar's hegemony in the world. Nevertheless, introducing digital currency, built by block-chain technology, to the state's financial system can be considered as a next innovation step for future economy. Since the system hasn't been introduced yet, in this paper we will try to underline its huge importance for the society and the economy, summarize common opinions.

Keywords: Solar Air Heater, Solar Energy, Solar Radiation, Transient Thermal Analysis.

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### **1. Introduction**

There's still no certain definition of Central Bank Digital Currency (CBDC) in relation to the poor law mechanism in this field. According to International Monetary Fund (IMF) (2018), CBDC is a new form of money, issued digitally by the central bank and intended to serve as legal tender. Even if the definition isn't solid settled yet, the vast majority of countries pursue their central banks to explore the possibility development state own digital currency. In the research and development of legal digital currency, the Central Bank of China has shown strong foresight. In 2014, the central bank set up a research group on legal digital currency to start the research and development of legal digital currency. By 2019, the central bank has basically completed the top-level design, standard formulation, function research and development, joint debugging and testing of digital RMB. In 2020, digital RMB will enter a new stage of pilot test and scenario selection.

Yuan Digitalization is settled in the main focus of international community for last several years. Starting from Blockchain technology introduction, Chinese officials has settled their own long-term route of implementing this technology to the government financial system. Recent researches (Narayanan et al., 2016; Bordo and Levin, 2017) have explored the importance of currency digitalization, underling its vital importance for a government to actively participate in this field, and forcing national central bank to force its development. As China's legal digital currency, the digital renminbi is issued by the People's Bank of China, endorsed by national credit, and legally solvable official currency. Digital RMB is based on the broad account system, the loose coupling function of holding bank accounts is equivalent to banknotes and coins.

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### **2. Significance of the study**

This theoretical paper will be useful for the readers to introduce a new aspect of the currency, initially discussed by Chinese officials in 2010ss and applied in practice in the end of decade, Yuan digitalization, summarize the fundamental influence in various sectors, such as possible changes in the banking system, its importance in terms of international trade between China and trade partner countries, and the reflection of the society to hi-tech

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modification of existing currency system in the country. Into the bargain, we truly believe that our descriptive research can be applicable for other countries, to let other economists and sociologists be familiar with recent updates occur around this topic. Moreover, the digitalization process has become to be a quite significant topic for discussions in the modern fiscal policy, when the government need to step into a new area of digitalization, to adapt to the new tendencies in the economy.

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### 3. Analytical and Theoretical Framework

In this section we introduce the possible influence of Yuan Digitalization on most important sectors we do believe in terms of our studies. CBDC can be considered as a long-term project, with changes, which not such observable from short-term perspective. Under these circumstances, the analytical and theoretical framework is based on previous academic papers, predictions and recent updates, mostly retrieved from the news. Further sections are organized as follows: Banking system, International trade and Influence on society.

#### 1. Banking system

To establish our theoretical framework regarding to banking system, we need to investigate existing banking transaction system (Diamond and Dybvig, 1983) and compare it to possible changes with new adopted digital currency system. With traditional approach of money supply (hereby M0), when Chinese Central Bank prints paper banknotes under settled zero interest rate. CBDC is able to replace M0, which is a zero-interest rate under normal circumstances (Lu and Zhou, 2020), simultaneously decreasing the cost of maintaining money cycle of banknotes and its printing. In this circumstances, commercial banks will be more beneficial in borrowing rates, since the overall expenses are minimized in terms of money supply. Designated commercial banks and other institutions are responsible for providing digital RMB exchange services to the public. Digital RMB has the nature of legal compensation, that is, as long as the domestic electronic payment scene can be used, it comes not to be possible to refuse operating in digital RMB, neither to refuse to accept RMB cash at present. Additionally, compared with the paper version of RMB, digital RMB is undoubtedly more secure. It is stored in the mobile phone and protected by the mobile phone password. (Chang, 2020). Digitalization will help the central bank to fight counterfeiting more effectively and reduce the cost of additional banknote security measures' introduction.

