

# Toward Universal Financial Inclusion in China

Models, Challenges, and Global Lessons

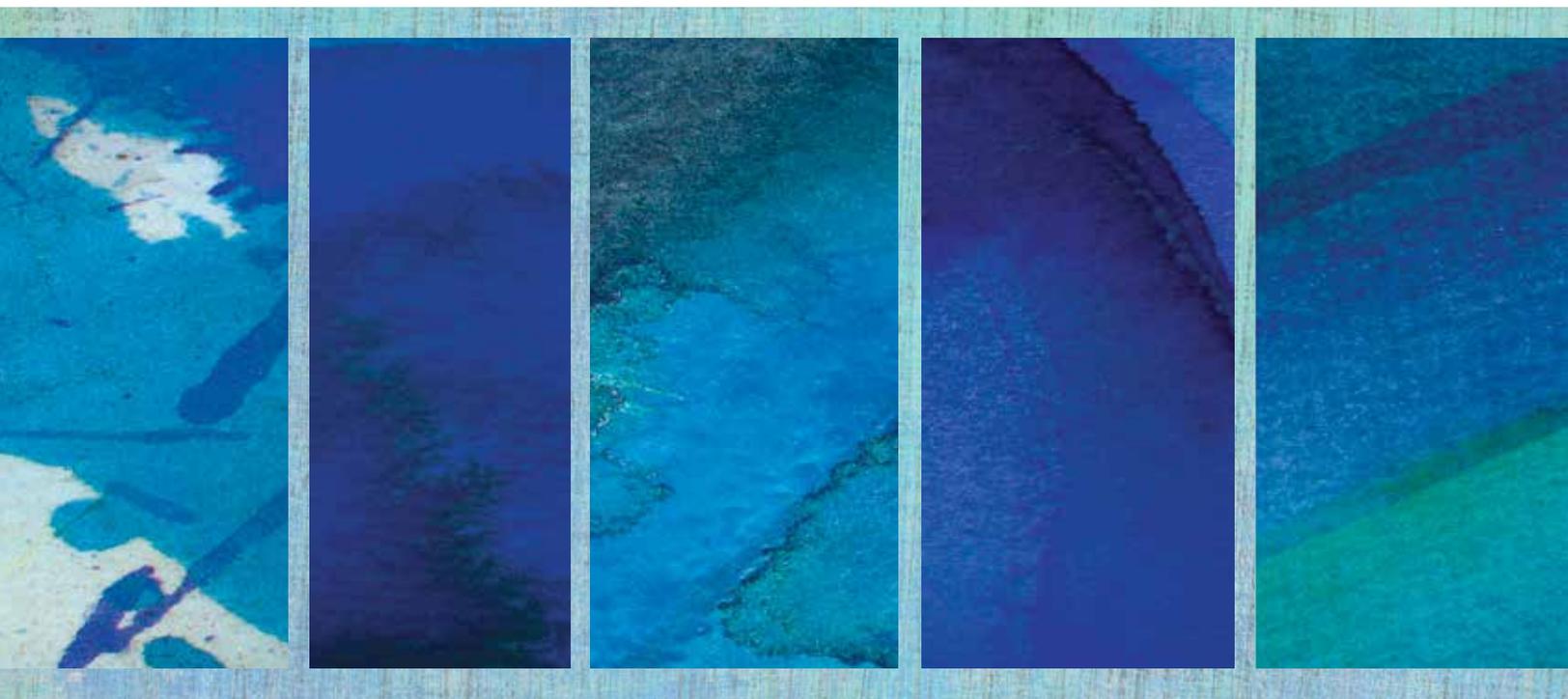




February 2018

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## ACKNOWLEDGMENTS

*Toward Universal Financial Inclusion in China: Models, Challenges, and Global Lessons* was jointly written by staff of the People's Bank of China (PBOC) and the World Bank Group (WBG) Finance, Competitiveness & Innovation Global Practice.

The primary drafting team comprised Dangwei Bai (PBOC), Rundong Jiang (PBOC), Tiandu Wang (PBOC), Jennifer Chien (WBG), and Douglas Randall (WBG). The PBOC initially drafted chapters 1, 4, and 5, and the WBG initially drafted chapters 2, 3, and 6. The entire drafting team has extensively discussed and jointly revised all content in the report.

Additional drafting support and inputs were provided by Xiaoxiao Li (PBOC), Zhiyong Fan (PBOC), Sihui Feng (PBOC), and Yi Yan (WBG). Tian Wang (PBOC) and Jian Chen (WBG) provided administrative support. Sheldon Lippman and Tora Estep provided editorial assistance, and Naylor Design, Inc. provided design and layout assis-

tance. We also acknowledge editorial and translation assistance from Lei Zhou (PBOC) and Fei Chen (PBOC).

The team benefited from the overall guidance of Wenjian Yu (PBOC), Tianqi Sun (State Administration of Foreign Exchange), Shaogang Ma (PBOC), Douglas Pearce (WBG), James Seward (WBG), Irina Astrakhan (WBG), and Nancy Chen (WBG).

The team is grateful to the WBG peer reviewers of the report—Douglas Pearce, Hoon Soh, Jinchang Lai, Harish Natarajan, Fiona Stewart, Serap Gonulal, Fangfang Jiang—as well as Eric Duflos (UN Secretary-General's Special Advocate for Inclusive Finance for Development) for their valuable comments. We also gratefully acknowledge the support and review from the China Banking Regulatory Commission (CBRC), China Insurance Regulatory Commission (CIRC), Ministry of Finance (MoF), and the relevant departments of PBOC.

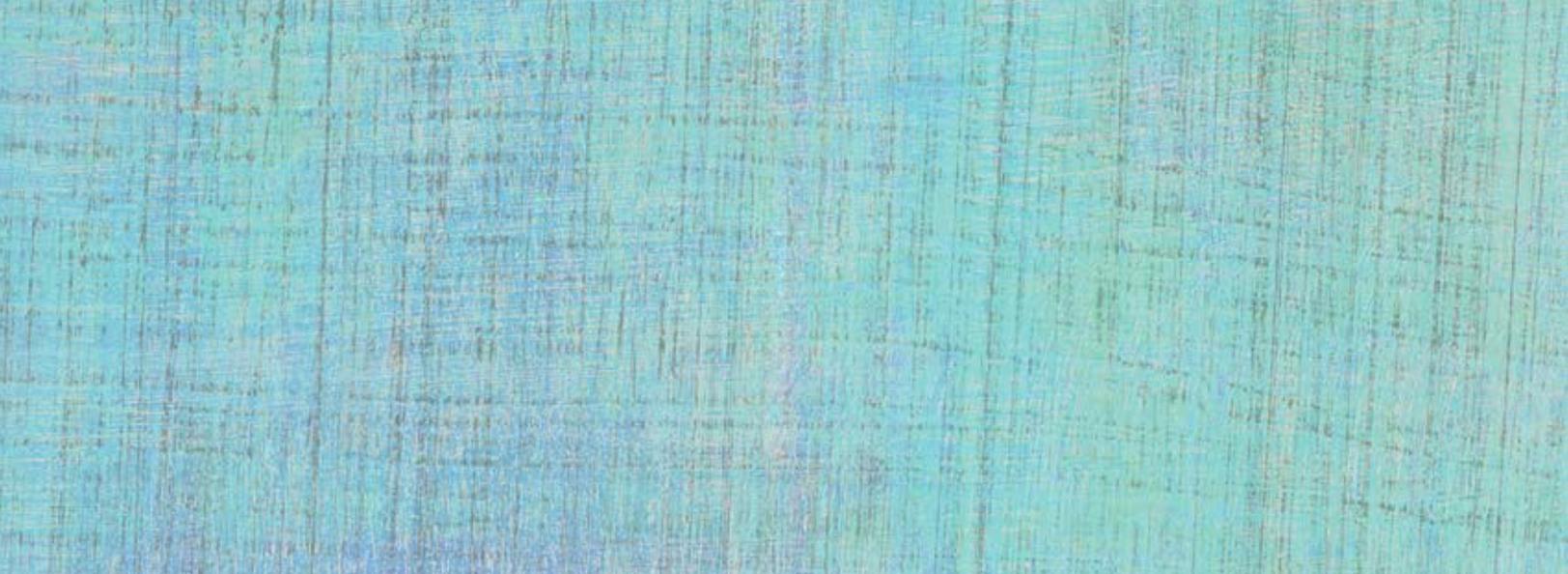


## ACRONYMS AND ABBREVIATIONS

1RMB = US\$0.15<sup>1</sup>

ABC	Agricultural Bank of China	ICT	information and communication technology
AFI	Alliance for Financial Inclusion	IFC	International Finance Corporation
AML/CFT	anti-money laundering/combating financing of terrorism	FAS	Financial Access Survey (IMF)
ATM	automated teller machine	IT	information technology
CADB	China Agricultural Development Bank	IMF	International Monetary Fund
CAR	capital adequacy ratio	JD	Jingdong
CBRC	China Banking Regulatory Commission	LTD	loan-to-deposit
CCB	city commercial bank	MCC	microcredit company
CCB	China Construction Bank	MIC	middle-income country
CCRC	Credit Reference Center of PBOC	MNO	mobile network operator
CDB	China Development Bank	MoF	Ministry of Finance
CDD	customer due diligence	MSE	micro and small enterprise
CIRC	China Insurance Regulatory Commission	MSME	micro, small, and medium enterprise
CHFS	China Household Finance Survey	NEEQ	National Equities Exchange and Quotations
CNAPS	China National Advanced Payment System	NFC	near field communication
CPMI	Committee on Payments and Market Infrastructures	NIFA	National Internet Finance Association
CRS	cash recycling system	NPL	nonperforming loan
CSRC	China Securities Regulatory Commission	Other L-MIC	Other large middle-income countries
CUP	China UnionPay	P2P	peer-to-peer
EAP L-MIC	East Asian and Pacific large middle-income countries	PAFI	Payment Aspects of Financial Inclusion
EximBank	Export-Import Bank of China	PBOC	People's Bank of China
FATF	Financial Action Task Force	POS	point of sale
FCPB	Financial Consumer Protection Bureau of PBOC	PSBC	Postal Savings Bank of China
FIP	Plan for Advancing the Development of Financial Inclusion (2016–2020)	RCOPB	rural cooperative banks
GNI	gross national income	RCOMB	rural commercial banks
G2P	government-to-person	RCC	rural credit cooperative
GPFI	Global Partnership for Financial Inclusion	RMB	renminbi (Chinese currency)
HIC	high-income country	RMCC	rural mutual credit cooperative
HLP	G-20 High-Level Principles for Digital Financial Inclusion	SAC	Securities Association of China
IBPS	Internet Banking Payment System	SACCO	savings and credit cooperative
ICBC	Industrial and Commercial Bank of China	SME	small and medium enterprise
		US\$	U.S. dollar
		VTB	village and township bank
		WBG	World Bank Group

<sup>1</sup> Conversions to US\$ are indicative only and included to assist global readers.



# INTRODUCTION

The conceptualization and practice of financial inclusion in China has undergone a significant transformation in recent years. From the reforms of rural credit cooperatives (RCCs) and policy banks, to the pursuit of agent banking models, to the emergence and scaling of fintech companies, a diverse range of providers, products, and policy approaches has characterized the recent evolution of financial inclusion in China. And indeed, significant progress has been made. China's accomplishments include the development of a robust financial infrastructure that has reduced information asymmetries between lenders and borrowers and enabled the safe and efficient transfer of money among individuals, firms, and the government. China has also established one of the largest agent networks in the world, thereby extending the reach of the formal financial sector into previously underserved rural areas. Consumers have responded with high demand for new financial products and services, which are increasingly offered via digitally-enabled business models. China's rate of account ownership—a basic metric of financial inclusion—is on par with that of other G-20 countries.

Yet China still faces many challenges to achieving sustainable and long-term financial inclusion. A modern conceptualization of financial inclusion must be more fully adopted and agreed upon by all relevant stakeholders, in particular local government authorities, many of whom have not evolved past focusing on the provision of subsidized credit. Further efforts are required to

ensure that existing models are sustainable and represent a market-oriented approach, with the government playing an appropriate enabling role. Risks associated with new technology-driven providers and products must be better understood and effectively managed and balanced with encouraging innovations in product design and delivery that advance 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.

The current market and policy context represents a unique and potentially transformational period for financial inclusion in China. On the market side, China's fintech industry continues to grow and develop, and traditional providers are also actively pursuing digitally-enabled business models. On the policy side, the Chinese government's current focus on developing an inclusive financial sector is without precedent in the country's history. One recent marker of this strong focus is the *Plan for Advancing the Development of Financial Inclusion (2016–2020)*, which outlines an ambitious agenda for improving the availability, uptake, and quality of financial products and services in China, with a clear emphasis on expanding and deepening financial inclusion for historically unserved and underserved population segments, including micro and small enterprises (MSEs), rural residents, low-income urban groups, the poor, the disabled, and the elderly.

## 1.1 PURPOSE OF THE REPORT

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, and many countries have achieved remarkable results. A supporting factor in this development is the role of international organizations and forums, including the Global Partnership for Financial Inclusion (GPFI), the Alliance for Financial Inclusion (AFI), and the World Bank Group (WBG). These organizations and forums allow countries—and other global stakeholders—to share best practices and models; discuss common challenges; and, where feasible, propel progress through coordinated action. One lesson from these activities is that each financial inclusion “success story” is a product of a unique combination of factors within a given country. The groundbreaking uptake of mobile money in Kenya, the spread of banking correspondents across Brazil and Colombia, and the establishment of niche banks in India and Mexico 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 successfully increase financial inclusion.

Thus, the goal of this report—written jointly by the People’s Bank of China (PBOC) and the WBG—is to showcase China’s approach to financial inclusion over the past 15 years, highlight remaining challenges, and distill globally relevant lessons. The report builds on the tradition of peer learning now established among countries with a shared interest in expanding financial inclusion. The hope is that the report will assist countries in developing and refining their own pathways toward sustainable and long-term financial inclusion.

## 1.2 INTERNET FINANCE, DIGITAL FINANCE, AND FINTECH

The opportunities for and challenges of leveraging technology to enable financial inclusion are cross-cutting themes throughout this report. The *Guidelines on Promoting Sound Development of Internet Finance* jointly issued by PBOC and nine other Chinese ministries and commis-

sions in July 2015 (“Guidelines”) states that “Internet finance” is a new financial business model that both traditional financial service providers and Internet-based firms have adopted to provide financing, payment, investment, and intermediary information services by leveraging the Internet and information and communication technologies (ICT).<sup>2</sup> The Guidelines also states that “deeper integration of the internet and finance would be a major trend and would have more profound impacts on financial products, operations, organizations and services.”

The terms “digital finance,” “Internet finance,” and “fintech” are used interchangeably in China. Given this report’s global audience, the authors have chosen to use the term “digital finance” to refer to the broader concept of applying digital technologies in the delivery of financial services that either traditional financial service providers or new entrants can leverage. For the purposes of this report, the term “fintech companies” refers specifically to those new entrants whose core business model is based on innovative digital finance. Digital finance therefore encompasses both the application of digital technologies by traditional providers (for example, agent-based models, payments infrastructure, online platforms, and the use of big data, which are discussed in section 4.1) and fintech companies, which are discussed in section 4.3. Section 4.3.8 and chapters 5 and 6 discuss the overall contribution and challenges of digital finance.

