

Payment System Report (Q4 2021)

According to payment statistics in Q4 2021¹, the payment systems functioned smoothly in general across the country. The number of bank accounts kept increasing. The volume of non-cash payments rose rapidly and the transaction volume in payment systems continued to grow.

I. Bank Accounts

The number of new bank accounts² continued to rise. In Q4 2021, 326 million new bank accounts were opened nationwide, increasing by 17.77 percent year on year (y-o-y).

The number of new bank accounts opened by institutions maintained growth, and the number of new bank accounts opened by market entities increased rapidly. In Q4 2021, 3.6987 million new institution bank accounts were opened nationwide, increasing 15.20 percent y-o-y. Specifically, 2.1774 million were basic deposit accounts, 1.2991 million were general deposit accounts, 205,800 were special deposit accounts, and 16,400 were temporary deposit accounts, accounting for 58.87 percent, 35.12 percent, 5.56 percent and 0.44 percent of the total number of new bank accounts opened by institutions respectively. Enterprises and individual businesses newly opened 3.4748 million bank accounts, up 16.62 percent y-o-y.

The number of new individual bank accounts kept increasing, and the growth rate showed a downward trend. In Q4 2021, individual bank accounts newly opened were 323 million nationwide, up 17.80 percent y-o-y, and the growth rate decreased by 8.74 percentage points from the previous quarter.

II. Non-cash Payment Instruments

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.

In Q4 2021, a total of 128.538 billion non-cash payment transactions³ with an amount of RMB1159.96 trillion were processed by banking financial institutions nationwide, exhibiting a y-o-y increase of 19.16 percent and 8.48 percent respectively.

(I) Bank cards

The number of newly opened bank cards⁴ dropped. In Q4 2021, the number of bankcards newly opened decreased by 18.30 percent y-o-y to 189 million nationwide. Specifically, debit cards went down by 22.64 percent y-o-y to 150 million, while credit cards and debit-credit integrated cards rose 4.13 percent y-o-y to 39 million. The number of bankcards per capita⁵ reached 6.55, among which the per capita number of credit cards and debit-credit integrated cards recorded 0.57.

The number of merchants and terminals increased. At end-Q4 2021, merchants, POS terminals connected to the UnionPay inter-bank payment system recorded an increase of 2.6640 million and 4.0180 million⁶ respectively compared to the end of the previous quarter, and ATM terminals⁷ recorded a decrease of 11,900 compared to the end of the previous quarter. The number of POS terminals connected to the inter-bank payment system per 10,000 persons recorded 275.63, up 11.44 percent quarter on quarter (q-o-q), and the number of ATMs per 10,000 persons recorded 6.71, down 1.30 percent q-o-q.

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

⁴ The number of newly opened bank cards refers to the number of all bank cards newly opened by banks during the statistical period, regardless of the card status at the end of the statistical period.

⁵ When indicators involve per capita figures, the population applied is 1.41260 billion of mainland China at end-2021, in accordance with the data released by the National Bureau of Statistics, similarly hereinafter.

⁶ The data of merchants and POS terminals that were connected to the UnionPay inter-bank payment system are from China UnionPay Co., Ltd, and the statistical standards were the merchants and POS terminals that had at least one successful transaction in this quarter. Since Q1 2020, UnionPay has newly added the statistics of the QR code used-only equipments such as QR code scanners, white boxes for payments and merchant-presented QR code, and corresponding offline merchants connected to the payment system.

⁷ 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 banking institutions, but also self-service terminals, Virtual Teller Machines (VTM), smart counters and other new-type terminals.

Bankcard transactions climbed up steadily. In Q4 2021, a total of 125.759 billion bankcard transactions⁸ with an amount of RMB255.98 trillion were processed across the country, increasing by 19.42 percent and 9.05 percent y-o-y, respectively. The transactions included 1.211 billion cash deposits of RMB8.84 trillion, 1.830 billion cash withdrawals of RMB8.60 trillion, 53.972 billion transfers of RMB202.75 trillion, and 68.746 billion consumer payments of RMB35.79 trillion. The bankcard penetration rate stood at 49.20 percent, increasing by 0.02 percentage points q-o-q. The consumer payment per bank card registered RMB3870.65, increasing by 8.00 percent y-o-y. The consumer payment per transaction via bank cards recorded RMB520.62, down 11.57 percent y-o-y.

