THE PATH

to Universal Coverage of Account Ownership in Rural China

▲ Experiences, policies, and innovations

BILL & MELINDA GATES *foundation*

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The Path to Universal Coverage of Account Ownership in Rural China

Experiences, Policies, and Innovations

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A Brief Review

Background of Study

According to the annual China Payment System Development Report[1] issued by the Payment and Settlement Department (PSD) of the People's Bank of China (PBOC), the cumulative number of bank cards issued in China experienced a ninefold increase during the last 15 years (Figure 1). Dividing these cumulative numbers of total bank card issuance by China's concurrent year-end population[2], we find that as of the end of 2020, the Chinese, on average, own 6.4 bank cards. Per capita possession of bank cards septupled compared to that of 2006, back in which the average number of bank cards owned was still less than 1.

Figure 1

Cumulative Bank Cards Issuance in China (2006 - 2020), Total and per Capita

Source: PSD of PBOC, China Payment System Development Report (2006- 2020)
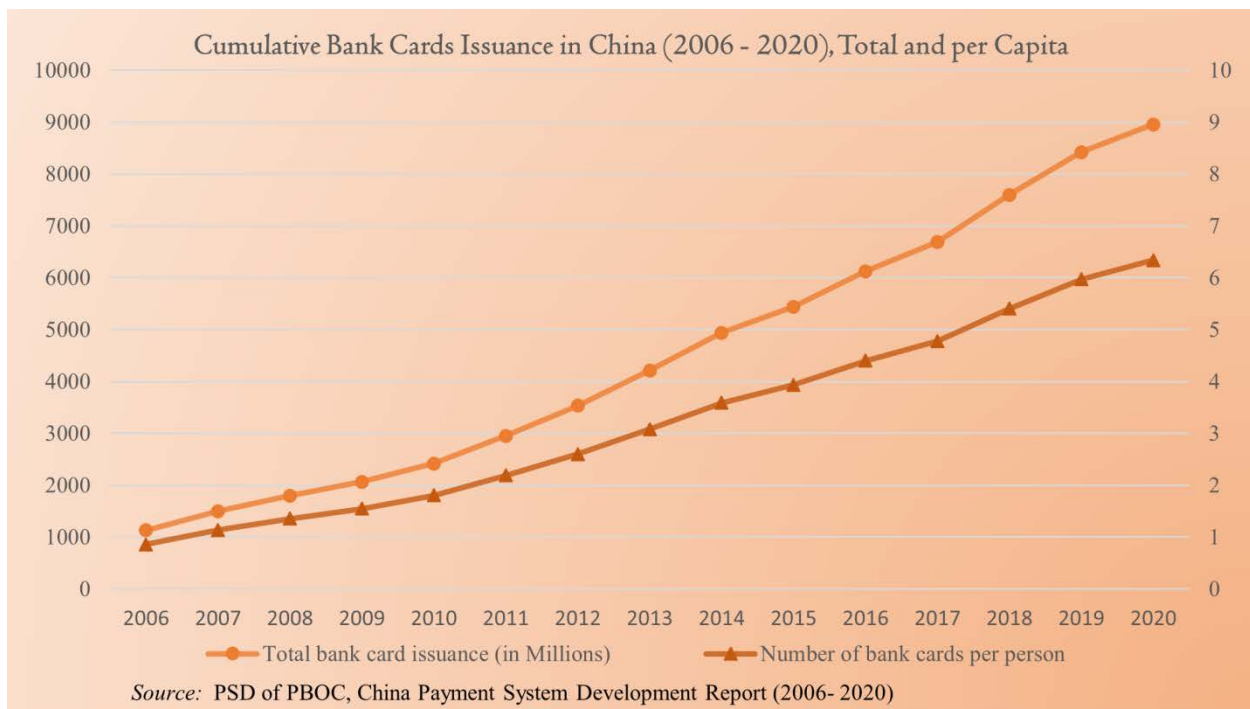
We also notice that by the end of 2020, China's per capita possession of personal bank accounts reached 8.83 (Figure 2)– a number larger than that of bank cards because bank accounts are generally more broadly defined. During 2017 – 2020, the estimated annual growth rate of personal account ownership was about 10 percent on a YoY basis, as stated in

the Analysis Report on the Financial Inclusion Indicators of China[3] issued by the Financial Consumer Protection Bureau (FCPB) of PBOC.

Figure 2
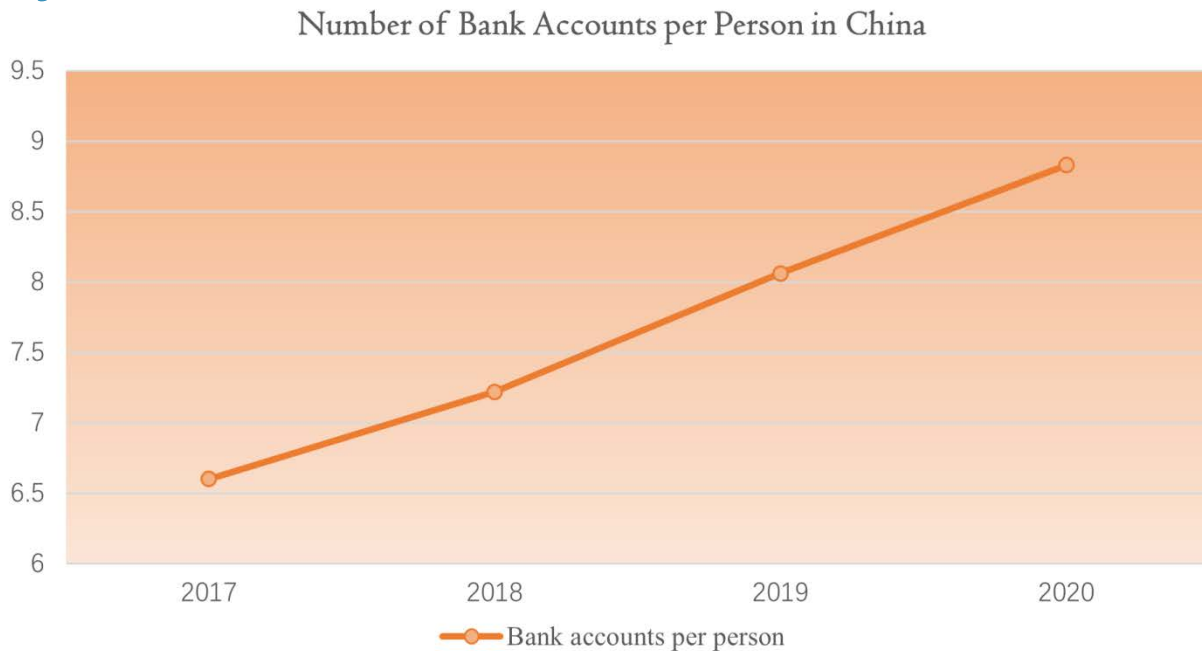
Number of Bank Accounts per Person in China

Source: FCPB of PBOC, Analysis Report on the Financial Inclusion Indicators of China (2017-2020)

By looking at these numbers, it is no doubt that today's China, as an upper-middle-income country (UMIC), has made significant progress in promoting financial inclusion through improving accessibility to financial services, especially by opening up personal bank accounts.

However, one question remains if one scrutinizes the broader picture behind these nationwide average numbers. Given the urban-rural divide and the widely existing income disparities in China's city and rural areas, we need to go beyond plain descriptive statistics and pay particular attention to the long-tailed groups that often ended up being "averaged." For example, people living in the city may have multiple bank accounts, while at the same time, some individuals in China could remain unbanked given its large population base. Moreover, individuals that are still unbanked tend to cluster in China's rural area, in which nearly 40 percent of the nation's total population permanently reside by the end of 2020.[4]

Purpose and Scope of Study

Therefore, to get a comprehensive view of account ownership in China, we could take an alternative perspective and adopt the World Bank's practices. We focus on the percentage of

individuals having a bank account within a specific group, explore what led to an increase in such a ratio over time, and summarize the takeaways for other countries. This report examines individual account ownership, focusing on individuals in rural China throughout the following discussions and analysis.

From the viewpoint of a specific individual, having a bank account is the prerequisite to access a full suite of financial services. In the context of financial inclusion, an account enables one to receive money, save, invest, and so forth. Hence having an account entails a broad set of possibilities, especially for those residing in the rural area. Compared to the aggregated national statistics discussed above, one's personal experience of this zero-to-one switch of account ownership status is also worth studying from a micro perspective.

Furthermore, besides caring about account ownership on either an individual or a national level, we also pay attention to the evolution of accounts' manifestation in China and how different forms or carriers of accounts emerged over the years have contributed to the popularization of personal accounts in the countryside.

Delineating the ownership of the personal account in rural China and describing the evolution of its form is meant to pave the way for answers to the two following questions. **"What factors/policies contributed to the unprecedented high penetration rate of bank accounts among rural residents?"** and **"How did digital finance and fintech companies involve more rural residents to become owners of digital personal accounts?"**

In short, we aim to provide a picture of the current account ownership in rural China to the audience and comb through a set of historical policies that may have contributed to the prevalence of personal accounts. Furthermore, by underlining the procedures that we think give rise to the inclusive growth of account ownership in China, this report aims to shed light on policy suggestions to enhance account ownership for concerned countries and parties still in the early stage of account opening campaigns.

Findings and Conclusions

We find that **urbanization, nationwide direct agricultural subsidies, and the prevalence of social security cards (SSC) among rural households**, in chronological order, were the driving forces that pushed up bank account ownership over the past forty years in rural China between 1976 – 2015. In addition, digital payment platforms that emerged during the most

recent decade enabled rural residents to access digital personal accounts through simple real-name verification by scanning their ID cards and adding their existing debit/credit cards to the app.

A synopsis of the factual evolution track for the development of account's manifestation in China is shown in Figure 3. There are four stages on the path along which one's account level could evolve. We define Stage 0 as an individual having no Identity Card (ID card, either physical or electronic), albeit this is rarely the case in China nowadays. Stage 1.0 stands for the status that someone only has an ID card and no bank or digital accounts. In other words, in stages 0 and 1.0, an individual is financially excluded – having no access to formal financial products or services. Going one step further, stage 2.0 indicates the status of having a bank account – either a passbook, a debit card, or a credit card. From stage 2.0 onward, account owners would then have access to all the possibilities unleashed by their "financial identities" – starting with a personal account.

Figure 3: Four Stages of the "Store-of-Value Transaction Account" Development
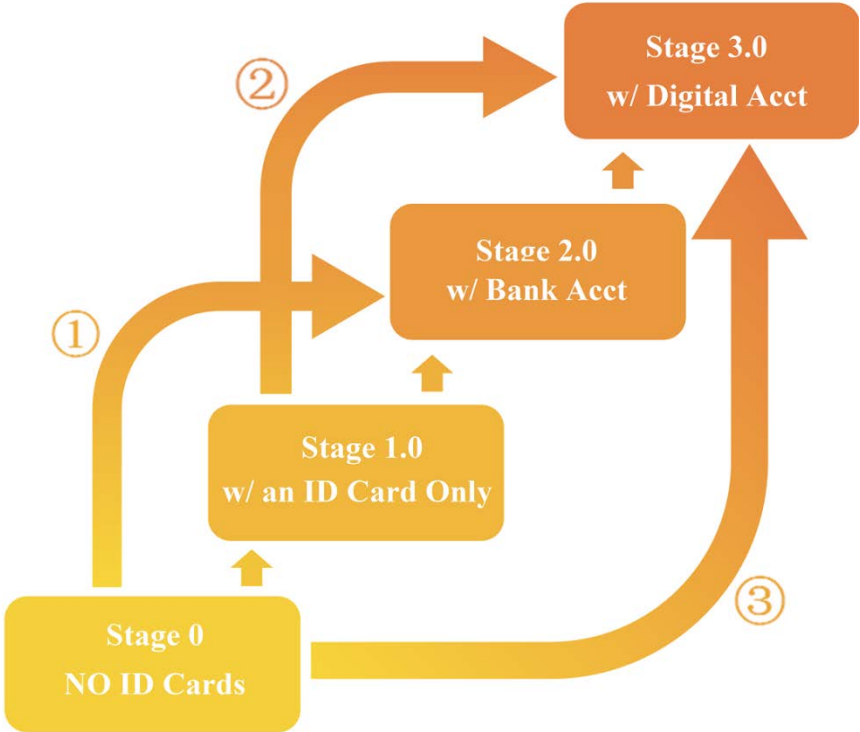
Along this path, the most highly developed stage is stage 3.0, owning a digital personal account. The two questions we seek to answer thus perfectly fit into the above diagram: the

first question relates to the upgrade of account manifestation from stage 1.0 to stage 2.0. The second question - how the fintech sector pushed up rural account ownership - corresponds to another upgrade from stage 2.0 to 3.0.

Our findings combine China's valuable experiences and could serve as references for policymaking regarding different development stages of account ownership. In Figure 3, besides going "upstairs" following a step-by-step routine, we also outlined three "shortcuts." We labeled the shortcuts to inspire policymakers. For example, the emergence of China's Urban Resident Basic Medical Insurance (URBMI) in 2010 and the claim and issuance of SSCs to kids insured accordingly made the shortcut① possible. In China, since the household registers (Proof of hukou) often contain enough information for children's identity verification purposes and thus perfectly substitute ID cards for the underaged, many kids didn't have the incentives to apply for a juvenile ID card separately. However, significantly more kids' parents opted in the URBMI plan, obtaining their kids' personal SSCs as a result. Compared to ID cards, SSCs in China are preloaded with financial functions to be activated in any local bank. To put it another way, a Chinese kid can have a personal SSC with bank card function enabled while having no ID card yet.

Similarly, in our opinion, shortcut② is enabled by WeChat Wallet, an e-wallet enabling balance payment launched by Wechat, Tencent. Moreover, we find that most of the world's digital accounts or wallets today function similarly (e.g., M-Pesa): they bridge stage 1.0 and stage 3.0 likewise. For example, in the case of WeChat Pay, by scanning both sides of one's ID card only (Stage 1.0), one could immediately activate the wallet and obtain a quota of 1,000 CNY (Chinese Yuan) in total for future digital transactions or payments (the realization of Stage 3.0). This upper bound of the accumulative amount of balance payment transactions resulted from the enactment of *Administrative Measures for the Online Payment Business of Non-bank Payment Institutions* issued by the PBOC in 2016. Tencent's compliance with the new *Measures* has effectively compromised the "strike-through" function that WeChat Pay used to enable (shortcut③: stage 0 to stage 3.0) starting from 2014. Another illustration that comes to our notice in terms of realizing shortcut③ is the case of Jan Dhan-Aadhaar-Mobile (JAM) in India. This trinity of biometric IDs, mobile communications, and finance/payments could empower users with a birth certificate and mobile device only to own a biometric ID and a digital payment account straightaway.

These shortcuts suggest possible paths to effectively and efficiently expand uptake of personal (digital) accounts elsewhere in the world. In China's scenario, the government did the job through G2P transfer payments (Ministry of Finance, MOF) and the social security

system (Ministry of Human Resources and Social Security, MOHRSS) to uplift its citizens from stage 1.0 to stage 2.0. Innovations during the last decade in the private sector by fintech firms have helped the masses to reach stage 3.0. The synergistic collaboration between the public and private sectors contributed to the current account ownership in China.

We organize the rest of this report as follows. Chapter 1 provides an overview of China's financial inclusion first. Then, in Chapter 2, we sort out question one by presenting stylized evidence and outlining the policies/mechanisms that we believe are the causes of the high bank accounts/cards ownership rate in rural China (Stage 1.0 to 2.0). Chapter 3 studies WeChat Pay as the starting point of telling the story from the private sector (Stage 2.0 to 3.0) and the policies/regulations Tencent embraced all along the way. Finally, we select nine digital payment products from different countries worldwide, with an attempt to compare the product design cross-sectionally and provide insights to policymakers for regulation purposes.

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[1] PSD of PBOC, "China Payment System Development Report", (2006 – 2020).
[2] End-of-year population obtained from the official website of National Bureau of Statistics (NBS) of the People's Republic of China, https://data.stats.gov.cn/easyquery.htm?cn=C01
[3] FCPB of PBOC, "Analysis Report on the Financial Inclusion Indicators of China", (2017-2020).
[4] NBS of China, "Statistical Communiqué of the People's Republic of China on the 2020 National Economic and Social Development", http://www.stats.gov.cn/english/PressRelease/202102/t20210228_1814177.html

Chapter 1: China's Financial Inclusion

An Overview of Day One: The Starting Point

Financial Inclusion in China

China has witnessed a substantial growth of financial inclusion over the past three decades. Even before the explicit proposal of this idea, China has come a long way in extending financial services and products to the public. This chapter provides an overview of financial inclusion in China, relying on the content covered in the report jointly written by the PBOC and the World Bank Group (WBG) [5] in 2018 (referred to hereafter as the "joint report"). As some of the statistics cited in that report date back to 2014, the numbers we quote in this chapter solely reflect the relative level of financial inclusion's development at the starting point. Accordingly, we will update complementary figures to illustrate China's progress in the past few years.

G20's initiative, the Global Partnership for Financial Inclusion ("GPFI") defines financial inclusion as "a state in which all working-age adults, including those currently excluded by the financial system, have effective access to the following financial services provided by formal institutions: credit, savings, payments, and insurance." On the other hand, the Center for Financial Inclusion ("CFI"), a US think-tank founded by non-profit Accion, offers another interpretation: access to a full suite of financial services, to everyone who can use financial services, provided with quality (i.e., convenient, affordable, suitable, provided with dignity and client protection).

In its Plan for Advancing the Development of Financial Inclusion (2016–2020) ("FIP"), Beijing describes financial inclusion as "providing financial service for all social strata and groups with appropriate and valid financial services, at affordable cost, based on the principle of opportunity equality and commercial sustainability. Small and micro businesses, peasants, urban low-income groups, impoverished groups, the disabled, the aged and other special groups are the focus of the financial inclusion in China." After the issuance of FIP at the end of 2015, the Financial Consumer Protection Bureau (FCPB) of PBOC started to publish a series of reports for four straight years, "Analysis Report on the Financial Inclusion Indicators of China," from 2017 to 2020.

Despite the variations in its concept, all parties generally agree that financial inclusion has four dimensions:

1) Financial services need to be accessible and affordable;
2) Such services shall be appropriate to the users' profile and adequate to meet their needs;
3) Pay particular attention to vulnerable groups: women, MSMEs, rural areas, and marginalized populations；
4) Responsible financial products and services. Quality should be held to high standards.

On all of the above four fronts, China has impressive achievements.

1-) In terms of **physical accessibility** to local financial service points, the physical reach of China's financial services was in line with the median G20 high-income countries (HICs). The number of physical access points per 100,000 adults in China, for example, was 183 in 2016, which is even higher than the median of G20 HICs' 179[6]. A detailed breakdown of the composition of these 183 access points shows that 100,000 adults, on average, shared 19 **bank branches** and 76 **ATMs** (the rest 88 were all **agents**). We updated these numbers in Figure 4 according to the statistics cited in the FCPB reports in the subsequent years until 2020. The FCPB statistics did not restrict the denominators to be adults; instead, they used the total population to calculate branches owned per 100,000 persons. Therefore, expanding the population range in the denominator would cause the numbers shown in Figure 4 to be slightly lower than the "19 branches" derived in the joint report with the World Bank. Per 100,000 Chinese hence owned about 16 bank branches nationwide, and this estimate remains relatively steady during the time interval we plotted.

Figure 4

Source：FCPB of PBOC, "Analysis Report on the Financial Inclusion Indicators of China", (2017-2020).
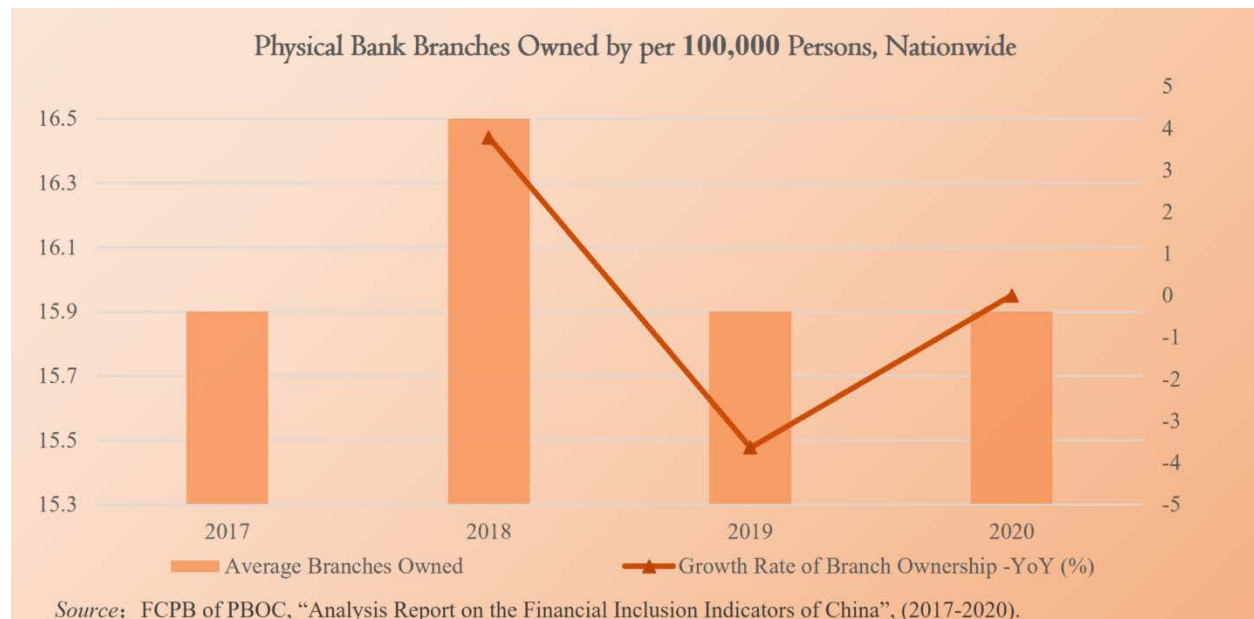
We also updated the corresponding statistics for rural China between 2015 – 2018 from the newsletters found on the website of PBOC in Figure 5. Compared to the nationwide scenario, the average number of local branches shared among 100,000 persons in rural China hovered around 13; Disparity did exist, though the difference was not large in absolute magnitude.

Figure 5

Physical Bank Branches Owned by per **100,000** persons, Rural

Average Branches Owned — Growth Rate of Branch Ownership -YoY (%)

Source：PBOC, Overall Development of Digital Payments in Rural Area, (2015 - 2018).
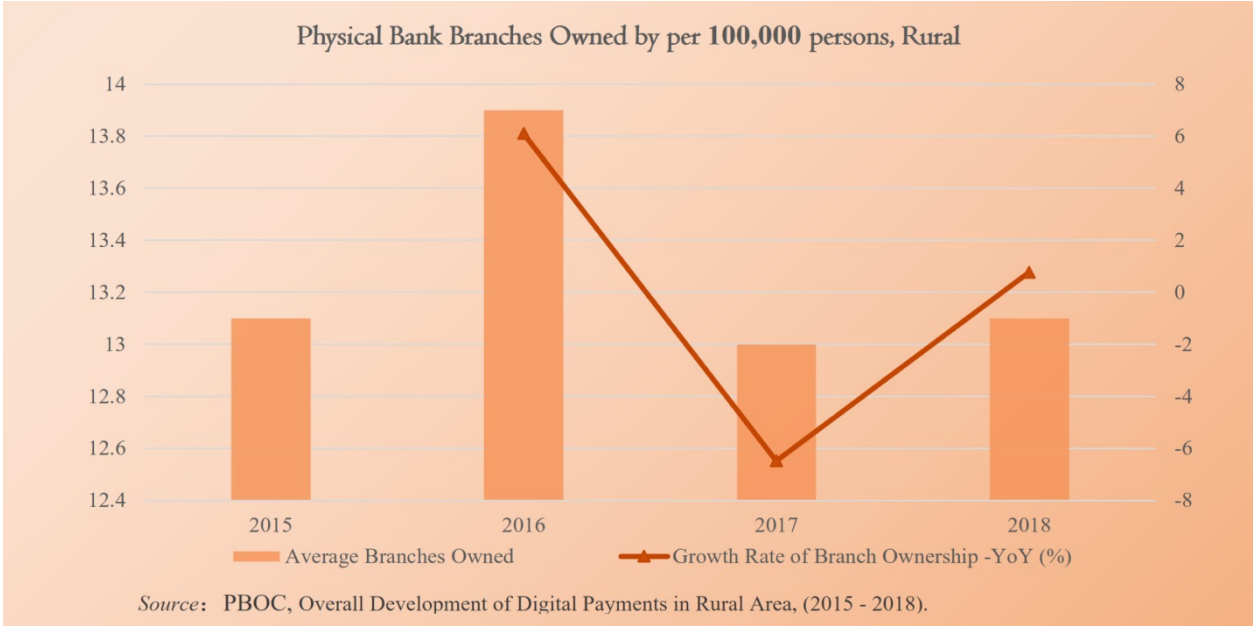
Relative to the urban-rural disparity found concerning bank branch outlets, more prominent differences existed regarding ATMs between China's urban and rural areas. Nationwide ownership of automated teller machines (ATMs) fluctuated around 74-75 between 2017 – 2020, as the FCPB reports stated (Figure 7). The number of ATMs owned per 100,000 Chinese peaked in 2018, reaching somewhere close to 80. After 2018, individual ownership of ATMs started to decline gradually because the prevalence of digital payment accounts in the countryside may have probably in part satisfied the traditional cash-in/cash-out (CICO) needs[7]. Although the absolute number of CICO points has decreased year by year as digital financial systems (DFS) grow[8], it is still indispensable in a county's transition from a cash-based system to fully DFS. According to the FCPB's 2020 report, agent-based service points reached 893,300, covering 99.31% of all administrative villages in China. In China, agent-based service points are typically located in local retail stores or villagers' committees, though the breakdown varies significantly across and within provinces. It provides consumption scenarios to use DFS, i.e., deposit, withdraw, transfers, and agent-assisted payments.

