

Payment System Report (2021)

According to payment statistics in 2021¹, the nation's payment systems functioned smoothly as the size of fund flows within the economy expanded and the payment system volume rose steadily.

I. Bank Accounts

The number of RMB bank accounts² continued to grow. At end-2021, the RMB bank accounts totaled 13.664 billion, increasing 9.00 percent year on year, a deceleration of 1.43 percentage points from the end of 2020.

The number of bank accounts held by institutions grew steadily, and the number of newly-opened bank accounts held by market entities grew rapidly. At end-2021, bank accounts opened by institutions totaled 83.3697 million, increasing 11.44 percent year on year and representing an acceleration of 2.01 percentage points from end-2020. Specifically, 59.33 million were basic deposit accounts, with an increase of 10.00

¹ Since 2015, the payment system has disclosed payment transaction data according to the financial industry standards of *Statistical Indicators of Payment Operations*.

² Bank accounts refer to RMB bank settlement accounts.

percent year on year; 19.4873 million were general deposit accounts, with an increase of 17.14 percent year on year; 4.3637 million were special deposit accounts, with an increase of 7.59 percent year on year; and 188.7 thousand were temporary deposit accounts, with an increase of 1.84 percent year on year. They accounted for 71.16 percent, 23.37 percent, 5.23 percent, and 0.23 percent respectively of the total number of bank accounts held by institutions. In 2021, bank accounts newly opened by enterprises and individual businesses posted 13.9493 million, increasing 20.48 percent year on year (y-o-y).

The number of individual bank accounts grew at a slower rate. At end-2021, the bank accounts opened by individuals totaled 13.581 billion, marking an increase of 8.99 percent y-o-y, with a deceleration of 1.45 percentage points from end-2020.

II. Non-cash Payment Instruments

In 2021, a total of 439.506 billion non-cash payment transactions³ with an amount of RMB4415.56 trillion were processed by banking institutions nationwide, exhibiting an increase of 23.90 percent and

³ Non-cash payment transactions include commercial bills, bankcards and other settlement transactions. Specifically, other settlement transactions include credit transfer, direct debit, collection with acceptance and domestic L/C.

10.03 percent y-o-y respectively.

1. Bankcards

The number of bank cards rose slightly. At end-2021, the number of bankcards in use rose 3.26 percent y-o-y to 9.247 billion, among which debit cards rose 3.30 percent y-o-y to 8.447 billion, while credit cards and debit-credit integrated cards rose 2.85 percent y-o-y to 800 million. The number of bankcards per capita⁴ reached 6.55. In particular, the per capita number of credit cards and debit-credit integrated cards recorded 0.57.

The number of bankcard acceptance POS terminals⁵ rose. At end-2021, 27.9827 million merchants, 38.9361 million POS terminals and 0.9478 million ATM terminals⁶ were connected to the Unionpay inter-bank payment system, with a decrease of 964.8 thousand, an increase of 605.8 thousand and a

⁴ When indicators involve per capita figures, the population applied is 1.41260 billion in China's mainland at end-2021, in accordance with the data released by the National Bureau of Statistics, similarly hereinafter.

⁵ The data of merchants and POS terminals that were connected to the Unionpay inter-bank bankcard payment system are from China UnionPay Co., Ltd. The data include merchants and POS terminals that have at least completed one transaction in Q4 2021. Since Q1 2020, UnionPay has added to the statistics the QR code-only scanners, white boxes for payments and merchant-presented QR code, and the corresponding offline merchants connected to the system.

⁶ Since Q1 2018, the statistical coverage of the number of ATMs has been adjusted. It includes not only the in-service automatic deposit machines, automatic withdrawal machines, automatic deposit and withdrawal machines, self-service payment terminals, and other traditional self-service facilities distributed by depository institutions, but also self-service terminals, Virtual Teller Machines (VTM), smart counters and other new-type terminals.

decrease of 66.0 thousand y-o-y respectively. The number of POS and ATM terminals per 10,000 persons increased by 0.68 percent and decreased by 7.34 percent y-o-y respectively, to 275.63 and 6.71.