## 1.3 CONTENT AND STRUCTURE OF THE REPORT

The rest of the report is structured as follows. Chapter 2 establishes the conceptual foundations of financial inclusion used throughout the report. The chapter defines and explores the critical elements of financial inclusion: accessibility, diverse and appropriate products, commercial viability and sustainability, and safety and responsibility.

Chapter 3 provides a quantitative benchmarking analysis of China’s current state of financial inclusion as compared with peer countries.

Chapter 4 summarizes China’s financial inclusion experience over the past fifteen years. The chapter is not meant to be comprehensive, but rather focuses on key developments, particularly those that may be of relevance or interest to other countries. The chapter is roughly organized by categories of financial service providers—(1) traditional providers (e.g., banks, rural credit cooperatives, and insurance providers), (2) “new-type” providers (e.g., village and township banks and microcredit companies), and (3) fintech companies (e.g., nonbank digital payment providers,

Internet-based lenders, and Internet banks)—and explores the role of each type of provider in contributing to financial inclusion. This chapter also discusses the role of the Chinese government in promoting the development of financial inclusion.

Chapter 5 discusses the major challenges remaining in China to achieving sustainable financial inclusion over the long term.

Finally, chapter 6 discusses globally relevant lessons from China's financial inclusion experience.

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**NOTE**

2. PBOC and nine other ministries and commissions (2015).



## KEY ELEMENTS OF FINANCIAL INCLUSION

The concept of financial inclusion has advanced considerably over the past few decades. From its initial beginnings in the product- and institution-specific microcredit and microfinance movements, financial inclusion is now viewed as a broader national and global policy objective—one that is multifaceted and encompasses a range of products and consumer segments, financial service providers, delivery channels, government actors, and stakeholders. For the purposes of this report, financial inclusion is defined as:

*The uptake and usage of a range of appropriate financial products and services by individuals and micro and small enterprises (MSEs), provided in a manner that is accessible and safe to the consumer and sustainable for the provider.*

This definition represents a holistic conceptualization of financial inclusion. It is broader than some alternative definitions, which have been limited to certain financial products or consumer segments. However, it shares many common elements with definitions offered by other national and global stakeholders, including the definition outlined in China's *Plan for Advancing the Development of Financial Inclusion (2016–2020)* (FIP) (see box 2.1). The FIP highlights MSEs, farmers, urban low-income groups, impoverished groups, the disabled, and the elderly as particularly underserved segments.

This chapter defines and summarizes the key components of financial inclusion in order to serve as a framework for the subsequent discussion of China's progress and challenges in this area. To achieve this aim, this chapter expands on four key elements that are embedded in the aforementioned definition of financial inclusion:

- 1) Accessibility,
- 2) Diverse and appropriate products,

- 3) Commercial viability and sustainability, and
- 4) Responsibility and safety.

The following sections explore these four key components in greater detail, describing their main elements, significance to financial inclusion, common obstacles, and strategies to address such obstacles. While these four components are segmented into separate subsections, clear linkages exist among them, which are noted and discussed.

### 2.1 ACCESSIBILITY

Consumers' ability to conveniently access financial products and services is a key driver of financial inclusion. Accessibility means that a consumer has sufficient physical proximity to access points—including branches, agents, automated teller machines (ATMs), and other outlets or devices—to enable him or her to easily select and use a range of financial products and services. Remote access channels like mobile phones and computers are also increasingly relevant to the uptake and usage of financial products. Lack of physical accessibility generates significant transaction costs for underserved consumers (e.g., direct costs for transportation, indirect costs for lost time) that can limit the overall value proposition of financial products as tools to meet daily financial needs. Indeed, consumers place considerable value in accessibility when choosing whether and how to participate in the formal financial system. According to the 2013 China Household Finance Survey (CHFS), 45 percent of households with an account report that they chose their financial service provider mainly because of its "convenient location," the

**BOX 2.1****Global Definitions of Financial Inclusion**

Different stakeholders have defined financial inclusion in different ways. China's *Plan for Advancing the Development of Financial Inclusion (2016–2020)* begins by noting that "Financial inclusion means 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."

The World Bank's *Global Financial Development Report 2014* includes a basic and straightforward definition of financial inclusion as "the share of individuals and firms that use financial services."

The Center for Financial Inclusion provides a multidimensional vision of financial inclusion, describing financial inclusion as "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 addition, financial services are provided through a diverse and competitive marketplace, with "a range of providers, robust financial infrastructure and clear regulatory framework."

The Global Partnership for Financial Inclusion (GPFI) describes 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 (defined broadly to include current accounts), payments, and insurance." "Effective access" is further defined as "convenient and responsible service delivery, at a cost affordable to the customer and sustainable for the provider, with the result that financially excluded and underserved customers can access and use formal financial services."

Source: CFI (2011); GPFI (2011); World Bank (2014).

most commonly cited rationale.<sup>3</sup> Limited accessibility results in low uptake and use of formal financial products and services. Research indicates that improving the accessibility of financial services increases consumer use and the many follow-on benefits of financial inclusion, including increases in income, productive investment, and employment.<sup>4</sup>

In many countries, the financial sector has developed around the economics of branch networks. Until recently, consumers' choices for accessing financial products were limited to interactions at brick-and-mortar branches of financial service providers. However, the cost of building and operating brick-and-mortar branches often vastly outweighs the revenue gained by serving certain consumer segments. Thus unsurprisingly, some segments—disproportionately rural and poor consumers, often with small and irregular income streams—were systematically unserved or underserved.

Specialized financial service providers that focus explicitly on these underserved segments—such as village and township banks (VTBs) in China or savings and credit cooperatives (SACCOs) in Rwanda—have achieved meaningful progress in improving the financial sector's reach for rural and low-income consumers in many countries. Such providers typically have lower-cost, simpler operations than mainstream commercial banks.

Yet even with a more diverse set of providers, branch economics remain a major constraint in most economies. Achieving financial inclusion therefore requires extending physical access beyond brick-and-mortar branches. The combination of technology, new business models, and evolving regulatory approaches has allowed further progress in bringing financial services even closer to the doorstep of the everyday consumer at relatively low costs to providers. ATMs were the first widespread nonbranch access point and are now more ubiquitous than brick-and-mortar branches in 130 economies, including in China, where there are more than four times as many ATMs as branches.<sup>5</sup> A broad range of innovative approaches, from banking by boat, motorbike, or van (e.g., China, Indonesia, and Maldives) to mobile ATMs (e.g., Vietnam) to payment kiosks (e.g., India and the Russian Federation), have also been successfully used to increase accessibility for consumers without investing in building and operating full-scale branches.

Agent-based models are a more recent widespread development, and a key component of China's financial inclusion success story. In such models, small convenience stores, post offices, large retailers, or other outlets serve as third-party agents on behalf of traditional or mobile financial service providers. Point-of-sale (POS) terminals and/or mobile devices are most often used to enable

these agents' operations. The prevalence of these models is driven by financial service providers' desire to leverage existing retail infrastructure (particularly infrastructure that reaches into rural and remote areas), reduce transaction costs, reach new consumer segments, and benefit from payment-oriented businesses.<sup>6</sup> Retail agents representing financial service providers outpace brick-and-mortar branches in several major economies, including Brazil, China, India, and Peru.<sup>7</sup>

Despite these new approaches to increase accessibility, progress remains uneven. Although new access channels are less expensive for providers than full-service branches, such channels are still not inexpensive in absolute terms, and the cost-benefit calculus that historically posed an obstacle to financial inclusion is still relevant. For example, the costs of establishing ATMs and POS-enabled agents remain nontrivial, and in many cases the revenue stream from low-value transactions may be insufficient to justify up-front investment and operational costs. As a result, inequality in physical access to financial services remains a central characteristic across many economies. Globally, over 20 percent of adults without an account report distance as a major obstacle to account ownership, according to the 2014 Global Findex. This means at least 440 million adults worldwide are excluded from the financial system due to poor accessibility.<sup>8</sup>

In addition, not all provider types or access channels can be considered equal from the consumer perspective. The convenience, product offerings, functionality, and quality of operations of each type of access point create meaningful differences across types. In most countries, commercial bank branches still provide the most comprehensive set of financial products and services. Specialized financial service providers targeting rural and poor consumer segments are critical for expanding physical access, but in some cases offer a more limited set of products, are not fully integrated into key financial infrastructure systems (e.g., payments infrastructure and credit bureaus), and face regulatory and supervisory obstacles. For example, microcredit companies (MCCs) in China are credit-only institutions with limited geographic scope (i.e., operations are typically limited to within a single county's boundaries), limited funding options, and inconsistent regulation and supervision across provinces and counties, which in some cases results in high entry barriers and operating costs. These issues suggest that ultimately a diverse set of access points is necessary to provide a comprehensive degree of accessibility to consumers.

The legal and regulatory framework and operational business models can determine the degree to which agents of financial service providers can match the basic functions of brick-and-mortar branches. While agents in Brazil and Peru can provide a broad range of services, agents in China currently perform limited cash-in transac-

tions or account openings. Practical limitations on agents' capacity, and legal restrictions such as those related to customer due diligence requirements, impede the extent to which agent-based models can fully match the offerings of a physical bank branch.

Beyond physical access points operated by financial service providers, personal devices like mobile phones and computers increasingly provide a further avenue for consumers to select and use financial products. These personal digital devices can facilitate product uptake for consumers with existing relationships with financial service providers (i.e., linking an existing account to a third-party payment platform) and provide a platform for convenient product usage (i.e., sending or receiving money), hence increasing consumer access. However, in most circumstances personal digital devices cannot fully replace the need for face-to-face interactions with financial service providers, in particular for consumers who are entering the formal financial system for the first time. Digital products often still require initial physical interaction with the provider for identification or documentation purposes. For example, in China, most customers of CreditEase (a peer-to-peer [P2P] lender) still submit their appraisal documents in person.

## 2.2 DIVERSE AND APPROPRIATE PRODUCTS

Achieving financial inclusion requires a range of financial products and services that are appropriately designed and fit the needs of consumers, particularly the unserved and underserved. Appropriate design of financial products requires identifying the needs of particular customer segments and selecting product features that could meet those needs at a reasonable cost. Various aspects must be considered regarding the appropriateness, or quality, of financial products. As defined by the Center for Financial Inclusion, "quality" includes affordability, convenience, product fit, safety, dignity of treatment, and client protection.<sup>9</sup> Other definitions include suitability, transparency, and client value. These elements are often interrelated or overlapping.

How does quality product design affect financial inclusion? The appropriateness of products can drive uptake and usage and increase entry by the unserved and underserved into the formal financial sector. Conversely, poorly suited products will neither have significant uptake nor long-term usage, or they may actually harm low-income consumers. The World Bank's *Global Financial Development Report 2014* notes that recent studies show that product design features can affect both the extent and the impact of use by individuals. Insufficient attention to product design is cited as a driver of limited uptake and usage of transaction accounts.<sup>10</sup>

Often, conventional financial products and services are not well suited to the needs of low-income consumers, who may require simplified, low-cost products without unnecessary features. One example of a simplified, low-cost product is a basic bank account, which is typically a current account with no or low monthly fees and minimum balance requirements and the basic functionalities of a current account, often with limitations on the number of monthly transactions allowed and without additional features such as overdraft facilities. Microcredit focused on microenterprise lending is another traditional example of product design tailored to low-income consumers, as microcredit is designed to provide small amounts of credit over short cycles using collateral substitutes (e.g., reputational collateral, group guarantees), which is more suitable for informal and small microentrepreneurs. Digital finance unlocks the potential for even greater tailoring and customization of products and services to fit individual consumer needs, based partly on the ability to use advanced data analytics on existing and potential customers to design products appropriately.

Appropriate product design must also account for the behavioral biases that affect all consumers of financial services. Present bias often influences financial decision making, leading consumers to prioritize present consumption over saving for the future. Understanding and adapting to behavioral biases can be incorporated into product design for financial inclusion purposes. Examples of product designs that incorporate insights into behavioral biases include commitment accounts for savings products and accounts with automatic savings reminders.

Obtaining a deeper understanding of the unique characteristics and needs of the unserved and underserved can also enhance appropriate product design. Although gaining detailed knowledge of a target clientele can be challenging, new methods have emerged in recent years. Financial diaries, which closely follow the financial lives of households at a granular level, and other types of market research can be used to gain a more detailed understanding of consumer behavior. Emphasis on human-centered or customer-centric design, which goes beyond traditional market research, is also growing. The human-centered design process focuses on learning directly from customers by carefully listening to and observing them in their environment, allowing designers to understand customer needs, preferences, and behaviors and deliver solutions that work in specific contexts.<sup>11</sup> Findings are then incorporated into new or different product offerings.

Convenience is another important component of the appropriateness of products and services. For consumers, convenience can refer to both physical access as well as the timeliness and bureaucratic efficiencies (or inefficiencies) of the financial service. Requirements related to loan documentation, number of days for approval of applica-

tions, and language and literacy difficulties can all pose real barriers to consumers seeking to obtain and use financial products and services.

Affordability is also a critical component of the quality of financial products and services for the purposes of financial inclusion. The importance of product cost to a low-income consumer is self-evident. However, the more practical perspective to consider may be the value proposition for providers more broadly, which is necessary for the provision of financial products and services to be sustainable over the long term. Section 2.3 discusses this concept further.

The overall range and diversity of available products is another important component of financial inclusion. Research such as financial diaries reveals that the needs of low-income households are diverse and complex. They need access to the same basic financial products and services as all others, not just a single product such as credit or payment services, to effectively manage risk, store money safely, conduct daily transactions, and meet credit needs. The concept of financial inclusion does not mean that consumers require products in all these categories at all times, but rather that they need access to various financial products and services that they can select from and use when necessary.

As further explained in box 2.2, basic payments and store-of-value instruments are valuable to most adults to facilitate common activities such as conducting economic transactions, sending and receiving money, and storing value. As low-income individuals are particularly vulnerable to financial shocks, which can have severe long-term consequences, insurance products are also necessary (e.g., life insurance, health insurance, funeral insurance, property insurance, agricultural insurance, etc.). A safe place to save money is one of the most demanded products by low-income individuals, who often have unpredictable and seasonal incomes. Without access to formal savings products, low-income individuals often resort to informal means of saving—in cash, in assets such as livestock, or through social networks—that are more vulnerable to theft or loss in value. Finally, credit is useful for production and consumption purposes, and more broadly for income smoothing. Credit can include microenterprise loans, consumer loans, education loans, mortgages, home improvement loans, etc.

The role of digital finance has been expanding rapidly and has significant potential to increase product diversity for purposes of achieving financial inclusion. Digital finance encompasses new, innovative products and services created for digital channels (such as mobile money and online lending); digitally enabled business models that leverage technology (such as big data analytics for credit scoring purposes and agent-based models); and digital access to traditional financial products and ser-

**BOX 2.2****Store-of-Value Transaction Accounts**

One product category where greater attention to appropriate product design can yield significant impacts is store-of-value transaction accounts. In recent years, a consensus has emerged that most adults can benefit from these types of basic products, which allow them to store value and send and receive payments. This consensus is driven by a robust evidence base that finds significant and meaningful benefits to consumers from the adoption and use of these products and the near-universality of the types of behaviors that these products facilitate—most adults make or receive payments as part of their regular money management, and nearly all adults seek a safe place to store money.