In contrast to the national average of ATM ownership similar to that reported in the joint report of WBG&PBOC, we find that the ATM ownership in rural China was half of the

Figure 7

Source：FCPB of PBOC, "Analysis Report on the Financial Inclusion Indicators of China", (2017-2020).
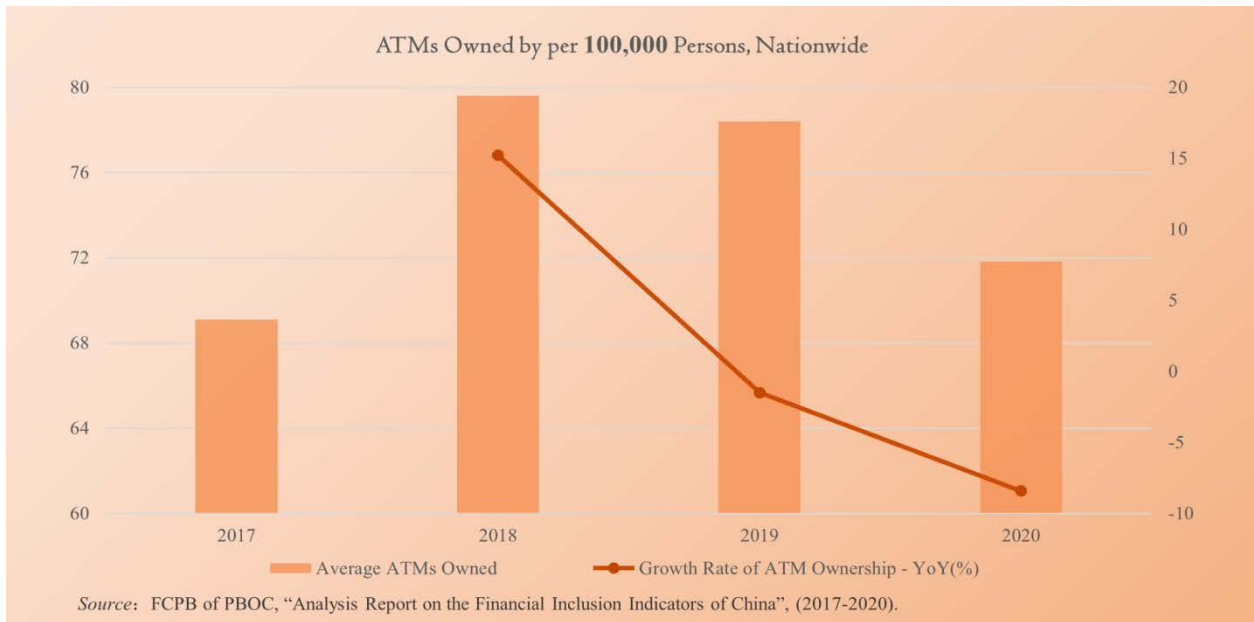
nationwide average in absolute values in Figure 8. In other words, per 100,000 rural residents

(those residing in county-level administration divisions and below), shared around 37-38 ATMs on average between 2015 – 2018. However, one observation is still valid concerning the rural area: 2018 is the year ATM ownership summitted.

Figure 8

Source: PBOC, Overall Development of Digital Payments in Rural Area, (2015 - 2018).
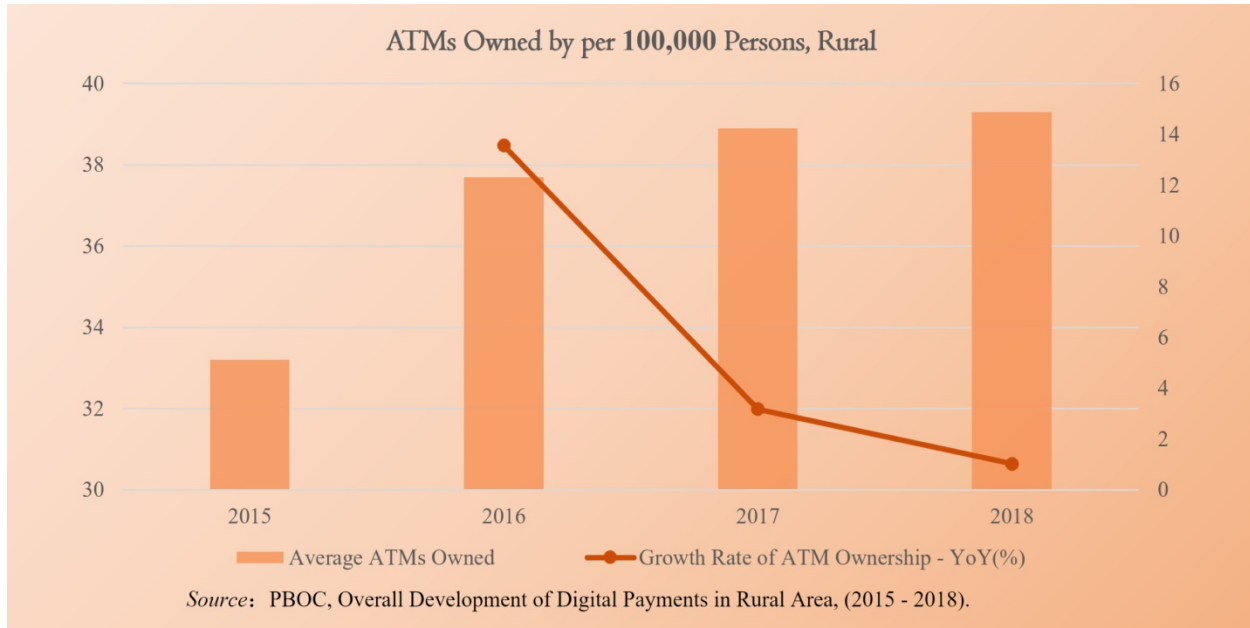
We again verified this observation in Table 1, where we extended the original table included in the joint report to cover 2017 – 2020 (yellow-shaded rows). Statistics we found from PBOC's website confirmed this record-setting number of nationwide ATMs in 2018. Among those 1,119,000 ATMs, 34% are located in rural areas. The total number of ATMs has more than tripled during the last decade. The percentage of ATMs operated in rural areas remains relatively constant, implying a similar growth rate of ATM networks in rural and urban. However, the growth rates of the point-of-sale (POS) terminals diverged in the cities and the countryside: Disproportional more POS terminals emerged in the cities. Even though the POS exhibited slower growth in the countryside, the absolute numbers of POS terminals in rural areas still rose from 2,896,200 in 2011 to 7,222,530 as of 2018. Therefore, rural areas' physical accessibility overshot in 2018 and then fell back to a state slightly higher than 2016 in 2020. In our opinion, the nationwide promotion of financial inclusion started in 2016 catalyzed the overshooting in 2018. The adjustment afterward resulted from the recent prevalence of digital finance that lessened rural residents' reliance on physical access points.

Table I

	NUMBER OF ATMS (THOUSANDS)		NUMBER OF POS (THOUSANDS)	
YEAR	NATIONWIDE	% IN RURAL AREAS	NATIONWIDE	% IN RURAL AREAS
2011	334	41%	4,827	60%
2012	416	43%	7,118	56%
2013	520	39%	10,632	42%
2014	615	41%	15,935	33%
2015	867	36%	22,821	28%
2016	924	37%	24,535	28%
2017	967	39%	31,414	23%
2018	1,119	34%	34,393	21%
2019	1,098	34%	30,893	22%
2020	1,014	36%	38,330	N/A

Source: PBOC, (2016 – 2020); CAFI Research.

Regarding **remote accessibility**, in 2014, 97 percent of Chinese adults reported that they or someone in their household had access to a mobile phone[9]. Besides, the percentage of these adults who reported having made a digital payment in the last 12 months was 31% in the same year. As digital finance quickly expanded to the underserved areas in China after 2014 due to the popularity of the WeChat app, we updated this outlook of electronic payments[10] in Figure 9. We skipped the two years after 2014 due to data availability. In 2017, the FCPB of PBOC reported that 76.9% of Chinese adults used electronic payments in the last 12 months – a significant jump from the 31% three years ago. Initially, this number was slightly lower in rural areas: 66.5% in 2017. This 10 percent gap in the usage of electronic payments narrowed to 7 percent in 2020. The percentage of adults using electronic payments in the nation reached 89.16%, and in the countryside, this number was 82.72%. The expansion of digital payment platforms in rural areas, especially during the COVID-19 pandemic, accelerated the process of urban-rural remote accessibility gap reduction in China.

Figure 9

Percentage of Adults Using Electronic Payments (%), Nationwide and Rural

Source: FCPB of PBOC, "Analysis Report on the Financial Inclusion Indicators of China", (2017-2020)
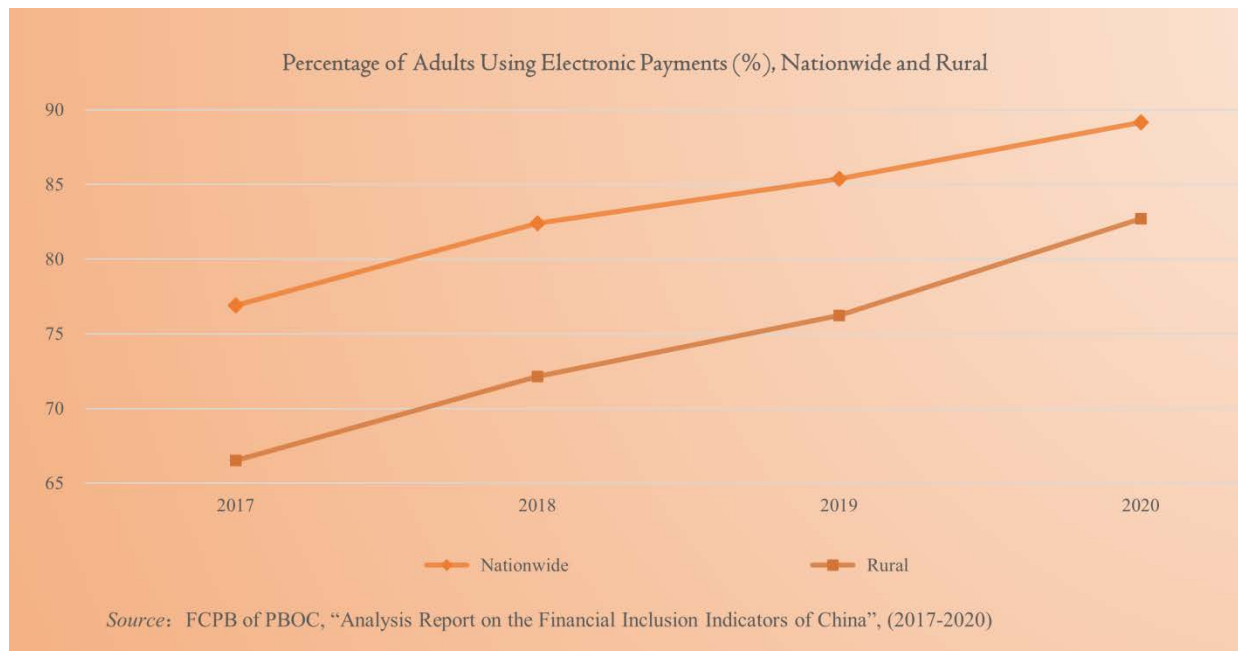
As for the changes in **affordability**, the emergence of many fintech companies, and the services and products they have provided, brought challenges into China's financial market and increased the competition among financial service providers. Along with the government's inclusive finance policies, market competition drove down the fees and costs of using financial services. For example, transferring money into one's e-wallet or making payments typically incurs no extra costs using many non-bank digital payment services. However, withdrawing money from the e-wallet incurs a 0.1 percent withdrawal fee for the amount exceeding the free transfer amount up to 1,000 CNY, taking WeChat Pay as an example. Besides digital payment services, digitally-enabled business models have also made the development of low-cost internet-based insurance and fund-based financial management products possible.

Additionally, the costs of credit became progressively low in China. According to WBG's Enterprise Surveys conducted in China (2012)[11], only 4% of small businesses and 10% of medium enterprises indicated interest rates as the reason for not applying for a loan or line of credit in the survey. These numbers were 15% and 14% in other G20 MICs during 2012-2016's surveys. Moreover, China's average interest rate for newly-issued micro and small business inclusive loans was 6.7% in 2019[12]. This number further went down to an annual average of 5.94% in 2020[13] and 5.71% within the first 11 months of 2021[14].

2-) Innovations entailed in **designing** the following inclusive financial **products** reflected the input of efforts and wisdom from relevant financial service providers.

Non-bank fintech firms in China and the traditional service providers collectively generated innovations in payment products during the past decade. For example, Tencent integrated Tenpay into its WeChat app, the most influential Chines social network platform nowadays, in 2013. The integration of a payment functionality into the social platform launched in 2011 quickly transformed their existing customer networks and relationships into exponentially-growing potential payment product users through the typical commercial and social interactions in Chinese culture. Specifically, sending "gifts" or remittances between families and friends contributed to the infectious proliferation in WeChat Pay's client base.

On the other hand, China UnionPay (CUP) launched multiple rounds of trials innovating payment service as a traditional financial service provider. As a nationwide interbank transaction clearing system, CUP has its advantage in connecting Rural Credit Cooperatives (RCC) to the national payment system and thus enabling farmers to withdraw cash at a local access point with a bank card specifically designed for rural migrant workers starting from 2006 under the guidance of PBOC. CUP also launched a trial payment service allowing grain brokers and purchasers to pay to farmers' CUP cards in real-time through POS terminals in those grain-producing areas.

Driven by the profit-chasing motivations within the private sector and the intended mandate to expand payment services to the rural area from the public sector, China has come a long way in promoting payment products and services in the last twenty years. According to Global Findex 2017, 80% of Chinese adults reported owning a store-of-value transaction account (78% in rural China), tying with the G20's average at 80% of the same year.

Efforts in designing innovative products to expand financial inclusion did not stop with payment products; insurance companies have broadened their markets through digitalizing marketing and delivery channels. Internet was the fastest-growing delivery channel for non-life insurers because digitalization increased the uptake and availability of insurance products and services. As of 2015, approximately 7% of Chinese individuals purchased or were covered by non-vehicle commercial insurance (including business life, commercial health, and other insurance plans). In 2019, China's insurance penetration rate, which measures total premium income relative to GDP, was 4.3%, compared to 2016's 4.16%[15]. Similarly, the insurance concentration rate, defined as the ratio between total insurance premium income

and total population, was more than USD 450 per person – equivalent to an annual compound growth rate at 10.77% relative to 2016.

3-) An increasing number of vulnerable groups such as micro and small enterprises (MSEs) and rural clients have been included in the formal financial system. By the end of June 2020, the MSE and agriculture-related loan balances were nearly USD 6.3 trillion and USD 5.8 trillion, respectively. Smaller loans under approximately USD 1.5 million to a single borrower rose 28.4% (YoY) to USD 2.1 trillion[16]. In 2020, 53.6% of adults in China were borrowers of commercial banks, 96.3% higher than the figure in 2012[17].

4-) As the number of users in the financial sector increases, Chinese authorities are trying to release more regulations to protect financial service consumers. In 2014, the Law of Consumer Rights and Interests Protection was revised. For the first time, it mentions the obligations of financial service providers to disclose charges, safeguards, and warnings regarding risks. The Law also has personal data protection, standard contract terms, and other aspects. In 2015, the General Office of the State Council issued the *Guidelines on Strengthening the Protection of Rights and Interests of Financial Consumers*. One year later, PBOC released the *Implementation Rules on the Protection of Rights and Interests of Financial Consumers* that focus on the conduct of financial service providers, specific requirements regarding personal information protection, complaint filing regime, and enforcement mechanisms.

China's Financial Inclusion Experiences

Between 1981 and 2015, China's poverty rate dropped from 88% to only 0.7% using WBG's purchasing price parity terms. In the meantime, the Chinese government and various market players in the country have contributed significantly to the course of financial inclusion. It starts with the construction of a solid financial infrastructure.

1. Secured Lending

First, the public sector has been investing heavily in improved secured lending and helping more borrowers become qualified. For example, in April 2019, the Chinese authorities began to pilot movable asset registration platforms in Beijing and Shanghai. Only within two months were there 653 registrations. Twenty-one full-lifecycle supply chains were built on the platforms, servicing almost 100 supply chain companies and more than 20 commercial banks. Such secured transaction systems and collateral registries will effectively expand the

options of collaterals for businesses, especially MSMEs, and help them obtain capital for investment and growth. In addition, land rights have been a long-time issue in rural China. Due to the lack of clarity, the Agricultural Bank of China ("ABC"), for example, had to develop various non-mortgage financial products such as farming equipment, agricultural inventory, and direct grain subsidies, to facilitate secured lending in rural areas. But this has changed. Land rights have been further defined and protected by new legislation. In 2009, China's People's Congress reviewed and approved the Law on Land Contract in Rural Areas, clarifying that land management rights can be used as collateral for accessing credit from financial institutions. Moreover, on the residential front, farmers are allowed to use their homestead rights as collateral under certain conditions.

2. Tax Policies

Tax can be used as a tool to promote financial inclusion. A few specific tax exemptions have been established to assist the vulnerable:

- ➢ The value-added tax (VAT) is exempted for the interest income of financial institutions and microcredit companies on small loans to farmers;
- ➢ The taxable income was calculated on only 90% of the interest income of financial service providers when they lend small loans to farmers;
- ➢ The stamp tax is exempted for loans to MSMEs;
- ➢ Apply discounted tax rates for insurance premiums for insurance companies covering crop cultivation and livestock production.

3. Guarantees and Risk Sharing

The Chinese government has also proactively participated in the market and supported guarantee companies for underserved customer segments. Take Zhejiang Province as an example. State-owned guarantee firms can share 50% of total investments and not exceed USD 1.5 million for funding tech companies at early and growth stages. In fact, by the end of October 2019, guaranteed loans for startups reached more than USD 21.8 billion with a 33.25% growth rate. In the meantime, risk relief funds have been established in China. For example, the Yinchuan branch of PBOC has led the management of a government-backed fund targeting industrial-sector business borrowers. Overall, such relief funds had deployed over USD 3 billion capital to private micro-enterprises by the end of 2019.

4. Differentiated Regulations

Regulators have actively made efforts to promote financial inclusion. As of 2016, PBOC allowed lower reserve ratios for the financial institutions dedicated to rural areas. Its ratio for rural commercial banks was set to 12%, which was 5% lower than the reserve ratio for large commercial banks. The reserve ratio for rural cooperative banks, rural credit cooperatives, and village and township banks was reduced to only 9%. In 2019, PBOC further changed the eligibility of reserve ratio reduction by increasing the maximum loan size from USD 0.78 million to USD 1.55 million, encouraging lenders to serve more SMEs. As for financial institutions, the management teams have also made liability exceptions when managing safeguards and KPIs related to financial inclusion activities. Bank of Communications, for instance, has exempted the liabilities of the SME department staff if they encounter risk issues after due process, given that they have performed due diligence and make liability investigations independently before lending to SMEs.

China's Rural Finance

Financing Gap

In 2014, the total lending to rural households was 5.4 trillion Chinese yuan, accounting for only 6.4% of the total national loan value. Additionally, approximately 40.5% of loan applications were approved nationally. In the rural areas, however, only 27.6% were approved[18]. From an overall economic perspective, the income gap is wide between urban and rural residents. In 2009, the average urban residents' disposable income was 3.3 times higher than that of rural residents. Although the gap had been declining, it was still a 2.7 times' difference eight years later[19]. Thus, the enormous rural population remains largely underserved.

Solutions at Hand:

The Chinese authorities have taken the following measures to help rural households and businesses access financial services.

Between 2006 and 2008, new types of rural financial institutions were established by the Chinese government to promote financial inclusion, including village and township banks (VTBs) and rural mutual credit cooperatives (RMCCs), as well as microcredit companies (MCCs).

As of 2016, there were 1,519 VTBs across China with total loan balances around USD 105 billion. They provide small loans to rural residents and are under the supervision of an established commercial bank. RMCCs are membership-based mutual financial organizations that manage members' deposits, loans, and settlements and trade government debts and financial bonds. There are 60,00 members of RMCCs who have deposited USD 405 million. The total loan balance is around USD 285 million.

MCCs, on the other hand, are usually privately owned but not allowed to take deposits and are targeting a similarly underserved segment of rural clients as VTBs. There are 8,673 MCCs, with total loan balances reaching USD 139 billion.

Moreover, when distributing rural or agricultural subsidies, the government usually asks commercial banks to facilitate the transfer via their debit card platforms. On the one hand, it assures the safety and efficiency of the disbursement. On the other hand, this policy has effectively accelerated the bank account ownership rates among the rural population. A total of 3.15 trillion Chinese yuan was transferred from the government to the rural areas between 2010 to the first half of 2015. Such subsidies often cover insurance, medicare, and agribusinesses.

The government has also leveraged subsidies to encourage new financial instrument adoption. For example, certain state-owned insurance companies have developed innovative products tailor-made for agricultural production cycles, including weather index insurance, price index insurance, crop yield insurance, income insurance, and agricultural product quality insurance. The government primarily subsidizes their premiums. Since 2016, there have been 50 pilots of price index insurance products, 400,000 insured rural households or insurance policies, and a 16 billion Chinese yuan portfolio of risk insurance products.

To solve the "Last Mile" problem for rural financial services, various market participants have developed creative solutions depending on China's extensive mobile signal coverage, even in some remote regions. For instance, Shangyu Rural Cooperative Bank of Zhejiang has a unique "bank on wheels" initiative launched in September 2014. The "bank on wheels" is a bus equipped with service counters and ATMs that are connected to the host bank network via 3G. Rural customers can use the bus to open or close current and deposit accounts, deposit or withdraw money, make remittances and payments, pay bills, etc. Moreover, digital payments have become common in rural areas. In 2019, 76.21% of rural residents reported using this payment method, which grew by 7.15%.

[5] The PBOC and the WBG, "Toward Universal Financial Inclusion in China – Models, Challenges, and Global Lessons", 2018.

[6] The PBOC and the WBG, 2018.

[7] FCPB of PBOC, "Analysis Report on the Financial Inclusion Indicators of China", 2018, p21.

[8] Source: https://www.cgap.org/blog/role-cash-incash-out-digital-financial-inclusion.

[9] Gallup World Poll 2014.

[10] Electronic payments here refer to account balance adjustments initiated via online banking, phone banking, mobile banking, POS terminals, ATMs or other electronic channels.

[11] WBG, "Enterprise Surveys.", 2017, https://www.enterprisesurveys.org/en/enterprisesurveys.

[12] Source: Economic Information Daily, http://www.jjckb.cn/2020-10/19/c_139450395.htm.