The scale of bankcard credit maintained growth. At end-Q4 2021, the total bankcard credit line⁹ increased by RMB360 billion from the end of the previous quarter. The outstanding balance of bankcard credit increased by RMB210 billion compared with the end of the previous quarter. The credit line per bank card was RMB26,300, with the credit utilization rate¹⁰ standing at 40.99 percent, up 0.31 percentage points q-o-q. The total outstanding amount of credit in arrears for more than half a year¹¹ was RMB86.039 billion, down 1.02 percent q-o-q, accounting for 1.00 percent of the total outstanding balance of credit.

(II) Commercial Papers

The transaction volume of commercial papers stayed on a downward trend in general, and the transaction volume of commercial drafts kept going up.

In Q4 2021, transactions of commercial papers totaled 34.7192 million nationwide, or RMB28.50 trillion, decreasing by 16.03 percent and 15.30

⁸ Bankcard transactions refer to the sum of RMB and foreign currency denominated transactions.

⁹ Total bankcard credit line refers to the sum of credit lines of credit cards and debit-credit integrated cards.

¹⁰ The credit line utilization rate is the ratio of outstanding bankcard credit balance to total credit line.

¹¹ The total outstanding amount of credit in arrears for more than half a year refers to the balance of outstanding principal of a credit card that has not fully repaid the minimum payment with overdue period over 181 days (inclusive), excluding the written-off amount.

percent y-o-y, respectively. These included 27.8813 million transactions or RMB22.84 trillion of checks, with a decrease of 21.45 percent and 19.26 percent y-o-y respectively; 6.7539 million actual settlements of commercial drafts or RMB5.54 trillion, with an increase of 17.66 percent and 5.95 percent y-o-y respectively; 34,500 transactions or RMB43.011 billion of bank drafts, with a decrease of 24.82 percent and an increase of 5.89 percent y-o-y respectively; 49,500 transactions or RMB77.597 billion of bank promissory notes, with a decrease of 29.05 percent and 15.93 percent y-o-y respectively.

Transactions processed by the electronic commercial draft system¹² kept rising. Q4 2021 saw the following transactions processed by the electronic commercial draft system of the Shanghai Commercial Paper Exchange. 6.8328 million issues of RMB6.02 trillion, both increasing by 9.58 percent and 11.60 percent y-o-y respectively; 6.9244 million acceptances of RMB6.15 trillion, both increasing by 9.46 percent and 11.25 percent y-o-y respectively; 2.7296 million discounts with an amount of RMB3.92 trillion, both up 34.32 percent and 27.36 percent y-o-y respectively; 4.4731 million interbank discounts of RMB11.42 trillion, with an increase of 65.16 percent and 15.85 percent y-o-y respectively; 682,000 bond-pledged repos of RMB4.89 trillion, both increasing by 29.92 percent and 2.19 percent y-o-y respectively; and 35,300 bond buyout repos of RMB154.178 billion, increasing by 4.01 percent and decreasing by 17.01 percent y-o-y respectively.

(III) Credit Transfers and Other Settlement Transactions

The volume of credit transfers and other settlement transactions continued to grow. In Q4 2021, the number of other settlement transactions including credit transfer, direct debit, collection with acceptance, and domestic L/C totaled 2.744 billion, with an amount of RMB875.48 trillion, increasing by 9.09 percent

¹² The data of the electronic commercial draft system are from the Shanghai Commercial Paper Exchange.

and 9.31 percent y-o-y respectively. In particular, the credit transfer transactions recorded 2.649 billion, totaling RMB862.23 trillion.

