

Payment system developments in the People's Republic of China

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Introduction

The mission of modernising the payment system in China is to prepare a platform without which it is impossible for a socialist market economy to work smoothly and readily engage in the global economy. Both marketisation and globalisation are needed now. How to construct a national payment system to meet those two needs has become a revolutionary and strategic choice affecting the financial sector and whole economy in China.

Financial diversification and risk control

Driven by the two trends, The People's Bank of China (PBC) has started to make great efforts to modernise the national payment system. Its objective is that, by the end of this century, a framework for China's National Advanced Payment System (CNAPS) will be in place, including:

- a legal framework for the financial sector and a set of mutually consistent rules;
- a plurality of institutions based on the legal framework and the rules;
- a range of payment instruments;
- a telecom-network based payment system infrastructure which can provide a variety of convenient (easy to use and swift), secure and low-cost services.

The subject of this presentation is how to construct and implement a payment system which can meet the needs of the times, that is, both for running the socialist market economy and for accessing the global market.

Since 1989, the PBC has launched three major payment system projects as well as a number of smaller projects. The first of the major projects is the EIS (Electronic Interbank System); the second is the CNAPS, begun in 1991; and the third is the "Golden Card"/"Bank Card"

project, started in 1993. The completion of these projects will bring about a fundamental change in China's payments sector, in which transactions have long been carried out mainly through manual operations and using a large amount of notes and coin.

Since China is the largest of the developing countries, with significant imbalances resulting from different rates of development between regions and industrial sectors as well as between rural and urban areas, it is tremendously difficult and complex to shift from an economy based on central control and planning to one essentially driven by the relationship between market supply and demand. The complexity and the difficulty of the task are major challenges that we are facing; to put it briefly, "a big ship is difficult to turn around". We do, however, have a good opportunity, in that, to quote another saying, "a latecomer should learn from mistakes previously made by others". This means that, in the context of the policy of opening its door to the outside world, China can use the experience and knowledge accumulated by other countries, especially the G-10 countries, as a reference, in order to learn and adopt mature and effective methodology and technology verified by practice elsewhere.

This is the case, for example, in the redesign of the national payment system in accordance with the two-tier banking structure: on the one hand, to adopt RTGS with DVP and PVP functions, in order to strengthen safeguards against systemic risk; on the other hand, to re-engineer the electronic bulk payment system to incorporate netting arrangements among all participants, in order to reduce costs and increase efficiency.

In view of the fact that China is still in the primary stage of socialism, a central policy is to maintain the strategy of "gradual advance", that is, "to cross the river by stepping stones". Any significant reform should therefore first take the form of a pilot project of limited scope; once enough experience has been acquired and the major laws have been identified and understood more clearly, the scope can be broadened, step by step. China is still a developing country and different from more developed countries. On the one hand, we have to apply general essential principles, but, on the other hand, we should also avoid "cutting all at once". We cannot deal with all regions, rural and urban areas, as well as industrial sectors without differentiation. Experience has demonstrated that this strategy, viewed overall, has already achieved rather positive and reliable results.

Trends of change

Shift towards financial sector diversification and emphasis on risk control

The major features of change in China's financial and payment systems are:

- a shift from a single bank to a diversity of financial institutions;
- a shift from focusing solely on increasing efficiency in clearing and settlement arrangements to paying more attention to preventing risk.

In the last 18 years, China's GDP has grown at an average annual rate of about 10%, with a significant increase in the income of individuals. The direct result of this change is that the opportunities open to consumers have continually increased, while consumer preferences have become more individualised and diverse. This in turn has led to a diversification of financial institutions, financing methods and financial instruments.

Diversity in the financial and payment system sectors

The financial infrastructure has shifted from a single bank monopoly for all banking business to a two-tier banking structure with a plurality of institutions. A framework was developed that provides for different types of financial institution, including banks (central bank, state-owned commercial banks, policy banks, cooperative banks, and commercial banks) and non-bank financial institutions (trust and investment companies, securities companies, finance companies, insurance companies).

Financing methods have shifted from traditional bank deposit-taking and lending towards trading in a variety of financial assets, including securities, bonds, drafts and bills. Payment methods have shifted from cash to cashless funds transfers via bank accounts. Payment and settlement services have shifted from manual procedures to various forms of automated electronic processing.

Increased exposure to financial risks

The emergence of a financial market, including a money market and a capital market, and of a variety of financial products and instruments creates both profit opportunities and financial risks, which are becoming a

reality for a wider section of society. In mainland China, the number of accounts held by participants involved in stock exchange transactions stood at about 31 million at the end of August 1997. The total market value of the stocks listed on the Shanghai and Shenzhen stock exchanges has reached about 1,600 billion yuan.

While, in comparison with developed countries, the scale of the financial market is still limited, people are now not only concerned about efficiency in accessing and circulating cash, but are also starting to pay attention to the risks arising from financial trading and payment services. They have become aware of the fact that a lower level of risk means more stable and reliable returns.