Bankcard transactions climbed up steadily. In 2021, a total of 429.022 billion bankcard transactions⁷ with a cumulative trading amount of RMB1002.10 trillion were processed across the country, increasing 24.2 percent and 12.85 percent y-o-y respectively. The transactions included 5.047 billion cash deposits of RMB38.41 trillion, decreasing by 7.14 percent and 7.01 percent y-o-y respectively; 7.556 billion cash withdrawals of RMB37.46 trillion, decreasing by 9.10 percent and 5.57 percent y-o-y respectively; 184.6 billion transfers of RMB790.26 trillion, increasing by 19.81 percent and 14.47 percent y-o-y respectively; and 231.818 billion consumer payments of RMB135.97 trillion, increasing by 30.52 percent and 16.56 percent y-o-y respectively. The bankcard penetration rate stood at 49.20 percent, increasing 0.02 percentage points y-o-y. The consumer payment per bankcard reached RMB14.7 thousand, increasing by 12.87 percent y-o-y. The consumer payment per transaction via bankcards recorded RMB586.55, decreasing by 10.70 percent y-o-y.

⁷ Bankcard transactions were the sum of RMB and foreign currency-denominated transactions.

The bankcard credit grew steadily. At end-2021, the total bankcard credit line⁸ reached RMB21.02 trillion, with a growth of 10.86 percent y-o-y, while the outstanding balance of bankcard credit registered RMB8.62 trillion, with a growth of 8.90 percent y-o-y. The credit line per bankcard posted RMB26.3 thousand, with the credit utilization rate⁹ registering 40.99 percent. The total outstanding amount of credit in arrears¹⁰ for over half a year reached RMB86.039 billion, accounting for 1.00 percent of the total payable credit balance.

2. Commercial Bills

The transactions of commercial bills as a whole kept a downward trend while that of commercial drafts continued to grow. In 2021, transactions of commercial bills totaled 137 million, or RMB112.65 trillion, decreasing by 8.46 percent and 9.00 percent y-o-y respectively. These included 110 million transactions or RMB89.89 trillion of checks,

⁸ The total bankcard credit line is the sum of credit lines of credit cards and debit-credit integrated cards.

⁹ The credit line utilization rate is the ratio of outstanding bankcard credit balance to total credit line.

¹⁰ The total outstanding amount of credit in arrears refers to the unliquidated principal balances that are 181 days or more overdue with the minimum amount due on credit cards unpaid in full, excluding the amount written off.

with a decrease of 12.90 percent and 12.97 percent y-o-y respectively; 26.6486 million actual settlements or RMB22.26 trillion of commercial drafts, with an increase of 16.61 percent and 11.70 percent y-o-y respectively; 137.1 thousand transactions or RMB139.352 billion of bank drafts, with a decrease of 24.96 percent and 7.81 percent y-o-y respectively; and 242.3 thousand transactions or RMB335.483 billion of bank promissory notes, with a decrease of 33.89 percent and 14.93 percent y-o-y respectively.

Transactions processed by the electronic commercial draft system¹¹ climbed up steadily. The year 2021 saw the following transactions: 26.8817 million issues of RMB23.52 trillion, increasing by 20.56 percent and 10.12 percent y-o-y respectively; 27.3825 million acceptances of RMB23.99 trillion, increasing by 20.58 percent and 9.73 percent y-o-y respectively; 9.6692 million discounts of RMB14.99 trillion, increasing by 33.47 percent and 12.03 percent y-o-y respectively; 14.5628 million inter-bank discounts of RMB46.93 trillion, increasing by 40.93 percent and 6.41 percent y-o-y respectively; and 2.7518 million collateralized repos of RMB21.70 trillion, increasing by 29.43 percent and 11.06 percent y-o-y respectively.

¹¹ The data of the electronic commercial draft system are from the Shanghai Commercial Paper Exchange.