[13] Source: CBIRC (China Banking and Insurance Regulatory Commission), http://finance.people.com.cn/n1/2020/0824/c1004-31833330.html.

[14] Source: CBIRC, http://finance.people.com.cn/n1/2021/1229/c1004-32319985.html.

[15] Source: Financial Times, https://www.financialnews.com.cn/ll/xs/202010/t20201026_203813.html

[16] Source: WBG, https://data.worldbank.org/indicator/FB.CBK.BRWR.P3?locations=CN.

[17] Source: Global Findex Database 2017.

[18] Kong & Loubere, 2021.

[19] Source: https://www.unicef.cn/figure-23-capita-disposable-income-urban-rural-19902017.

Chapter 2: History of First-Account Opening

From Stage 1.0 to Stage 2.0 - owning a bank account

According to a multiperiod survey conducted by the World Bank disclosed in their Global Findex database[20], the worldwide share of the population aged above 15 owning an account was 69 percent in 2017. This number previously rose from 51 percent in 2011 to 62 percent in 2014. In China, the percentage of adults (15+) owning an account was 64 percent, 79 percent, and 80 percent, respectively, over the same time horizon, as shown in Figure 10. One could tell as the percentage of account ownership approached 80 percent, the growth of this initial symbolization of financial expansion started to slow down. The same survey revealed 58 percent, 77 percent, and 78 percent of adults in rural China had an individual account. The earliest data point in the study mentioned above was 2011, during which more than half of the adults aged 15+ in rural China already have at least one of their accounts opened. It thus makes more sense for us to date back much further into the earlier decades, during which the account ownership in random rural counties in China "leapfrogged."

Figure 10

Source: Global Findex (2011, 2014, 2017)
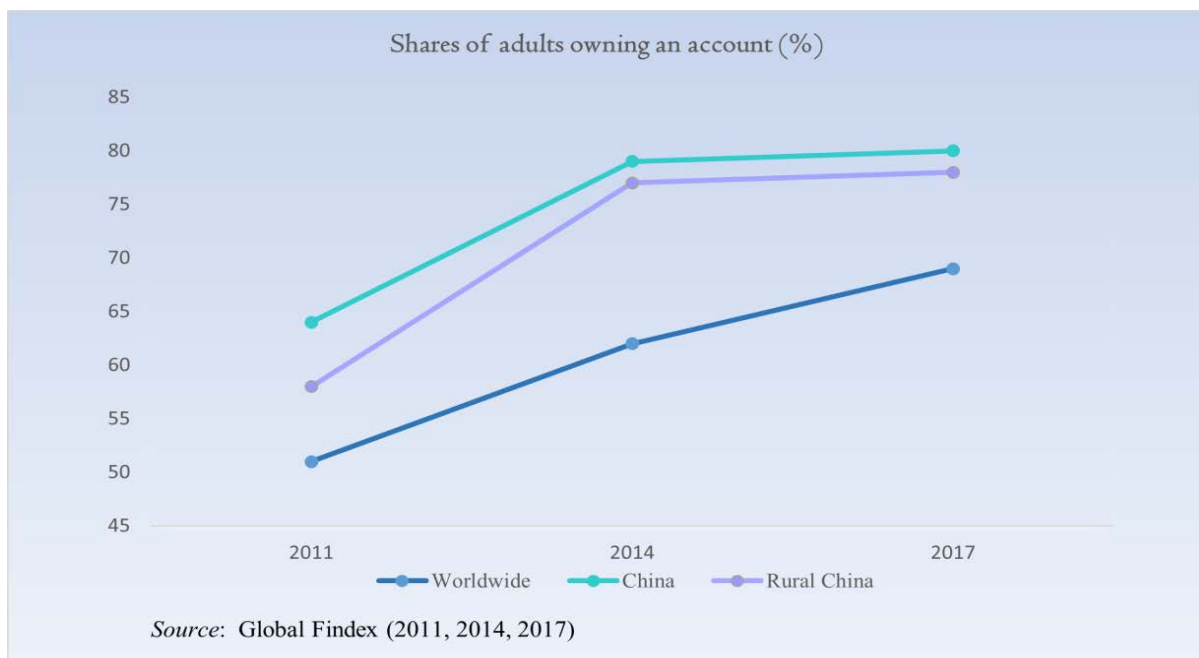
Given that the existing reports available exploring China's account ownerships only cover a time span of the most recent decade and report the aggregated data on the national level, we adopt a new methodology and create a micro-perspective to tackle multiple underlying issues

preparing for further policy analysis. A micro-level study allows us to readily track down the exact policies' effects on enhancing local account ownership within a given period back in history. Unlike most circulating reports, this report does not merely emphasize displaying descriptive statistics or providing general stylized facts. We instead attempt to crack the problem by delving into the first account-opening timeline back towards 1976, the earliest data point available from one of our past surveys conducted in Jan 2016 in Guangxi Province.

Figure **11**: Map of Baise, with two counties of Tiandong and Pingguo labeled

Source: Amap

In that survey, we asked all the respondents to recall when they had their first account opened (or ever had an account) at a local bank. Our survey collected 1,064 questionnaires from two adjacent counties under the city with the largest geographical area in the province of Guangxi, of Baise's governance (shown in Figure 11). We narrowed our study's scope to a forty-year horizon from 1976 to 2015, which coincides with the Chinese economic reform and opening-up that started at the end of 1978.

In Figure 12, we plot a time series showing the evolution of account ownership in the rural areas of Guangxi. Each dot represents the percentage of adults (defined as 15 years old or older) owning a bank account using our sample to proxy that ratio of the total population. Please see Annex 1 for a precise definition of the ratio and the sample selection.

Adults (Aged 15+) with an Account at a Local Bank(%)

Sample Restricted to the Rolling Cohort Aged 15 or Above

2014, 85.2% ⟶

2011, 71.1% ⟶

Source: Pooled Sample from Our Tiandong & Pingguo Sample during 1976-2015, N = 1061

 The evolvement of account ownership in our selected counties in Guangxi generally echoes the World Bank statistics on a relative basis starting in 2011. In our sample, the percentage of adults (aged 15+) with an account rose from nearly zero in 1976 to 20 percent back in 2000. Moreover, this number doubled within the first five years after the new millennium. In 2009, approximately 60 percent of the adults in our sample already owned (at least) one account. As the timeline hits 2013, the adult account-ownership rose to 80 percent, slightly more than the concurrent ownership Findex reported for rural China as of 2014 in Figure 10. Thus, for the first time to our knowledge, this report extends the time horizon accounting for China's rural account ownership to cover the past forty years. As we scrutinize local policies and the socio-economic background in Guangxi Province during the same period, we propose a three-phase development model to interpret the history of first-account opening in rural China. We divide the evolution of China's rural account ownership into the **early infancy stage**, the **rapid growth stage**, and the **final saturation stage** when personal accounts became quickly popularized in the countryside.

The **early infancy stage** spans the twentieth century and the first few years right after 2000. We advocate the steady increase in rural account ownership was primarily due to China's urbanization process. Driven by the need for money transfer, e.g., for remittance or paying for college tuition in the city, ruralists, on their initiatives, had accounts opened for the first time to avoid the hassle of bringing cash back and forth between cities and their hometowns.

The exponential increase in account ownership observed after 2004 signifies the arrival of the **rapid growth stage**. This surge manifests in both relative and absolute terms of account ownership. As elaborated in detail in the following sections, we attribute this steep increase in the villagers' first-account-opening observed in our sample to the national agricultural policy turnaround promulgated in 2004. For the first time, China abolished the agricultural tax, a scheme that had lasted for 2,600 years in its history, and switched to subsidizing farmers through direct payments. Yet, the MOF of China did not specify the exact distribution channels of these direct G2P payments until May 2007, when they explicitly urged local governments to hand out the funds received from local finance departments through an "all-in-one **passbook**" or an "all-in-one **card**" to the farmers. We track down the evidence among a pile of regional policy documents suggesting that Tiandong became a provincial pilot zone for the direct agricultural subsidies starting in 2005. Being listed as the pilot zone for direct G2P payments could have caused the local RCCs to open passbook saving accounts for all farmers eligible for such subsidies with no existing personal accounts. Though intending to protect its agricultural sector's competitiveness after joining WTO in 2001[21], this direct agricultural subsidies policy incidentally expanded the scope of account ownership in China's rural area effectively from 2005 onward.

The **final saturation stage** came with the advent of the third wave of rural account ownership's popularization, as the "Golden Insurance Project" extended to cover the information of newly insured rural residents from the New Rural Pension Scheme (NRPS) pilot zones. The State Council of China rolled out the NRPS to support the elderly in rural regions in 2009. The "Golden Insurance Project" was, back then, an existing network platform initiated in 2002, integrating all national-level labor security information with an emphasis on urban China[22]. Extending China's social pension scheme to its countryside requires an instrument to record the annual contributions' payments and the distribution of pension benefits to the farmers. A social security card carrying the terminal information of the rural participants is thus called upon to serve this purpose of bookkeeping. National authorities encouraged local governments to promote social security cards with an all-out effort, especially in the countryside. In Aug 2011, China's Ministry of Human Resources and

Social Security (MOHRSS) and PBOC jointly issued a notice about launching a new generation of social security cards (i.e., the 2nd generation SSC) with finance functions enabled for the first time. In other words, **whoever possessed an SSC could then be considered a bank account owner**; people who reside in the countryside could upgrade their 1st generation SSC by visiting their local HRSS office. More significantly, this new generation of SSC filled in the gap of potential financial exclusion of the young, the elderly, and the female cohorts in rural China left out by the direct agricultural subsidies as mentioned in the rapid growth stage. Recipients of the aforementioned direct payments were required to be the head of rural households, and in most scenarios, the newly-opened account owners were male. With all-level HRSS departments taking the lead, the 2nd generation SSC practically made a bank account/card increasingly commonplace to all of China's rural residents. Our sample only covers the information in Guangxi Province up until Jan 2016. However, according to our interviews with local officials in Jiangxi Province conducted in Mar 2021, China's HRSS departments already completed the nationwide campaign of issuing the 2nd generation SSC in 2017. By the end of 2020, there have been 1.335 billion SSC holders, accounting for 95% of China's total population[23]. Nowadays, every rural resident, from newborns to the centenarians, could participate in the social security scheme and obtain an SSC, thus becoming an account owner.

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[20] WBG, Findex Database, Demirgüç-Kunt, Asli, Singer, Ansar, & Hess, 2018.
[21] OECD, 2018.
[22] Sangfor Technologies, https://www.sangfor.com/en/info-center/success-stories/sangfor-ad-makes-the-the-golden-insurance-project-successful.
[23] State Council Information Office (SCIO) of PRC, 2021: http://www.gov.cn/xinwen/2021-03/01/content_5589524.htm.

Chapter 2.1: The Urbanization: 1976 - 2003

China's urbanization process followed a peculiar pattern until the early 1980s due to the government's strict regulation of intra-country migration. However, these controls began to slacken from the early 1980s as the People's Commune system phased out. From the observable data collected in Guangxi Province, we argue that the steady increase from 1976 to 2000 in rural account ownership was mainly due to China's urbanization process. When they moved from rural to urban areas, people got more exposure to the essential financial instruments, i.e., bank accounts.

This chapter focuses on the interactions between China's food and demographic policies and their impacts on rural bank account ownership during its long-lasting urbanization process. In Annex 2, we organized a policy evolution flowchart to demonstrate how food policy and population policy played a vital role in driving the movement of people from rural to urban areas.

Figure 13
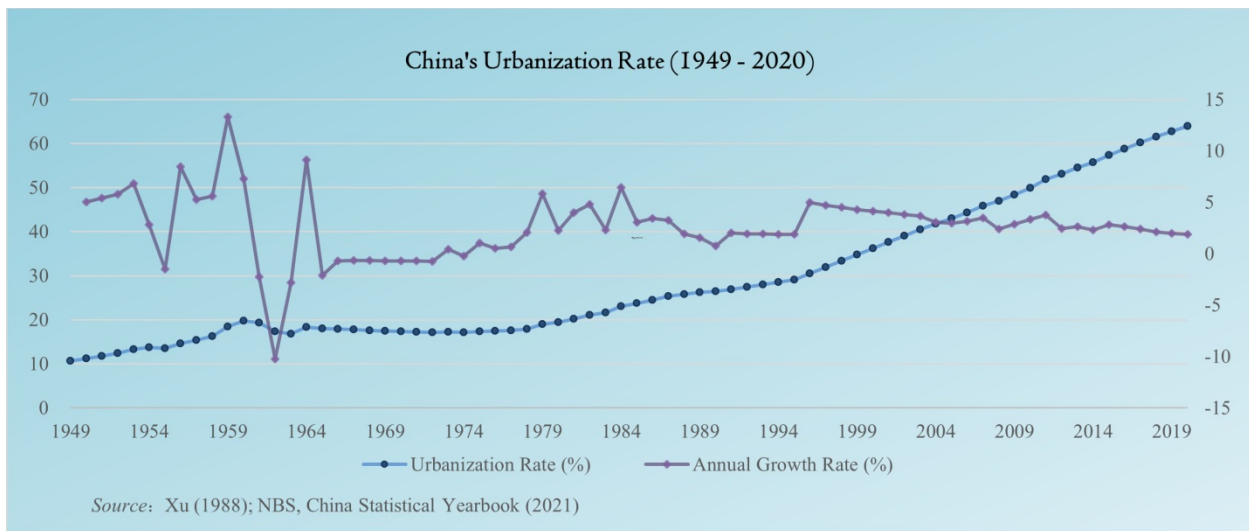
According to the NBS, China's urbanization rate rose from 10.64% in 1949 to 36.22% in 2000, featuring a steady increase during the first 50 years (Figure 13). Figure 14 characterizes the major population movements between China's rural and urban areas during 1949-2000 by specifying four different periods: R2U(Rural to Urban), U2R(Urban to Rural), R2T(Rural to Town), and R2U again. This framework could help the audience build background

knowledge for our policy analysis and evaluation in terms of changing rural account ownership that followed.

Figure 14 **Four Historical Periods of Population Flow**
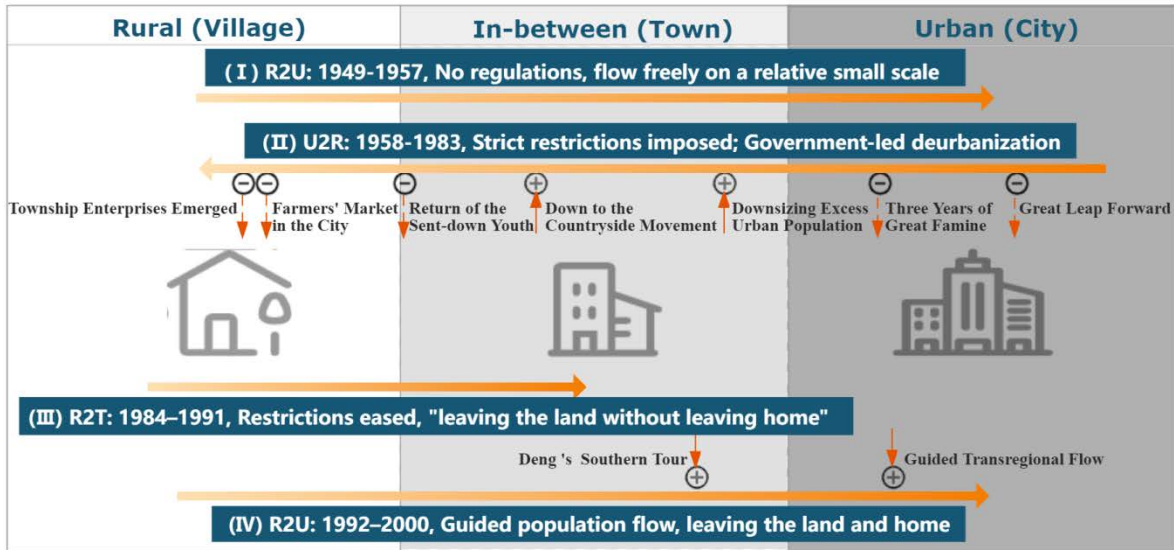
Source: Wu (2002); Zhou (1998); Lu et al. (2019); Goldstein et al. (1985).

Stage 1 is "R2U" (Rural to Urban), spanning 1949-1957, featuring free urban-rural movement with no regulations. We name Stage 2 as "U2R" (Urban to Rural) that covered 1958-1983, during which mainstream population policies started to impose restrictions on rural-to-urban mobility, and a few political campaigns also resulted in urban population moving to rural areas. Stage 3 is what we call "R2T" (Rural to Town) that happened during 1984-1991. During the R2T period, the restrictions imposed on rural people entering cities eased, and township enterprises' employees were encouraged to move and reside in towns. Stage 4, the last stage before the new millennium, is R2U that, at the very minimum, covered 1992-2000. This period is still the case in China today, during which rural population flowed into cities in an orderly manner under the government's guidance.

Stage 1 (R2U): In the early years of the new China between 1949-1957, China was a centrally planned economy that prioritized the development of the heavy industries in the cities. As a "social planner," the government kept the industrial wages and food prices low to accumulate capital for industrialization—the dual urban-rural economic and social structure formed at this stage. In the cities, the state provided jobs to most non-disabled urban residents. Such employment status, known as the "iron rice bowl," provided lifelong job security for the employees and the families behind them. As a result, obtaining a job in the city was

extremely attractive for people still in the countryside whose annual incomes are only determined by the vagaries of weather or the collective leadership's decisions about how much to distribute to particular individuals.

In the early 1950s, many farmers, to seek lifetime jobs, migrated from rural to urban areas, putting enormous pressure on the urban food supply system. As a result, the central government adopted new measures to consolidate its control on grain resources to ease the food supply shortage. The grain crisis in 1953 triggered the right timing to promulgate China's Unified Purchase and Sale of Grain Policy[24], thereby replacing free market operations with state compulsory agricultural procurement, planned production, and food rationing[25].

Meanwhile, the central government mentioned the household registration system for the first time in its first five–year plan: 1953 to 1957. The State Council emphasized multiple times to prevent farmers from flowing into the cities "blindly" within the same period. The implementation of these policies was not strict initially; the number of urban employees almost doubled, rising from 16.03 million to 31.01 million[26].

Stage 2 (U2R): In 1958, the Regulations on Household Registration of the PRC became effective. The design of this household registration (hukou) system aimed to ensure the farmers could stay in the countryside and produce adequate grain supplies at low, stable prices to urban residents –the main force of industrial production. From then on, the creation of hukou divided people into urban residents and farmers, and local authorities strictly controlled the switch of hukou status into urban residents. Spontaneous migration into the cities was frozen under such solid administrative controls until the 1980s. If we take a closer look at Figure 13, China's urbanization rate during 1958-1983 was relatively steady, accumulating a five-percent increase only, from 16.25% to 21.62%, over 25 years. Compared to other periods that we outlined, Stage 2 features the lowest compound annual growth rate of urbanization, namely 1.41% compared to the 4.12%, 2.80%, 3.35% of Stage 1, 3, and 4.

The five-percent net increase in urbanization was mainly due to the hump observed between 1958 and 1960. The central government, back then, set ambitious goals to double China's industrial output. To realize these goals entails employing rural residents as state workers to participate in steel productions in the cities. These job opportunities gave a temporary green light to the rural migrants seeking to switch to non-agricultural hukous to settle down in the cities and make up for labor shortages. However, despite these short-lived R2U movements, the major trend in Stage 2 was still U2R due to the Down to the Countryside Movement.

In the late 1970s, China adopted institutional and economic reforms, shifting from a planned economy to a more open, market-oriented economy. The establishment of the Household Responsibility System and the abolishment of the People's Commune in 1983 made agricultural productions more efficient. As a result, the growth in agricultural productivity freed up extra rural labor supply. Meanwhile, the government lifted bans on migration and rationing in the early 1980s, making it possible for the surplus labor force in the rural areas to enter the cities.

Stage 3 (R2T): We, following most of the literature, characterize the population mobility pattern in the mid-1980s and late-1990s as "leaving the land without leaving home." Farmers are allowed to move into small cities and towns. In the 1980s, village and township enterprises (VTE) arose and provided working opportunities to surplus rural laborers[27]. In 1984 and 1985, the government amended regulations regarding R2T migration, making it possible for rural residents to make a living in the cities. In 1985, the Unified Purchase and Sale of Grain Policy ended, leaving more space for a free market for grain transactions. Accordingly, considerably more migrations occurred for job-related or educational purposes during this period. As time went on, rural residents started to make money away from their homes, and the financial needs to manage their income emerged.

Stage 4 (R2U): An entirely new stage of population movement came in the 1990s, with the widening and deepening of economic reform and opening-up policy. Regarding the choice of destinations, inter-provincial migrants chose to settle down along the coastal areas of Eastern China. In contrast, intra-provincial migrants preferred large cities in Central and Western China[28]. Compared to Stage 3, when farmers only migrated to small towns near their homes, the migration distance significantly enlarged. As a result, they not only "left the land" but also "left their homes." Therefore long-distance migration away from home triggered the scenarios to utilize accounts. Externally, urban employers tended to adopt payroll card accounts to pay employees; internally, migrant workers had the spontaneity of opening personal bank accounts to send money back home to support their families.

However, no appropriate instruments were developed for documenting the process, nor have data been collected at the national level to account for changes in rural residents' account ownership before 2000. Therefore, we decided to attribute the first-account-opening behavior among farmers to those rural migrant workers after combing through literature in the field of China's urbanization. In other words, Phase I of rural account opening was primarily driven by specific individuals (mainly rural migrant workers) from the demand side in need of financial services.

[24] Tian, 2007.
[25] FAO, 1998.
[26] Lu et al., 2019.
[27] Goldstein et al., 1985.
[28] Gao and Wang, 2019.

Chapter 2.2: Direct Agricultural Subsidies: 2004 - 2010

As we attributed the steady increase in the evolution of rural bank account ownership in China to urbanization in phase I, another wave of agricultural reforms that had profound implications on the welfare of farmers (and their access to financial services) occurred around 2003 – 2004. The urbanization process did not slow down, per se, and it accelerated after 2000 as the economy's service sector (tertiary industry) was bourgeoning. Higher agricultural productivity set more labor free into the urban job market, causing the demand for remitting to surge during the same period. While this spontaneous driving force behind account-opening persisted, the occurrence of a new kind of nationwide direct G2P payment geared many farmers/grain producers up for the opening of their first accounts.

In 2004, to maintain food security and protect domestic agricultural competitiveness after joining WTO., the central government introduced a scheme to subsidize farmers directly instead of taxing them[29]. This elimination of taxes reversed China's Agricultural Tax Policy instituted in 1958, symbolizing the start of the manufacturing sector nurturing the agriculture sector in China. Among all other domestic support measures sharing the feature of transfer pricing, direct subsidies through payments complied with the WTO Agreement. In 2004's "No.1 Document", the original policy was to subsidize grain producers in 13 key grain-producing provinces and differentially cut taxes nationwide. However, Guangxi did not belong to the cohort mentioned that received the central government's fiscal net transfer. It was not one of the seven provinces/municipalities that thoroughly eliminated the agricultural tax right away in the same year, either. Nevertheless, the autonomous region's government set its standard for granting subsidies to some of the major grain-producing counties in Guangxi. A notice issued by the local government (No. 50 [2004] of the People's Government of Guangxi Zhuang Autonomous Region) set forth some details about the rules set for such direct subsidies.

Starting in 2004, Guangxi decided to experiment directly subsidizing grain producers in 18 of its major grain-producing counties by linking the payment of subsidies to the procurement of its pre-ordered reserves. As a result, local farmers could either receive the cash on the spot, pay as they travel to the centralized grain depots in the pilot counties, and sell their grain reserves or have the subsidies help offset the agricultural taxes they should pay. At that stage,

farmers in Guangxi still needed to pay (albeit lower) taxes, and the distribution of payments needn't be in cash.

Tiandong and Pingguo, two adjacent counties of our interest, were not among the first batch of 18 counties listed in the provincial notice. In 2005, Guangxi entirely eliminated the agricultural tax, following the other 27 provinces, municipalities, and autonomous regions in China at the same time. In the same year, Guangxi expanded the scope of pilot counties for direct agricultural subsidies to 31 counties, and Tiandong became one of them for the first time. From 2005 to 2007, the number of such experimental zones in Guangxi rose from 31 to 40. The design of the policies had not changed much compared to the original stipulations in the 2004's notice.

