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## The specifics of the formation of the modern payment system of China

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#### **Abstract**

This article discusses the specifics of the formation of the PRC payment system. China is one of the most important players on the economic world stage of this century. At this stage, for the viability of the entire economic system of the world, it is necessary to understand how certain economic mechanisms are arranged in China in order to be able to predict the path of economic development. The purpose of the work is to study the features of China's modern payment system and highlight its main components. The research methods were secondary analysis and synthesis of data from official sources, scientific works of Chinese and Russian authors, as well as the use of the snowball method for the analysis of statistical information. The result of the work was the identification of the stages of reforming the banking sector in China. The novelty of the work lies in a detailed analysis of the strategic approach of the PRC leadership to the organization of the national payment system. The purpose of the article is to provide an up-to-date analysis of the current economic processes taking place in China, which can help other researchers. The structure of the study consists of an introduction, three analytical paragraphs that reveal the historical context, the current state and the main trend for the future development of the payment system in China, and a conclusion.

### For citation

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## Keywords

Strategy, business model, competition, payment system, China.

### Introduction

At the turn of the 20th and 21st centuries, major changes associated with a significant strengthening of China's position became clearly visible in the development of the world economy. Consistently and gradually implementing economic reforms, the country has achieved obvious success in various areas, including the adaptation of a huge national economy to the processes of globalization. The PRC has become a major producer and exporter of a wide range of goods, from textiles to sophisticated machinery and information technology. The ongoing modernization of China's economy is of great interest to politicians, business circles and economic researchers. This interest is strengthened by the sharp intensification of China's foreign economic relations observed in recent years. Because of the rapid growth of exports and imports, China is becoming an increasingly influential subject of international economic relations, exerting a growing influence on the conjuncture of individual commodity markets, the international monetary system, and the economic situation of partner countries.

Ensuring sufficiently high rates of stable economic growth is one of the priorities of the socioeconomic development of any state. For this reason, in the context of the global economic downturn as a result of the global crisis, the issue of effectively resuming this growth and making it sustainable in the context of the emerging new global post-crisis economy seems to be very relevant for almost all countries.

The problem considered in this article is the specifics of the development and formation of China's payment system over the past decades. The strategy chosen by Chinese banks is relevant for research in the face of accelerating digitalization of the entire global economic system.

# **Background and context**

2023 year will mark the 45th anniversary of China's "opening up" reform, during which time the country has become a growth marvel and the world's first largest economy. As reforms continue, including the liberalization of the financial and external sectors, monetary policy will receive increasing attention. Changes in monetary policy help the domestic economy grow and stabilize, and increasingly have global repercussions. However, it is necessary to remember how far China has gone to its current success.

The first mention of the significant role of banks in the socio-economic development of China, including the circulation of the first paper money, dates back to the reign of the Tang Dynasty (618-907) [Human Development Reports, www]. For a long time, the basis of the activities of Chinese financial institutions was the conduct of payment transactions and customer settlements, however, with the advent of representative offices of European banks in the country in the 19th century received their development operations to attract deposits and lending. During the Golden Decade (1928-1937), the main activities of China's commercial banks coincided with the dynamics of banks in developed countries, which played a key role in financing national industry and agriculture.

Immediately after the revolution of 1949, the assets of commercial banks were nationalized and transferred to the control of the People's Bank of China, while all the powers to manage the finances of economic entities were centralized in the Ministry of Finance. In the 1950s, The People's Bank of China was actually assigned the functions of a central bank (including money issue and monetary policy), a national treasury, and the only bank that carried out all financial transactions in the country [China economic indicators, www]. Initially, the activities of the People's Bank of China resembled the work

of a state agency that accumulated free financial resources in the economy and provided loans to enterprises and organizations in accordance with the direct directives of the Ministry of Finance and the Planning Committee.

As part of measures to modernize socio-economic relations in the late 1970s. It was decided to limit the scope of activities of the People's Bank of China and the need to create specialized banks in the main sectors of the national economy. The "big four" banks established during this period (China Construction Bank, Agricultural Bank of China, Industrial and Commercial Bank of China, as well as the Bank of China, which limited its activities in the field of foreign trade operations) formed the current basis of the country's banking system, along with rural credit cooperatives [Li Keqiang, 2018].

The lack of market competition and management motivation system, the directive nature of lending led to the low efficiency of banks in terms of risk management, liquidity, as well as credit analysis and monitoring of borrowers. In this regard, in 1985, banks received greater decision-making autonomy; they were allowed to compete with each other in attracting savings from the population. To stimulate the participation of banks in the development of the economy, the government and the People's Bank of China annually formed a national credit plan. Initially, banks were required to comply with individually set national plan lending quotas, which were later replaced by indicative benchmarks for expected lending volumes.

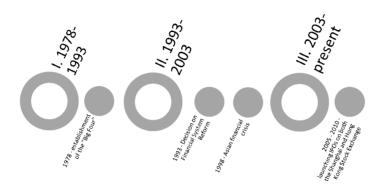
To increase the role of the banking system in the development of the economy, several significant reforms were initiated in the 1990s. In particular, they allowed the creation of new commercial banks, the founders of which, along with regional authorities, could be enterprises and individuals. In accordance with the law on the People's Bank of China adopted in March 1995, the latter received full independence in the field of monetary policy, including the right to impose interest rate limits on commercial banks and control the functioning of financial markets [China won't resort..., www].