The 2016 *Payments Aspects of Financial Inclusion (PAFI)* report, prepared by the CPMI and the WBG, defines store-of-value transaction accounts as follows:

*Store-of-value transaction accounts can be defined as accounts (including e-money accounts) held with banks or other authorized and/or regulated payment service providers, which can be used to make and receive payments and to store value.*

More specifically, this includes all deposit accounts held with banks and other authorized deposit-taking financial institutions that can be used for making and receiving payments and prepaid instruments based

on e-money offered by banks, other authorized deposit-taking financial institutions, and non-deposit-taking payment service providers such as mobile network operators.

While evidence on the benefits of many financial products has been inconsistent, modest consensus exists among researchers that basic payments and store-of-value instruments offer meaningful benefits to their owners, as exemplified in the *Global Financial Development Report 2014* (World Bank, 2014). At the global level, WBG President Dr. Jim Kim made a significant acknowledgement of the value of these accounts and the existing gap in ownership of such accounts in late 2013 when he announced an initiative to achieve *Universal Financial Access* by 2020. The goal of this initiative is for all adults to own a store-of-value transaction account.

Of course, the widespread uptake and use of store-of-value transaction accounts will require more than just improvements to product design—it will require improvements related to many of the themes discussed in this chapter. The PAFI report provides a framework for increasing uptake and usage of such accounts, structured around seven guiding principles and spanning a wide range of public and private sector actions.

vices. The advent and use of digital technology applied to financial services has greatly increased the potential range of products and services available to the underserved by allowing providers to develop innovative new products at lower cost that reach a much broader range of consumers via more accessible channels.

Many of the aforementioned points relating to product range and appropriateness have policy and regulatory implications. The regulatory environment can help or hinder financial inclusion efforts. Financial sector authorities can play a high-level role in promoting innovation in product design and delivery, and regulation can address specific issues. For example, flexible, risk-based know-your-customer and customer due diligence rules can help overcome the obstacle of serving low-income consumers without formal identification. As always, policymakers must balance the risks and benefits of new approaches to reach the underserved.

## 2.3 COMMERCIAL VIABILITY AND SUSTAINABILITY

Accessibility and diverse and appropriate products are critical elements of financial inclusion from the consumer perspective, but an important challenge is to develop and sustain a financial ecosystem in which providers can deliver these products and services in a cost-effective and sustainable manner over the long term. A financial system that expands its reach to previously underserved consumers but does not do so sustainably ultimately fails at meeting the long-term objectives of financial inclusion.

A diverse, competitive, and innovative marketplace is critical to achieving sustainable levels of financial inclusion. While consumers need a range of basic financial products and services, in most markets commercial banks alone are unlikely to provide this full range to all underserved segments. Different types of providers, operating on a fair and level playing field and utilizing different busi-

ness models to target market niches and consumer segments, can collectively generate innovations in product design and delivery models and encourage the long-term development of a diverse and sustainable financial ecosystem. Commercial banks, rural banks, financial cooperatives, microfinance institutions, postal banks, payment service providers, mobile network operators (MNOs), and fintech companies can all contribute to financial inclusion. For example, rural banks and financial cooperatives often have long-standing ties in the communities where they operate and may be better positioned to build trust and to understand and meet the specific needs of their customer base. Postal banks and agent-banking models provide the opportunity to leverage broad infrastructure networks in remote areas to increase access. China has also recognized and followed this approach, first with the creation of new types of providers (including VTBs and MCCs), and more recently with the licensing of Internet banks, as well as the entry of new fintech companies such as Internet-based lenders.

Business practices can also be adapted to lower operational costs and overcome the inherent obstacles to profitably and sustainably serving the unserved and underserved. One common obstacle is information asymmetries. Providers often lack access to credit histories of potential borrowers among the unserved and underserved. Past strategies to address this challenge included relying on group lending or reputational collateral. The increasing availability of “big data” and “alternative data,” including transactional and social data, gives providers further sources of information to utilize for creditworthiness assessments and risk management, among other uses. Digital technologies can also be leveraged for operational processes, such as loan repayments and processing, further lowering the ongoing administrative and operational costs of serving low-income consumers.

Another critical factor for the sustainable provision of financial services is a robust financial infrastructure that supports efficient transmission of information and transactions among a wide range of market participants. Financial infrastructure primarily consists of credit infrastructure (including credit reporting systems, secured transaction systems, collateral registries, and insolvency systems) and national payment systems. Credit reporting systems that collect and disseminate relevant and in-depth data (e.g., repayment data) among all relevant credit providers enables the reliable and cost-effective evaluation of consumer creditworthiness, thereby reducing informational asymmetries and transaction costs that often deter providers from lending to low-income individuals and MSEs. Secured transaction systems and collateral registries allow businesses to leverage their immovable assets (e.g., land) and movable assets (e.g., equipment and inventory) as

collateral to obtain capital for investment and growth. Insolvency and debt resolution systems that effectively save struggling firms when possible or productively reallocate the assets of failing firms can encourage entrepreneurs to make investments and take informed risks and increase financial service providers’ willingness to lend to such firms.

As noted in the Payment Aspects of Financial Inclusion (PAFI) report, prepared by the Bank for International Settlements’ Committee on Payments and Market Infrastructures (CPMI) and the WBG, key elements of a national payments system include an interbank system for retail electronic funds transfers, a payment card processing platform or platforms, and a large-value interbank clearing system. Interoperability among payment systems—which allows for seamless interaction of two or more proprietary acceptance and processing platforms—can promote competition and allow providers to avoid large sunken investments in parallel infrastructure systems. Efforts to restrict access to shared payment systems for some providers, especially new or nontraditional providers, via anticompetitive measures can hinder market entry and long-term competition and market dynamism. Further development in mobile and retail payment infrastructure can also facilitate the expansion of digital finance models.

Finally, a key element of commercially viable and sustainable provision of financial services to underserved and unserved segments is recognizing the appropriate role of government. Well-intentioned government efforts to expand financial inclusion can sometimes have distortionary impacts on market dynamics that are ultimately detrimental to consumers. One example is imposing overly strict interest rate caps that limit the amount of credit available. Another example is providing subsidized lending that may encourage poor repayment behavior from consumers and discourage market entry by the private sector. The efforts and resources of financial sector authorities should instead be directed at developing (1) well-coordinated policy dialogue and engagement with the private sector, (2) an enabling legal and regulatory environment with proportionate regulatory requirements and adequate supervisory capacity, and (3) a far-reaching and robust financial and information and communication technology (ICT) infrastructure.

## 2.4 SAFETY AND RESPONSIBILITY

Achieving long-term financial inclusion requires that products and services be responsibly delivered to consumers and that the policy objectives of financial inclusion align with those of financial stability and market integrity. Over-

all, this balance requires financial sector authorities to continually assess the risks and trade-offs among these various policy objectives.

The core elements of financial consumer protection, such as clear disclosure and transparency of the terms and conditions of products and services, fair treatment of consumers, and accessible recourse mechanisms, are necessary to ensure that consumers obtain the products and services that best meet their needs and do not suffer harm in their interactions with financial service providers. Financial consumer protection plays an important role in building trust in the financial system, particularly for consumers who are new to the formal financial sector. The legal and regulatory environment should ensure that a sufficient framework is in place for financial consumer protection that sets clear rules regarding the conduct of financial service providers.

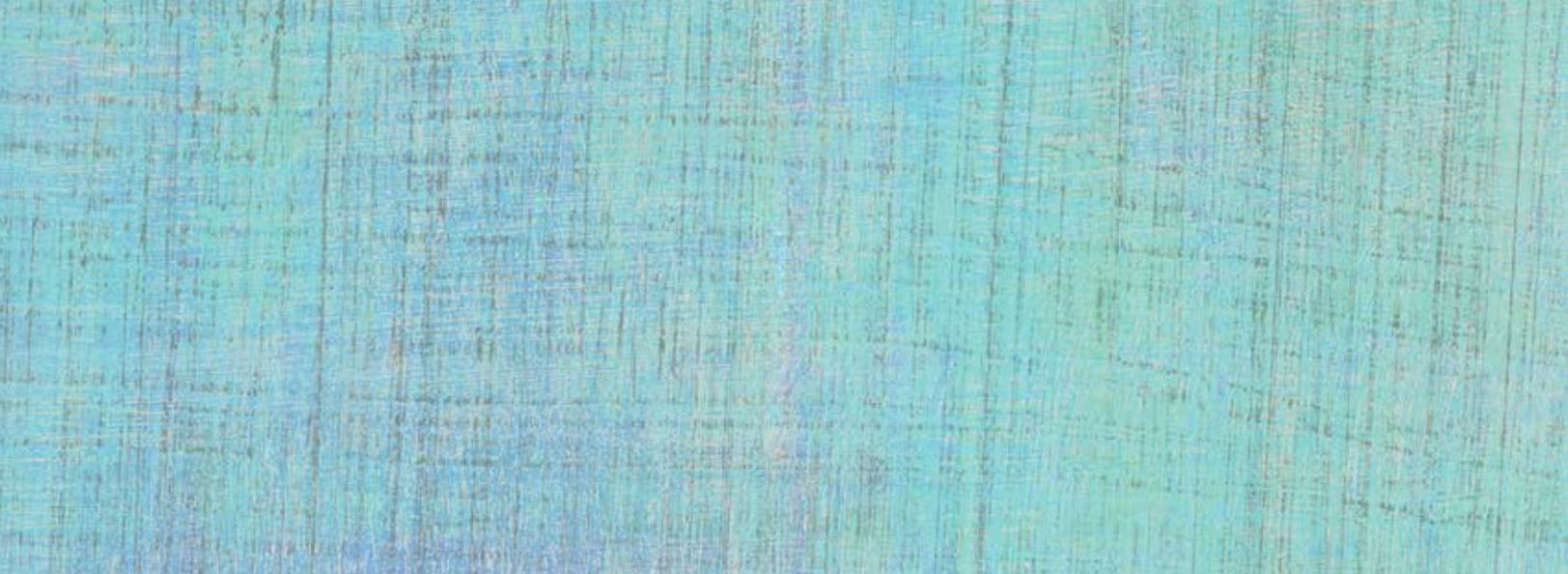
Low levels of financial capability can present a further obstacle to the responsible uptake and usage of financial products and services, regardless of the level of accessibility or appropriateness of products. Financial capability is defined as the internal capacity to act in one's best financial interest and encompasses the knowledge, attitudes, skills, and behaviors of consumers with regard to managing their resources and understanding, selecting, and using financial services that fit their needs.<sup>12</sup> Individuals with low levels of financial capability may distrust formal financial providers and/or may be unaware of the potential benefits or uses of financial products and services. Improved financial capability can lead to increased uptake and usage of financial products and services to effectively meet the needs of consumers. Both providers and financial sector authorities should consider and pursue approaches to improving the levels of financial capability of the unserved and underserved.

Realizing long-term financial inclusion also depends on the overall safety and soundness of the financial system. For example, financial sector authorities incentivizing certain types of providers or delivery channels by relaxing regulatory requirements to meet financial inclusion objectives should ensure that sufficiently robust regulatory and supervisory frameworks remain to allow long-term financial stability and protect consumers. Particularly in the realm of fintech, balancing risks and innovation is necessary to enable continued growth in new products, new delivery mechanisms, and new business models and partnerships that expand the potential for achieving full financial inclusion.

Maintaining market integrity while pursuing financial inclusion objectives also requires striking the right balance. As the PAFI report notes, national authorities may struggle to achieve a regulatory regime that protects the financial system from money laundering and terrorist financing activities while building in sufficient flexibility to address customer identification issues that impede serving the underserved, enable the entry of new providers, and allow the development of innovative financial products. The Financial Action Task Force (FATF) supports a risk-based approach to implementing FATF recommendations, particularly with respect to customer due diligence (CDD). However, some authorities' fear of being found noncompliant with FATF recommendations can outweigh the perceived financial inclusion benefits of a risk-based approach. As a result, overly restrictive anti-money laundering/combating financing of terrorism (AML/CFT) regimes will have some impact on the development of financial inclusion.

## NOTES

3. Thirty-five percent of respondents chose "because designated bank to receive salary/wages or subsidy payment"; 10 percent chose "because it has convenient hours"; 7 percent chose "because of good service"; 5 percent chose "because it has many ATMs"; and less than 5 percent chose reasons related to online banking, low fees, simple business procedures, unlimited withdrawals, small risk of bank failure, and lack of another option.
4. For examples, see Banjeree and others (2013); Bruhn and Love (2014); Burgess and Pande (2005); Sanford (2013).
5. IMF FAS (2016).
6. Kumar (2011).
7. IMF FAS (2016); World Bank GPSS (2016).
8. Demircuc-Kunt and others (2015). The Global Findex is a World Bank database on financial inclusion in over 140 countries. The data is collected triennially through surveys with individuals conducted as part of the Gallup World Poll.
9. [www.centerforfinancialinclusion.org](http://www.centerforfinancialinclusion.org).
10. World Bank (2014).
11. McKay and Seltzer (2013); Kilara and Rhyne (2014).
12. <http://responsiblefinance.worldbank.org/publications/financial-capability>.



## BENCHMARKING CHINA'S FINANCIAL INCLUSION PROGRESS

This chapter provides a quantitative, cross-country benchmarking analysis of China's progress in expanding financial inclusion. The analysis contained herein is from a high level; chapter 4 explores the trends highlighted here and the drivers and factors behind these trends in greater depth. This chapter leverages various global and national databases relevant to financial inclusion, including the China Household Finance Survey (CHFS), the WBG Global Findex, the International Monetary Fund Financial Access Survey (IMF FAS) database, the WBG Global Payment System Survey (GPSS), the WBG Enterprise Surveys. Key indicators for the analysis derive from the recently updated G-20 Financial Inclusion Indicators, including new indicators on digital financial inclusion developed by the Global

Partnership for Financial Inclusion (GPFI) under the leadership of the People's Bank of China (PBOC) during 2016. The benchmarking analysis employs four groups of comparison countries to provide context to China's current state of financial inclusion:

- 1) G-20 high-income countries (G-20 HIC),
- 2) G-20 middle-income countries (G-20 MIC),
- 3) East Asian and Pacific large middle-income countries (EAP L-MIC), and
- 4) Other large middle-income countries (other L-MIC).

Table 3.1 provides an overview of these comparison groups.