(IV) Electronic Payment

Mobile payment transaction volume maintained growth. In Q4 2021, banks processed a total of 75.546 billion electronic payment transactions¹³ in RMB783.26 trillion, up 13.37 percent and 6.03 percent y-o-y, respectively. Specifically, the transaction volume and value of online payment posted 27.722 billion and RMB608.06 trillion, up 13.77 percent and 2.35 percent y-o-y, respectively. The transaction volume and value of mobile payment reached 42.523 billion and RMB152.91 trillion, up 17.85 percent and 29.11 percent y-o-y, respectively. The transaction volume and value of payment by phone reached 66 million and RMB2.63 trillion, as the volume went up by 17.49 percent y-o-y and the value went down by 5.55 percent y-o-y.

In Q4 2021, non-bank payment institutions processed a total of 278.681 billion online payment transactions¹⁴ with an amount of RMB90.96 trillion, up 13.25 percent and 7.65 percent y-o-y, respectively.

III. Payment Systems

In Q4 2021, the payment systems¹⁵ processed a total of 270.329 billion

¹³ Electronic payment refers to the transactions volume and value that cause changes in the balance of settlement account initiated by customers through six channels such as online banking, telephone banking, mobile banking, ATM, POS, and other electronic payments. Specifically, online payment refers to the number and amount of payments initiated through bank settlement accounts by customers using electronic devices such as computers. Mobile payment refers to the number and amount of payments initiated by customers through bank settlement accounts using mobile devices such as mobile phones.

¹⁴ The online payment transaction volume processed by non-bank payment institutions includes the volume of online payment involving bank accounts initiated by payment institutions and online payment of payment accounts, but does not include the transaction volume of Red Packets and similar entertainment products. On April 1st 2018, the *Provisions on Barcode and QR Code Payment Business Standards (Interim)* came into effect. Starting from Q2 2018, statistics of merchants' barcode and QR code transaction payments have been collected based on bankcard payment acquiring services instead of online payment.

¹⁵ The payment systems include the four PBC CNCC (China National Clearing Center) systems, namely, HVPS (high-value real-time payment system), BEPS (bulk electronic payment system), IBPS (internet banking payment system), and CFXPS (China foreign exchange payment system), as well as intra-bank business systems of commercial banks, UnionPay interbank payment system, the payment & clearing system of City Commercial Bank Clearing, rural credit banks payment & clearing system, CIPS (China international payment system) and NetsUnion Clearing platform. All ACH (automated clearing house) businesses were incorporated into HVPS and BEPS for processing starting after December 2020. Therefore, the transaction volume and value of ACH will no

transactions in payments of RMB2,526.50 trillion, up 18.37 percent and 14.19 percent y-o-y, respectively.

(I) PBC CNCC Systems

In Q4 2021, the PBC CNCC systems processed 5.538 billion transactions in payments of RMB1,760.37 trillion, up 2.95 percent and 15.22 percent y-o-y, respectively. The daily processed transactions averaged 60.8393 million, and the daily processed value averaged RMB27.79 trillion¹⁶.

The transaction value of the HVPS maintained growth. In Q4 2021, the HVPS processed 122 million transactions in payments of RMB1,640.78 trillion, as the former went down by 13.68 percent y-o-y and the latter went up by 15.35 percent y-o-y. The daily processed transactions averaged 1.9623 million in volume and RMB26.46 trillion in value.

The transaction volume of payments processed by BEPS grew steadily. In Q4 2021, the BEPS processed 998 million transactions of RMB43.94 trillion, up 2.59 percent and 8.04 percent y-o-y, respectively. On a daily basis, the system processed 10.8532 million transactions of RMB477.609 billion.

The transaction value of IBPS expanded at a fast pace. In Q4 2021, the IBPS processed 4.416 billion transactions in payments of RMB71.63 trillion, up 3.68 percent and 19.29 percent y-o-y, respectively. On a daily basis, the system processed 48.0042 million transactions of RMB778.548 billion.

The transaction volume of CFXPS climbed up rapidly. In Q4 2021, the CFXPS processed 1.2085 million transactions in payments of USD630.299 billion (equivalent to about RMB4.02 trillion¹⁷), a y-o-y increase of 45.48 percent and 41.39 percent respectively. On a daily basis, the system processed

longer be disclosed separately starting from Q1 2021.