In an effort to reduce leakages along the G2P process, in May 2007, China's MOF issued a notice to all the Departments/Bureaus of Finance in the nation, specifying a Standard Operating Procedure for granting direct agricultural subsidies. In that notice, the MOF clearly instructed all county-level Bureaus of Finance to directly deposit the fund to its recipients' accounts through an "all-in-one passbook" or an "all-in-one card" whenever possible. The MOF also urged local governments to "proactively take measures" if the conditions at the moment were not satisfied for such direct deposit. Furthermore, the notice also stipulated that local governments actively publicize the standard of agricultural subsidies and disclose the amount of payment each farmer is entitled to on a case-by-case basis.

The logic behind the mechanism design for the above policies is somewhat straightforward: Avoiding potential embezzlement, corruption, or bribery. Like most other G2P payments, direct deposit practically minimizes the possibility of officials having access to cash. Starting in 2008, the scope of counties receiving direct agricultural subsidies in Guangxi extended to cover all of the 60 counties under the autonomous region's governance. In compliance with the stipulations set by the MOF, the provincial government of Guangxi, in its 2008's notice, announced that all county Finance Offices should directly deposit the subsidies to the grain sellers' bank accounts whenever possible. In 2009, regulations further tightened. The notice issued this year restricted the only distribution channel of payment to be "bank transfer" to a grain producer's bank account, leaving no doors open for cash transfers or state-owned grain marketing entities' payment-on-behalf-of (POBO). Hence having a bank account became a necessary condition for a farmer to receive direct agricultural subsidies in Guangxi.

To summarize, Tiandong became a pilot zone for direct payment in 2005, while the grain producers in the county of Pingguo, on the other hand, did not receive any compensation

until 2008. This staggered timing of policy implementation allows for deepening the analysis with specific methods to identify causal inference.

It is also worth noticing the design of these policies has specific implications on the portrait/profile of the beneficiaries. For instance, in the notice issued in 2008, a "grain-selling certificate" is needed to prove the existence of a pre-ordered three-party contract: the grain marketing entities, the farmers, and the villagers' committee. Farmers should bring the certificate validated by the county governments to the grain depots to collect direct payments. Moreover, the notice specified that the **household head** had to sign on the certificate to acknowledge and consent. A natural consequence of the above policy design is that the household head of a grain-producing family would be the recipient of the direct subsidies. An implication thus follows: if any rural residents opened their first bank accounts triggered by the requirements we introduce above, they tend to be the head of their households. Therefore new account openers due to the direct agricultural subsidies are most likely to be the household heads of the grain-producing families in the context of Guangxi.

The direct agricultural subsidies initially targeting grain producers unintentionally led to the surge in bank account ownership in two ordinary counties in Guangxi. The size of each payment is usually about 110-120 CNY for 500 kilos of grains in 2009, an amount showing the government's goodwill to the farmers but not quite enough for a farmer to expand his farm production, and that ended up as a stroke of luck in terms of early-stage financial inclusion.

In a nutshell, we argue that the combination of direct G2P payment and urbanization in China gave rise to the faster-than-ever growth rate of account ownership during 2004 – 2010.

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[29] Gale et al., 2005.

Chapter 2.3: The Social Security Cards: 2011 – Present

From Stage 1.0 to Stage 2.0 – Phase III

China has built up the world's most extensive social security system during the past five years, with basic medical insurance covering more than 1.3 billion people and basic pension insurance covering nearly one billion people, according to the report of the State Council in 2021[30].

The **SSC's upgrade to its 2nd generation** with financial functions integrated for the first time and the **promulgation of China's Social Insurance Law in 2011**[31] jointly brought rural account ownership into Phase III. China's rural social security system arose in the late 1990s and early 2000s. Before that, the government only provided a welfare system (pension, healthcare, and housing) for urban residents. In contrast, rural residents had to rely on mutual aid within local communities and their allotted lands for self-sufficiency. Compared to the urban social insurance system, the rural social insurance system is far behind its ideal development stage.

To reduce the rural-urban disparities in terms of social security system, the Chinese government has taken several steps to upgrade the rural insurance system as the economic upturn has happened ever since the reform period. The Ministry of Labor and Social Security (MOLSS, the preceding department of MOHRSS) was established in 1998 and kicked off a new era of the institutional establishment of China's rural social security system. Since 2002, the state has successfully launched two major social insurance schemes in rural areas: the New Rural Cooperative Medical Scheme (NRCMS) and the New Rural Pension Scheme (NRPS)(Annex 3).

NRCMS: In 2002, the MOLSS launched this new public health insurance system for rural residents, replacing the malfunctioning rural community welfare system. The nation spent six years piloting and popularizing the NRCMS in rural areas until 2008. Then, to further reduce the rural-urban disparities in healthcare services, the NRCMS was merged with the Urban Resident Basic Medical Insurance (URBMI) to create a unified basic medical insurance for all urban and rural residents – URRBMI starting in 2016[32]. As time went on, the number of people covered multiplied and reached 1.35 billion in 2019, making up nearly 97 percent of the population in China[33].

NRPS: In 2009, MOLSS took similar steps to establish a social pension insurance system in rural China: the New Rural Pension Scheme (NRPS) for rural residents was mainly state-subsidized. Pilot programs for this scheme took four years in rural areas, and in 2014 NRPS integrated with the Urban Residents Pension Scheme (URPS) to establish a Unified Basic Pension Insurance System for Rural and Non-working Urban Residents[34]. By the end of 2021, the coverage of this unified pension system reached 547.97 million (not including urban working groups, in which 480.75 million urban workers participated in a separate pension system) all over China[35].

In retrospect, the promulgation of China's Social Insurance Law in 2011 granted a formal legislative foundation for including rural residents in the nation's social security systems. Article 21 & 24 specified "the benefits of the new rural social insurance of the old-age pension shall consist of base pensions and individual account benefits" and "the State shall establish and improve the new rural cooperative medical system." The enactment of this Social Insurance Law significantly accelerated the popularization of social security services in rural China and laid the foundation for the subsequent prevalence of an individual certificate as proof of participating in the social security system – a social security card.

Annex 4 shows the evolution of different generations of the SSC and the policies behind that positively affected rural account ownership in China. In 2002, the State Council approved launching a national labor security information system[36]: the "Golden Insurance Project." By establishing electronic network platforms, the system collects and shares labor security information at all central, provincial, and municipal levels[37]. The SSC, serving as proof of the insured, is indispensable for anyone to access full benefits of medical and old-age basic insurance at each stage of their lives. However, the Golden Insurance Project platform only contained information about urban workers in the early stage. In 2009, as NRPS emerged, this information system started to include rural residents in the NRPS pilot areas. In 2011, the MOHRSS and PBOC jointly issued a notice about launching the 2nd generation SSC with finance functions enabled for the first time[38]. This newer generation of SSC has two separate accounts loaded inside: a social security account and a financial account. While the social security account enables usage at particular pharmacies and hospitals, the financial account realizes all financial functions, including cash deposit and withdrawal, payment transactions, transfers, and remittance. Simply put, rural residents who participated in any one of the social insurance schemes and thus obtained an SSC, therefore, had a bank card.

The upgrade of SSCs did not stop there. China's 12th five-year plan (2011-2015) set a new goal to build an integrated and comprehensive, "all–in–one" SSC. In April 2018, the MOHRSS issued the nation's first electronic social security card at the opening of the Digital China Summit in Fuzhou[39]. Compared to the 2nd generation physical SSC, the e-SSC contains all the digital functions of the current card and enables transactions without carrying a physical card. Owners of the physical SSCs could choose to obtain and activate their e-SSCs via any MOHRSS-authorized apps, including the official local HRSS app, commercial banking apps, and the apps developed by third-party payment platforms. If any rural resident could activate their e-SSCs, we consider them to possess digital payment accounts, thus reaching Stage 3.0 in the context of our first chapter. Therefore the upgrade of the e-SSC gave rise to rural account ownership, not only in a sense along the intensive margin (more people having a bank card) but also along the extensive margin (shifting rural residents to an even higher Stage in our synopsis.) Two Hundred and thirty cities in China have adopted these e-SSCs by January 2019[40], with Fuzhou, Tsingtao, and Chengdu pioneered among the first batch of the pilots.

Figure **15: Sample of 2nd generation of SSC, from PBOC**

In 2020, the MOHRSS and PBOC started distributing the 3rd generation of social security cards. The 3rd generation SSC added an IC chip, enabling a non-contact dual interface. In addition, besides the social security account and financial account included in the 2nd generation of SSC, this newer generation of SSC activated another account to incorporate

public transportation payment functions. The SSC, now, becomes a contactless MetroCard effectively.

By the end of Sep 2021, 1.347 billion Chinese became SSC owners[41]. This number accounts for 95.4% of China's total population by the end of 2020. It is consistent with what we mentioned at the beginning of this section that now China's social security system is serving 1.3 billion people in the country. To some extent, China has overissued bank cards to the citizens for different transfer payments programs, which partially led to the high per-capita ownership of bank cards revealed in Figure 1. On the other hand, the Overissuance of bank cards sometimes makes many cards dominant accounts. Therefore PBOC, MOHRSS, and many other ministries have been consolidating transfer payments to the all-in-one SSC. Many commercial banks have also closed dormant bank accounts with zero balances.

Case Box: Sichuan Explores Routing ALL G2P Payments through an SSC since 2018[42]

Sichuan, a province in Southwest China, has been exploring routing all G2P payments through an all-in-one SSC since 2018. Transferring G2P payments into individuals' social security cards helps to increase the effectiveness of accurate distribution and accountability of fiscal fund management.

Mr. Yang, aged 67, lives in a small village of DeYang, Sichuan. He recalled having seven to eight bank cards for receiving different subsidies or transfer payments in the past. Since these payments came from multiple government departments, it was not easy to tell the payments received apart, let alone the exact amount of each transfer and the timing the subsidies would arrive. Another villager in Neijiang, Mr. Liu, felt the same way. He had to carry all the bank cards to collect his subsidies, going from one bank to another to withdraw cash. Moreover, some officials once misappropriated farmers' subsidies due to the absence of systematic management of funds.

To ensure that the distribution of fiscal funds is transparent and on time, Sichuan Province explores establishing a Sunshine Distribution Information Platform, integrating cards of the payees, the distribution channels, and the management mechanisms altogether. The platform serves all the following purposes: information declaration and entry, transfer distribution, filing for complaints, public services and regulations, etc. Here the provincial-level finance department is mainly responsible for providing guidance and supervision for the platform. The municipal-level Bureau of Finance is responsible for establishing the information system of the all-in-one SSC and guiding the delivery of all subsidies. The county-level financial

offices are the ones allocating fiscal funds for all projects. The design of this Sunshine Platform takes care of transparency and efficiency simultaneously; since the information entry, review, and distribution of transfer all take place within the same information system, any delay in the process will trigger a system alert.

To universalize ownership of SSCs, and extend transfer payments to benefit more people, Deyang has issued 3.5 million SSCs locally, accounting for 99% of the permanent residents. Neijiang, on the other hand, has included 111 out of 128 categories (e.g., cash transfer programs benefiting persons with disabilities, children living in low-income families, etc.) of subsidy projects into its range of issuance of the all-in-one SSC. As a result, the cumulative amount of funds transferred through this channel reached RMB 3.654 billion, benefiting 1.38 million people.

Given considerations to the prevalence of SSC and the potential overissuance of bank cards in the rural area, seven central ministries jointly issued Guiding Opinions on Further Strengthening the Regulations of Subsidy Fund Benefitting Farmers through All-in-One Card in Nov 2020. The Opinions requires that, in principle, by 2023, all fiscal subsidies directly cashed to people or households in the state be distributed through an all-in-one SSC. A "single platform for fund transfers" will apply to all the G2P payments programs in China.

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[30] Source: CGTN, https://news.cgtn.com/news/2021-02-12/China-has-built-up-the-world-s-largest-social-security-system-XOXToyG97q/index.html.

[31] Source: MOHRSS of PRC, 2010, http://www.mohrss.gov.cn/gjhzs/GJHZzhengcewenjian/201506/t20150625_212401.html.

[32] Source: State Council of PRC, http://www.gov.cn/zhengce/content/2016-01/12/content_10582.htm.

[33] Textor, 2020.

[34] Source: SCIO of PRC, 2014, http://www.scio.gov.cn/ztk/dtzt/2014/32252/32256/Document/1390938/1390938.htm.

[35] Source: MOHRSS of PRC, 2021 ,http://www.mohrss.gov.cn/SYrlzyhshbzb/zwgk/szrs/tjsj/202201/W020220127375841771152.pdf

[36] Source: MOLSS, 2002, http://www.mohrss.gov.cn/SYrlzyhshbzb/zhuanti/jinbaogongcheng/jbgczhengcewenjian/200512/t20051214_90322.html.

[37] Sangfor Technologies.

[38] Source: MOHRSS, PBOC, 2011, http://www.mohrss.gov.cn/SYrlzyhshbzb/zhuanti/jinbaogongcheng/jbgcshehuibaozhangka/jbgcshbzkwenjianbiaozhun/201112/t20111202_47481.html

[39] Source: MOHRSS, 2018, http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/buneiyaowen/201804/t20180423_292812.html

[40] Source: http://www.gov.cn/xinwen/2019-01-28/content_5361654.htm.

[41] Source: MOHRSS, 2021, http://www.mohrss.gov.cn/xxgk2020/fdzdgknr/zhgl/rlzyshbzxxh/202111/t20211111_427406.html.

[42] Source: A press release on 15, January 2021 . Access at people.cn http://cpc.people.com.cn/n1/2021/0115/c64387-32000277.html

Chapter 3: Accelerating Financial Inclusion – Fintech Firms

From stage 2.0 to stage 3.0 - Owning a digital payment account

China has made significant progress in financial inclusion by completing the Plan for Advancing the Development of Financial Inclusion (2016-2020)[43] as scheduled. The newly evolved FinTech companies—Non-bank digital platforms have played critical roles in accelerating financial inclusion in China. Technology companies and financial institutions invested heavily during the past decade, aspiring to provide digital payment services today. Built on its solid financial infrastructure featuring high bank account ownership and the widespread of smartphones, we see a period of rapid development for digital payments in China. People can easily link existing bank accounts to their phones through an app.

Alipay and TenPay are the two dominant digital payment platforms in China, constituting 90% of the total market share, helping many unbanked individuals obtain digital wallets and access the digital ecosystem in the past few years. According to the FCPB Analysis Report, in 2020, banking and non-bank financial institutions processed 14.223 billion and 467.042 billion digital payments in rural areas. Payments processed by the latter were nearly 30 times more than the digital services provided by traditional banking institutions. The gap in the number of transactions explains why fintech companies were vital in solving the "Last Mile" challenge of financial inclusion in rural China.

The terms "Digital Payment," "Network Payment," and "Mobile Payment" are used interchangeably in China. We choose to follow the practice of the joint report of WBG&PBOC by using "digital payment" to refer to the broader concept of applying digital technologies in the delivery of financial services, especially savings and payments that the new financial service providers can leverage. Similarly, the term "FinTech companies" in this report also refers to "those new entrants whose core business model is based on innovative digital finance."

In this section, we choose Tencent's WeChat Pay to illustrate how fintech companies effectively extended digital financial services to rural China and raised the level of rural residents' store-of-value transaction account ownership to Stage 3.0. Figure 16 describes a pyramid-shaped classification system for all tiers of cities in China. In the context of Tencent's story, its product managed to reach the most underserved population at the bottom county-level areas. These people served have always been the focus of this report, as we

stated initially – farmers, low-income individuals, people with disabilities, women, and the elderly living in the countryside.

Figure 16: China's Cities and Counties Classification Pyramid

New First-tier cities (15)
i.e. Chengdu, Wuhan,Xi'an

First-tier cities (4)
Beijing, Shanghai, Guangzhou, Shenzhen

Second-tier cities (30)
i.e. Ningbo, Dalian, Taiyuan

Third-tier cities (70)
i.e. Haikou, Linyi, Ganzhou

Fourth-tier cities (90)
i.e. Lishui, Zhangjiakou, Quzhou

Fifth-tier cities (128)
i.e. Hanzhong, Tieling, Zhangjiajie

County-level cities, counties and autonomous counties (1817)

Source: National Cities Grading (2021 Edition), first to fifth tier of cities; NBS of PRC (2020), for counties.

According to Tencent's interim report released during Aug 2021[44], the combined monthly active user accounts (MAU) of Weixin and WeChat were about 1.25 billion[45]. That said, WeChat connected a billion people with chats, calls, payments, and more. A research group from the School of Information at the Renmin University of China, together with WeChat, jointly issued a report studying WeChat's impact on the digital economy's development in rural China[46]. As a part of this research project, a survey shows that WeChat Pay became 83% of the respondents' most preferred payment method at the county level, and this number in towns and villages was 78%, both higher than that of 76% in the cities. This research also reported that the average daily transactions WeChat Pay processed in rural areas (including counties, towns, and villages) had increased 91% within the last two years. Moreover, rural areas' nationwide average expenses paid through WeChat Pay was RMB 2,650. These numbers are, of no doubt, impressive and practically already suggest that China's private sector has empowered its residents in the remote countryside with the most updated financial technology products.

This chapter will introduce the emergence and development of digital payments in China. By tracking the development of WeChat Pay, WeChat, TenPay, and Tencent, we attempt to: elaborate on what stimuli in the market gave birth to these fintech companies; summarize

the innovation entailed in the product designs that enabled them to reach an enormous client base in the rural areas; and last but not least, comb through the evolving policies and regulations towards them over the past few years. We believe relevant parties or policymakers could draw on these valuable experiences to enhance rural account ownership as we share the interactions between China's private and public sectors.

The chapter is structured as follows. First, chapter 3.1 introduces the innovation and development of digital payments – taking WeChat Pay as an example. Then, chapter 3.2 reviews the regulations of digital payments and discusses the role of the Chinese government in promoting the development of financial inclusion. Finally, chapter 3.3 provides statistical information to show the effects of digital account adoption towards financial inclusion, especially among the unbanked and those inactive account owners.

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[43] The Plan is issued by the State Council.

[44] Source: Tencent's Interim Report, 2021, https://static.www.tencent.com/uploads/2021/08/31/7276c2279348d70e0b0f74f6c470f92e.pdf.

[45] WeChat is the version of Weixin designed for overseas users. Hereafter in this report, either expression used is interchangable, both denoting the Weixin Group, WXG, in short.

[46] Source: https://mp.weixin.qq.com/s/OTPlJT-D8e-d31P3yA7RlQ

Chapter 3.1: FinTech and the WeChat Pay

From Stage 2.0 to Stage 3.0 - Owning a Digital Payment Account

The emergence and rapid growth of FinTech companies, a diverse range of products, and policy approaches have characterized the recent evolution of financial inclusion in China. The digital payment industry created a financial inclusion revolution, changing People's daily lives and creating a flourishing e-commerce sector.

Tencent has gone through its 23rd year since its establishment in 1998 (Table 3). Tencent obtained the non-bank third-party license issued by the PBOC in 2011 and started its digital payment business in 2013. In the release of WeChat 5.0, the payment function was introduced. At that time, WeChat Pay was only available for Quick Payment. That said, new customers must link an existing bank card or account to their WeChat wallets and give permissions to WeChat to access the customers' due diligence information for their bank accounts.

Figure 17
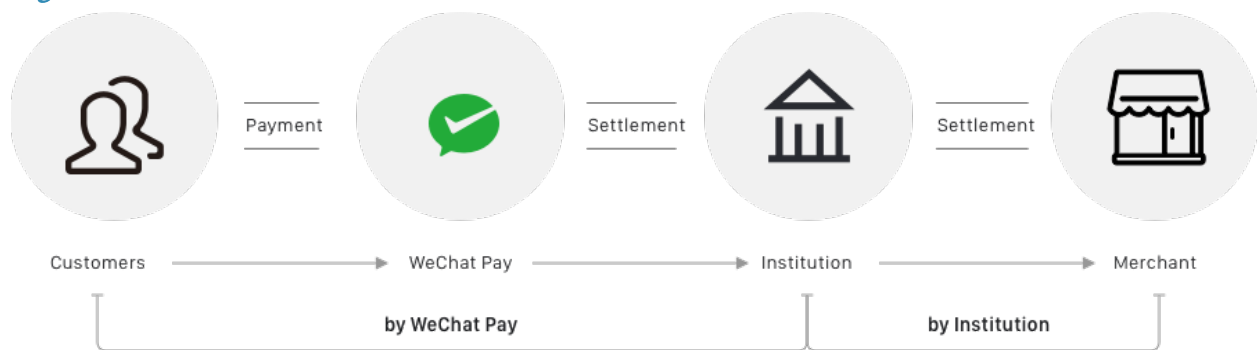
Source: https://pay.weixin.qq.com/index.php/public/wechatpay_en/basics_guide

WeChat's Red Envelope campaign, launched in 2014, was a notable success in using digital payments to send monetary gifts, with more than 8 billion red envelopes sent over the WeChat app during the 2016's Chinese New Year[47]. By then, WeChat Pay opened to merchants and service providers. WeChat has created easy onboarding for individual customers and merchants to enhance uptake. Customers self-enroll through the app by providing a valid mobile phone number, and sellers can start accepting digital payments by sharing their QR codes even before registering as merchants (Figure 17).

Figure 18 illustrates the application process to register as merchants. Each merchant can agree with an agency that partners with WeChat Pay. As a result, the merchant does not have to develop any technological solutions independently. Instead, the agency [48] supports the merchant by providing access to WeChat and manages the funds' settlement between WeChat Pay and the merchant.

To encourage broader uptake and drive transaction volume up, WeChat Pay charges relatively low transaction fees to remove the price barriers. For example, suppose the merchants' monthly transaction volume is lower than a certain threshold; In that case, WeChat Pay refunds the commission. In contrast, if the transaction volume goes above the threshold, the merchant shall pay a fee between 0.6 percent and 1 percent of the transaction values. It turns out that, most of the time, small businesses could use this service virtually for free. At the same time, it also created fee revenues for the intermediary agencies and WeChat Pay from merchants who used the service a lot.

Figure 18 : Application Guidelines for WeChat Pay

| Application Process

01	02	03
Contact an Institution	**Enter into an Agreement**	**Access WeChat Pay**
Contact one of WeChat Pay's local institution partners and ask about their acquiring services.	Enter into an agreement with the institution to become its sub-merchant.	Gain access to WeChat Pay through the institution's technical and operational support.
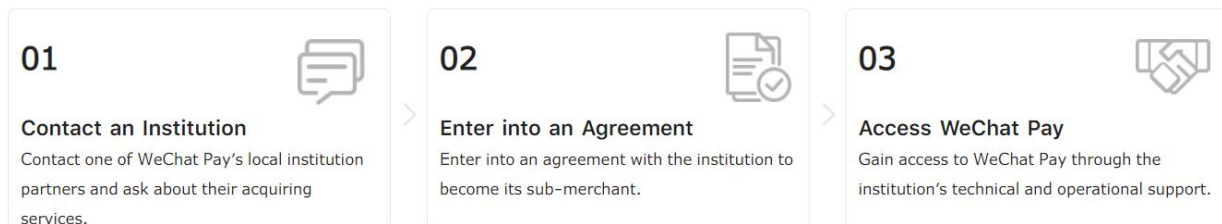
Source: https://pay.weixin.qq.com/index.php/public/wechatpay_en/basics_guide

In June 2014, WeChat version 5.3.1 upgraded WeChat Pay by integrating its Quick Payment and the WeChat Wallet/Balance Payment function. This integration, remarkably, **allowed customers who do not have bank cards or accounts to possess a digital payment account** and access digital payment services.

Before canceling the transaction fees on March 1, 2016, any person-to-person payment with a monthly transaction volume above RMB 20,000 would incur a cost, paying a 0.1 percent fee of the total transaction value. Payment receivers are free of charge. However, customers must pay a 0.1 percent fee when they withdraw the money from their digital wallets for any amount beyond a threshold (RMB 1,000). The design of this fee structure, for sure, generated revenue for Tencent and also aimed to encourage WeChat Pay users to leave their

funds in their WeChat wallet and spend them directly to merchants within the digital payment ecosystem WeChat Pay created and developed.