On the one hand, financial institutions, financing methods, financial instruments and payment and settlement services are all diversifying; on the other hand, all the financial sector reforms are intended to strengthen risk control. The impact of the change is profound.

Emphasis on risk control

To improve the situation, both management and operation have to follow laws and regulations. A series of laws and regulations have been enacted, including:

- Framework for Implementing Asset/Liability Ratio Management of Financial Institutions [1994, by the PBC];
- Law of the People's Republic of China on The People's Bank of China [18th March 1995];
- Commercial Bank Law of the People's Republic of China [10th May 1995];
- Law on Negotiable Instruments of the People's Republic of China [10th May 1995];
- General Rules on Loans [28th June 1996];
- Provisional Monitoring Indicators for Asset/Liability Ratio Management of Commercial Banks;
- Provisional Regulations on Warranty and Credit Authorisation of Commercial Banks;
- Provisional Regulations on Pawning;
- Provisional Regulations on the Qualifications of the Senior Management of Financial Institutions;
- Regulations on Avoiding Unfair Competition in Deposit-Taking.

Payment system projects in China

The challenge of the optimal use of information

A major challenge is how to ensure that the right information is obtained at the right time from the right financial markets in a dynamic context, and how to put that information to optimal use. The challenge of controlling risks is, in essence, the challenge of using information. There are two keys: one is to identify the object and scope; the second is to build an infrastructure through which data and information can be captured, transmitted, processed and used more promptly and safely.

Since China's economy is expanding rapidly, it is very important to identify the credit-worthiness of financial institutions. Since state-owned enterprises bear a large part of the historical and social burden in the economic transition, it is also very important to monitor their financial position in order to make decisions about macroeconomic policy. To safeguard the interests of investors, setting reasonable rules for the disclosure of information has become an urgent task, especially after the financial problems of Mexico, Thailand and other countries. The PBC and other banks have devoted a great deal of human, capital and physical resources to the modernisation of the national payment system in China. They see it as a strategic part of the national computerisation and modernisation programme.

China's National Advanced Payment System (CNAPS) project has forced us to make a number of crucial and strategic choices. Since mid-1980, we have taken a number of steps to develop our payment system:

- in 1988, we embarked on a reform of settlement instruments, promoting the introduction and use of drafts, promissory notes, cheques and bank cards. With the formal promulgation of the Law on Negotiable Instruments, the volume of bills expanded and their financing function increased further;
- in 1989, we started establishing the Electronic Interbank System (EIS) and a private satellite transmission network to provide its infrastructure.

The objectives of the EIS project are:

- to strengthen the central bank's macroeconomic management;

- to reduce float, speed up the circulation of funds and increase the efficiency of funds transmission;
- to improve convenience and service to users;
- to achieve a reliable, secure and integral payment, clearing and settlement system to meet the needs of a growing economy;
- to expand flexibility and modularity to suit Chinese conditions.

In 1990, we started to design and implement the CNAPS pilot project, with the support of the World Bank and the Government of Japan.

The objective of the project is to build a new national automated payment system by the middle of 1999.

The project will include:

- a national processing centre for the payment system in Beijing;
- a backup centre in Wuxi, Jiangsu Province;
- 20 city-level clearing and processing centres;
- 80 county-level branches;
- a new network communication system which will connect the three levels of processing centres.

There are three application systems on the network system:

- a high-value clearing system with an RTGS function;
- a bulk electronic system with a net settlement function;
- an account management system for executing final settlement across reserve accounts with the PBC.

In 1993 we embarked on the "Gold Card" project, a major part of which is the "Bank Card" sub-project. The goal of the project is that, by the beginning of the next century, about 300 million payment cards will have been issued in about 400 cities and some of the developed coastal regions.

In 1994 the National Foreign Exchange Trading System began operations.

In 1996, the National Bond Trading System began operations.

In 1995 it was proposed both to expand the network into each county and to establish an electronic connection "between heaven and earth" i.e. to connect the satellite network used for the inter-city link with the city-level WAN, or wide area network, in order to be able to send a payment message from a branch in one city to another branch in another city. While inter-city transmission takes three seconds, intra-city

transmission often takes three days. As someone said, three seconds for heaven, and three days for earth.

In 1996 the PBC set up a joint venture with the PTT, the major state-owned commercial banks and the People's Insurance (Group) company of China named the Zhong Yuan Company or China Financial Data Network Company Limited (CHINA FINET). Its main task is to establish an optical fibre backbone network connecting about 400 large and medium-sized cities, including 30 large provincial capitals. Over 200 cities have already been connected via this backbone network. High-speed frame relay communication technology will be adopted.

In 1997, a national bank card centre to provide services for interbank transactions was established.

All these efforts will push China's payment system towards modernisation and the National Advanced Payment System will provide the right conditions for the country's marketisation and globalisation.