#### 2. International trade

Yu and Chen(2019) firstly proposed that Yuan Digitalization may be a feasible way to promote the internationalization of the RMB. With implementing digital Yuan into all trade operations, Chinese suppliers will be able to achieve better debit leverage on international buyers by carry out transactions with digital currency. According to Ji Xiaonan Chen Shan (2021) research, the U.S. dollar has absolute advantages in scale and network externalities in terms of international trade settlement and international reserves. Nevertheless, introduction of Digital Yuan can change the U.S. dollar hegemony in transactions, especially between RCEP countries' members, since People's Republic of China is one of the Regional Comprehensive Economic Partnership (RCEP), covering a market of 2.2 billion people and \$26.2 trillion of global output. That accounts for about 30% of the population worldwide, as well as the global economy (Lee, 2020). Moreover, China is also the dominant player in The Belt and Road Initiative, established in 2013 as an international logistics development strategy of supplying produced in China goods to Europe, Middle East and Africa.

In fact, the biggest application scenario of digital RMB in the future may be cross-border payment. To some extent, the internationalization of RMB and the expansion of overseas business of China's financial institutions are limited by SWIFT system, while it is still complicated to create a solid foundation for China to lead in international payment and settlement system relying on international banking institutions. CBDC, based on blockchain technology, provides new ideas for reshaping the payment and settlement system. The birth and promotion of digital RMB may constitute an opportunity to break the shackles of SWIFT system and restructure RMB cross-border payment and settlement system.

#### 3. Influence on Society

Yuan Digitalization can bring significant changes to Chinese society. In recent years, with the rapid development of network technology and mobile payment, the payment tools based on the deposit currency of commercial banks have gradually become electronic and digital. However, the deposit currency of commercial banks cannot replace legal currency to play the role of value measure or bookkeeping unit. Therefore, in the evolution of money form, no matter how active the money issued by the people is, it is necessary for the country (or region) to issue legal tender centrally and uniformly. In history, while official money was in circulation, private money and foreign money also existed in varying degrees. The issue of private money and the users' self-determination of the weight and quality of money increased the social transaction costs. As a result, Consumer Price Index (CPI) will be boosted by currency digitalization, brings more spendings and transactions respectively, which in turn increases common society's welfare. "Based on the current available materials, digital RMB has brought many surprises to people, including more secure, digital, media free, account free, easy to extract and so on" (Chang, 2020). We do believe that Yuan Digitalization will be able to upsurge the well-being of citizens, increase purchasing power and reduce poverty in Chinese society. Simultaneously, driven power of digitalization might boost the country's inner consumption, which in turn is able to update the line of middle-class in the society, erase the poverty, and moreover, bring significant changes in social aspect of People's Republic of China.

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### 4. Conclusion

Economic globalization has promoted the birth and development of digital currency to a certain extent. In turn, the development and application of digital currency has laid a good foundation for further integration of global economy (Ning, 2021). Yuan Digitalization might bring significant changes to Chinese banking system and society. In terms of international trade, digital RMB can be used in transactions between the Regional Comprehensive

Economic Partnership (RCEP) members, what also promotes Chinese digital currency in the world economy. The partnership countries will be involved into operations using digital RMB, and it will link their economies to e-currency.

In scales of the country and its society, digitalization will create more electronic payments, and the financial system will be more transparent for the citizens. Moreover, digital RMB pretends to be more stable in comparison to other independent digital currencies, like Bitcoin or Ethereum, which exchange rates are extra volatile. Money laundering, financing terrorism and other anti-social operations will suffer from currency digitalization, since banknotes are not trackable for the officials, what makes them to be the greatest assets in criminal activities. With digitalization, where every e-banknote is easily visible for the central bank, the overall process will be tenacious to maintain all illegal money transactions.

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