If we look at the organizational chart of Tencent and the data from its 2021 interim report (Figure 19), most of the revenue generated cane from withdrawal and commercial payment. But, on the other hand, Tencent still keeps relatively low fees charged from merchants and individual users today for two fundamental reasons. First, the company realizes the need to maintain an as-large-as-possible client base within their digital payment ecosystem so that their other digital services could also generate revenue streams. Briefly speaking, the internet traffic accumulated through client acquisition and retention, and hence user referrals to other embedded products were Tencent's primary concern. Second, precision digital marketing of other products within the ecosystem also requires collecting and properly using users' data that heavily relies on the retention of customers. Therefore, given consideration to these needs and recognizing revenue-generating sources, WeChat Pay, overall, priced relatively user-friendly transaction fees. Meanwhile, the transfer function and the Red Envelop solutions are still accessible to all users for free; in other words, most rural users and our target groups of this report have hugely benefited from this free service.

Figure 19: Tencent Organizational Chart for FinTech
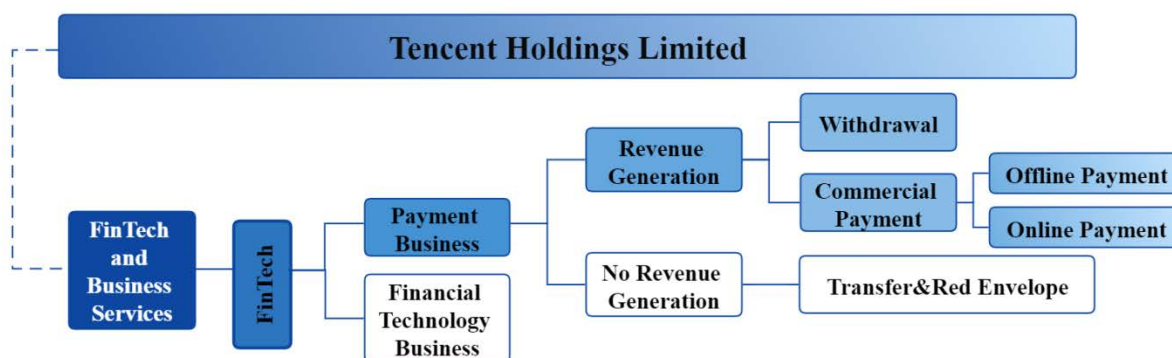
Source: Tencent Holdings Ltd. Interim Report 2021; Topsperity Securities (May 2021). Tencent Holdings(00700.HK): In-de pth Analysis of Tencent Financial Technology. Access at https://www.baogaoting.com/info/40580.

To improve account security, combat money laundering, and the financing of terrorism(AML/CFT), the PBOC issued the Administrative Rules for Network Payment of Non-bank Payment Institutions (the "Administrative Rules") in December 2015. The Administrative Rules, becoming effective from July 2016, established three tiers of non-bank payment accounts provided by non-bank digital payment providers. Specifically, for Type I,

Type II, and Type III personal accounts, transaction volume limits range from RMB 1,000, RMB 100,000, to RMB 200,000. Meanwhile, different types of account types have additional identification/verifications requirements. The requirements for opening different kinds of personal digital accounts differ in the number of external channels needed for identity validations, ranging from 1 or 3 or 5 legal and secure external databases, respectively (Table 2). To sum up, Type III is a fully functional account, which allows consumption purchases, transfers, financial product purchases (e.g., investment or wealth management). However, Type I and II accounts only support consumption purchases and transfers.

From the perspective of our target groups of this report, i.e., rural residents aged 60+ mainly fall into the lowest Type I account category, with a low transaction limit and elementary purchase and transfers function enabled. Especially, Type I has only RMB 1,000 lifetime quota for all transactions, including transfers to one's own bank account. Consequently, the Administrative Rules imposed obstacles and restrictions on the usage of WeChat Pay in rural China.

Table 2: Non-bank Personal Digital Account Features

NON-BANK PERSONAL DIGITAL PAYMENT ACCOUNT			
FEATURES	TYPE I	TYPE II	TYPE III (FULLY FUNCTIONAL)
Transaction volume limit	RMB 1,000 (US$150) (accumulated lifetime limit, including transfers to own bank account)	RMB 100,000 (US$15,000) (accumulated annual limit, not including transfers to own bank account)	RMB 200,000 (US$30,000) (accumulated annual limit, not including transfers to own bank account)
Daily transaction limit	RMB 1,000(US$150) or RMB 5,000(US$750) or other amount stated in the customer agreement, depending on the security level of transaction validation (excluding transfers to own bank account)	RMB 1,000(US$150) or RMB 5,000 (US$750) or other amount stated in the customer agreement, depending on the security level of transaction validation (excluding transfers to own bank account)	RMB 1,000(US$150) or RMB 5,000(US$750) or other amount stated in the customer agreement, depending on the security level of transaction validation (excluding transfers to own bank account)
Identification verification requirements to open	Identity verified remotely via at least one legal and secure external database, and the applicant must be opening a payment account with the provider for the first time	Identity verified in person or remotely via at least three legal and secure external databases, with the aim of multiple validations of identity by payment institution itself or cooperating institutions	Identity verified in person or remotely via at least five legal and secure external databases, with the aim of multiple validations of identity by payment institution itself or cooperating institutions
Functionality	Consumption purchases	Consumption purchases	Consumption purchases,

		transfers, financial product purchases (e.g., investment or wealth management)
and transfers	and transfers	

To mitigate the impact brought by the Administrative Rule, WeChat Pay launched a Family Relatives Card in 2018. It helped family members, mainly the elderly and the children who are, most of the time, lagged behind technology frontiers and afraid of sharing bank cards' information to make digital payments. The user could send a card to a family member by giving authorization on WeChat Pay, setting a monthly limit of transaction payments ranging from RMB 0.01 to RMB 3,000.

Nowadays, multiple payment methods, including Quick Pay, QR Code Payment, Mini Program Payment, Official Account Payment, In-App Payment, and Web-based Payment, are all accessible using WeChat Pay at any time, anywhere[49].

Table 3: Milestone Chart for WeChat Pay

Time	Milestones
1998.11	Tencent founded
2004.06	Tencent listed on the main board of the Hong Kong Stock Exchange (stock code: 0700, HK)
2005	Tenpay Payment Technology Co., Ltd. (hereinafter referred to as "Tenpay") [50] launched by Tencent as a Network Payment platform
2011.01	WeChat launched (registered an account by one's QQ account or mobile phone numbers)
2011.05	Tenpay obtained the first batch of third-party payment licenses issued by PBOC
2013.8	WeChat Pay launched (WeChat 5.0: Quick Payment only –directly deduct and collect funds from one's bank account)
2014.01	WeChat Red Packet launched, nearly 20 million WeChat Packets were exchanged on Chinese New Year's Eve
2014.03	WeChat Pay opened to merchants
2014.06	Balance payment[51] launched (WeChat 5.3.1: WeChat Wallet/digital wallet—Balance payment) One could transfer/spend funds using the balance in the payment account that the company has set up for users.
2015.09	WeChat Pay opened to service providers –a third agency authorized by Tenpay to assist merchants with WeChat Pay access, settlement, marketing campaigns, and the rest of the services that the WeChat ecosystem can offer.
2015.10	Transaction fees charged (the limit is 20000 per person per month, and the handling fee for the excess part is 0.1%, and the payee does not need any handling fee)
2016.03	Transaction fees canceled Withdraw fees charged (withdraw money exceeded the accumulation of RMB 1,000 from digital balance account to bank accounts charged a fee of 0.1%)

2016.07	*Administrative Rules for Network Payment of Non-bank Payment Institutions*[52] released by PBOC, categorized management of individual payment accounts according to the following requirements: - Type I: the balance used for consumption and account transfer only, and the accumulative amount of balance payment transactions shall not exceed RMB 1,000 (US$ 150) as of the date when the account is opened (including transfers to own bank account). - Type II: the balance in the account may only be used for consumption and account transfer. The accumulative amount of balance payment transactions in all payment accounts during a year shall not exceed RMB 100,000 (US$ 15,000) (accumulated annual limit, not including transfers to own bank account). - Type III: the balance in the account may be used for consumption, account transfers, and the procurement of investment and wealth management and other financial products, and the accumulative amount of balance payment transactions in all payment accounts during a year shall not exceed RMB 200,000 (US$ 30,000) (accumulated annual limit, not including transfers to own bank account).
2018.06	WeChat Pay –Relative Cards launched To help family members, mainly seniors who cannot keep up with technology and children or few who have bank cards, make payments. The user could also set a monthly limit to family members given authorization, respectively, ranging from RMB0.01 to RMB3000

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[47] Source : https://qz.com/613384/over-8-billion-red-envelopes-were-sent-over-Weixin-during-chinese-new-year/

[48] WeChat Pay payment service providers are the third-party agencies authorized by WeChat Pay who assist merchants with WeChat Pay access, settlement, marketing campaigns, and the rest of the services that the WeChat ecosystem offers. Access at https://pay.weixin.qq.com/index.php/public/Weixinpay_en/partner_search#/

[49] Source: https://pay.weixin.qq.com/Weixinpay_guide/intro_method.shtml

[50] Source: https://www.lexology.com/store/item/67699548d3ccf3110d822d09090c2545-alternative-payment-solution-tenpay

[51] Source: https://weixin.qq.com/cgi-bin/readtemplate?lang=en_US&check=false&t=weixin_agreement&s=pay

[52] Source: http://lawinfochina.com/display.aspx?id=21209&lib=law.

Chapter 3.2: Policy and Regulatory Environment

From Stage 2.0 to Stage 3.0 - Owning a Digital Payment Account

In the last two decades, the Chinese government implemented policies on tax, monetary, and supervision of the financial service providers to reduce the operational cost of financial institutions, particularly those that are providing financial services to the underserved population. In addition, policies to support innovation in digital finance also emerged, encouraging financial institutions to improve financial infrastructure and leverage technology to extend financial services to the underserved population, reduce inequality and alleviate[53].

A tolerant regulatory environment has offered room for China's digital payment ecosystem to grow and prosper. Before 2010, no explicit regulatory restrictions were imposed on digital payment products and services. The release of PBOC's "Rules for the Administration of Payment Services for Non-Financial Institutions" signified the start of another era concerning regulations towards digital payment in China. Since then, PBOC has issued 271 third-party payment licenses. Tenpay was one of them. To engage in the digital payment business in China, a fintech firm has to get the permit issued by PBOC. Although it now looks that the number of certificates circulating on the market is excessive, the granting of third-party payment licenses is still strictly controlled by PBOC.

In 2013, PBOC released the Rules for the Deposit of Customer Reserves of Payment Institutions. The barbaric growth of fintech firms and tech giants behind them called for a switch of the regulatory approach of the PBOC from "wait-and-see" towards a more active approach. The transition started with "close observation and timely interventions" before 2016. Then, after issuing the Administrative Rules, PBOC began to highlight the need for robust customer protections. Until 2018, a series of regulations were issued to regulate how fintech companies manage their customer's reserves (balance in one's digital payment accounts) in their digital wallets. The institutions have to deposit 20% (in 2017) and 50% (Jan 2018) of customer reserves to designated banks and 100% to PBOC in July 2018. The design of this new rule aims to regulate fund management of the fintech companies, prevent payment risks, and safeguard the rights and interests of customers.

Table 4: List of Supervisory Policies

Time	Policies	Implications
2010.09	**PBOC released "Rules for the Administration of Payment Services for Non-Financial Institutions."**[54] 2011.05 Tenpay obtained the first batch of third-party payment licenses issued by PBOC. Since then, PBOC has issued 271 third-party payment licenses, of which 41 got canceled, and 230 remained valid. Authorized payment services include internet payment, mobile payment, and landline phone payment. 2011.12 China Mobile Ltd., China Telecom Co., and China Unicom Ltd obtained the third batch of third-party payment licenses. Authorized payment services: mobile phone payment, fixed phone payment (not applicable for China Mobile Ltd.), bankcard acquiring.	Non-financial institutions can engage in the payment business if approved by the PBOC
2013-2018	2013.06 **Rules for the Deposit of Customer Reserves of Payment Institutions**[55] Clients' reserves received by a payment institution must be deposited in the special-purpose deposit account for reserves opened by the payment institution at a reserves bank. 2017.04 **Notice of the General Office of the People's Bank of China on Matters concerning Implementing the Centralized Deposit of the Funds of Pending Payments of Clients of Payment Institutions**[56] Beginning on April 17, 2017, a payment institution shall deposit a certain percentage (averaged 20%) of the funds of pending payments of its clients in a particular deposit account with a designated institution, and there is no interest on the funds in such an account for the time being. 2018.01 **Notice of the General Office of the People's Bank of China on Adjusting the Centralized Deposit Percentage of the Funds of Pending Payments of Clients of Payment Institutions**[57] The current centralized deposit percentage shall still be adopted in January 2018. The centralized deposit percentage shall be raised by 10% every month from February to April 2018. An average of 50% of reserves deposited centrally to designated institutions 2018.07 **Notice of the General Office of the People's Bank of China on Matters concerning Complete Centralized Deposit of the Funds of Pending Payments of Clients of Payment Institutions**[58] Strengthening financial supervision and preventing financial risks, in accordance with the deployments of the CPC Central Committee and the State Council for special rectification work of internet financial risks, the PBOC has decided to increase the centralized deposit	Deposit of Customer Reserves

	percentage to 100% to PBOC.	
2016.04	**Notice of the General Office of the State Council on Issuing the Implementation Plan for Special Rectification on Risks in Internet Finance**[59] Strictly implement the requirements for third-party depository of clients' funds By adopting the "penetrating" supervision method, products shall not be sold to clients with unmatched risk tolerance.	Risk management
2016.07	Administrative Rules for Network Payment of Non-bank Payment Institutions[60] These rules contained various online payments and consumer protection provisions, including data protection and data security, disclosure and transparency in service agreements, and dispute resolution mechanisms. it shall conduct real-name system management of clients, register and take adequate measures to validate clients' basic identity information	Real-name verification
2017.02	NetsUnion Clearing Corporation (NUCC), also called Wanglian, is an online settlement platform for non-bank institutions, established with the approval of the PBOC.	
2021	**PBOC: "Regulations on Non-bank Payment Institutions(Draft for comments)"** [61] Enhance the supervision and regulatory provisions to the legal level.	Non-bank payment institutions

[53] Source : CGTN, http://global.chinadaily.com.cn/a/202101/29/WS6013599ca31024ad0baa5e31.html.
[54] Source : http://www.lawinfochina.com/Display.aspx?lib=law&Cgid=134238
[55] Source : http://www.lawinfochina.com/display.aspx?id=14458&lib=law
[56] Source : http://www.lawinfochina.com/display.aspx?id=23109&lib=law
[57] Source : http://www.lawinfochina.com/display.aspx?id=27180&lib=law
[58] Source : http://www.lawinfochina.com/display.aspx?id=28536&lib=law
[59] Source : http://www.lawinfochina.com/display.aspx?id=23108&lib=law
[60] Source : http://www.lawinfochina.com/display.aspx?id=21209&lib=law
[61] China to toughen supervision of non-bank payment institutions - Chinadaily.com.cn
People's Bank of China, Regulations on Non-bank Payment Institutions (Draft for Comments) | China Law and Practice

Chapter 3.3: Conclusions and The Way Forward

From Stage 2.0 to Stage 3.0 - Owning a Digital Payment Account

The financial sector reforms have simulated financial inclusion in China. Today, China has developed a robust financial infrastructure with agent networks considered one of the world's largest. As a result of this development and with the help of digital financial inclusion, China's formal financial sector can extend financial services to the underserved and unbanked population, specifically those in the rural areas. China's growth in financial inclusion has been preceded by reforms in rural credit cooperatives and policy banks, the scaling of FinTech companies, and other digital finance providers to make financial services accessible.

During unexpected occurrences such as an outbreak of a pandemic, floods or drought, loss of a breadwinner, and unemployment, owning an account at a financial institution serves as an indispensable tool in surviving economic downturns; this prevents low-income households from falling back into poverty status.

The reliance on digital finance will support the social distancing measures adopted to curb the spread of the coronavirus. In addition, to alleviate poverty through financial inclusion in the long-term, countries in Asia and Africa could draw lessons from China's financial inclusion models by partnering with Chinese digital financial service providers and other relevant Chinese organizations[62].

The Chinese experience illustrates how quickly digital payments can scale up if providers and policymakers get it right. China shifts from an almost entirely cash-based retail economy in one decade. Indeed, suppose other developing countries are interested in emulating the success. In that case, a series of contextual factors should be enabled, including a high level of traditional bank account ownership built through the distribution of G2P payments, increased smartphone penetration rate and affordable data access, etc. The actual pathway varies country by country, depending on the circumstances.

Yet, the digital payments revolution is far from complete in China. China still faces many challenges to achieve sustainable and long-term financial inclusion. Further improvements to financial infrastructure are also required to keep pace with industry developments and enable the expansion of digital finance to underserved areas of the country. Advancing the

scope and depth of the engagement of rural China in the digital transformation is a crucial forthcoming agenda.

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[62] http://global.chinadaily.com.cn/a/202101/29/WS6013599ca31024ad0baa5e31.html

Chapter 4: Global Cases

A Comparative Study

Chapter 4 summarizes China's financial inclusion experiences over the past seventy years. The chapter is not meant to be comprehensive but instead focuses on key developments, particularly those of relevance or interest to other countries. It is a comparative study and a showcase summary for policymakers to learn globally relevant lessons and implications.

China is not alone in prioritizing and pursuing financial inclusion. Globally, significant progress has been made in broadening the scope and ambition of financial inclusion. Many countries have achieved remarkable results and produced financial inclusion "success stories"—best practices and models.

The groundbreaking uptake of mobile money in Kenya, and the spread of mobile money in other countries in South Africa—Ghana, Ethiopia, Zimbabwe, provide the rest of the world with the development pathway. Also, countries like Myanmar, Bangladesh, Nepal, Philippines are examples of pioneering approaches that reflect the particular historical, cultural, political, and financial contexts of those countries.

Yet these diverse approaches all seek to address common structural challenges: high transaction costs of serving customers with small and irregular incomes or reaching consumers in rural and remote areas via traditional methods; informational asymmetries that prevent reliable and efficient assessments of creditworthiness; and limited competition and innovation within the market, to name just a few. These are challenges that all countries must address to increase financial inclusion successfully.

The hope is that the report will assist countries in developing and refining their pathways toward sustainable and long-term financial inclusion.

Country 1: Kenya

Payment name: M-PESA

Date of establishment: March 2007

Operator: Vodacom and Safaricom

GDP: 2020: 98.84 billion[63]

Per capita income: 2020: 4,370 PPP dollars[64]

Literacy rate: 2018: 81.535%[65]

Brief overview: The service allows users to deposit money into an account stored on their cell phones, to send balances using PIN-secured SMS text messages to other users, including sellers of goods and services, and to redeem deposits for regular money.

Registration requirements[66]:

(1) For Safaricom Simcard

- Must carry the valid ID: National Identification Card or Passport or Alien ID or Driving License.

(2) For M-PESA

- Must carry the valid ID: Kenyan National ID or Passport or Military ID or Alien ID

Operation process:

1.   Deposit money

- Go to an authorized M-PESA agent with the phone and the original ID

- Inform the agent how much to deposit

- The agent will use their agent phone to send the customer e-money in exchange for cash

2.   Send Money

- Go to the 'Safaricom' menu and select 'M-PESA.'

- Select 'Send Money

- Enter the recipient's phone number, the sending amount, and the PIN

- The [remitter](#) and the recipient will receive an SMS confirming the transaction

3.   Withdraw Money

(1) For Registered M-PESA Customers

- Confirm the M-PESA agent has sufficient funds

- Give the phone number and show the original ID

- Go to your M-PESA menu, select 'Withdraw cash.'

- Enter the Agent number, the withdrawing amount, and the PIN

- Confirm the details are correct and press OK

- The customer and the agent will receive an SMS confirming the transaction

- Receive and confirm the cash and proceed to sign the logbook

(2) For Non-Registered Customers

- Confirm the agent has sufficient funds

- Present the SMS containing the M-PESA voucher number (notification confirming receipt of cash)

- Give the phone number and show the original ID

- The customer and the agent will receive an SMS confirming the transaction

- Receive and confirm the cash and proceed to sign the logbook

- The customer and the agent will receive an SMS from M-PESA confirming the transaction

- The customer can top up the M-PESA account from the bank account

Agent requirements[67]:

- Pay for the amount charged by the Safaricom M-PESA Dealer to acquire the Sub-agent Aggregated Till Line

- You are required to maintain a minimum float of Ksh 30,000 (about USD 270) for the M-Pesa Till line

- You will be required to provide your details such as your full names, national ID, and contact information

- A certificate of good conduct and the ID of the operator should be provided

- The details of the business, including the name, should be provided

Charge standard[68]:

- All deposits, registration, buying airtime, balance inquiry, and change PIN are free.

- Transfer service is free when the transaction amount is between Ksh 1 to 100; when the withdrawal amount is over 50, it requires Ksh 10.

- When the amount is above Ksh 100, and below 150000, both the transfer and the withdrawal service will be charged.

- Transfer to M-PESA users and other registered mobile money users share the same cost; transfer to unregistered users and withdraw from agent is higher than the former services.

e.g., When the transaction amount is between Ksh 101 to 500, transfer to M-PESA users and other registered mobile money users costs Ksh 6; transfer to unregistered users costs Ksh 45; withdrawal from agent costs Ksh 27.

- The maximum daily transaction amount and the holding amount in M-PESA are Ksh 300000 (about USD 2700).

- The withdrawal amount of the transaction range on ATM is from Ksh 200 to Ksh 20000, and the fees are from Ksh 34 to Ksh 197.

Usage scenarios: M-Pesa allows users to deposit, withdraw, transfer Money, pay for goods and services, access credit and savings, all with a mobile device.

Back-end technical support: M-PESA is an STK menu. It is an application embedded into the SIM of the network operator's simcard and linked to a server to allow you to to interact with features based on commands initiated by the user.

Market shares:

- In 2015, the amount of commercial banks was 1221, the amount of bank agents was 7052, and the mobile money agent was 48524[69].

- In 2019, M-Pesa is the leader with 30m active subscriptions, followed by Airtel Money with 4m and Equitel Money with almost 2m. Mobile commerce transactions in Kenya Shillings from April to June 2019 were M-Pesa 1,569bn, Equitel Money 378bn, and Airtel Money 2bn[70].

Appendix

Table 1: M-PESA charge standard classification

M-PESA TARIFF EFFECTIVE 1ST JANUARY 2021

TRANSACTION RANGE (KSHS)		TRANSACTION TYPE AND CUSTOMER CHARGES (KSHS)			
MIN	MAX	TRANSFER TO M-PESA USERS, POCHI LA BIASHARA AND BUSINESS TILL TO CUSTOMER	TRANSFER TO OTHER REGISTERED MOBILE MONEY USERS	TRANSFER TO UNREGISTERED USERS	WITHDRAWAL FROM M-PESA AGENT
1	49	Free	Free	N/A	N/A
50	100	Free	Free	N/A	10
101	500	6	6	45	27
501	1,000	12	12	49	28
1,001	1,500	22	22	59	28
1,501	2,500	32	32	74	28
2,501	3,500	51	51	112	50
3,501	5,000	55	55	135	67
5,001	7,500	75	75	166	84
7,501	10,000	87	87	205	112
10,001	15,000	97	97	265	162
15,001	20,000	102	102	288	180
20,001	35,000	105	105	309	191
35,001	50,000	105	105	N/A	270
50,001	150,000	105	105	N/A	300

MAXIMUM AMOUNT CUSTOMER CAN TRANSACT DAILY	MAXIMUM AMOUNT CUSTOMER CAN HOLD IN M-PESA
300,000	300,000

ATM WITHDRAWAL

TRANSACTION RANGE (KSHS)		CUSTOMER CHARGE (KSHS)
MIN	MAX	
200	2,500	34
2,501	5,000	67
5,001	10,000	112
10,001	20,000	197

OTHER TRANSACTIONS	KSHS
ALL DEPOSITS	FREE
M-PESA REGISTRATION	FREE
BUYING AIRTIME THROUGH M-PESA	FREE
M-PESA BALANCE ENQUIRY	FREE
CHANGE M-PESA PIN	FREE

- Download mySafaricom App and transact on M-PESA
- Dial *334# to access all M-PESA services

As part of our Customer Obsession strategy, we maintain our commitment to continue to introduce new measures and innovations that meet the needs of our customers.