Through the May 1995 Commercial Banking Act, the Big Four banks, which had begun operating on a full commercial basis, were relieved of their obligation to direct lending to government priority projects. At the same time, credit cooperatives received the right to reorganize into commercial banks. In addition, the government created three development banks specialized in investment projects in priority and innovative sectors, and allowed the creation of urban credit cooperatives.

The Asian financial crisis of 1998 had a major negative impact on the rapidly growing Chinese economy, which resulted in an increase in overdue loans on banks' balance sheets to 30% of total assets. To improve the health of the Big Four banks, the government recapitalized them, and transferred non-performing assets to the balance sheets of specially created investment companies. However, it is not known exactly which of the reforms led to an increase in the efficiency of Chinese banks. A. N. Berger, I. Hasan, M. Zhou in their study argue that the implementation of the above sectoral reform, as well as the reduction of the state share in the capital of banks and the increase in the share of foreign investors, significantly increased the operational efficiency of Chinese banks [Zhou Jichang, 2013]. X. M. Fu, S. Heffernan argue that such results were not stable and efficiency fell in 1985-1992, which resulted in reforms in the banking sector in 1995 [Lee Gangway, 2011]. C. Jiang, S. Zhang note that the participation of foreign shareholders in the capital of the bank played a positive effect in the end [Matthews, 2010]. C. Jia, in turn, argues that the key factor was the introduction of international standards (Basel 1 and Basel 2), which generally positively influenced the improvement of the risk management system [Jiang Zemin, 2011].

Since 2000 China is pursuing a policy aimed at easing restrictions on access to the financial market of private and foreign companies, and in 2004, a major international bank HSBC acquired a stake in Bank of Communications for the first time. In 2005-2006 The government successfully completed

initial public offerings of China Construction Bank, Industrial and Commercial Bank of China, and Bank of China on the Shanghai and Hong Kong stock exchanges. In connection with the end of the transitional period of accession to the WTO, the Chinese Government allowed the limited activity of foreign banks in the country [The 50th Statistical Report..., www].



Source: compiled by the authors

Figure 1 - Three Stages in the History of China's Banking Reforms

Figure one shows the three stages of development of the Chinese banking industry listed above. Figure one shows the above three stages in the development of China's banking industry. As you can see, the last stage started in 2000 and is still going on.

## The current state of the payment system in China

The creation of China's electronic interbank payment system began in 1989. In 1991, the system began to operate in the country's seven largest cities. The central element of the system was the National Clearing Center, which was opened in Beijing. Since 1995, with the assistance of the central banks of five countries (Japan, USA, Great Britain, Germany and Switzerland), the development of a new China National Advanced Payment System (CNAPS) has begun.

In 2002, the system was put into operation with the assistance of the Japanese company NTT DATA Corporation. In the same year, 2,160 branches and divisions of the People's Bank of China (Central Bank of China) were connected to the system. Since 2013, the second generation of the China National Advanced Payment System (CNAPS2) has been in operation.

Figure 2 shows the structure of China's national payment system today. The system consists of four main complementary elements, namely China National Advanced Payment System (CNAPS2), Regional payment systems, China's unified national card system, Internal Settlement System between Commercial Banks.

The concept of a unified national card system appeared in 1993, when the Golden Card project was developed. Then Chinese President Jiang Zemin actively supported the project. The modern card payment system China UnionPay is in many ways a continuation of the development of the Golden Card project [Chinese Central Bank..., www].

China's national payment system CUP was established at the initiative of the State Council and the People's Bank of China. All outlets work through this payment system, since all ATMs are connected to it. Foreign commercial banks issuing payment cards are required to use the Chinese payment system

for RMB payments. Under Chinese law, it is forbidden to conduct transactions in national currency using cards of foreign payment systems, as well as to issue cards of international systems separately from the national one. Therefore, international payment systems are forced to issue only joint payment cards with UnionPay. Thus, the competent organization of card transactions is of great importance in the development of international currency payments.



Figure 2 - The structure of China's national payment system. Source: compiled by the authors

Currently, the People's Bank of China has launched a new global interbank payment system (CIPS), which aims to increase the liquidity of the yuan in global financial markets. The system should significantly reduce costs and data processing time. The main task of CIPS is to ensure payment for cross-border transactions, direct investments, as well as loans and individual money transfers. The CIPS system intends to use the same messaging format as other global payment systems (for example, SWIFT).