**TABLE 3.1 Benchmarking Comparison Groups**

COMPARISON GROUP	ABBREVIATION	# OF COUNTRIES	INCLUDES	AVERAGE POPULATION	RURAL POPULATION (% TOTAL)	GNI PER CAPITA (US\$)
China	—	1	China	1,378,665,000	43.2	8,260
G-20 high-income countries	G-20 HIC	12	Argentina; Australia; Canada; France; Germany; Italy; Japan; Korea, Rep.; Russian Federation; Saudi Arabia; United Kingdom; and United States	88,170,704	17.8	34,990
G-20 middle-income countries	G-20 MIC	6	Brazil, India, Indonesia, Mexico, South Africa, and Turkey	342,650,232	34.6	6,603
East Asian and Pacific large middle-income countries	EAP L-MIC	4	Malaysia, Philippines, Thailand, and Vietnam	74,018,025	48.6	5,280
Other large middle-income countries	other L-MIC	12	Algeria; Bangladesh; Colombia; Egypt, Arab Rep.; Iran, Islamic Rep.; Kenya; Nigeria; Pakistan; Peru; Sudan; Ukraine; and Uzbekistan	83,669,777	47.2	3,030

Source: World Development Indicators 2017. All data as of 2016.

Note: "Large" is defined as an adult population above 20 million. "Middle-income" is defined according to the World Bank Group (WBG) income classifications. China and the European Union are excluded from the two G-20 comparison groups. Gross national income (GNI) per capita calculated using Atlas method, current US\$.

### 3.1 PHYSICAL AND REMOTE ACCESS POINTS

As discussed in section 2.1, physical access is a key element of financial inclusion. Overall, available data show that the physical reach of China’s financial sector—including branches, ATMs, and agents—is on par with that of the median G-20 HIC and significantly higher than that of the G-20 MIC and L-MIC group medians, a result largely driven by China’s vast agent network (figure 3.1). The reach of China’s branch network lags behind that of the median G-20 HIC, though it is on par with that of the median G-20 MIC. China’s automated teller machine (ATM) network is larger than that of the median G-20 MIC, median EAP L-MIC, or median other L-MIC, though smaller than the median G-20 HIC.

China’s branch network is complemented by a large and far-reaching agent network which, at close to 1 million agents, is the largest in the world by absolute size.<sup>13</sup> However, when normalized by population, China’s agent density rate (88 agents per 100,000 adults [age 15+]) is roughly equivalent to that of Brazil (84 agents per 100,000 adults), but lags behind those of Kenya (156), Peru (344), and Bangladesh (505).<sup>14</sup> The limited functionality of agents in China is also an important consideration, as agents currently do not fully facilitate the uptake of financial products (i.e., account opening and loan repayments), nor do they facilitate the deposit of funds into customer accounts.

High rates of mobile and Internet access provide Chinese adults with additional channels through which to access and use financial products and services. Indeed, many emerging fintech models in China (e.g., nonbank digital payment providers and peer-to-peer lending platforms) rely on access to mobile or Internet devices or build off data gleaned from the mass scale of digital trans-

actions. Mobile phone access is virtually universal in China, with 97 percent of adults reporting that they or someone in their household has a mobile phone (figure 3.2).<sup>15</sup> By contrast, just over half of adults report that their household has access to the Internet, which, while lower than the average in G-20 HICs, is far above the average in G-20 MICs and L-MICs. In fact, the increasing prevalence of smartphones that facilitate Internet access may potentially reduce the significance and utility of traditional broadband Internet connection.

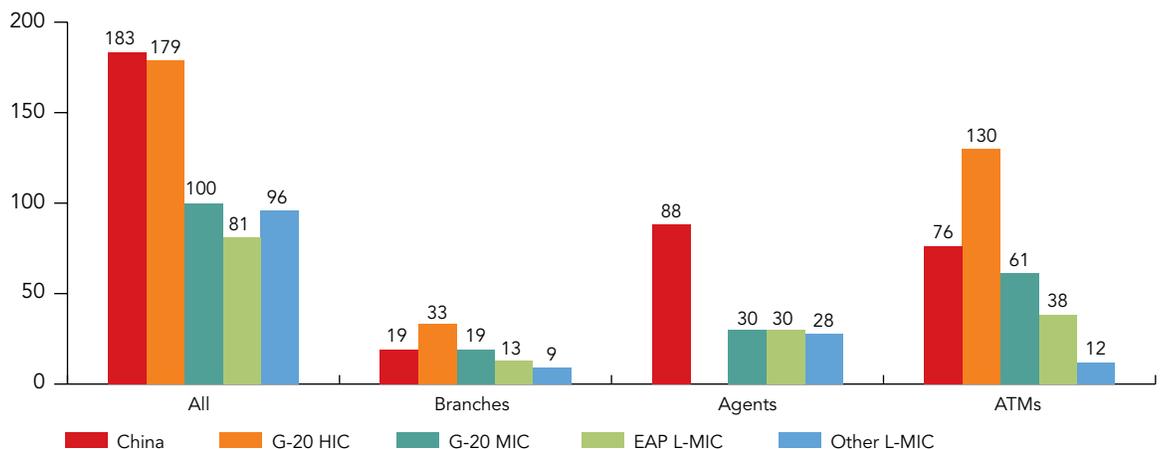
### 3.2 ACCOUNTS AND PAYMENT INSTRUMENTS FOR INDIVIDUALS

China has achieved considerable success in expanding uptake of a basic but essential financial instrument: the store-of-value transaction account. According to data from the 2014 Global Findex survey, 79 percent of Chinese adults report owning at least one store-of-value transaction account, a category that includes transaction and deposit accounts at regulated financial institutions or e-money providers (figure 3.3). The 2014 value represents a significant increase from 2011, and the value has likely increased further since 2014 (new Global Findex data is forthcoming in 2018). It should be noted that PBOC currently estimates account ownership to be above 90 percent in China. Nevertheless, Global Findex data is used in this report in order to undertake a cross-country and time-series benchmarking analysis.<sup>16</sup>

While several drivers are likely behind the impressive increase in account ownership, it almost certainly reflects the explicit efforts of financial sector authorities and financial service providers (discussed in detail in chapter

**FIGURE 3.1 Physical Access Points**

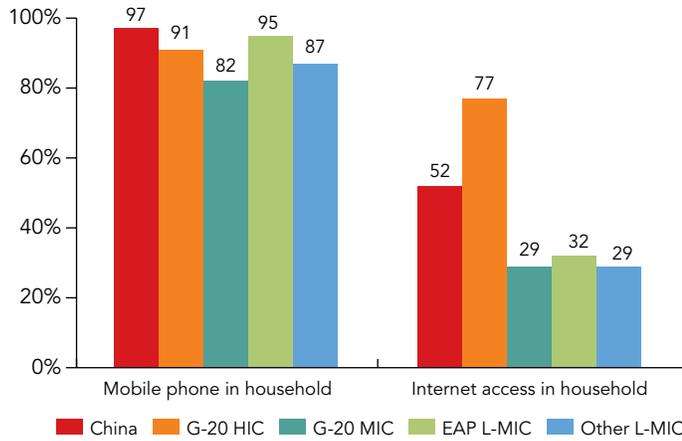
Median number of access points per 100,000 adults



Source: IMF FAS 2016; WBG GPSS 2016; national authorities.

**FIGURE 3.2 Remote Access Points**

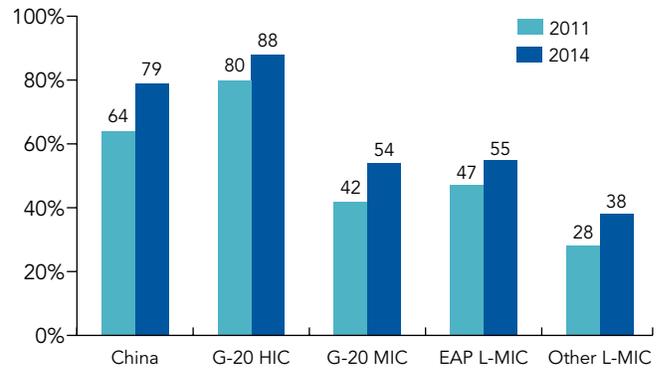
% adults (age 15+) reporting household-level access to mobile phone or Internet



Source: Gallup World Poll 2014.

**FIGURE 3.3 Ownership of Store-of-Value Transaction Accounts over Time**

% adults (age 15+) reporting ownership of a store-of-value transaction account

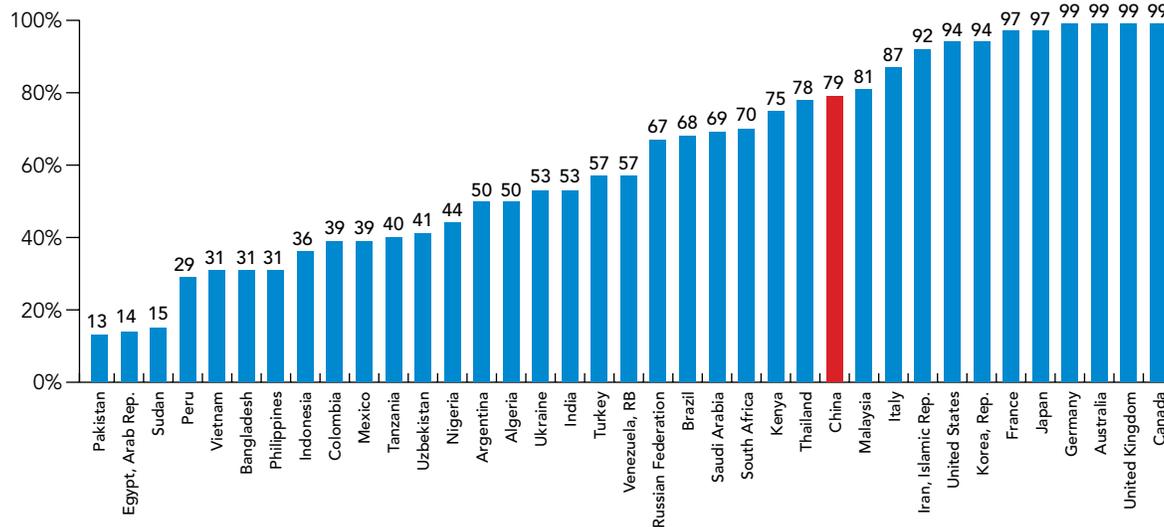


Source: Global Findex 2014 (Demirguc-Kunt and others 2015).

Note: Values for other L-MICs do not include the Islamic Republic of Iran as 2011 data for the country are unavailable. Including the Islamic Republic of Iran, the 2014 value for this group is 42 percent.

**FIGURE 3.4 Ownership of Store-of-Value Transaction Accounts across Selected Countries**

% adults (age 15+) reporting ownership of a store-of-value transaction account



Source: Global Findex 2014 (Demirguc-Kunt and others 2015).  
 Note: Figure includes countries from all comparison groups defined in table 3.1.

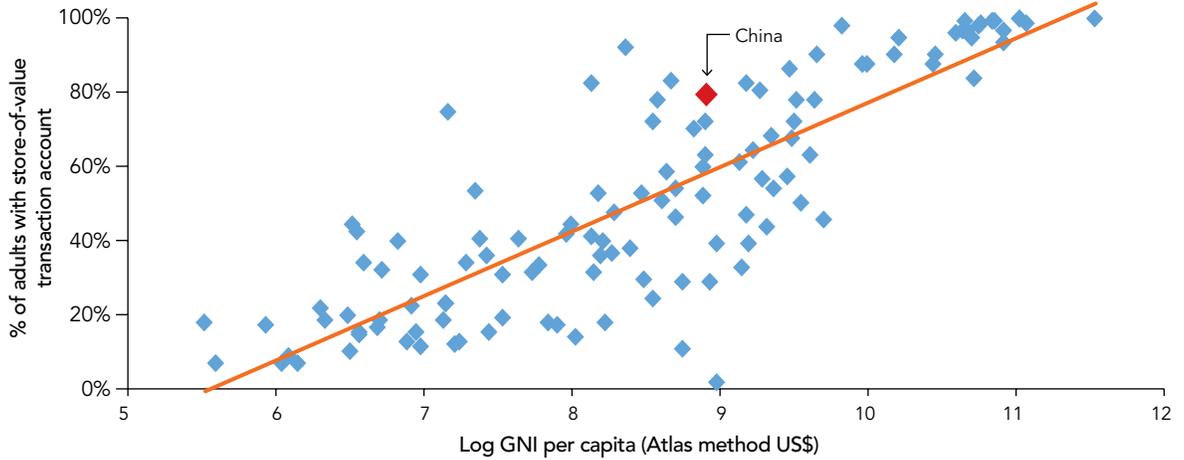
4) and broader economic and demographic trends, including migration, urbanization, formal labor market participation, and the evolving role of technology in everyday life in China.

Across G-20 countries, the average rate of ownership of store-of-value transaction accounts in 2014 fell just under that of China, at 76 percent, ranging from 36 percent in Indonesia to 99 percent in Australia, Canada, Germany, and the United Kingdom (figure 3.4). When considering that China's GNI per capita is significantly lower than that of the G-20 average, China is clearly far ahead of its peers

regarding this core metric of financial inclusion—a finding that is also apparent when China is compared with the 140 countries for which Global Findex data are available (figure 3.5). Among EAP L-MICs, the average ownership rate of store-of-value transaction accounts is 55 percent, and among other L-MICs, it is 42 percent.

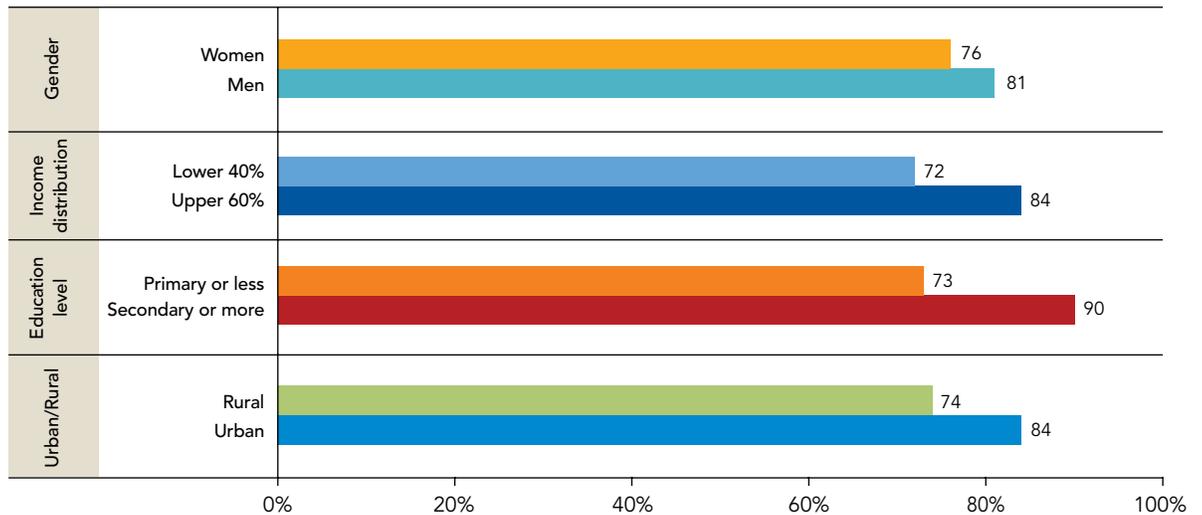
However, despite the significant progress made in recent years, some Chinese adults still lack a basic financial instrument to make and receive payments and store value (as of 2014).<sup>17</sup> These adults are disproportionately poor and live in rural areas (figure 3.6). The rate of account

**FIGURE 3.5 Ownership of Store-of-Value Transaction Accounts Compared with GNI per Capita**  
 % (age 15+) adults reporting ownership of a store-of-value transaction account



Source: Global Findex 2014 (Demirguc-Kunt and others 2015); World Bank Development Indicators 2017.