Safaricom | BEYOND 20 YEARS

Figure1: Financial access in Kenya

FIGURE 3

FINANCIAL ACCESS IN KENYA[10]
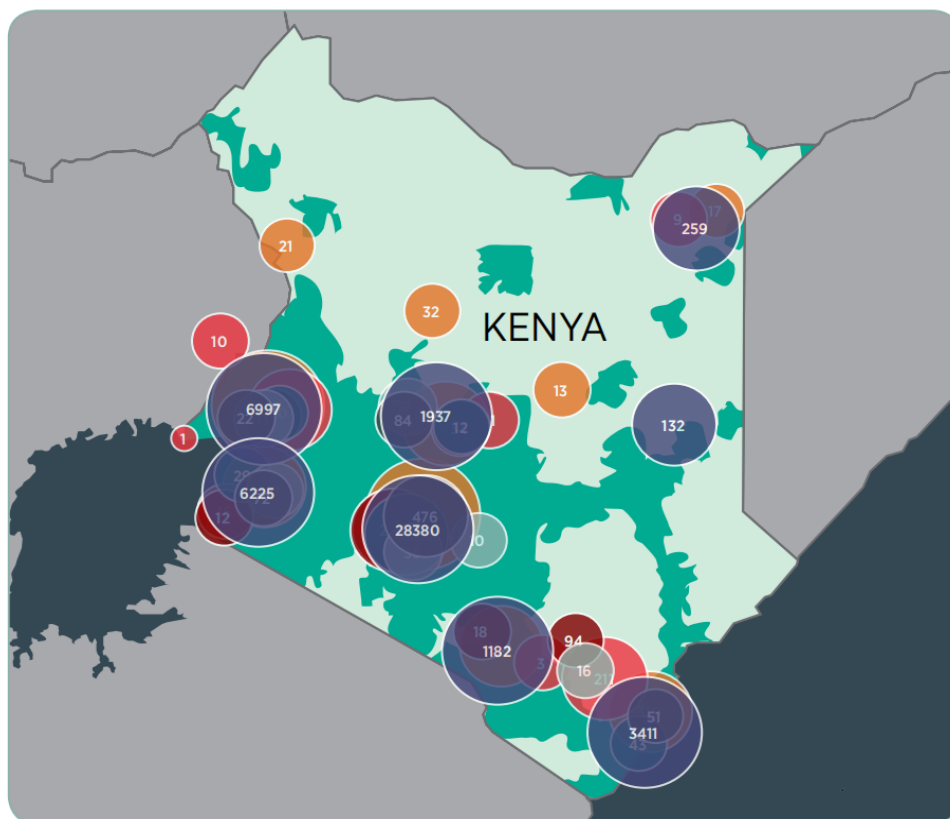
FINANCIAL SERVICE LOCATIONS

▮ BANK AGENT (7,052)	▮ MOBILE MONEY AGENT[11] (48,524)	▮ SACCOS (706)
▮ COMMERCIAL BANK (1,221)	▮ OFFSITE ATMS (503)	▮ MOBILE COVERAGE
▮ MFIS (500)	▮ POSTBANK (93)	

- **Country 2**: Bangladesh

- **Payment name:** bKash

- **Classification by income**: Lower-middle income economy (categorized by World Bank[71])

- **GDP**: 324b$ (2020)[72] China: 14.7t$

- **GDP per capita:** 1968$ China: 10500$

- **Literacy rate**: 74.9% (2020)[73]

- **Background**: Bangladesh Similar to countries in the developing world, many Bangladeshis earn a living in urban areas, whereas their family living in rural areas are supported by them. According to bKash[74], less than 15% of Bangladeshis are connected to the formal banking system, whereas over 68% of Bangladeshis have access to mobile phones. Thus, the fundamental insights driving digital finance development, especially mobile financial services in Bangladesh, are the desiring growing working class with limited access to finance. Since the introduction of mobile Money and Mobile Financial Service Guidelines in Bangladesh, mobile financial services have rapidly exploded, of which bKash has become one of the top leading MFS in Bangladesh.

- **Year launched:** 2011

- **Operator**: bKash is a joint venture of Bangladesh-based commercial bank BRAC Bank, U.S.-based Money in Motion, the International Finance Corporation (IFC) of the World Bank Group, the Bill & Melinda Gates Foundation, and China-based Ant Financial Services Group (Alipay), an affiliate of the Alibaba Group[75].

Shareholders' stakes: BRAC 31%, Ant Financial 20%, Money in Motion + IFC + he Bill & Melinda Gates Foundation 49%[76]

- **Overview**: bKash is a Bank-led Mobile Financial Service Provider in Bangladesh that virtually store Money and can be accessed through either smartphone or basic phone by either inputting bKash number or scanning QR code.

- **Registration requirements**: bKash's official website states that bKash users have to be Bangladesh nationals aged 18 or above, while a valid Photo national ID/Passport/Driving License is required. People who wish to open a bKash account has also need to be

current Robi, Grameenphone, Banglalink, Teletalk, and Airtel sim card subscribers. Notably, there is no need to have a bank account to verify or use a bKash account[77].

● **Operation process**: To access bKash's numerous and convenient functions, including adding Money, transferring Money, paying bill, cash in&out, sending Money, mobile charge, remittance, saving interests, donation, government services, a mobile phone is required. bKash's user interface can be accessed through any basic phone or smartphone app.

For basic phone: Dial *247# then you may follow the given instructions from bKash's user interface

For smartphone:

Send Money: To send Money to any bKash number, just tap the 'Send money' option and type the number or select it from contact with your phone.

Cash-out or payment: You can use the 'Cash Out' and 'Make Payment' option in case of cash out or payment. Just tap it, and a payment/cash out window will open. Here, you can either put the agent's/Merchant's number or just scan the QR code you find at the agent's or merchant's area. You can also save different agent or merchant numbers to save time in the future. Just click the saved number and cash out or pay.

Request money: Tap the option 'Request Money' on your interface, type the number or select it from your contact and then put the amount and send it.

Agent: Currently, bKash is running a network of more than 200,000 agents throughout urban and rural areas of Bangladesh, almost one in every two villages in rural Bangladesh[78]. If you have sufficient balance in your bKash Account, you can withdraw cash anytime from any bKash Agent

01. Go to any bKash Agent

02. Let the Agent know the amount you want to Cash Out (5,000 or higher requires to mention National ID Card number)

03. Write down the bKash Account Number and the amount in the Agent Register

04. Dial *247# on your mobile for the bKash Mobile Menu

05. Choose "Cash Out"

06. Choose "From Agent."

07. Enter Agent's bKash Account Number (ask the Agent)

08. Enter the amount

09. Enter your bKash Mobile Menu PIN

ATM: you may request ATM cash out from the app or used to receive SMS OPT

- **Charge standard:**

Opening an account: free

Cash in: free

Bank to bKash: free

Card to bKash: charge may impose by bank

Send money (both USSD&App):

no priyo number: free under 100tk/month, 5tk for 100.01-25000tk/month,10tk for over 25000tk/month

to priyo number: free under 25000tk/month,5tk for 25000.01-50000tk/month,10tk for over 50000tk/month

Cash-out from agent: limit up to 25000tk/month. charge 14.9tk/1000tk

Cash out from ATM: 3000-25000tk/cash out charge 14.9tk/1000tk

Merchant payment: free

Receive international remittance: free

Transfer money (bKash to banks): varies from 10tk/1000tk to 20tk/1000tk

Credit card bill: 10tk/1000tk

(Source: bkash website[79])

- **Market share:** there are currently 13 MFS providers[80] issued by the Bangladesh bank, which bkash is in the top position of MFS service with the gaining of 80% market share. In 2018, it is operated with over 30 million registered accounts[81].

Appendix[82]:

Volume of Different Modes of Digital Transactions in Bangladesh (in Crore BDT)

	August'19	August'20
Card Transactions	16,446	14,961
MFS Transactions	35,512	41,404
Internet Banking	4,646	6,800

MFS Users in Urban and Rural Areas in Bangladesh (in Millions)

	Urban Areas	Rural Areas
August'19	27.2	46.4
August'20	35.3	58.6
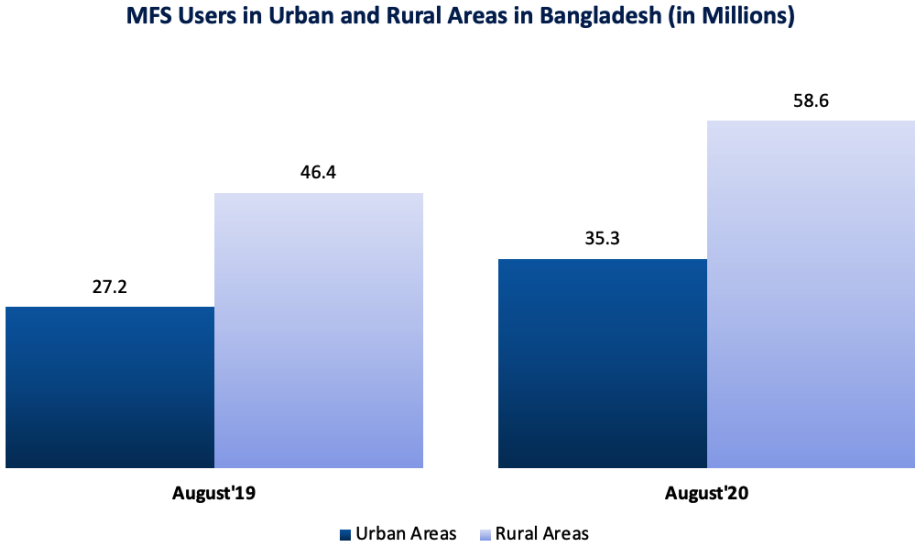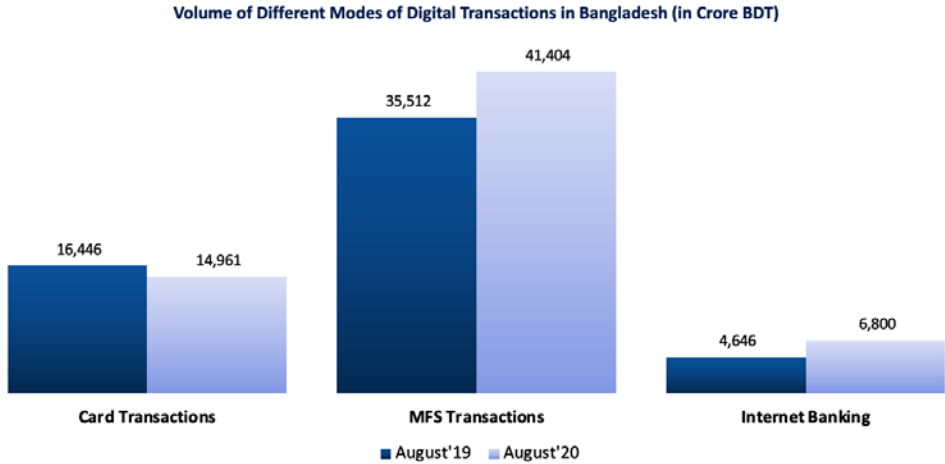
- **Country 3**: Myanmar

- **Digital Payment Method**: Onepay

- **Classification by income**: Lower-middle income economy (categorized by World Bank[83])

- **GDP**: 76.9b$ (2020)[84] China: 14.7t$

- **GDP per capita:** 1400$ China: 10500$

- **Literacy rate**: 89% (2020)[85]

- **Population**: 54.4million[86]

- **Background:** There were 68.24 million mobile connections in Myanmar in January 2020,[87] of which the smartphone penetration rate has reached 83 percent in urban areas and 75 percent in rural areas in 2016[88]. The rapid boom in smartphone proliferation has led the way of development in the digital economy. After releasing Legal Aspects of Payment and Settlement Systems in Myanmar, Wave Money received Myanmar's first mobile financial services registration certificate issued in October 2016[89], which also requires a smartphone to use.

- **Year launched:** May 2020

- **Operator**: Onepay Company Ltd, supported by Asia Green Development Bank (AGD) as banking partner and strong foundational pillars of secure and robust services[90]

- **Overview:** by combining financial and lifestyle activities, Onepay is a QR-based smartphone app designed to connect users and businesses to enable mobile financial transactions across one unified platform.

- **Registration requirements:** Anyone who can access a smartphone and a valid Myanmar mobile number (MPT, Telenor, Ooredoo, Mytel, MECTEL) and internet connectivity can use Onepay. Bank account and personal identity are not compulsorily required.[91] Registration may be accessed via the mobile phone numbers, AGD bank branches, or Onepay agents.

- **Functions:**

Mobile top-up

Utility bills

Book and pay for travel

Purchase redeemable digital codes to top up (e.g., iTunes)

Purchase goods

Astrology services

Order food delivery

Charity donation

Get exclusive promo code

Money transfer

QR payment person to merchant

- **Operation processes:**

1.* high-KYC (know your customer) verification:

Go to 'My Accounts'

Upload pictures of your national registration card and signature.

Provide your date of birth, residence address, and email address. Then, press 'Save'.

You will receive a notification once your account has been verified.

2. add Money

(1) Use debit or credit cards,

(2) Cash-in at TrueMoney agents,

(3) Cash-in at 123 agents,

(4) Cash-in at Onepay agents, and

(5) Link AGD Bank account and transfer funds to Onepay.

3. withdraw Money

Money can be transferred to ADG bank via the app, or withdrawn/cashed out from agents

4. payment with merchants

Scan the QR Code presented by the merchant, or on display at the store.

Enter the amount to pay.

Confirm your payment by entering a passcode.

5. transfer Money

Money can be transferred from your Onepay account to different bank accounts directly through the app located in the 'transfer icon'. The receiver's account details can be saved in the app. Currently, 16 local banks support this function, including A Bank, AGD Bank, AYA Bank, CB Bank, CHID Bank, GTB Bank, KBZ Bank, MAB Bank, MCB Bank, MOB Bank, MTB Bank, MWD Bank, SHWE Bank, SME Bank, UAB Bank, and Yoma Bank.

1. Tap transfer and select the bank

2. Select the town of receiver's bank account

3. Enter recipient (beneficiary) details as required

4. Enter transfer amount

5. Enter an optional note for the recipient

6. Press' Transfer' to send funds to recipient's bank account

- **Charge standard:** Free to use the app.

Daily limits: low-KYC accounts (unverified) have a daily maximum transaction limit of 400,000 Kyats (222us$). High-KYC (verified) users have a daily maximum transaction limit of 10,000,000 (5552us$) Kyats.

Cash out from agent: Customers need to pay 1.25% with the maximum fees of 3,000Ks for cash out through the Agents.

Interbank: Interbank transfer fees cost 0 fees for Onepay to AGD Bank accounts and 2,500Ks to other banks. The transfer fees will be charged per transaction. The current transfer limit is 300,000Ks (166.6us$) per day and can only be made if you are a Onepay verified user.

- **Market share:** There are currently 6140 registered agents and scan&pay merchants.

Appendix

1. Limits and transaction charges

DAILY EWALLET BALANCE LIMITS

ADD MONEY FEATURE	NON-VERIFIED USERS	VERIFIED USERS
ONEPAY AGENTS	UP TO 400,000 Ks	UP TO 20,000,000 Ks
TRUEMONEY AGENTS	UP TO 400,000 Ks	UP TO 20,000,000 Ks
AGDBANK ACCOUNTS	UP TO 400,000 Ks	UP TO 20,000,000 Ks
DEBIT / CREDIT CARDS	UP TO 400,000 Ks	UP TO 20,000,000 Ks
123 AGENTS	UP TO 400,000 Ks	UP TO 20,000,000 Ks

TRANSFER FEATURE	NON-VERIFIED USERS	VERIFIED USERS
ONEPAY USER TO USER	UP TO 400,000 Ks	UP TO 10,000,000 Ks
INTERBANK TO AGDBANK	UNAVAILABLE	UP TO 10,000,000 Ks
INTERBANK TO OTHER BANKS	UNAVAILABLE	UP TO 200,000 Ks

WITHDRAW FEATURE	NON-VERIFIED USERS	VERIFIED USERS
TO OWN AGD ACCOUNT	UP TO 400,000 Ks	UP TO 10,000,000 Ks
TO OTHER AGD ACCOUNTS	UNAVAILABLE	UP TO 10,000,000 Ks
TO OTHER BANK ACCOUNTS	UNAVAILABLE	UP TO 200,000 Ks

CASH OUT FEATURE	NON-VERIFIED USERS	VERIFIED USERS
ONEPAY AGENTS	UP TO 400,000 Ks	UP TO 10,000,000 Ks

FEES PER TRANSACTION

ADD MONEY FEATURE	NON-VERIFIED USERS	VERIFIED USERS
ONEPAY AGENTS	FREE	FREE
TRUEMONEY AGENTS	FREE	FREE
AGDBANK ACCOUNTS	FREE	FREE
MPU DEBIT CARDS	0.8%	0.8%
VISA/MASTERCARD CREDIT CARDS	3.80%	3.80%
123 AGENTS	0 + (VARIABLE FEE TO AGENT)	0 + (VARIABLE FEE TO AGENT)

TRANSFER FEATURE	NON-VERIFIED USERS	VERIFIED USERS
ONEPAY USER TO USER	FREE	FREE
INTERBANK TO AGDBANK	UNAVAILABLE	FREE
INTERBANK TO OTHER BANKS	UNAVAILABLE	3,999 Ks

WITHDRAW FEATURE	NON-VERIFIED USERS	VERIFIED USERS
TO OWN AGDBANK ACCOUNT	FREE	FREE
TO OTHER AGD ACCOUNTS	UNAVAILABLE	FREE
TO OTHER BANK ACCOUNTS	UNAVAILABLE	3,999 Ks

CASH OUT FEATURE	NON-VERIFIED USERS	VERIFIED USERS
ONEPAY AGENTS	1.25% (MAX 3,000 Ks)	1.25% (MAX 3,000 Ks)

2. Mobile phones, internet, and gender in Myanmar[92]

Smartphone penetration in Myanmar from 2015 to 2016,
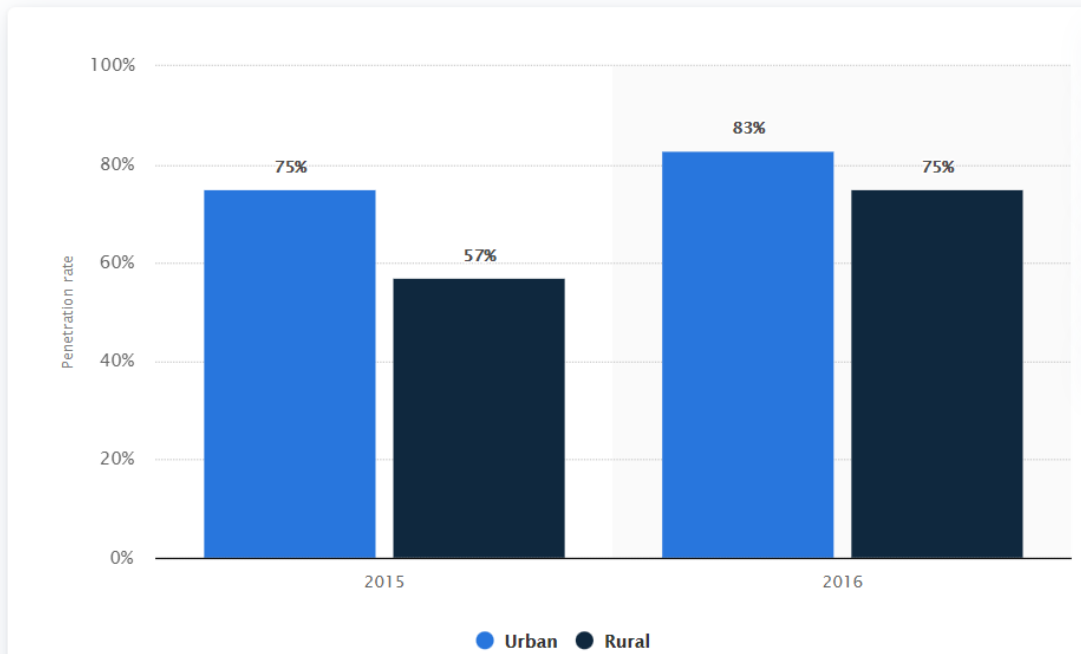
Table 4

Type of mobile handset owned (% of mobile owners)

	Male mobile owners (%)	Female mobile owners (%)
OWN A 'TOUCHPHONE' (SMARTPHONE)	65%	64%
OWN A 'KEYPAD' PHONE (BASIC/FEATURE PHONE)	37%	37%

Country 4: Ethiopia

Payment name: Telebirr

Date of establishment: May 2021

Operator: Huawei and Ethio telecom

GDP: 2020:107.6 billion USD

Per capita income: 2020: 2,410 PPP dollars

Literacy rate: 2017:51.77%

Population: 2020: 115 million

Background: Ethiopia has embarked on a national digital transformation, and the National Digital Payments Strategy (NDPS) for 2021-2024 is a central component of that transformation.

Brief overview: Ethiopia Telecom's Telebirr service enables people to deposit, receive, transfer and pay using mobile phone numbers, make cashless transactions and receive international money transfers, and pay for goods at convenience stores via QR codes.

Applicable tools: both the basic and the smartphone

Registration requirements[93]:

(1) For Ethio telecom

- Carry the valid ID: valid kebele ID, driving license, passport, etc.

(2) For Telebirr

- Carry the valid ID: valid kebele ID, passport, valid taxpayers ID, valid drivers license, Student ID, Employment ID.

Operation process:

1. deposit money

(1) Without bank account

- Visit nearby Telebirr agents or Ethio telecom shops

- Provide cash to the agent or Ethio telecom sales representative

- The agent receives cash and transfers equivalent e-money to your Telebirr account

- You will receive Telebirr transaction notification

(2) With a bank account[94]

- Open the bank account app or USSD[95]

- Choose transfer to Telebirr

- Enter mobile number and amount

- Confirm using the bank PIN

2. Send Money

- Dial *127# Or login to Telebirr mobile app

- Select 'Send Money' from the menu

- Enter/Select recipient's phone number

- Enter the amount you want to send

- Enter PIN

- Confirm the amount you want to send and to whom by pressing OK/Send Money.

- You will get a confirmation message instantly for the transaction.

3. Withdraw Money

(3) For Registered Telebirr Customers

Visit nearby agent or Ethio telecom shop

➢ Dial *127# Or login to telebirr mobile app

- Select 'Withdraw Cash' from the menu, then withdraw cash by using the below options:

- Withdraw cash using Agent ID

- Enter agent ID from which cash is to be collected

- Enter the amount of money to be drawn

- Enter PIN

- Confirm the amount to be withdrawn and receive your Money

➢ By Voucher

● Select 'Withdraw cash by voucher' from the menu

● Generate voucher code

● Provide the voucher and amount required to the agent

● Confirm transaction

● Receive the Money from the agent

➢ By QR code

● Select Scan QR from

● Enter the amount of money to be drawn

● Enter PIN

● Confirm the amount to be withdrawn

● Receive the Money from the agent

(4) For Non-Registered Telebirr Customers

● Show voucher code you received via SMS and proof of identity to the agent

● Then agent checks the voucher and provides the cash

Agent requirements:

● Tax identification number

● Trade or business license

● Bank account

● Email address

- Phone number

- Kebele ID card

- **Charge standard:**

- All deposits, registration, change phone number, airtime purchase, balance inquiry and change PIN are free.

- Both transfer and withdrawal services are free when the transaction amount is between Br. 1 to 50 (about USD 0.021 to 1.05).

- When the amount is above Br.51, and below 8000, both the transfer and the withdrawal service will be charged.

- The cost of transferring Money to unregistered customers is almost twice that of transferring Money to registered customers.

- Customers are allowed to make a maximum of two free transactions per day per recipient OR per agent (for amount lower than or equal to Birr 50).

Market shares:

- In September 2021, telebirr now has over 9.5 million users and is still growing, with Br. 938 million ($20m) transacted through the service.

Appendix

Table 1: Telebirr charge standard classification[96]

Paid services (Deposit and Withdrawal Ranges and tariff)

Min. tansaction (Br.)	Max. transaction amount (Br.)	Person to Person Transfer (Registered Initiator)	Over-the-counter (OTC) Transfer (Unregistered initiator)	Withdraw (Br.)
1	50*	Free	Free	Free
51	100	1	2	2
101	300	2	4	4
301	500	4	7	6
501	1000	5	10	8
1001	3000	7	14	10
3001	5000	9	18	12
5001	8000	12	22	15

Cash deposit fee is **FREE** for any transaction amount.