Table 1 - Comparative analysis of CUP and CIPS

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Comparison criteria	China	
	CUP	CIPS
Date of establishment	2002	2015
Function	National payment system, all essential functions	Increasing the liquidity of the yuan in global financial markets
Number of participants: countries institutions	79 300	1341 (76 – direct participants, 1265 – indirect participants) over 3000
Position in the market	Monopoly payment system	System for the internationalization of the use of the yuan

Source: compiled by the authors

Table 1 shows a comparative analysis of the two most popular Chinese payment systems CUP and CIPS. As you can see, the CUP payment system performs all the basic necessary functions; therefore, it occupies a monopoly position. CIPS is engaged in services that are more specific and has a lower degree of market mastery. CIPS was conceived and created to really increase the efficiency and reduce the cost of RMB transactions. Thus, it helps to move SWIFT-enabled funds to transfer RMB across the border.

Thus, we can single out the leading payment system, CUP. CUP is becoming an international payment system and has a number of advantages over its competitors, including lower tariffs, a simple and transparent tariff policy, and a constant expansion of the geography of its presence.

# Digitalization is the main trend

Thus, we can single out the leading payment system, CUP. CUP is becoming an international payment system and has a number of advantages over its competitors, including lower tariffs, a simple and transparent tariff policy, and a constant expansion of the geography of its presence.

The rapid development of the digital economy both globally and especially in China in recent years was catalyzed by the impact of the COVID-19 pandemic in 2019-2022. In 2022, CNNIC (China Internet Network Information Center) published a report that about 840 million users shop online. This has had a significant impact on current economic growth patterns, as well as the conditions for the functioning of markets and, in particular, the market for banking and financial services.

Since 2018, China has become the world leader in fintech investment, reaching \$25.5 billion. In 2019, the market value of China's fintech sector was 375.3 billion yuan (59.2 billion US dollars), or more than 35% of GDP. It is worth noting that the awareness of the importance of digitalization in the banking and financial sector has occurred not only in the commercial banks themselves, but also at the highest political level of the PRC, as a result of which the government is also actively engaged in promoting the goals of the digital economy in the banking system at the legislative, regulatory and administrative levels.

The PRC is already a de facto cashless economy in a number of areas, for example, most payments are made through mobile phones and electronic payment platforms such as WeChat Pay and Alipay. The volume of this market is colossal, so, according to the People's Bank of China, in 2021, 439.5 billion non-cash payment transactions were made in the country for a total of 4416 trillion yuan (about 670 trillion dollars), which is 10.7 and 3.4 times more than ten years ago.

A particularly large potential remains in China for digital banking, including due to the historically insufficient coverage of the population (especially in remote and underdeveloped so-called inland regions of the country) with traditional financial services.

The result of China's active efforts in the digital transformation of the financial sector may be that by 2026, China will be the world's largest digital banking market, which will account for up to 25% of the total number of digital banking users in the world (2.5 billion people in 2021 year and up to 4.2 billion people by 2026).

All of the above indicates serious prospects for the development of Chinese payment systems in the context of international cashless payments. The Western market has long been occupied by Visa and Mastercard payment systems, the possibilities for CUP development there are limited only by facilitating the use of Chinese CUP cards for Chinese citizens, so the prospects for the development of CUP in other markets, for example, the Asia-Pacific region, Latin America, the CIS, are much wider.

### **Conclusion**

Now China is developing quite rapidly, every year more and more expanding its influence on the world economy. The payment system in this process plays an important role, largely determining further development. Therefore, in order to predict the further development of the situation and its possible ways, it is necessary to understand the features of the Chinese payment system and their origins. The Chinese payment system followed a special path of development, which left its distinct mark on it. Therefore, for example, we must not forget that the Chinese economy was a command economy for a long time, and therefore the state continues to play a large role in China's payment system, although in recent decades, its role has gradually decreased to that of other countries. The

problems of China's financial and economic system, exposed in the course of the development of the crisis phenomena, require their prompt solution. For example, further reforms of the banking system are vital before the risks associated primarily with the increased influence of shadow banking and soft budget constraints in large companies become too serious to shake the entire global economic system, causing the most painful crisis, including in as a result of the events of the past two years.

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# Особенности формирования современной платежной системы Китая

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#### Аннотация

В данной статье рассматривается специфика формирования платежной системы КНР. Китай является одним из важнейших игроков на мировой экономической арене в этом столетии. На данном этапе для жизнеспособности всей экономической системы мира необходимо понимать, как устроены те или иные экономические механизмы в Китае, чтобы иметь возможность прогнозировать пути экономического развития. Цель работы – изучить особенности современной платежной системы Китая и выделить ее основные составляющие. Методами исследования стали вторичный анализ и синтез данных из официальных источников, научных работ китайских и российских авторов, а также использование метода снежного кома для анализа статистической информации. Результатом работы стало выявление этапов реформирования банковского сектора Китая. Новизна работы заключается в детальном анализе стратегического подхода руководства КНР к организации национальной платежной системы. Цель статьи – предоставить актуальный анализ текущих экономических процессов, происходящих в Китае, который может помочь другим исследователям. Структура исследования состоит из введения, трех аналитических раскрывающих исторический контекст, современное состояние и основную тенденцию дальнейшего развития платежной системы Китая, и заключения.

### Для цитирования в научных исследованиях

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#### Ключевые слова

Стратегия, бизнес-модель, конкуренция, платежная система, Китай.

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