**FIGURE 3.6 Store-of-Value Transaction Accounts in China, by Individual Characteristics**  
 % adults (age 15+) reporting ownership of a store-of-value transaction account



Source: Global Findex 2014 (Demirguc-Kunt and others 2015).

ownership among rural residents in China is lower than the corresponding value for urban residents. Given that the Chinese population is overall considerably more rural than that of the average G-20 country, achieving rural-urban financial inclusion parity is a larger and more significant challenge in China than elsewhere.

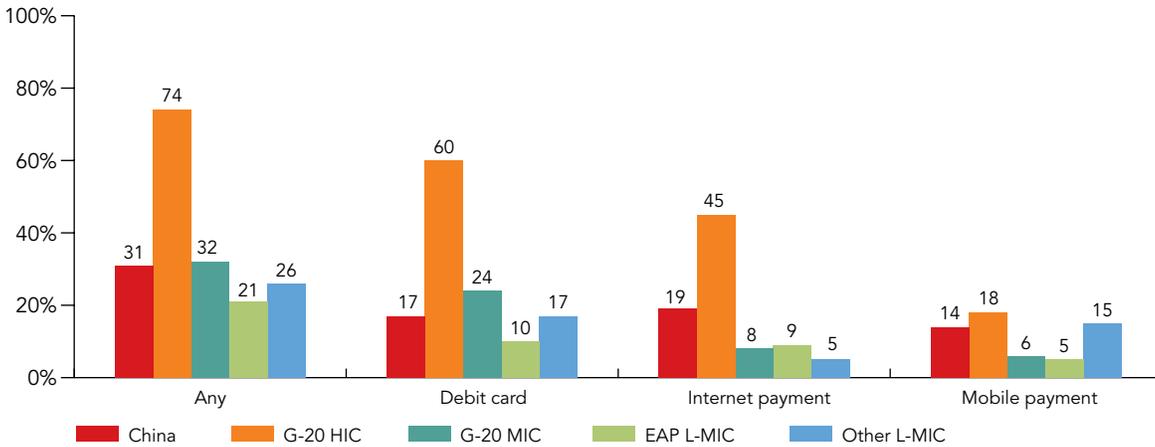
Ownership is of course distinct from usage. Eleven percent of accountholders in China report not making any deposits or withdrawals from their account in the past year, similar to the average across G-20 countries. Account holders in China with a primary education or less and those in the bottom income quintile are significantly more likely to hold inactive accounts.

Beyond ownership and use of store-of-value transaction accounts, using digital instruments to transact is a key indicator of digital financial inclusion. Overall, 31 percent of Chinese adults report using a debit card, Internet platform, or mobile platform to make payments in the past year (figure 3.7). While on par with the corresponding rate in G-20 MICs and above the rates of EAP L-MICs and other L-MICs, the prevalence of digital payments in China is lower than that of G-20 HICs.

The popularity of e-commerce and social network-based nonbank digital payment platforms have made Internet-facilitated payments and mobile phone payments (not mutually exclusive categories) relatively preva-

**FIGURE 3.7 Making Digital Payments**

% adults (age 15+) reporting having made a digital payment in the past 12 months



Source: Global Findex 2014 (Demircug-Kunt and others 2015).

lent in China. Nineteen percent of Chinese adults report having made a payment over the Internet in the past year, while 14 percent report having made a payment from their account using a mobile phone. While the prevalence of Internet payments lags behind that of G-20 HICs, it far exceeds that of G-20 MICs, EAP L-MICs, and other L-MICs. With respect to mobile phone payments, Chinese adults are almost as likely as their G-20 HIC counterparts to report a mobile-based transaction (14 and 18 percent, respectively), though other L-MICs have also achieved similar rates in mobile-based transactions, primarily driven by successes in Kenya and similar branchless banking pioneers. In comparison to other G-20 countries, while individuals in China are relatively likely to own debit cards, they are less likely to use this particular payment instrument, which may be partly due to the increasing prevalence of (and preference for) Internet- and mobile-based payments. Significant growth has likely occurred in the uptake and usage of digital financial instruments since the data was collected in 2014.

Data on specific payment use cases provide further insight into the integration of digital payments into the financial lives of Chinese adults. For example, the vast majority of social transfer recipients in China report receiving these payments directly into an account (figure 3.8). Across the four comparison groups, approximately 12–20 percent of adults report having received a social transfer payment from the government in the past year. In China, 66 percent of these adults report that the payment was made into their account, below the G-20 average of 77 percent but above the averages of EAP L-MICs and other L-MICs (41 percent and 64 percent, respectively).

What are the main obstacles to full financial inclusion in China? Available data on barriers to account owner-

ship provide some insight. As discussed previously, a portion of adults in China still lack a store-of-value transaction account, a basic and essential financial tool that addresses the need to make day-to-day payments and store value and can also open up access to other financial products and services. An adult may not be able to own, or may choose not to own, an account for several reasons. This analysis focuses on those reasons that public and private sector actions can help address: distance, cost, and documentation. Of adults without a transaction account in China, 19 percent report that they do not have an account because “financial institutions are too far away” (table 3.2). This may be related to the fact that while there are many agents and they provide convenient channels to use accounts for certain transactions (e.g. consumption, cash withdrawals, and transfers), they generally cannot be used to open accounts, make deposits, or conduct other types of transactions. Exclusion because of lack of physical access is reported at similar rates among the unbanked in G-20 and other

**TABLE 3.2 Obstacles to Account Ownership**

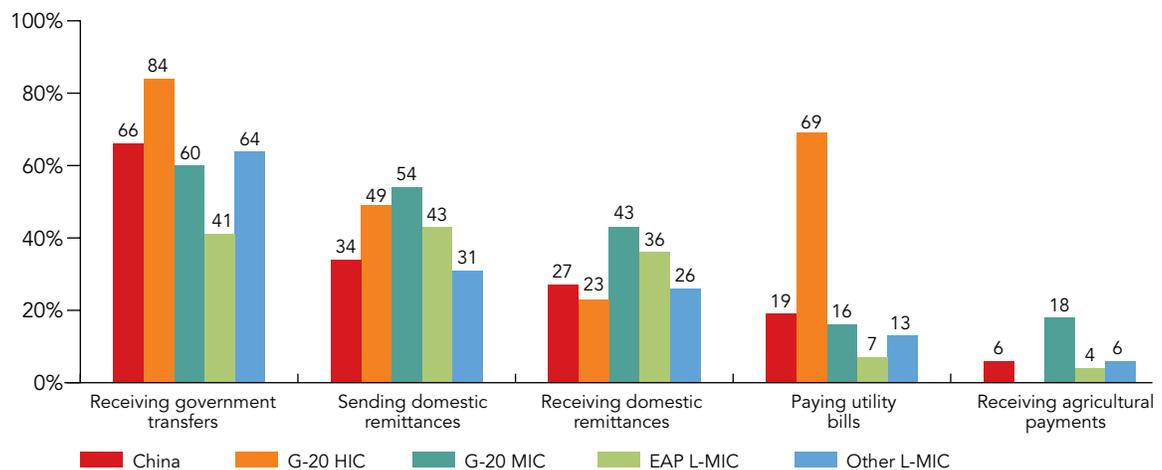
% of adults (age 15+) without an account reporting obstacle to account ownership

COUNTRY GROUPING	REPORTED OBSTACLES (% OF ADULTS WITHOUT AN ACCOUNT)		
	DISTANCE	COST	DOCUMENTATION
China	19	10	10
G-20 HICs	4	13	13
G-20 MICs	28	33	28
EAP L-MICs	29	31	24
Other L-MICs	19	28	17

Source: Global Findex 2014 (Demircug-Kunt and others 2015).

**FIGURE 3.8 Digital Payments Use Cases**

% adults (age 15+) reporting use of digital payment instrument, of those who report undertaking each activity



Source: Global Findex 2014 (Demirguc-Kunt and others 2015).

L-MICs. Cost and documentation are less commonly cited as an obstacle in China, compared with both distance and with corresponding levels for these obstacles in other countries.

### 3.3 SAVING AND BORROWING FOR INDIVIDUALS

Savings behavior is relatively prevalent among Chinese adults. Approximately 72 percent of Chinese adults report having saved or set aside money in the past year, significantly more than adults in G-20 HICs and MICs but in line with the rate in EAP L-MICs (figure 3.9). Most savers in China use formal financial institutions to do so, a pattern that distinguishes China from EAP L-MICs and is likely related to the high ownership rate of accounts. Current data do not indicate whether these savings accounts are linked to digital platforms (e.g., mobile apps and nonbank digital payment platforms) that would facilitate convenient deposit and withdrawal.

However, 31 percent of adults in China report saving, but not at a formal financial institution. Formalizing the “hidden” savings of these informal savers remains a significant opportunity for the financial sector and may also indicate the need to develop simple, accessible, and low-cost savings products, particularly for individuals with low and irregular incomes.

Saving for old age is the most commonly reported reason for saving, reported by 39 percent of Chinese adults, followed closely by saving for education or school fees (30 percent) and saving to start, operate, or expand a business (22 percent).

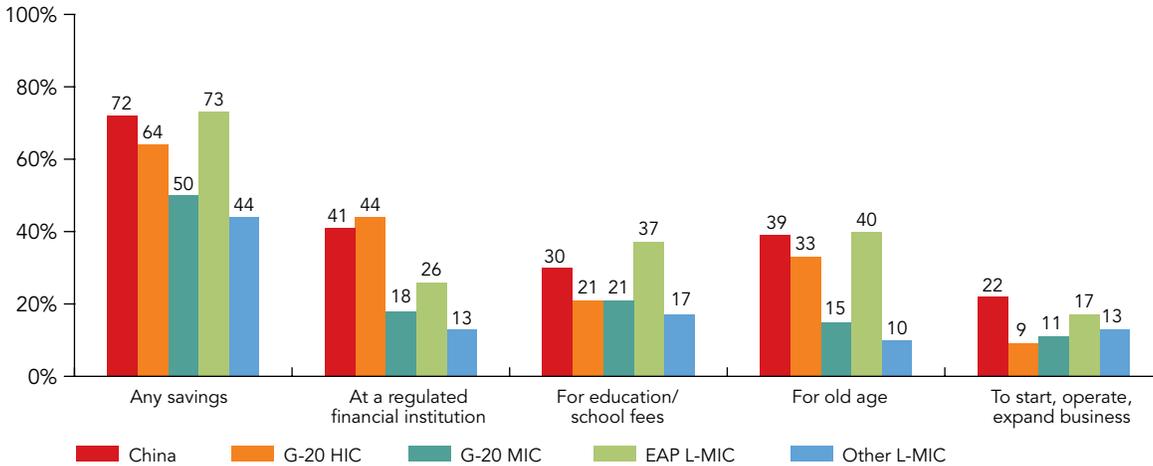
Chinese adults are as likely as adults in G-20 HICs to report having borrowed in the past year, but are significantly less likely to report having done so from a regulated financial institution. Overall, 36 percent of adults in China reported borrowing money in the past year, with less than a third of those adults (i.e., 10 percent of all adults) having reported borrowing from a regulated financial institution (figure 3.10). Among rural residents and adults in the bottom 40 percent of income distribution in China, formal borrowing is even less common: just 6–7 percent of these individuals reported borrowing from a regulated financial institution, despite no difference between these groups and the population as a whole with respect to overall borrowing prevalence.

Credit cards represent a significant source of short-term credit for adults in China. Sixteen percent of adults report owning a credit card, and 14 percent report having used a credit card in the past year. Ownership and use of credit cards is higher in G-20 countries, at 37 and 32 percent respectively. However, credit cards do not appear to be a widely used financial tool among rural residents and the poor in China. Just 4 percent of adults in the bottom 40 percent of the income quintile and 6 percent of rural residents report having used a credit card in the past year.

Existing demand-side data may not capture either peer-to-peer (P2P) borrowing or borrowing from family or friends, given that respondents likely do not consider such form of borrowing to be from a regulated financial service provider. Certain forms of short-term digital credit may also not be included. These gaps highlight the need for continued development in the measurement of financial inclusion to cover evolving models and ensure comprehensive data.

**FIGURE 3.9 Saving**

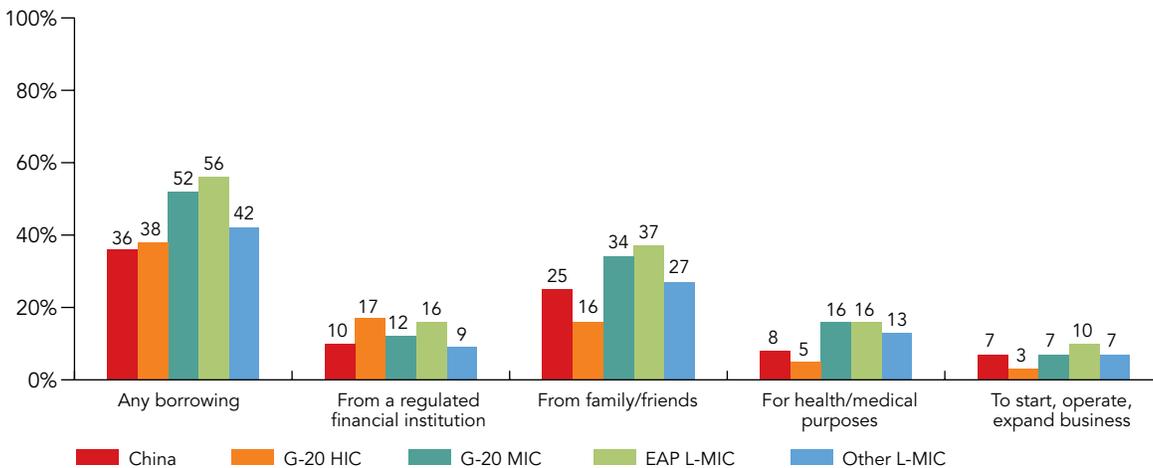
% adults (age 15+) saving in the past 12 months



Source: Global Findex 2014 (Demirguc-Kunt and others 2015).

**FIGURE 3.10 Borrowing**

% adults (age 15+) borrowing in the past 12 months



Source: Global Findex 2014 (Demirguc-Kunt and others 2015).

**3.4 INSURANCE FOR INDIVIDUALS**

Global data on individual and household uptake of insurance products are limited, thus preventing comprehensive benchmarking of the inclusiveness of China's insurance market. National insurance data do exist, however, and the 2015 CHFS provides valuable context for the insurance aspects of chapter 4. The CHFS data indicate that approximately 87 percent of working age (21 or older) and retired adults in China are covered by social health insurance, a category that includes various insurance programs like basic medical insurance for urban workers, new rural cooperative medical insurance, student health insurance, etc., but does not include commercial health insurance. Among

adults living in rural areas, social health insurance coverage reaches 91 percent.