3. Credit Transfers and Other Settlement Transactions

The volume of credit transfers and other settlement transactions maintained its growth. In 2021, the number of other settlement transactions including credit transfer, direct debit, collection with acceptance, and domestic L/C totaled 10.347 billion, with a cumulative amount of RMB3300.81 trillion, increasing 13.13 percent and 9.98 percent y-o-y respectively. In particular, credit transfer transactions recorded 9.957 billion, totaling RMB3245.95 trillion.

4. Electronic Payment

Mobile payment transactions continued to grow. In 2021, banks processed a total of 274.969 billion electronic payment¹² transactions in the amount of RMB2976.22 trillion, increasing by 16.90 percent and 9.75 percent y-o-y respectively. Specifically, online payment recorded 102.278 billion transactions or RMB2353.96 trillion, up 16.32 percent and 8.25 percent y-o-y respectively. The transaction volume and value of mobile

12 The volume and value of electronic payment refers to that of activities related to account changes initiated by customers from settlement accounts through e-bank, tele-bank, mobile bank, ATM, POS or other electronic channels. In particular, online payment refers to the number and value of transactions initiated from settlement accounts using electronic devices such as computers, while mobile payment refers to those using mobile devices including cell phones.

payment reached 151.228 billion and RMB526.98 trillion, up 22.73 percent and 21.94 percent y-o-y respectively. The transaction volume of telephone payment posted 273 million and the transaction value reached RMB11.65 trillion, up 16.68 percent and down 8.48 percent y-o-y respectively.

In 2021, non-bank payment institutions processed a total of 1028.322 billion online payment transactions¹³ in the amount of RMB355.46 trillion, increasing by 24.30 percent and 20.67 percent y-o-y respectively.

III. Payment Systems

In 2021, the payment systems¹⁴ processed a total of 933.623 billion payment transactions in the amount of RMB9450.69 trillion, up 27.53

¹³ The online payment transaction volume processed by non-bank payment institutions includes the volume of online payments through bank accounts initiated by payment institutions and through payment accounts, but does not include the transaction volume of Red Packet and similar entertainment products. On April 1, 2018, *the Provisions on Barcode and QR Code Payment Business Standards (Interim)* came into effect. Since Q2 2018, statistics of merchants' barcode and QR code transaction payments have been collected based on bankcard payment acquiring services instead of online payment.

¹⁴ The payment systems include HVPS (high-value real-time payment system), BEPS (bulk electronic payment system), IBPS (Internet banking payment system), CFXPS (China foreign exchange payment system), intra-bank payment systems of banking financial institutions, bankcard inter-bank payment system, urban commercial banks draft processing system and payment & clearing system, rural credit bank payment & clearing system, CIPS (China international payment system) and Nets Union clearing system. The transactions of Intra-City Clearing System (ICCS) have been migrated to the HVPS and BEPS since December 2020. Therefore, the transactions volume of the ICCS will not be disclosed separately since 2021.

percent and 15.32 percent year on year respectively.

1. PBC Payment Systems

In 2021, the PBC payment systems processed 21.858 billion payment transactions in the amount of RMB6622.19 trillion, up 11.13 percent and 10.06 percent year on year respectively. The daily processed transactions¹⁵ averaged 60.4975 million and the daily processed value averaged RMB25.94 trillion.

The transaction value in the HVPS maintained growth. In 2021, the HVPS processed 482 million payment transactions of RMB6171.42 trillion, down 5.95 percent and up 9.27 percent year on year respectively. The daily transactions averaged 1.9276 million in volume and RMB24.69 trillion in value.

The transaction volume of BEPS continued to grow. In 2021, the BEPS processed 3.881 billion transactions of RMB162.55 trillion, up 12.21 percent and 10.67 percent year on year respectively. On a daily basis, the system processed 10.6318 million transactions of RMB445.344

¹⁵ In 2021, HVPS, CFXPS and CIPS operated for 250 business days, and other payment systems for 365 business days. The actual operating days are used for the calculation of daily averages, similarly hereinafter.

billion.