Active mobile money accounts over 1m

	Active accounts	% of Population		Active accounts	% of Population
KENYA		50,000,000	**ZIMBABWE**		17,000,000
Mpesa	24,000,000	48%	Ecocash	7,200,997	42%
Airtel Money	2,482,759	5%			
Equitel	2,234,483	4%	**UGANDA**		43,000,000
			MTN Mobile Money	6,300,410	15%
TANZANIA		57,000,000	Airtel Money	3,624,827	8%
Mpesa	8,967,720	16%			
Airtel Money	5,124,410	9%	**RWANDA**		12,000,000
Tigo Pesa	6,619,030	12%	MTN Mobile Money	4,100,000	34%
			Tigo Cash	3,240,000	27%
ZAMBIA		17,000,000	Airtel Money	1,600,000	13%
MTN Mobile Money	1,300,000	8%			
Airtel Money	3,158,620	19%	**MOZAMBIQUE**		30,000,000
			Mpesa	1,830,000	6%
GHANA		29,000,000			
MTN Mobile Money	7,400,000	26%	**NIGERIA**		190,000,000
Airtel Money	4,800,000	17%	Nigeria Banks (via NIBSS)	49,800,000	26%

AFRICAN PAYMENT SOLUTIONS
RCM PAYMENT SOLUTIONS
EUROPE PAYMENT SOLUTIONS

www.africanpaymentsolutions.com

Country 5: Ghana

Payment name: MTN Mobile Money (MoMo)

Date of establishment: January 2020

Operator: MTN Group

GDP: 2020:72.35 billion USD[97]

Per capita income: 2020: 5,470 PPP dollars[98]

Literacy rate: 2018: 79.04%[99]

Population: 2020: 31.07 million[100]

Background: After the government of Ghana discovered that mobile wallets in Kenya in 2007 could help ordinary people access inclusive finance, in 2008, under the guidance of the World Bank, it revised financial regulations to allow non-bank branches to operate financial services and promote mobile wallets and inclusive finance development.

Brief overview: The MTN Mobile Money (MoMo) service lets people store, send and receive Money using their mobile phones without a bank account or fancy smartphone.

Applicable tools: both smartphone and basic phone

Registration requirements:

(2) For MTN Simcard[101]

- ID (or ID card, temporary ID, or passport) and proof of residence (e.g., levy statement or electricity bill)

(3) For MTN Mobile Money[102]

- Carry a valid ID: National ID card, driving license, passport

Operation process[103]:

1. Payment

- Dial *170#

- Enter option 2 for MoMoPay &Pay Bill

- Choose 1 for MoMoPay

- Now, you will need to know the merchant's ID. The merchant should provide his ID upon request.

- Enter the Merchant ID.

- Enter the amount to be paid.

- Enter your reference

- The full name of the merchant will be displayed for confirmation before payment.

- After confirming the merchant's name, enter your Mobile Money PIN.

- You and the merchant will receive a notification for successful payment after this.

2. Send Money

- Check the recipient has set up their MTN Mobile Money account and make sure you have their Mobile Money number

- Choose 'Mobile Money Transfer' from our service options

- Select 'MTN Mobile Money' as the payout-network

- Select the currency and the amount you want to send. You will see the fees and exchange rate upfront

- You and the recipient will receive an SMS notification once the transfer is complete

3. Withdraw Money from ATM

- Dial *170#

- Enter 5 for Financial Services

- Enter 1 for Bank Service

- Select 3 for ATM Cash Out

- Select 1 to Generate Token

- Enter Four-digit Secret Code

- Enter Amount

- Enter MTN Mobile Money PIN

- You will receive notification for a successful transaction

Agent requirements[104]:

- Dial *5051#. (With the Business Owner's MTN subscriber line)

- Select Register and send.

- Select the region in which you intend to operate and send.

- You will receive a reference number via SMS.

- Write the reference number received on the MoMo registration forms.

- MTN Mobile Money Agent will call and also visit your location for inspection.

- Must complete and submit the following forms for processing;

-Registration Form

-Agent/Merchant Form

-Agent Account handler

-Authentication Questions

Charge standard[105]:

Transaction Point	Services	Transaction Limit (GHS) Minimum (GHS)	Maximum (GHS)	Charges (GHS)
At Merchants	MoMoPay	1	1000	0.2% of the amount
		Above 1,000	N/A	GHS 2 flat fee
	Money Transfer (C2C)	1	50	GHS 2.5
		Money Transfer (C2C)	1000	5%
At Agents	Cash In	1	N/A	Free
	*Cash Out	1	50	GHS 0.5
		More than 50	N/A	1%
		More than 1000	N/A	GHS10
	Money Transfer (P2P)	1	50	GHS 0.5
		More than 50	50	1%
		More than 1000	N/A	GHS10
* On Your Mobile	Money Transfer (A2C)	1		GHS 1.5
		More than 50	1000	3%
	Airtime Top-up	1	100	Free
	PostPaid	N/A	N/A	Free
	GoTV (Agent)	1 and Above		GHS 1
	GoTV (Subscriber)	1 and Above		GHS 0.50
	DSTV (Subscriber)	N/A	N/A	Free
	DSTV(Agent)	N/A	N/A	Free
	ECG (Subscriber)	N/A	N/A	GHS 0.5
	ECG (Agent)	N/A	N/A	GHS0.5
	Ghana Water (Agent)	N/A	N/A	Free
	Ghana Water (Subscriber)	N/A	N/A	Free
	Box Office	N/A	N/A	Free
	Startimes	N/A	N/A	Free
Bill Payment	School Fees (Agent)	N/A	N/A	GHS 2.00
	School Fees (Subscriber)	N/A	N/A	GHS 2.00
	Balance Enquiry	N/A	N/A	Free
Account Mgt.	Mini Statement	N/A	N/A	GHS 0.01
	Statement Request	N/A	N/A	GHS 0.50
Bank Integration	Transfer to Bank	Free	Free	Free
	Transfer from Bank	Free	Free	Free
ATM	ATM Token	MINIMUM (GHS) 5	MAXIMUM (GHS) 400	
		1	50	
				GHS 0.5
		More than 50		1%

Market shares[106]: In 2019, as over 7.4 million users and is still growing, accounting for 26%.

Country 6: Zimbabwe

Payment name: EcoCash

Date of establishment: 2011

Operator: Econet Global Ltd

GDP: 2020: 16.77 billion USD[107]

Per capita income: 2020: 2,850 PPP dollars[108]

Literacy rate: 2014:88.69% [109]

Population: 2020:14.86 million[110]

History[111]： In 2005, Econet developed a mobile payment system to help NGOs transfer cash to refugees after the war in Burundi. This model was extended along with the credit solution and integrated into Econet's technology. EcoCash was officially launched in 2011.

Brief overview: Econet allows users to deposit, withdraw, transfer and pay for goods and services, including utility bills, via mobile phones. Users can also purchase prepaid airtime or data packages for themselves or others. Users can also exchange stored mobile currency into cash. The cost of each service is directly deducted from the account stored on the phone and accessed with a PIN.

Registration requirements[112]:

For EcoCash

● Carry the valid ID: original National ID, driver's license or passport, and a copy.

Operation process[113]:

(1) Deposit money

● Go to your EcoCash menu and select 'EcoCash Save.

● Select 'Transfer to savings'

● Enter amount

● The select bank account, which is EcoCash, Save and confirm

- You will receive a confirmation message

(2) Send Money

- Dial *151# to access the EcoCash Menu.

- Select EcoCashDiaspora.

- Select Western Union Pick Up Option.

- Enter Money Transfer Code (MTCN Code)

- Upon successful verification, the EcoCash wallet is credited with the Money.

(3) Withdraw Money

- Go to your EcoCash menu and select 'EcoCash Save

- Select "Withdraw from savings."

- Enter amount

- The select bank account, which is EcoCash Save, and confirms

- You will receive a confirmation message

Agent requirements[114]:

- **Float funds**

- Harare CBD: a minimum amount of $1000

- Other CBD' s: a minimum amount of $500

- Suburbs: a minimum amount of $1000

- Rural Areas: a minimum amount of $200

- **Mandatory Documents (Required for the account to be opened)**

Limitation:

- Minimum deposit - $1

- Minimum withdrawal - $2

- Minimum EcoCash Save balance - $0

- Maximum deposit per transaction - $500

- Maximum withdrawal per transaction - $500

- Total transaction amount per day - $1,000

Charge standard[115]:

Bands		Use Cases		
Lower	Upper	Bill Payment	Send Money	Pay Merchant
1.00	9.99	1.08	0.72	0.93
10.00	19.99	1.51	1.49	1.52
20.00	29.99	1.85	2.20	2.16
30.00	39.99	6.26	2.88	3.47
40.00	49.99	3.37	3..93	4.19
50.00	74.99	4.68	5.31	5.69
75.00	99.99	6.17	5.89	7.53
100.00	149.99	9.00	9.38	8.91
150.00	199.99	10.25	13.22	11.00
200.00	299.99	11.65	16.16	12.44
300.00	499.99	18.37	21.44	13.03
500.00	999.99	39.00	42.96	42.17
1000.00	1499.99	58.50	65.29	61.66
1500.00	1999.99	78.00	88.18	84.86
2000.00	2499.99	97.50	110.22	104.76
2500.00	2999.99	117.00	132.25	124.12
3000.00	5000.00	1.85%	1.91%	1.85%

Market shares[116]:

In October 2019, Zimbabwe had more than 7 million mobile money subscribers, and Ecocash owned 6.64 million mobile money subscribers, accounting for 95.4 percent market share of the sector.

- **Country 7:** Nepal

- **Digital Payment Method**: eSewa

- **Classification by income**: Lower-middle income economy (categorized by World Bank[117])

- **GDP**: 33.7b$ (2020[118]) China: 14.7t$

- **GDP per capita:** 1155$ China: 10500$

- **Literacy rate**: 67.9% (2018[119])

- **Population**: 29.1million[120]

- **Background:** The country's efforts to grow its digital economy are currently focused on strengthening an enabling regulatory environment, supporting the private sector to expand mass-market digital services, and building the necessary telecom and financial infrastructure. This will lay the foundations for the innovation sector to grow in the future. In Nepal, smartphone penetration has increased from around 15% in 2013 to more than 60% in 2020, which boosts mobile finance development. Geographically, Nepal has hills and mountainous terrains, making it difficult for people living in such areas to access financial institutions for transactions and/or for financial institutions to deliver cash. Therefore, through digital payment systems and a cashless economy, people in every part of the country can access financial services and quickly make simple transactions, which is advantageous for all. However, a recent report by Nepal Telecommunication Authority (NTA) mentioned that the total broadband subscription is 84.09%. The fixed broadband (wired) subscription is 21.85%, the fixed broadband wireless subscription is 0.77%, and the mobile broadband subscription is 61.47%. The remaining15.91% of the population does not have any subscription and has yet to access the internet. Such a situation can lead to a digital divide in accessing financial services because a certain percentage of the population will not access digital payment systems.

- **Year launched:** 2009

- **Operator**: eSewa is a subsidiary company of F1Soft International, a fintech company in Nepal.

- **Overview:** An online payment gateway and hosted wallet service that also integrates mobile banking methods to support different forms of money transactions.

- **Registration requirements:** Registration may be done via a mobile application, SMS, or website. Only a mobile number or email address is required during the registration process, but verification for KYC (know your customer) requires

  - Full Name

  - Father's Name

  - Grandfather's Name

  - Date of Birth

  - Gender

  - Contact No.

  - Occupation

  - Permanent Address

  - Current Address

Also, scanned photo and both sides of Citizenship/License/passport/voter ID is required to upload for KYC

- **Functions:** recharging mobile, paying utility bills (NEA, Khanepani, Landline, etc.), internet bills, TV bills, school fees, deposit funds into banks, and many more

- **Operation processes**[121]**:**

- **Load money:**

1. Internet Banking or mobile banking: there are currently 24 internet banking and 42 mobile banking provide services to upload Money for eSewa

2. Counter services: visit a bank, fill up the separate eSewa deposit slip and submit it, 12 banks support this service.

3. Authorized agents: Visit our Cash Points and provide your registered eSewa ID and the amount you need. You will receive a notification when the transaction is complete

- **Send Money:** [122]

Via mobile number:

1. Open the eSewa app and log in

2. Tap on "Send Money".

3. Enter the recipient's mobile number or add it to your contact list.

4. Enter the amount you want to send.

5. Choose purpose (Bill Sharing, Family expense, Lend/ borrow, Personal Use)

6. Write Remarks and tap on "Proceed."

7. Check the details and tap on "Confirm".

8. Complete the transaction using your MPIN, Fingerprint, or Password.

Via QR code:

1. Open the eSewa app and log in

2. Tap on the "Scan & Pay" icon.

3. Scan the recipient's QR code.

4. Enter the amount you want to send.

5. Choose purpose (Bill Sharing, Family expense, Lend/ borrow, Personal Use)

6. Write Remarks and tap on "Proceed."

7. Check the details and tap on "Confirm".

8. Complete the transaction using your MPIN, Fingerprint, or Password.

- **Withdraw Money:**

1. bank transfer: Login to eSewa>> Bank transfer>> fill in the details and make withdrawals.

2. agent:

send: Visit the nearest eSewa Money Transfer service provider with a valid or government-issued ID. Make sure to fill in all the required information mentioning the correct

amount/transaction fees. Share the unique control ID provided by our agents to your beneficiary for cash pick-up.

Pick-up: Visit the nearest eSewa Money Transfer agent, bring along the sender's control ID, and fill out the required form. Show valid or government-issued ID to the EMT agent and receive your funds right away.

- **Charge standard:**

Few functions are not free

Bank transfer (Bank withdraw):

TRANSACTION AMOUNT	SERVICE CHARGE
Rs. 100 – 1,000	0
Rs. 1,001 – 50,000	Rs. 10
Rs. 50,001 – 100,000	Rs. 20

Credit Card Bill Payment:

TRANSACTION AMOUNT	SERVICE CHARGE
Rs. 100 to Rs. 1,000	–
Rs. 1,001 to Rs. 10,000	Rs. 20
Rs. 10,001 to Rs. 20,000	Rs. 30
Rs. 20,001 to Rs. 30,000	Rs. 40
Rs. 30,001 to Rs. 40,000	Rs. 50
Rs. 40,001 to Rs. 50,000	Rs. 60
Rs. 50,001 to Rs. 100,000	Rs. 75

- Cash in: Users can enjoy free cash-in services up to 2 times per month or up to Rs. 10,000 (83.99$) per month, whichever comes first. Exceeding the limit, customers will be charged 0.5% of the transaction amount for every transaction.

- Cash out: Service charge of 1% of the transaction amount will be applicable for every cash-out transaction.

- **Market share:** With over 80% of digital payments in Nepal, eSewa processes more than 130K transactions a day (2018)[123], serving 420,398 active customers across Nepal. There was a 35% increase in the number of users of eSewa since the start of the COVID-19 pandemic. They also have 24,793 agents across the country.

Appendix

1. eSewa KYC

- **Country 8:** Philippines

- **Digital Payment Method:** Gcash

- **Classification by income:** lower-middle-income economy (categorized by World Bank[124])

- **GDP:** 361b$ (2020[125]) China: 14.7t$

- **GDP per capita:** 3298$ (2020[126]) China: 10500$

- **Literacy rate:** 92.5% (2019[127])

- **Background:** Before 2018, the Philippines has no national identification system. Hence, according to BSP (Bangko Sentral ng Pilipinas) 's financial inclusion survey, the share of adults who own formal bank accounts was 29% in 2019[128]. The working-age population in 2020 was around 64%[129]. Therefore the whole society enjoys a vast mobile Internet demographic dividend. Most internet users gain access through smartphones. Smartphone penetration is now at 72.1% of households in 2020[130]. BSP expects at least 50 percent of payments to shift to digital by 2023[131]. A distinctive local feature is a decisive role of telecoms operators in this wave of third-party fees, which differs significantly from China where internet companies are mainly the "first movers". For example, the two biggest players, GCash and PayMaya, are owned by local operators Globe and SmartMaya, respectively. There has always been a strong desire for operators to make e-wallets easier for users to top up and keep more of their Money within their own systems. Gcash's original function in the PC era was to top up, pay bills, transfer Money, and co-brand cards with banks[132].

- **Year launched:** 2004

- **Operator:** owned by Mynt, which is a joint venture between Ant Group; formally owned by Globe, a local telecom operator

- **Overview:** Gcash is a BSP-licensed e-money issuer and remittance agent which provides multiple functions in digital economic solutions in both online and offline payments.

- **Registration requirements:** Before the national identification system is formed (2018), KYC (know your customer) identity verification has always been a challenge, with low efficiency and high cost of manual involvement. In the verification process, users submit various supporting information online and then need to book a return visit from a

human customer service agent to verify their identity. Due to the high local popularity of Facebook Messenger, GCash uses this chat tool to do a remote video answer verification with the applicant.

Currently, the requirements are:

Gcash app or USSD for Globe/TM subscribers

Basic account: Name, Birthday, Address and E-mail address [133]

Verified account: valid government ID, face scan, personal information[134]

Foreign nations: Alien/Immigrant CoR, Nature of Work[135]

Minors: Passport as the valid id, parents or guardian's name, nationality, and address[136]

- **Functions[137]:**

WHAT CAN YOU DO WITH GCASH?

PAY BILLS

Tick paying bills off your to-do list with a simple tap of your screen.

- Utilities
- Credit card bills
- Government bills
- Loans
- Tuition fees

MAKE BANK TRANSFERS

Transfer money to and between banks for free!

SEND MONEY

Send money to another GCash wallet with no additional charges — even when you're using another network!
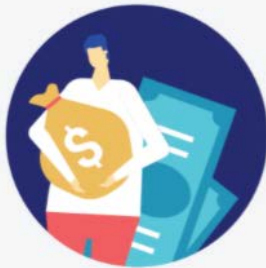
INVEST MONEY

Start investing! Grow your money with the various investment funds available on GCash

BOOK MOVIES

Say goodbye to the battle of getting first dibs on great seats! Book movies at any of our partner cinemas:

- Ayala Malls
- UpTown Bonifacio
- SM Supermalls

CASH OUT/ WITHDRAW CASH

Accumulated a sizeable amount of GCash balance? Withdraw the money through these methods!

- Cash-Out with any GCash partner outlet
- Transfer the amount to your BPI Savings account
- Withdraw from any Bancnet ATM with your GCash card

USE GCREDIT

GCredit is your personal GCash credit line!

- Use it to pay your bills
- Use it to shop now and pay later at GCash partner merchants

BUY LOAD

Purchase load for any network, for your own number or for a friend.

BORROW LOAD

Use the Borrow Load feature if you're currently low on cash but need load urgently!

SHOP ONLINE

Purchase anything from the local and international online stores with these GCash exclusive payments!

- American Express Virtual Pay
- GCash Mastercard

BUY IN-STORE

Use GCash to pay for in-store purchases at over 63,000 GCash merchants.

- Operation processes:

- Cash in: [138]

1. Online banks: you will need to access your online banking app to link it with Gcash or transfer Money to a Gcash account. There are 15 banks that support this function.

2. Over the courter: you may access courter in supermarkets, department stores, drug stores, gas stations, logistics, machine cash-in, pawnshop, payment facilities, or convenient stores. Either use the machine and follow the instructions or inform the cashier you would like to cash in and provide them a barcode generated on your app or your mobile number linked with Gcash.

3. There are also global partners providing international cash-in/withdrawal services

- Cash-out[139]:

1. via GCash Mastercard

Apply for a GCash Mastercard, go to any BancNet or GCash MasterCard affiliated ATM, and withdraw using your card. Use your GCash MPIN as your ATM PIN.

2. via GCash partner outlets

To cash-out via GCash Partner Outlets, present one valid ID *(e.g. driver's license, TIN ID, etc.)*. Each Partner Outlet has its own cash-out steps. These can be found and viewed on the app

Send Money:

1. to another GCash account140: 1. Tap Send Money on the GCash dashboard, then tap on Express Send. 2. You can input the recipient's mobile number and the amount you want to send. You can also write an optional message. You can also tap the phonebook icon and choose your desired recipient from your contacts list. 3. Review the confirmation page. 4. Seeing the in-app receipt means that your Send Money was successful.

2. to the non-GCash user141: Not applicable. Receivers must have its own GCash account.

3. Via personal QR142: Step 1. Log in to your GCash App and tap "Send Money" on your dashboard. Step 2. Tap "Send via QR". Step 3. Scan the QR inside the frame or upload a saved QR from your photos. Step 4. Input the necessary information on the fields provided, then tap "Next". Step 5. Review the details that you offered, then tap "Send".

- Pay QR[143]: 1. Log in to your GCash account, then tap on QR on your navigation bar. 2. Align your phone's camera to the store's QR code for it to be scanned. Make sure the QR code is within the frame. 3. Input the total amount and tap Next. 4. Review all details, then tap on Pay.

Over 73000 merchants accept GCash QR pay.

- **Charge standard:** Features vary between basic and fully verified account.

Limits	Basic	Fully Verified	Fully Verified w/ Linked Bank	Enterprise
Wallet Size	₱50,000	₱100,000	₱500,000	₱500,000
Monthly Incoming Limit	₱10,000	₱100,000	₱500,000	₱500,000
Daily Outgoing Limit		₱100,000	₱100,000	₱100,000
Monthly Outgoing Limit	₱10,000			
Yearly Outgoing Limit	₱100,000			

Product	Fee Description	Fee Amount
Cash in	via linked bank account in the GCash app (BPI and Unionbank)	FREE
	via bank's mobile banking app. Fees depend on bank partners. **View partner list here.**	₱0 to ₱50
	via remittance in the GCash app (Moneygram, WU)	FREE
	via Over-The-Counter outlets will have a fee once users exceed the monthly free limit of Php8,000. View fee breakdowns here.	2%
Cash out	via Over-The-Counter outlets is charged with a withdrawal fee. View partner list here.	2%
	via ATM withdrawal fee *as charged by banks servicing the ATMs	₱10 to ₱18
	via ATM Withdrawal fee (International)	₱150
GCash Mastercard	Offline Card Purchase	₱150
	Online Card Purchase. Order here now. *Php65 delivery fee	₱215
GCredit	The interest charged for the total credit purchased within the billing period.	3-5%
	Penalty fee for users who have not paid their total amount due 1-30 days after its due date.	₱200
	Penalty fee for users who have not paid their total amount due 31-60 days after its due date.	₱500
	Penalty fee for users who have not paid their total amount due 61-90 days after its due date.	₱900
	Penalty fee for users who have not paid their total amount due 90 days onwards after its due date.	₱1500
GLoan	One-time processing fee in addition to the loan amount	3%
	Late GLoan payments will incur a fixed fee of ₱100, and an additional 0.15% of the principal outstanding balance (charged daily)	₱100 + 0.15% outstanding balance
Pay Bills	Billers with fixed fees *Please refer to app for actual fees per biller	₱0 to ₱60
	Billers with percentage-based fees *Please refer to app for actual fees per biller	2%
Send Money	via Express Send	FREE
	via Bank Transfer *Fees effective starting November 1, 2020	₱15
	via Send with a Clip	FREE
	via Ang Pao	FREE
	via **GCash Padala**	₱5 or 1.5%
Request Money	via Request Money or KKB	FREE
General Account	Balance Inquiry via ATM	₱3
	Balance Inquiry via ATM (International)	₱50
	Dormancy fee	₱50
	GCash PRO Biz Starter 99 (details on GCash.com)	₱99

- **Market share:** Over PHP 1 trillion in transactions have passed through the GCash app during 2020, peaking at a PHP 7.5 billion daily gross transaction value, and with more than 6 million transactions in a day. The mobile wallet company also grew its users to 33 million, a 65% growth versus last year[144]. It has the most significant mobile wallet application market share in the Philippines at 49.4%.[145] The second most prominent application is PayMaya (41.9%)

Appendix[146] [147]

Unlock all features when you get verified

Fully verify your GCash account to gain access to the wide range of services in the GCash App. All you need is a valid ID and a selfie. Tap Verify Now in the GCash App to start!