As of 2015, approximately 7 percent of all Chinese individuals (all ages) purchased or were covered by non-vehicle commercial insurance, which includes business life insurance (covering 4 percent of Chinese individuals), commercial health insurance (2 percent), and other commercial insurance (1 percent).

Among households that report owning a vehicle (including cars, trucks, motorcycles, etc.), 95 percent report having vehicle insurance, though this varies between 91 percent among rural households and 97 percent among nonrural households. The most commonly reported forms of vehicle insurance are traffic insurance (reported

by 72 percent of vehicle-owning households), third-party liability insurance (47 percent), and loss of vehicle insurance (33 percent).

### 3.5 ACCESS TO FINANCE FOR FIRMS

Firm-level access to credit is a policy priority in China. This analysis draws on recent data from the WBG’s Enterprise Surveys (World Bank 2017(a)), a cross-country database of firm-level data collected from firms with five or more employees. Firms are segmented into three size categories:

- 1) Small, defined as firms with 5–19 employees;
- 2) Medium, defined as firms with 20–99 employees; and
- 3) Large, defined as firms with 100 or more employees.

The analysis uses data collected between 2012 and 2016, varying across countries. The data on Chinese firms were collected in 2012 and must therefore be interpreted in this context. Due to limited data availability, no G-20 HIC grouping is used and the sample of countries included in the remaining categories are defined in the notes below each figure.

At the basic level of access to payment and savings services, account ownership is nearly universal in China, with more than 96 percent of firms reporting owning a checking or savings account (figure 3.11). Even among the subsample of small firms in China, 95 percent of respondents report owning an account. This compares favorably with G-20 MICs, where account ownership among firms is considerably lower, on average.

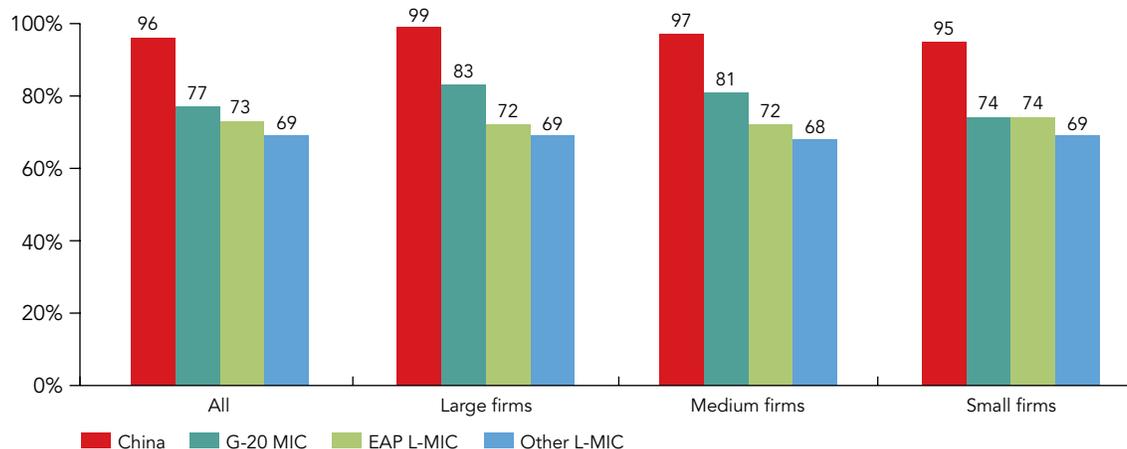
Approximately 25 percent of Chinese firms report having a loan or line of credit, though the percentage varies significantly from 14 percent among small firms, to 35 percent among medium firms, to 51 percent among large firms (figure 3.12). Indeed, while the average prevalence of loans among Chinese firms is on par with that in other G-20 MICs and above that of other L-MICs, significantly more variation exists in access to finance across firm size in China. The result is that while large and medium firms in China are more likely than large and medium firms in other country groups to have a loan or line of credit, small firms in China are far less likely than their counterparts in G-20 MICs and EAP L-MICs to report the same.

Among firms that report not having applied for a loan or line of credit in the past year, the most common reason is “no need for a loan—establishment has sufficient capital” (reported by 57 percent of firms that have not applied for a loan), followed by “collateral requirements were too high” (10 percent), and “application procedures were complex” (10 percent) (figure 3.13). Between 5 and 10 percent of firms that did not apply for a loan or line of credit in the past year report the following reasons: “interest rates were not favorable,” “did not think it would be approved,” and “size and maturity of loan not sufficient.” Relatively little variation exists across firm size categories in these responses, though small and medium firms are significantly less likely to report “no need for a loan.” Compared with other country groupings, small and medium Chinese firms are less likely to avoid applying for loans due to interest rates and more likely to cite high collateral requirements as an obstacle.

Measuring and defining the degree to which a firm is credit constrained can be done in many ways. One method, developed by WBG researchers in the Enterprise Survey

**FIGURE 3.11 Account Ownership among Firms**

% firms with an account at a bank

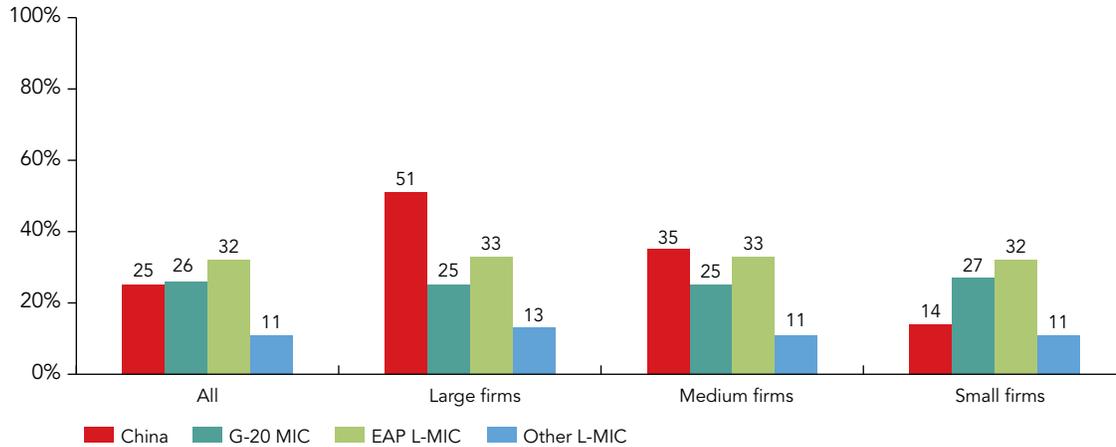


Source: WBG Enterprise Surveys 2012–2016.

Note: Countries with available Enterprise Survey data since 2012 include Bangladesh (2013); China (2012); Egypt, Arab Rep. (2013); India (2014); Kenya (2013); Malaysia (2015); Nigeria (2014); Pakistan (2013); Philippines (2015); Sudan (2014); Thailand (2016); and Turkey (2013).

**FIGURE 3.12 Access to Finance for Firms**

% firms with loan or line of credit

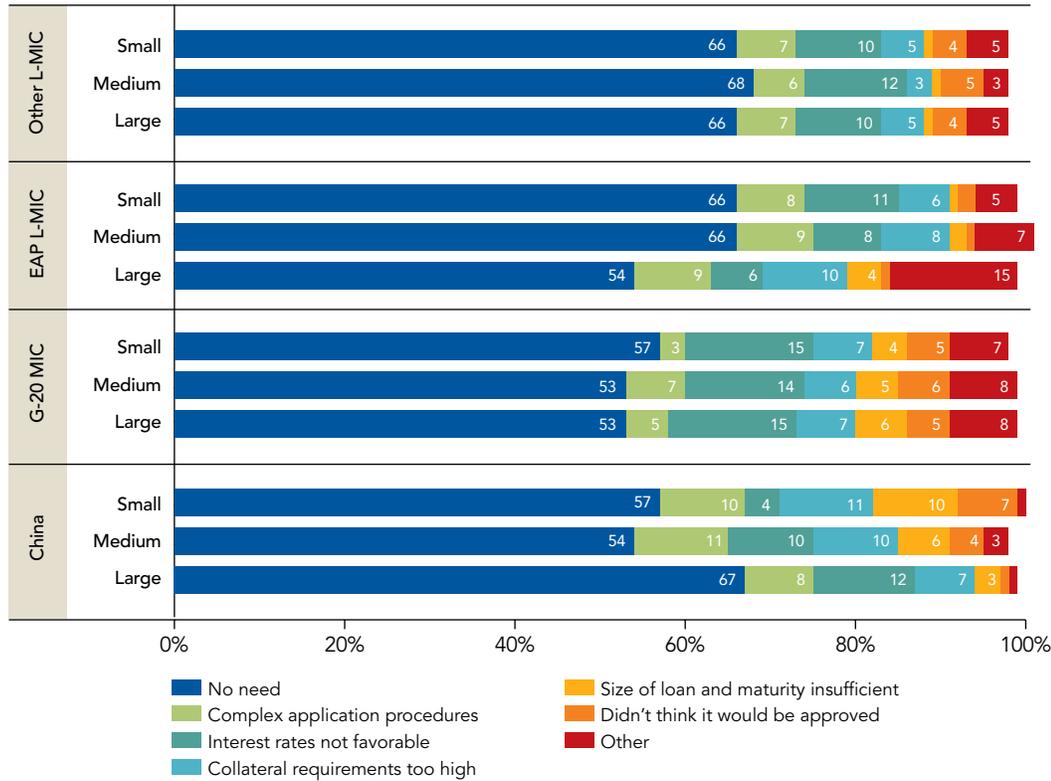


Source: WBG Enterprise Surveys 2012–2016.

Note: Countries with available Enterprise Survey data since 2012 include Bangladesh (2013); China (2012); Egypt, Arab Rep. (2013); India (2014); Kenya (2013); Malaysia (2015); Nigeria (2014); Pakistan (2013); Philippines (2015); Sudan (2014); Thailand (2016); and Turkey (2013).

**FIGURE 3.13 Reasons for Not Applying for a Loan or Line of Credit**

% firms responding affirmatively to each reason



Source: WBG Enterprise Surveys 2012–2016.

Note: Countries with available Enterprise Survey data since 2012 include Bangladesh (2013); China (2012); Egypt, Arab Rep. (2013); India (2014); Kenya (2013); Malaysia (2015); Nigeria (2014); Pakistan (2013); Philippines (2015); Sudan (2014); Thailand (2016); and Turkey (2013).

Unit, establishes four categories—“not credit constrained,” “maybe credit constrained,” “partially credit constrained,” and “fully credit constrained”—and categorizes responding firms based on responses to questions including whether or not the firm has any source of external finance, whether or not the firm has applied for a loan or line of credit, whether or not the firm was granted financing, and why the firm chose not to apply for a loan or line of credit. The analysis finds that 29 percent of Chinese firms are fully credit constrained, 7 percent are partially credit constrained, 18 percent are maybe credit constrained, and 46 percent are not credit constrained (figure 3.14).<sup>18</sup>

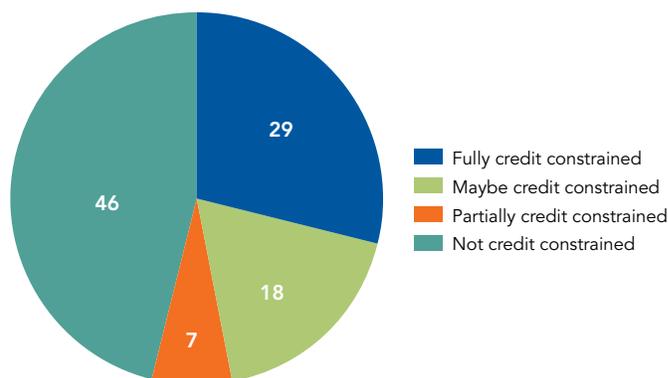
Another method to assess the degree to which firms are credit constrained is to ask firms directly whether access to

finance is an obstacle to their operations and growth. Indeed, Chinese firms report access to finance as their biggest business environment obstacle. The Enterprise Survey questionnaire asks responding firms to rank their biggest business environment obstacles from a list of options. Approximately 22 percent of Chinese firms report that access to finance is their biggest obstacle, more than the informal sector (20 percent), tax rates (15 percent), and poorly educated workers (13 percent) (figure 3.15). Relatively little variation exists across firm size categories in reporting access to finance as the biggest obstacle. Chinese firms are far more likely than their counterparts in other country groupings to report access to finance as the biggest constraint. Between 9 and 12 percent of firms in G-20 MICs, EAP L-MICs, and other L-MICs report the same.

Approximately 78 percent of Chinese firms report that their most recent loan or line of credit required collateral. This is on par with what is observed in other country groupings.

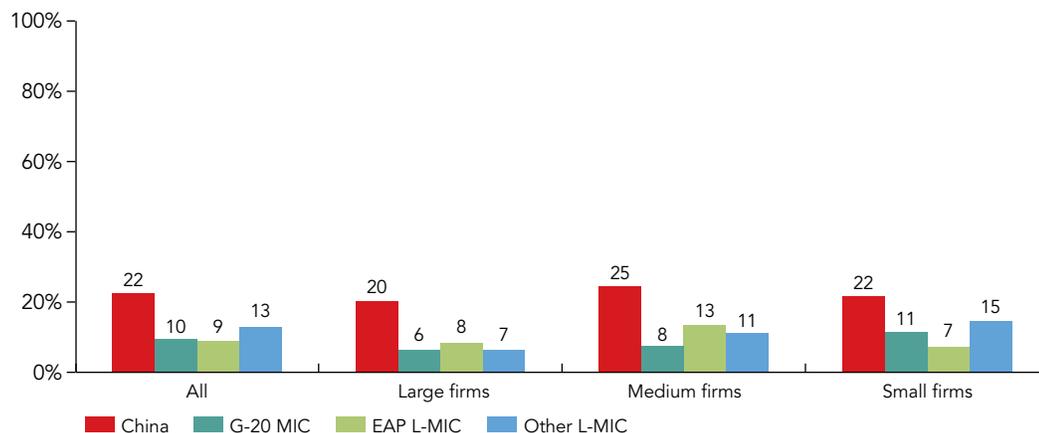
The survey data reveal that Chinese firms primarily fund investments (e.g., fixed assets such as machinery, vehicles, land, buildings, etc.) through internal financing (figure 3.16). On average, firms in China finance 90 percent of their investments using internal sources of finance (e.g., retained earnings). Relatively little variation in this indicator is observed across firm size. Fifteen percent of firms in China report using banks to finance investments, and bank financing accounts for approximately 5 percent of funding for investments. Among small firms, just 4 percent use banks to finance investments, and bank financing accounts for less than 1 percent of funding for investments. Across all firm size categories, Chinese firms are less likely than their counterparts in G-20 MICs and EAP L-MICs to use banks to finance investments.

**FIGURE 3.14 Credit-Constrained Status of Chinese Firms**  
% firms corresponding to each category



Source: Kuntchev and others 2014.  
Note: Countries with available Enterprise Survey data since 2012 include Bangladesh (2013); China (2012); Egypt, Arab Rep. (2013); India (2014); Kenya (2013); Malaysia (2015); Nigeria (2014); Pakistan (2013); Philippines (2015); Sudan (2014); Thailand (2016); and Turkey (2013).