¹⁶ In Q4 2021, HVPS, CIPS and CFXPS operated for 62 business days, while other payment systems operated for 92 business days. The actual operation business days are used for calculation of daily averages, similarly hereinafter.

¹⁷ The transaction value of CFXPS was calculated and then converted to RMB according to the exchange rates of the last trading day of the statistical period.

19,500 transactions of USD10.166 billion (equivalent to about RMB64.816 billion).

(II) Other Payment Systems¹⁸

The volume of transactions processed by the intra-bank business systems of commercial banks maintained growth. In Q4 2021, these systems processed 4.733 billion transactions of RMB559.33 trillion, up 5.51 percent and 10.16 percent y-o-y, respectively. On a daily basis, the systems processed 51.4434 million transactions of RMB6.08 trillion.

The volume of transactions processed by the UnionPay interbank payment system¹⁹ continued to increase. In Q4 2021, the system processed 57.622 billion transactions²⁰ of RMB59.62 trillion, up 22.90 percent and 12.38 percent y-o-y, respectively. On a daily basis, the system processed 626 million transactions of RMB647.994 billion.

The volume of transactions processed by the payment and clearing systems of City Commercial Banks Clearing²¹ went up rapidly. In Q4 2021, the systems processed 4.7029 million transactions of RMB514.620 billion²², up 57.76 percent and 35.18 percent y-o-y, respectively. The daily processed transactions averaged 51,100 of RMB5.594 billion.

¹⁸ According to the PBC working requirement of “breaking the direct connection between the third party payment institutions and commercial banks”, all third-party payment institutions should join the system of UnionPay or NetsUnion, and the businesses between the payment institutions and commercial banks, as well as business between members of City Commercial Banks Clearing Co., Ltd. or Rural Credit Banks Funds Clearing Center and third-party payment institutions will not be included in calculating transactions of the intra-bank business systems of commercial banks, the payment & clearing system of City Commercial Banks Clearing, and rural credit banks payment & clearing system.

¹⁹ The data of the UnionPay interbank payment system are from China UnionPay Co., Ltd.

²⁰ Starting from Q2 2018, the volume of transactions processed by the UnionPay interbank payment system only includes transactions of capital settlement; inquiries, account verification and other non-capital settlement transaction are excluded. Starting from Q1 2019, the volume of transactions processed by the UnionPay interbank payment system includes online payment involving bank accounts initiated by payment institutions and processed by the UnionPay interbank payment system.

²¹ The data of the payment & clearing system of City Commercial Banks Clearing include the previous city commercial bank draft processing system and the payment & clearing system. The data are from the City Commercial Banks Clearing Co., Ltd.

²² Starting from 2017, in addition to the statistics of bank drafts, remittance and deposit and withdrawal, the payment & clearing system of City Commercial Banks Clearing also includes real-time statistics of the collection and payment agent services.

The transaction volume of rural credit bank payment & clearing system²³ enjoyed remarkable growth. In Q4 2021, the system processed 671 million transactions of RMB804.620 billion, up 39.08 percent and 6.30 percent y-o-y. The daily processed transactions averaged 7.2963 million of RMB8.746 billion.

The transaction volume of CIPS²⁴ expanded rapidly. In Q4 2021, the CIPS processed 923,000 transactions in payments of RMB21.30 trillion, up 34.91 percent and 57.62 percent y-o-y, respectively. The daily processed transactions averaged 14,900 of RMB343.481 billion.

The transaction volume of NetsUnion Clearing platform²⁵ grew at a steady pace. In Q4 2021, the platform processed 201.760 billion transactions in payments of RMB124.57 trillion, up 17.89 percent and 13.89 percent y-o-y. The daily processed transactions averaged 2.193 billion in payments of RMB1.35 trillion.

²³ The data of rural credit banks payment & clearing system are from the Rural Credit Banks Funds Clearing Center.

²⁴ The data of CIPS are from Cross-border Interbank Payment System Co., Ltd.

²⁵ The data of the NetsUnion Clearing platform are from NetsUnion Clearing Co., Ltd. The data refer to online payment transaction volume initiated by payment institutions and processed by the NetsUnion Clearing platform via bank accounts.