BASIC	FULLY VERIFIED
5 available features	All features available
PHP 50,000 wallet size	PHP 100,000 wallet size
PHP 10,000 monthly incoming limit	PHP 100,000 monthly incoming limit
PHP 10,000 monthly outgoing limit	PHP 100,000 daily outgoing limit

| **BASIC** | **FULLY VERIFIED** |
Registration	ID, Selfie, and Address
Offline Cash-in	Offline Cash-in
Pay Bills	Pay Bills
Buy Load	Buy Load
AMEX Virtual Pay	AMEX Virtual Pay
Pay QR	Pay QR
	GCash Mastercard
	Send Money
	Cash Out
	Request Money
	Card Transactions
	Invest Money
	GCredit
	Online Cash-in
	International Remittance

- **Country 9**: India
- **Digital Payment Method**: JAM (Jan Dhan-Aadhaar-Mobile)
- **Classification by income**: Lower-middle income economy (categorized by World Bank[148])
- **GDP**: 2.66t$ (2020)[149] China: 14.7t$
- **GDP per capita:** 1900.71$ China: 10500$
- **Literacy rate**: 74.4% (2018)[150]
- **Background**: Despite that more than 6 billion people registered with the Aadhaar biometric system after six years of its launch, but there was merely the application to prove its value. When Indian Prime Minister Modi took power in 2014, he put digital transformation at his development plans. His first movement was to launch the Jan Dhan scheme based on the existing Aadhaar ID. In contrast, besides free no-frill bank accounts, the additional benefits stimulate participation in the formal banking system. The percentage of adults in India who have a bank account has more than doubled, reaching 80%. The government policy that encouraged account ownership among unbanked individuals using biometric identification cards was a significant driver of this rise. This strategy benefited previously marginalized populations and aided in the growth of inclusive account ownership. Women and adults in the lowest 40% of families in India increased their account ownership by more than 30 percentage points between 2014 and 2017. It climbed by almost 20 percentage points among males and adults in the wealthiest 60% of households.[151] Currently, Bank accounts, SIM connections, income tax returns, and other services need to be linked to the Aadhaar ID, making the Aadhaar ID number essential in today's Indian society
- **Year launched:** The Aadhaar program was launched in 2009[152], and the JAM trinity was proposed in the Economic Survey of 2014-15[153]
- **Operator**: the government of India

- **Overview**: Aadhaar is a verifiable 12-digit identification number issued by the Unique Identification Authority of India to the resident of India for free of cost that are identified with their iris scan and fingerprints. An Aadhaar card is not proof of citizenship, but citizens must provide it to receive welfare payments and social services[4]. Jan Dhan is India's National Mission for Financial Inclusion campaign to ensure access to financial services. To get the money into people's hands, greater use of mobile payments technology is to be made. Mobiles can transfer money quickly and securely and improve the quality and convenience of service delivery. Jan Dhan-Aadhaar-Mobile is the trinity, whereas it has been launched to seek to offer no-frill accounts, valid identity proof, and a digital platform for financial transactions[154]. In short, it links Jan Dhan accounts, Mobile numbers, and Aadhar cards of Indians to directly transfer subsidies to intended beneficiaries and eliminate intermediaries and leakages[155].

- **Registration requirements**:

To get an Aadhaar card, lists of acceptable documents for verification are as follow:
Either POI (Proof of Identity) documents containing Name and Photo, or POR (Proof of Relationship) documents containing Name of applicant and Name of HoF (Head of Family) or DOB (Date of Birth) documents containing Name and DOB or POA (Proof of Address) documents containing Name and Address
For the full list see:
https://uidai.gov.in/images/commdoc/valid_documents_list.pdf
Note[156]: for people who do not have documentary proof for authenticating identity and residence, you can take the help of an introducer authorized by UIDAI to apply for an Aadhaar card without documents.

there are two more ways to apply for an Aadhaar card if an individual does not have their own POI/POA supporting documents

(1) Through Head of Family (HOF)

The prerequisites for people without a valid ID and who want to apply to an Aadhaar through an introducer are if the individual's name exists in the family entitlement document such as ration card has to be proved. The HoF must also carry his/her original proof of identity and proof of address. The HoF must also accompany the individual applying for an Aadhaar card at the enrolment center.

,and (2) Through an Introducer

Another method to apply for an Aadhaar card is through an Introducer if an individual does not have PoI and PoA documents. An introducer is a person who is authorized/notified by the Registrar to introduce residents who do not possess any PoA/PoI documents. The introducer should already have an Aadhaar number and needs to be present in person at the Aadhaar center for introducer-based enrolments[157].

CERTIFICATE FOR AADHAAR ENROLMENT/ UPDATE

Instructions: **All details to be filled in Block Letters**

To be printed on plain A4 paper size;   Not required to print on letter head;

(To be valid for 3 months from date of issue)

D D   M M   Y Y Y Y

Resident's Details

☐ Resident   ☐ Non-Resident Indian (NRI)   ☐ New Enrolment   ☐ Update Request

Aadhaar Number:
(For update only)

Full Name:

C/o:

House No./ Bldg./ Apt:

Street/ Road/ Lane:

Landmark:

Area/ Locality/ Sector:

Village/ Town/ City:

Post Office:

District:

State:

PIN Code:

Date of Birth:

Signature of the Resident/
Thumb/ Finger Impression

Resident's Recent
Colour Photograph
3.5cm x 4.5 cm

Cross Signed and
Cross Stamped
by the Certifier.

NB: DO NOT
OVERLAP WITH
TEXT BOXES

Certifier's Details (To be filled by the certifier Only)

Name of the Certifier:

Designation:

Office Address:

Contact Number:

I hereby certify above mentioned details of the resident
and I am a.... (Tick appropriate box below)

☐ Gazetted Officer - Group A
☐ Village Panchayat Head or Mukhiya
☐ Gazetted Officer - Group B
☐ MP/ MLA/ MLC/ Muncipal Councilor
☐ Tehsildar
☐ Head of Recognized Educational Institution
☐ Superintendent/ Warden/ Matron/ Head of Institution
of Recognized shelter homes/ Orphanages
☐ EPFO Officer

Checklist for Certifier

☐ No overwriting   ☐ Issue date is filled   ☐ Resident's signature   ☐ Certifier's details
☐ Resident's Photo is cross signed and cross stamped (paper to photo or photo to paper)

Signature & Stamp of the Certifier

- **Market share:**

As of October 2021, about 4.4 billion beneficiary accounts under the Jan Dhan scheme have been integrated with the 'JAM' (Jan Dhan-Aadhaar-Mobile) trinity[158]

[63] World Bank https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=KE
[64] World Bank
https://datacommons.org/place/country/KEN?utm_medium=explore&mprop=amount&popt=EconomicActivity
&cpv=activitySource%2CGrossDomesticProduction&hl=en
[65] World Bank https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=KE
[66] Safaricom websitehttps://www.safaricom.co.ke/personal/m-pesa/getting-started/using-m-pesa
[67] Safaricom website https://www.safaricom.co.ke/personal/m-pesa/getting-started/experience-m-pesa
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[70] KENYA - Latest Stats for Payment Providers on Mobile Phone Market Share, Online Payment Methods and Mobile Money.
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ANNEX

Noticing that the number of adults was constantly changing within our time horizon, as there were always people who just became adults (turning fifteen years old) every year, which gives us a "rolling cohort." This cohort dynamically absorbed "rookies" into its coverage and discharged those adults who passed away. Thus, the precise definition of the ratio we are attempting to approximate is the total number of adults owning (at least) an account divided by the total number of adult populations within a particular county at a given time. However, our sample only covers interviewees who survived the forty-year observation period till January 2016. Therefore approaching the actual population account-ownership using our sample counterpart could be, admittedly, tricky. We may be overstating these percentages' absolute values because any ratio's denominator should be the actual total population of a given county within a specific year back in history. Leaving out the deceased from the total population in the denominator would enlarge our proxy of actual account-ownership as a result. One may argue that the actual numerator (number of adults owning an account) could also be higher than that in this sample counterpart, as a matter of fact (whoever passed away could have a bank account as well). Nevertheless, we tend to think that the population base without an account was the relative majority, especially in the earlier decades.

Putting the potential survivor bias issue aside for the moment, we argue that what matters most is this time series' relative changes over time. Absolute magnitude makes little sense in this scenario since we are not strictly comparing our results to aggregate national-level statistics presented in Figure 10. Instead, we plot such a time series to match the critical moments in rural account ownerships' development with the time nodes over which various local policies got launched. In other words, we will be using local policies to explain the observed local phenomenon. As a country with a vast territory, China has more than thirtyish provincial-level administrative regions. Provincial governments could each make administrative policies following the central documents' policy guidance's spirit in general. Such policy analysis aiming to explain a local phenomenon will entail digging up county-level policy documents issued decades ago. The set of local policies we are about to unveil would necessarily be a part of serial national campaigns. We believe that the national-level policies thus referred eventually accounted for the progress made regarding bank account ownership in rural China. This report aims to provide an extraordinary glimpse and implications on how the Chinese central and local government carried out specific policies to

advance financial inclusion at various stages back in the past forty years for other policymakers' information.

Population Policy

Food Policy

1949 — Large income gap between urban and rural area

1950 — Population spontaneously flowed to the city
*Interim Measures on the Administration of Special Population (Draft);
Interim Provisions on the Administration of Urban Household
Registration*

1951 — Initial establishment of household registration system in cities
*July, the Provisional Regulations on the Administration of Urban
Household Registration*

1953 — The end of all spontaneous population movements
*April, Instructions for the registration of the national census in
preparation for general elections; Measures for the Registration of the
National Population Survey*

1954 — Constitution Promulgation

1955 — • Establishment of unified national household registration
*June, the Directive on the Establishment of a Permanent Household
Registration System*
• Initial formation of dual household registration system
November, the provisions on the criteria for urban and rural division

1956
1957 — Almost all spontaneous population movements end.
The First Five-Year Plan (1953-1957) completed
No strict restrictions on population movement

1958 — • Restricting farmers to move to cities in law for the first time
*January, Regulations of the People's Republic of China on Household
Registration*
• Strictly control the relocation of rural counties to cities
*September, on several issues in the work of streamlining and reducing
urban population*
• 1958-1959, large reservoir resettlement, Xinjiang Construction Corps

1959 — *January, the Notice on Immediate Cessation of Recruitment of New
Employees and Fixed Temporary Workers*

1960 — A large number of rural people entered cities
the Great Leap Forward Movement and three years of natural disasters

1961 — • 1960s, the movement of streamlining and decentralization began,
arranging the peasants entering cities in the Great Leap Forward.
• 1970s, the educated young people go to poor areas.
• 1961, Nine Measures on Reducing Urban Population and Reducing
Urban Grain Sales

1962 — Strictly control the migration of rural population to cities
*December, the Opinions on Strengthening the Management of
Household Registration*

1963 — the movement of streamlining and decentralization finished.
*July, the Report on the Completion of Streamlining Tasks and the
Opinions on the End of Streamlining Work*

1964 — Further control of rural-urban migration
August, the Policy Provisions on Household Registration Migration

1975 — A clause in the constitution abrogating citizens' freedom of movement

1977 — Strictly control the transfer of farmers to non-farmers
*December, the Regulations on the Handling of Household Registration
Migration*

1978-1984 — • People in "down to the countryside movement" returned to cities
• A large number of peasants entered cities and towns because the
opening of urban and rural trade fairsand development of township
enterprises

1983 — the People's Commune disintegrated

1984 — Farmers and their families who work, do business and run service
industries in market towns can apply for permanent residence and issue
self-care ration household registration book.
*October, Notice of the State Council on the issue of farmers entering
market towns and settling down*

1985 — • The temporary residence permit has legitimacy
*July, the Regulations on the Management of Temporary Urban
Population*
• Providing a basic means for the management of floating population
*September, Regulations of the People's Republic of China on Resident
Identity Cards*

1987 — Township enterprises flourished and absorbed a large number of
surplus rural labor force.

1989 — Restrict blind flow and do not let go to big cities.
*1989-1991, Urgent Notice on Strict Control of Migrant
Workers'Outgoing*

1990s — Tide of migrant workers

1992 — After Deng Xiaoping's Talks in the South, the policy of population
flow had a new turning point

1994 — Guiding rural labor force flow orderly across regions
*November, the Interim Provisions on the Management of Cross-
Provincial Mobility and Employment of Rural Labor Force*

1995 — Unified management of floating population
*September, the Central Committee for Comprehensive Management of
Social Security issued opinions on strengthening the management of
floating population*

1998 — Promoting the Important Position of Developing Small Towns
*October, the Decision of the Central Committee of the Communist
Party of China on Several Major Issues Concerning Agriculture and
Rural Work*

2000 — Developing small towns
*July, Some Opinions on Promoting the Healthy
Development of Small Towns*

The General Administration of Food Management was established — **1950**

The Ministry of Food was established — **1952**
— **1953**
The state monopoly for the purchase and marketing of grain began.
*October, the Resolution on the Unified Purchase and Marketing of Grain
November, the Order on the Planned Purchase and Supply of Grain*

Unified purchase and marketing of grain; grain rationing in urban area — **1955**
*August, the Interim Measures for the Unified Purchase and Marketing of Rural
Grain; the Interim Measures for the Quantitative Supply of Town Grain*

Nine Measures on Reducing Urban Population and Reducing Urban Grain Sales — **1961**

Household contract responsibility system — **1978**

After 1979, there is a gap in the policy of unified purchase and marketing of grain — **1979**
• The People's Commune Disintegrated — **1983**
• The People's Commune Disintegrated and the State Monopoly for Purchase and Sale
Began to Loosen up
Central No.1 Document

• China's first grain circulation system reform, the system of unified purchase of — **1985**
agricultural products was broken
January, Ten Policies on Further Activating the Rural Economy
•At the end of the year, the new policy of narrowing contract ordering and
expanding market negotiation was adopted

Allowing farmers to bring their own rations to work and do business in cities — **1988**

The policy of long-term liberalization of grain management has been implemented — **1991**
Notice on Further Enlivening the Circulation of Agricultural Products

The second round of food reform has really begun — **1992**
*September, the Decision on Developing High-yield, High-quality and High-efficiency
Agriculture*

• Cancellation of co-ordination — **1993**
February, the Notice on Accelerating the Reform of the Grain Circulation System
• The state monopoly for purchase and marketing is finally over
*November, Several Policies and Measures on Current Agricultural and Rural
Economic Development*

Insist on government purchase and appropriately increase the number of purchase — **1994**
May, the Notice on Deepening the Reform of the Grain Purchase and Sale System

Starting a new round of grain reform — **1998**
May, the Decision on Further Deepening the Reform of the Grain Circulation System

Zhejiang has become the first province in China to implement market-oriented — **2000**
reform of grain purchase and sale
In the spring, the State Council approved

The scope of reform was extended to the whole country, and the third grain — **2001**
reform began
*August 20, the Opinions on Further Deepening the Reform of the Grain Circulation
System*

• The grain administrative departments were entrusted with the functions of — **2004**
management and examination
May, Regulations on the Administration of Grain Circulation
• Fully open up the grain purchase market; realize the marketization of grain
purchase and sale and the diversification of market players
*May, the State Council's Opinions on Further Deepening the Reform of the Grain
Circulation System*

1949–1957
Free flow
in a small scope

1958-1983
Strict restriction
on free flow
Government-led
decentralization

1984–1991
Policy easing
Leaving the land
without leaving
the home
(1984-1987)

1992–2000
Guided population flow
Leaving the land
and home

1949-1952
Free buying
and selling system

1953-1984
Unified Purchase
and Sale of Grain

1985-1997
Contract order,
state order and
Dual-track
price system

From 1998
Marketization
reform

Annex 3: Policy Evolution of Two Rural Insurance Schemes

New Rural Cooperative Medical Scheme(NRCMS)　　　　**New Rural Pension Sheme(NRPS)**

1949

1949-1980 , The emergence and popularity of rural cooperative medical scheme (Old Rural Medical Scheme) which relied on collective economy

1980

1981-1989 , The disappearance of the Old Rural Medical Scheme; self-supported medicalcare became dominant.

1980

From the early 1980s to 2001, the Rural Pension Scheme (Old Rural Pension Scheme) led by the government with emphasize on self-funded was established

1989

1997

The Recovery of Old Scheme in rural areas

On May 28th, the Ministry of Health, the State Planning Commission, the Ministry of Finance, the Ministry of Agriculture and the Ministry of Cvil Affairs jointly issued 《Several opinions on developing and improving the Rural Cooperative Medical Scheme》

2001

1990-2008 the NRCMS was explored and popularized

2002

The NRCMS began to establish

On October 19th, 《Decisions of the CPC Central Committee and the State Council on further strengthening rural health work》

2002

2003

2003-2008 , The NRCMS was piloted and fully covered

2002-2008 , the NRPS was in the exploratory stage and had gained some useful experience

2008

2008

At the end of the year, 55.95 million people participated in the NRPS across the country

《Statistical bulletin on the development of human resources and social security in 2008》

2009

The NRPS was piloted at the national level

On September 1st, 《Guiding opinions of the State Council on carrying out the pilot of new rural Pension Scheme》

2012

The NRPS has basically achieved full coverage

On October, Speech by WenJiaBao at the commendation meeting for the social security work of new rural and urban residents

2014

By the end of the 12th Five Year Plan, the NRPS and the Urban Pension Scheme will be merged throught the country

On February, 《Opinions of the State Council on establishing a unified basic pension scheme for urban and rural residents》

Since 2009, the NRCMS has been further developed

2016

The NRCMS was merged with Urban Residents Health Insurance

On January, 《Opinions of the Stata Council on integrating the basic medical scheme for urban and rural residents》

Since2009, the NRPS has been piloting and improving

2019

Complete the integration of the rural-urban basic medical schemes

On April, 《Security for urban and rural residents in 2019 issued by the State Medical Security Bureau and the Ministry of Finance》

2020

2020

1016.76 million urban and rural residents participated in the basic medical shceme

At the end of the year, 《Statistical bulletin on the development of national security in 2020 issued by National Medical Security Bureau》

542.44 million urban and rural residents partipated in the basic Pension Scheme by end of 2020

On January 29th, 《Statistical express data of human resources and social security in 2020》

Annex 4: Social Security Card Evolution Flowchart

Social Security Card

1980s-1990s — Social security management in the early stage: serious local separatism, coexistence of multiple specifications and types, inconsistent technical information standards, single business and chaotic application

Mar, 1998 — The establishment of Ministry of labor and social security
The 9th National People's Congress approves <the plan for institutional reform of the State Council>

Dec 1st, 1999 — Social Security card application should be in accordance with the overall planning requirements, on the basis of the pilot in a safe and orderly manner
The Department of Social Security <The master plan for the construction of Social Security cards>

Jun 7th, 2000 — Establish National Social Security card unified standards, Key System and management system
The Department of Labor and Social Security released <the Social Security (individual) card code>

1999-2003 Normative start-up stage

2004 — The first phase of Golden Insurance Project

2004-2008 Progressive development stage

2008 — Set up the Ministry of Human Resources and Social Security of the People's Republic of China
<Institutional reform of the State Council in 2008>

Nov 16th, 2009 — Vigorously promote the social security card and make the social security card an important symbol for rural insured residents to enjoy social security rights and interests
<Guiding opinions on the construction of new rural social endowment insurance information system>

2011 — The 12th Five Year Plan points out that the all-in-one social security card is the ultimate goal of the construction of social security card, and the social security card will be included in the overall national deployment
<Outline of the twelfth five-year plan for national economic and social development>

Dec 2th, 2011 — The all-in-one social security card was implemented, and the social security card began to incorporate financial functions
<Circular of the Department of Social Security and the People's Bank of China on loading financial functions on social security cards>

Aug 7th, 2014 — The 102 application catalogues of social cards in the field of social security were made clear, and the pilot demonstration of comprehensive application of Social Security cards was promoted with the focus on pension insurance and medical insurance shcemes
<Opinions on speeding up the application of Social Security cards>

Sept 18th, 2014 — Start the first batch of Social Security card comprehensive application pilot demonstration work
<Circular of the Department of Social Security on the demonstration of the comprehensive application of the Social Security card>

Apr 13th, 2016 — Determine the first batch of demonstration bases for comprehensive application of social security cards and carry out the second batch of pilot demonstration work.

Jul 7th, 2016 — The second phase of the financial insurance project is approved to build a technical environment supporting "all-in-one card"

2017 — The second generation social security card was issued
<Confirming the first batch of demonstration bases for the comprehensive application of Social Security cards and launching the second batch of pilot demonstration work>

Apr 22th, 2018 — The release of the first electronic social security card

Mar 21th, 2019 — Electronic social security card issuance, authentication and payment services were fully launched, covering a wide range of social security card holders
<Circular on the full implementation of the Electronic Social Security card application>

Oct 18th, 2019 — The MHRSS signed cooperation agreements on innovative application services of social security cards with 11 financial institutions and Internet companies, carried out business services related to social security cards with cooperative banks, and jointly built grass-roots convenience service outlets in towns or administrative villages
Notice of the general office of the Ministry of human resources and social security on reducing the production and issuance cycle and optimizing social security card management services

2009-npresent stable advancing stage

Dec 27th, 2019 — Strive to fully realize the distribution of old-age insurance benefits through social security card by the end of 2019, and realize the application of social security card in the management of migrant workers' real name system and salary distribution by the end of 2020
<Circular of the General Office of the Department of Social Security on shortening the business card printing cycle and Optimizing Social Security card management services>

Sept 7th, 2020 — Start the construction of innovative application demonstration of "all-in-one card" of social security card, and actively promote the service of electronic social security card
<Circular on the demonstration of the innovative application of the Social Security Card "one card">

Nov 26th, 2020 — Promote the issuance of subsidy funds with social security cards as the carrier
<The guiding opinions of the Ministry of Finance, the Ministry of Agriculture and rural areas, the Ministry of Civil Affairs, the Department of Human Resources and social securities, the Audit Commission, the Poverty Alleviation Office of the State Council, and the China Banking Regulatory Commission on Further Strengthening the "one card" management of financial subsidies for benefiting people and agriculture>

Oct 30th, 2020 — Comprehensively start the promotion and application of the third generation social security card and improve the security application level of social security card.
<Circular of the General Office of the Department of Social Security and the General Office of the People's Bank of China on promoting the application of the third generation Social Security card with financial functions>

Feb 26th, 2021 — At a press conference held by the State Council Information Office, the ministry said there were 1.335 billion social security card holders nationwide, with 95 percent of the population having a social security card

Annex 5: List of Direct Agricultural Subsidies Pilot Arrangements in 2004

直补试点安排一览表

试点县	储备粮订单收购 计划（万吨）	补贴资金 （万元）	留给当地比例 （％）
武鸣县	2.5	200	30
邕宁县	2.0	160	30
横　县	2.5	200	30
宾阳县	2.0	160	30
象州县	1.5	120	30
柳江县	1.5	120	30
全州县	3.0	240	30
兴安县	2.5	200	30
临桂县	1.5	120	30
合浦县	1.5	120	30
博白县	1.5	120	30
灵山县	2.0	160	30
苍梧县	1.0	80	30
八步区	1.5	120	30
宜州市	1.0	80	30
覃塘区	1.5	120	30
田阳县	1.0	80	30
福绵区	1.2	96	30
合　计	31.2	2496	

Annex 6: Name List for Direct Agricultural Subsidies Pilot Counties in 2005

2005 年实行直补试点县(市、区)名单
和订单粮食收购计划及补贴资金安排一览表

单位：原粮、吨、万元。

序号	试点县名单	订单粮食收购计划	补贴金额
1	武鸣县	20000	200
2	横 县	30000	300
3	宾阳县	25000	250
4	全州县	30000	300
5	兴安县	25000	250
6	临桂县	15000	150
7	柳江县	10000	100
8	苍梧县	15000	150
9	八步区	20000	200
10	合浦县	20000	200
11	博白县	25000	250
12	福绵区	10000	100
13	灵山县	20000	200
14	覃塘区	10000	100
15	田阳县	15000	150
16	象州县	10000	100
17	宜州市	15000	150
18	桂平市	25000	250
19	陆川县	20000	200
20	兴业县	15000	150
21	港南区	10000	100
22	藤 县	10000	100
23	浦北县	10000	100
24	灵川县	15000	150
25	鹿寨县	15000	150
26	兴宾区	15000	150
27	浦阳县	10000	100
28	环江毛南族自治县	10000	100
29	扶绥县	10000	100
30	上思县	5000	50
31	田东县	15000	150