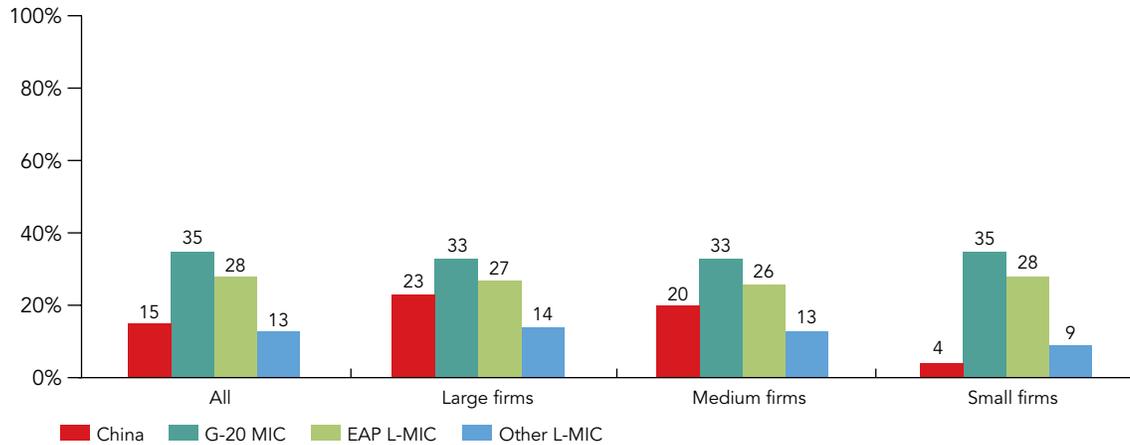
**FIGURE 3.15 Access to Finance as Biggest Obstacle**  
% firms (>5 employees) reporting that access to finance is their biggest business environment obstacle



Source: World Bank Enterprise Surveys 2012–2016.  
Note: Countries with available Enterprise Survey data since 2012 include Bangladesh (2013); China (2012); Egypt, Arab Rep. (2013); India (2014); Kenya (2013); Malaysia (2015); Nigeria (2014); Pakistan (2013); Philippines (2015); Sudan (2014); Thailand (2016); and Turkey (2013).

**FIGURE 3.16 Use of Banks to Finance Investment**

% firms using banks to finance investments, among firms having made investments in the past year

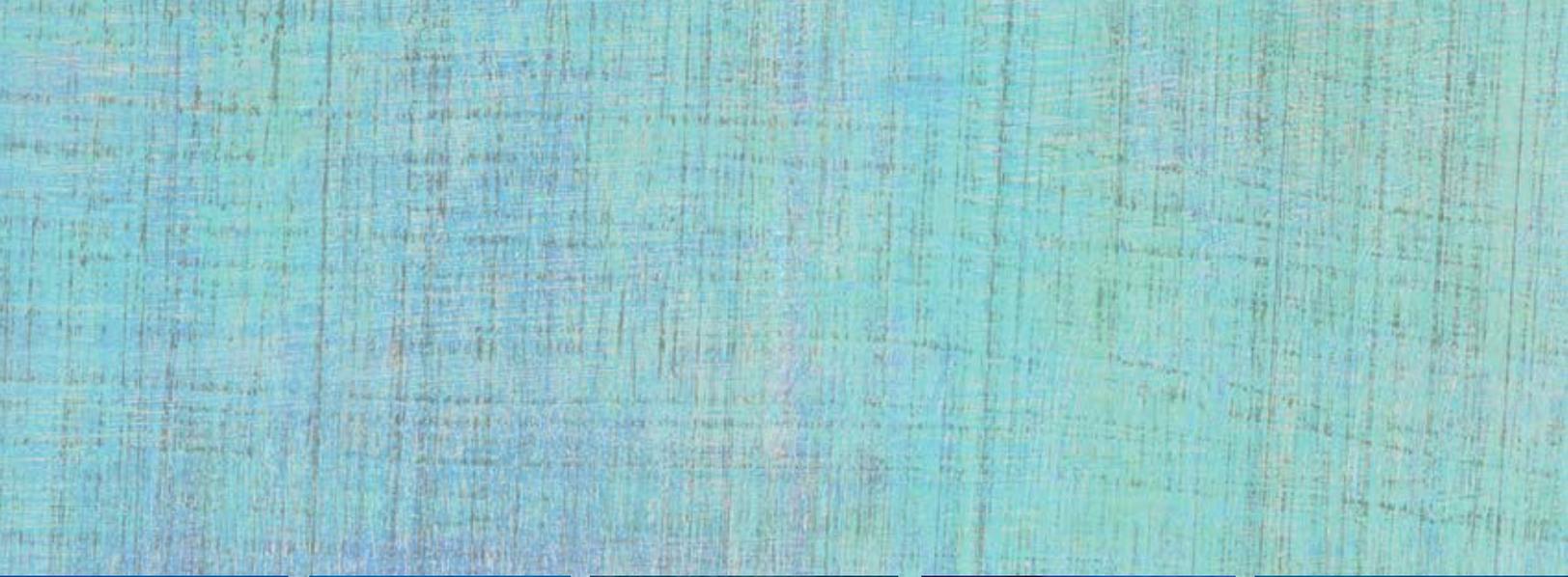


Source: World Bank Enterprise Surveys 2012–2016.

Note: Countries with available Enterprise Survey data since 2012 include Bangladesh (2013); China (2012); Egypt, Arab Rep. (2013); India (2014); Kenya (2013); Malaysia (2015); Nigeria (2014); Pakistan (2013); Philippines (2015); Sudan (2014); Thailand (2016); and Turkey (2013).

**NOTES**

- 13. PBOC reports 983,400 “rural cash withdrawal points” (i.e., agents) in China at end of 2016.
- 14. IMF FAS 2016, GPSS 2016, and author calculations.
- 15. Gallup World Poll 2014.
- 16. From the supply-side perspective, PBOC also reports more than 6.5 billion accounts in China, which translates to more than one account per individual when compared with China’s overall population. However, the analysis in this chapter utilizes demand-side data such as Global Findex, as demand-side data can more accurately account for the prevalence of dormant accounts and the fact that many individuals own multiple accounts, which is of greater relevance for assessing financial inclusion at the individual level.
- 17. According to Global Findex 2014 data, 21 percent of Chinese adults do not own a store-of-value transaction account.
- 18. See “What Have We Learned from the Enterprise Surveys Regarding Access to Credit by SMEs?” at <https://www.enterprisesurveys.org/~media/GIAWB/EnterpriseSurveys/Documents/ResearchPapers/Enterprise-Surveys-access-to-finance-and-SME.pdf>.



## CHINA'S FINANCIAL INCLUSION EXPERIENCE

China's financial inclusion experience has evolved through many phases. Expanding access to financial services first became an explicit policy priority in the early 1950s with the establishment of rural credit cooperatives (RCCs). While the full scope and impact of marketization and privatization on the financial sector in the decades that followed are outside the purview of this report, this evolution is important context for understanding China's financial inclusion experience since 2000. By the early 2000s, the impacts of marketization and financial sector reforms had led to the closure of tens of thousands of financial service providers in rural areas, leaving RCCs and the postal savings system as the primary providers of financial services for rural residents.<sup>19</sup> As of 2005, there was just one deposit-taking institution at or below the county level for every 20 villages.<sup>20,21</sup> Compounding the relative lack of access to financial products and services were RCCs' limited capacity to meet rural households' financial needs (due in part to a legacy of high levels of nonperforming loans [NPLs]) and the postal savings system's limited range of product offerings (primarily money transfer services and savings accounts). Banks, for their part, focused mainly on lending to state-owned enterprises, leaving a vast informal credit market and significant market gaps for underserved individuals and firms.<sup>22</sup>

In the early 2000s, Chinese financial sector authorities turned their attention to improving the banking system's commercial viability and leveraging the financial system to support the national goals of social harmony and sustainable development.<sup>23</sup> In line with the latter objective, financial inclusion policy objectives focused on three main areas: (1) universal access to basic banking services (i.e., bank accounts and payment services), (2) productive credit for rural households, and (3) bank credit for micro and small enterprises (MSEs). In pursuing these objec-

tives over the last 15 years, China's financial inclusion experience has features in common with other countries—including the use of agents and the establishment of new institutional types meant to serve underserved populations—as well as characteristics that are unique to China, such as the significant role of development-oriented financial service providers and policy banks and the proliferation of nonbank digital payment platforms linked to e-commerce and social networks.

This chapter provides a targeted summary of China's financial inclusion experience in recent years. It is not meant to be comprehensive, but rather focuses on key developments, particularly those that may be relevant or interesting to other countries. The first three sections of this chapter are roughly organized by categories of financial service providers and the role of each in contributing to financial inclusion.

- Section 4.1 addresses “traditional” financial service providers, including state-owned commercial banks (e.g., Postal Savings Bank of China [PSBC] and Agricultural Bank of China [ABC]), joint-stock commercial banks and city commercial banks, rural commercial banks (RCOMBs), rural cooperative banks (RCOPBs), and RCCs.
- Section 4.2 covers “new-type” providers such as village and township banks (VTBs) and microcredit companies (MCCs).
- Section 4.3 addresses fintech companies, including nonbank digital payment providers, peer-to-peer (P2P) lending platforms, Internet-based microlenders, Internet banks, Internet-based insurance, Internet-based fund management, and Internet equity-based crowdfunding.

**TABLE 4.1 Overview of Select Financial Service Providers in China**

CATEGORY OF FINANCIAL SERVICE PROVIDER	# OF PROVIDERS	TOTAL ASSETS (BILLION RMB [BILLION US\$])	TOTAL # OF BRANCHES	REGULATOR
State-owned commercial banks	5	86,598 (12,990)	68,953	CBRC
Joint-stock commercial banks	12	43,473 (6,521)	15,366	CBRC
City commercial banks	134	28,238 (4,236)	16,156	CBRC
Rural Commercial Banks (RCOMBs)	1,114	20,268 (3,040)	49,307	CBRC
Rural Cooperative Banks (RCOPBs)	40	436 (65)	1,381	CBRC
Rural Credit Cooperatives (RCCs)	1,125	7,950 (1,193)	28,285	CBRC
Insurance companies	203	15,120 (2,268)	—	CIRC
Village and Townships Banks (VTBs)	1,443	1,238 (186)	—	CBRC
Microcredit companies (MCCs)	8,673	—	—	Local government
Nonbank digital payment providers	266	—	—	PBOC
P2P lending platforms	3,709	—	—	CBRC

Source: CBRC, CIRC and PBOC. Data is of 2016. "Branches" includes special branches, but does not include agent-based service points.

- Finally, section 4.4 focuses on the role of the Chinese government in promoting financial inclusion, including via fiscal and monetary policies, financial infrastructure, development-oriented and policy banks, and financial consumer protection.

Table 4.1 provides an overview of these different providers.

#### 4.1 THE ROLE OF TRADITIONAL FINANCIAL SERVICE PROVIDERS IN FINANCIAL INCLUSION

Traditional financial service providers have played a critical role in expanding financial inclusion in China. With policy guidance from the Chinese government, traditional financial service providers have significantly expanded the physical reach of their service networks, modernized China's payments infrastructure, and innovated at the product level, including through partnerships with fintech companies. The result has been a significant increase in product uptake and usage, most notably for bank accounts and bank cards.

##### 4.1.1 Improving Accessibility by Expanding the Physical Reach of Service Outlets

As discussed in chapter 2, accessibility is a core element and driver of financial inclusion. As in many countries, traditional financial service providers in China have historically been characterized by limited and uneven geographic coverage. Yet in recent years, government policies, increased competition, and business opportunities have motivated financial service providers to expand the physi-

cal reach of their service networks into remote and rural areas by establishing special sub-branches, agents, mobile branches, and self-service outlets. In 2007, CBRC launched the China Rural Banking Services Distribution Map on its website, emphasizing its policy objective of increasing the physical reach of the financial sector.

Government authorities have actively promoted the expansion of basic financial coverage. In 2014, the CBRC issued the *Guidelines on Promoting Village-Level Coverage of Basic Financial Services*, which stated an overall target of achieving coverage of basic financial services in all villages in three to five years. Local governments at all levels have also taken active measures to support further expansion of basic financial services. These measures vary in form, but many relate to subsidies, tax deductions and exemptions, risk compensation, guarantee mechanisms, and adapted branch security requirements. For example, the finance department of Fengdu County in Chongqing gives a subsidy of RMB 20,000 (US\$3,000) to each bank outlet newly established with deposit, withdrawal, and lending functions in villages or towns.

In addition, increased per capita income in rural areas and improvements in physical and financial infrastructure, combined with strong competition among financial service providers in urban areas, have incentivized many financial service providers to develop new customer bases and take advantage of untapped business opportunities in rural and remote areas. Table 4.2 shows that automated teller machine (ATM) and point-of-sale (POS) infrastructure has increased rapidly in recent years, with approximately 924,000 ATMs as of 2016 (37 percent of which are located in rural areas) and approximately 24,535,000 POS terminals as of 2016 (28 percent of which are located in rural areas). The absolute numbers of

ATMs and POS terminals in rural areas have increased in recent years (although the total share of ATMs and POS terminals in rural areas has decreased due to relatively greater increases in absolute numbers in urban areas).

#### *Special Sub-Branches of Commercial Banks*

Since 2013, CBRC has actively encouraged small- and medium-sized commercial banks to open simplified or "special" sub-branches. Such sub-branches benefit from lighter licensing requirements and approval processes. Establishing special sub-branches allows these banks to achieve a more geographically diverse range of operations and provide professional and accessible financial services to underserved communities and MSEs.

The two types of special sub-branches are (1) community sub-branches and (2) small and micro sub-branches. Community sub-branches provide services to customers through a "self-service + consulting" model. The main activities of community sub-branches are to accept deposits and sell financial products, including microloans in some sub-branches. Usually, community sub-branches are equipped with ATMs or CRS (cash recycling systems, which are similar to ATMs but also facilitate cash deposits and other financial transactions). Normally, a community sub-branch has two to three employees to provide counseling, product marketing, and other services.

Small and micro sub-branches are similar to community sub-branches, but focus on providing basic financial services to MSEs. These sub-branches tend to be located in industrial parks. Special sub-branches are also able to offer flexible hours that align with the operating hours and shift schedules of workers within the industrial clusters they serve.

In recent years, commercial banks have actively established many community sub-branches and small and micro sub-branches. China Minsheng Bank, Shanghai Pudong Development Bank, and the Bank of Communications, among others, have received licenses to establish special sub-branches. Regulatory authorities formally

**TABLE 4.2 ATMs and POS Terminals**

YEAR	NUMBER OF ATMS (THOUSANDS)		NUMBER OF POS (THOUSANDS)	
	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%

Source: PBOC, 2016.

approved the first batch of community sub-branch licenses in 2014. By the end of 2015, more than 5,000 community and small and micro sub-branches had been established. Site selection of special sub-branches typically avoids highly centralized areas such as city centers and actively targets the extension of banking services to the county, town, and village level. For example, in Zhejiang Province, approximately 48 percent of community sub-branches are located in towns and approximately 22 percent in villages. Small- and medium-sized commercial banks, especially city commercial banks, have leveraged sub-branches to shorten the geographic distance to customers. Some city commercial banks have established sub-branches in peri-urban areas and urban villages to further expand into underserved markets. Table 4.3 provides an overview of community sub-branches and small and micro sub-branches.