The transaction value in the IBPS grew steadily. In 2021, the IBPS processed 17.491 billion transactions in payments of RMB273.76 trillion, up 11.95 percent and 34.53 percent year on year respectively. On a daily basis, the system processed 47.9215 million transactions of RMB750.026 billion.

The transaction volume of CFXPS grew steadily. In 2021, the system processed 4.1642 million transactions of USD2.24 trillion (equivalent to about RMB14.46 trillion¹⁶), up 56.28 percent and 49.15 percent year on year respectively. On a daily basis, the system processed 16,700 transactions of USD8.954 billion (equivalent to about RMB57.858 billion).

2. Other Payment Systems¹⁷

The transaction value of the intra-bank payment systems grew rapidly.

¹⁶ The transaction value of CFXPS was calculated and then converted to RMB according to the exchange rate on the last trading day of each quarter.

¹⁷ According to the PBC's requirement of "breaking the direct connection between third-party payment institutions and commercial banks", all third-party payment institutions join the system of UnionPay or Nets Union, and the business between the payment institutions and commercial banks, as well as business between the Urban Commercial Bank Clearing Co., Ltd. or members of Rural Credit Banks Funds Clearing Center and third-party payment institutions will not be included in calculating the transaction volume of the intra-bank systems of banks, urban commercial bank payment and clearing system, or rural credit bank payment and clearing system.

In 2021, these systems processed 18.451 billion transactions of RMB2055.34 trillion, up 9.06 percent and 29.40 percent year on year respectively. On a daily basis, the systems processed 50.5505 million transactions of RMB5.63 trillion.

The transaction volume of the interbank bankcard payment system¹⁸ increased substantially. In 2021, the system processed 208.004 billion transactions of RMB226.95 trillion, up 38.15 percent and 18.09 percent year on year respectively. On a daily basis, the system processed 570 million transactions of RMB621.783 billion.

The transaction volume of the urban commercial bank draft processing system and payment & clearing system¹⁹ surged. In 2021, the systems processed 16.2687 million²⁰ transactions of RMB1.87 trillion, up 115.22 percent in volume and 70.30 percent in value year on year respectively. The daily transactions averaged 44600 in volume or

¹⁸ The data of the inter-bank bankcard payment system is from China UnionPay Co., Ltd. From Q2 2018, the transaction volume of the inter-bank bankcard payment system only covers the clearing business and excludes inquiry, account verification and other transactions that are not related to the clearing business, From Q1 2019, the transaction volume of the inter-bank bankcard payment system incorporates the bank account-related Internet payment transactions that are made by payment institutions and via the system.

¹⁹ The data of the urban commercial bank draft processing system and payment & clearing system is from the Urban Commercial Bank Clearing Co., Ltd.

²⁰ Since 2017, the data of the urban commercial bank draft processing system and payment & clearing system has also covered real-time collection payment transactions in addition to bank drafts, remittance, universal deposit and withdrawal.

RMB5.134 billion in value.

The number of transactions of the rural credit bank payment & clearing system²¹ increased substantially. In 2021, the system processed 2.530 billion transactions of RMB3.27 trillion, up 45.57 percent and 23.85 percent year on year respectively. The daily transactions averaged 6.9317 million in volume or RMB8.973 billion in value.

The transaction volume of CIPS²² increased steadily. In 2021, the CIPS processed 3.3416 million transactions of RMB79.60 trillion, up 51.55 percent and 75.83 percent year on year respectively. The daily transactions averaged 13400 in volume or RMB318.4 billion in value.

The Nets Union platform²³ ran smoothly. In 2021, the platform processed 682.76 billion transactions of RMB461.46 trillion, up 25.70 percent and 32.27 percent year on year. The daily transactions averaged 1.871 billion in volume or RMB1.26 trillion in value.

²¹ The data of the rural credit banks payment & clearing system is from Rural Credit Banks Funds Clearing Center.

²² The data of CIPS is from Cross-border Interbank Payment and Settlement Co., Ltd.

²³ The data of the Nets Union platform is from Nets Union Clearing Co., Ltd. It refers to online payment transaction volume initiated by payment institutions and processed by the Nets Union platform via bank accounts.