From the perspective of commercial banks, network expansion through special sub-branches has many advantages. Special sub-branches attract new clientele in underserved areas where rent and operating costs are often relatively low. From the perspective of regulatory authorities, establishing special sub-branches helps to promote the development of financial inclusion and improve vulnerable groups' access to financial services.

**TABLE 4.3 Community Sub-Branches and Small and Micro Sub-Branches of Commercial Banks**

	COMMUNITY SUB-BRANCH	SMALL AND MICRO SUB-BRANCH
Location	Residential areas at county, town, and village levels	Clusters of MSEs
Target segment	Provide community residents with basic financial services	Provide MSEs with basic financial services
Business scope	Provide basic financial services like savings, payments, financial management, buying national debt, etc.	Provide basic financial services like savings, payments, financial management, buying national debt, etc.; lending up to cap (see below)
Restricted activities	No manual cash business	No manual cash business; single-entity maximum line of credit of RMB 5 million (US\$750,000)

Source: CBRC.

Specialized sub-branches are helpful in meeting the unique needs of their customers. A key objective of community sub-branches is to meet the financial needs of middle-aged and older customers, who often have low financial capability and familiarity with digital finance. Such customers prefer to have financial transactions conducted tangibly and in person, within their community. The flexible hours of special sub-branches provide an additional convenience. Small and micro sub-branches can leverage their knowledge of specific industry segments to offer more tailored financial products and services to meet the needs of their MSE customers, including innovations related to supply chain financing.

However, at present, community sub-branches and small and micro sub-branches face several challenges, including limited independence from their parent branches, a narrow range of product and service offerings, and difficulties in achieving profitability. To be sustainable, such sub-branches must clearly define and leverage their unique market position, improve operational models, improve managerial practices, and provide more tailored and adapted products to meet the financial needs of MSEs and residents in rural and urban communities.

#### **Agent-Based Models for Cash Withdrawal Services in Rural Areas**

In recent years, China has issued and implemented various subsidies and programs for rural and agricultural households, such as subsidies supporting agricultural activities, new rural social endowment insurance, and new rural cooperative medical insurance. According to the 2013 China Household Finance Survey (CHFS), approximately 40 percent of all households and 68 percent of rural households report having received some form of subsidy or grant payment from the government in the past year.<sup>24</sup> However, many subsidy recipients living in remote areas historically had limited access to basic financial services, requiring an expensive and inefficient distribution system of cash payments. To address this problem, as well as to achieve the broader goal of improving financial access, the PBOC launched a pilot program in 2010 to test cash withdrawal services for rural residents via an agent-based model using debit cards linked to bank accounts. These pilots were initially undertaken in partnership with ABC, PSBC, and other financial service providers in select towns in Chongqing, Shandong, Zhejiang, Hunan, and Shaanxi (see box 4.1).

In 2011, the PBOC-issued *Notice on Promoting Bank-card Withdrawal Services for Rural Residents* established

#### **BOX 4.1**

### **Postal Savings Bank of China: Agent-Based Service Points Help Reach the “Last Mile”**

PSBC has positioned itself to serve *sannong* (the agricultural sector, farmers, and rural areas), MSEs, and small communities since its establishment in 2007. Thanks to its extensive physical network, PSBC now has more than 40,000 access points all over the country covering 98 percent of counties nationwide and with 71 percent of outlets located in counties and sub-county areas. This makes PSBC the most broadly represented financial service provider in rural China.

Increasing financial inclusion in rural areas has been an integral part of PSBC's strategy. In response to the PBOC's policy, PSBC began deploying agent-based service points in 2010, which became part of its “village service point—town outlets—county-level branch” strategy. By the end of February 2016, PSBC had established 21,888 access points in the central and western regions of China (comprising 54.6 percent of all PSBC access points), and had set up nearly 152,000 agent-based service points nationwide. The transaction volume and turnover of PSBC agent-based service points are among the largest nationwide.

In addition to financial accessibility, PSBC also strives to make agent services safer, more reliable, efficient, and adapted to rural consumers' diverse needs. For example, “*shangyitong*” (easy commerce settlement) machines (similar to POS terminals) were developed to facilitate rural agent transactions and improve settlement.<sup>29</sup> PSBC has also attempted to diversify transactions at service points beyond cash withdrawals and balance inquiries. A broader range of services are now available in pilot areas, such as minimum livelihoods guarantee payments, grain subsidies, rural medical insurance subsidies, utility payments, remittances, e-commerce services, loan applications, and investment counseling. To ensure operational and transaction security, agent screening and selection are conducted in a strict manner. Selected agents are usually affiliated with reputable and credible merchants or stores, and business operation and risk prevention trainings are required. PSBC also conducts onsite and offsite inspections and monitoring of agents. In cases of operational abnormalities, customer service managers are informed for further investigation.

Source: PSBC.

the policy objective of scaling up initial pilots such that by the end of 2013, agent-based service points for cash withdrawal would cover nearly all rural towns in China. The notice prohibited agent-based service points from accepting deposits and stipulated a daily cash withdrawal limit of RMB 1,000 (US\$150) per card. In 2014, via the *Guiding Opinions on Promoting the Development of Rural Payment Service Environment*, PBOC removed restrictions on providing remittance and bill payment services via agent-based service points, subject to applications from acquirers. The withdrawal limit was also raised to RMB 2,000 (US\$300), but discretion was given to PBOC branches at the sub-province level and above to adjust these limits. Currently, agent-based service points can also provide person-to-person transfers.

By the end of 2016, the number of agent-based service points across China had reached 983,400, covering more than 90 percent of administrative villages and averaging 1.8 service points per administrative village. Agent-based service points have been established by financial service providers (since expanded beyond ABC and PSBC to include local banks, RCCs, and nonbank digital payment providers with a "bank card acquirer" license) in towns and villages and equipped with POS terminals and other tools. Approximately 2 percent of service points have been established by nonbank digital payment providers (e.g., Alipay and Tenpay).

Agent-based service points are typically located in local retail stores and commune offices, though the breakdown varies significantly across and within provinces. For example, among the more than 2,800 service points in the rural areas of Ningbo in Zhejiang province as of mid-2017, approximately 41 percent of service points are located in retail locations, 27 percent in post offices, and 20 percent in commune offices (figure 4.1). Among the nearly 5,000 service points in Qinghai province as of mid-2017, approximately 82 percent are located in retail locations, 11 percent in public clinics, and 4 percent in commune offices.

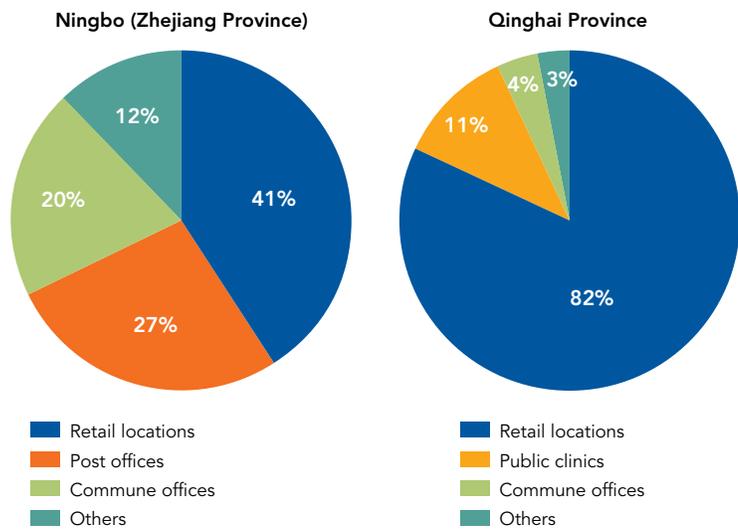
To promote electronic payment and e-commerce in rural areas, some provinces have made efforts to encourage resource sharing between agent-based service points and e-commerce outlets in rural areas. For example, some agent-based service points and e-commerce outlets (e.g., a retail store or household that facilitates the sale of goods on the Taobao e-commerce platform for the village) are integrated or share common information technology and human resources.

In 2016, agent-based service points conducted a total of 495 million payment transactions totaling RMB 424.78 billion (US\$63.72 billion), representing year-on-year growth rates of 14 percent and 6 percent, respectively. Cash withdrawal services account for 52 percent of all transactions, but represent only 30 percent of the total

transaction value; the average amount of a cash withdrawal is RMB 493 (about US\$74) (figure 4.2). Transfers and remittances constitute 27 percent of all transactions but represent 68 percent of the total transaction value; the average amount of a transaction is RMB 2,131 (about US\$320). Finally, bill payments account for 21 percent of all transactions but represent just 3 percent of the total transaction value; the average bill payment amount is RMB 105 (about US\$16).<sup>25</sup>

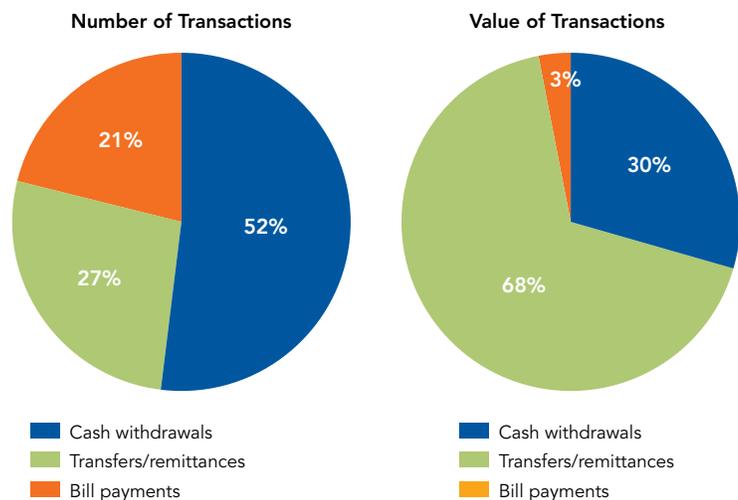
As in many countries with large agent networks, a significant share of service points in China have low levels of

**FIGURE 4.1 Locations of Agent-Based Service Points**  
% of service points in each area by location type



Source: PBOC.

**FIGURE 4.2 Transactions via Agent-Based Service Points**  
% share of transactions by number and value



Source: PBOC.

activity. Though no national, comprehensive data exist on agent activity levels, data from select areas illustrate this trend: among the more than 2,800 service points in the rural areas of Ningbo in Zhejiang province, 57 percent had a monthly average of more than 30 transactions, 14 percent had a monthly average of 3–30 transactions, and 29 percent had a monthly average of 0–2 transactions as of mid-2017.<sup>26</sup> Low activity of some service points may be driven by consumers substituting with online channels and declining population in rural areas.

The agent-based service point model in rural areas was established to create a mutually beneficial situation for all participants and stakeholders, including consumers, financial service providers, merchants, the government, and so on. First, the model allows consumers the convenience of withdrawals, transfers, and bill payments without having to leave their villages, thus eliminating direct and indirect costs associated with transportation to branches and other outlets. Second, the model complements the existing retail business model of merchants operating such points, providing them with additional income sources and higher foot traffic for cross-sales. Third, financial service providers (mostly local small- and medium-sized banks and RCCs) can achieve market expansion in rural areas through transactional services and enhance brand awareness and loyalty with rural residents. Moreover, they can more accurately understand rural consumers' transaction behaviors, providing information to support business development. Fourth, national and local government bodies that provide subsidies supporting agriculture, rural social endowment insurance, and rural cooperative medical insurance have a means to disburse such subsidies more efficiently and cost-effectively. Such subsidies usually occur in small amounts and large frequencies, involving multiple links and high costs when released in cash. To simplify these transactions and reduce these costs, the PBOC and relevant departments encourage local governments to provide subsidies to financial service providers for installing POS terminals, given the long-term cost savings for all involved. Fifth, agent-based service points can be leveraged to disseminate financial knowledge and carry out financial education of rural consumers.

Since 2010, China has learned important lessons from both the success and challenges of developing the agent-based service point model. One important lesson and ongoing challenge is the need to ensure the model's sustainability. At present, service fees charged by agents are capped by regulation, which in practice often means that an agent cannot cover his or her operational costs through cash withdrawal services only. Expanding to additional permissible services such as transfers and remittances and bill payments may partially address this issue. Strategic efforts will need to be undertaken to better cover opera-

tional costs, improve efficiency, and promote the sustainable development of agent-based service points. Financial sector authorities will need to consider whether further expanding agent functionality (e.g., to include cash-in transactions) is an effective way to further strengthen the viability of the business model.

Balancing interoperability and investment incentives is also a challenge for government authorities. To increase convenience and utility for rural residents, PBOC has developed the financial infrastructure for interbank clearing in rural areas, lowered the cost of interbank clearing, and encouraged acquirers to accept debit cards issued by other institutions. However, acquirers can be resistant to such requests, as their aim is to expand their market share in rural areas via agent-based service points. If government authorities require acquirers to provide interbank services, the latter's enthusiasm for installing the equipment necessary to further expand such points may be compromised to a certain degree. To address this issue, local PBOC branches would, in the initial phases of developing the service point network, sometimes gave acquirers a temporary period during which POS terminals could be made exclusive to the respective acquirer.<sup>27</sup> More recently, the typical approach has been to allow acquirers to charge a small interchange fee to customers using a debit card from a different financial service provider.

Another important lesson is the need to strengthen supervision to monitor and manage risks. The agent-based service model, which outsources part of the cash business of traditional banking outlets to agent-based service points, represents a delivery channel and business model innovation. As always, new businesses and new models generate new risks. To manage these attendant risks, the PBOC issued management requirements, transaction ceilings, service point qualifications, location distribution requirements, and operational management requirements to control risks effectively while ensuring further and sound development of agent-based service points in rural areas.<sup>28</sup>

Finally, given that regulatory authorities heavily promoted and guided the piloting and initial expansion of the agent network in China, reconsidering government's appropriate role in this model will be necessary going forward. Indeed, many service points currently do not operate profitably because of infrequent, limited, and low-value transactions, but remain open due to social responsibility commitments by banks. It has been noted anecdotally that some service points have only one transaction every few days, or even less frequently (although reliable data on transaction volumes are lacking). Financial sector authorities (and consequently providers as well) have traditionally viewed expanding service point coverage to all villages as a social responsibility rather than as a strategic, market-based decision.

The very terminology used for service points (which are often referred to as “cash withdrawal service points” in China) illustrates that they are not fully leveraged for their potential as proactive agents of financial service providers—mainly due to policy concerns regarding controlling for risks—although they could be capable of providing a broader range of financial services. A more flexible, market-based policy approach is needed that allows financial service providers to innovate to improve commercial sustainability, including considering adjacent revenue streams and developing strategies to increase traffic and transaction volume and thus better realize the potential of service points as fully functional agents. Research to more closely analyze the characteristics of agent-based service points and segment such points by their potential would also be helpful, as the optimal strategy will likely differ by type of service point.

#### **Mobile Service Outlets**

In areas that have poor or no access to financial services, but which cannot support the establishment of a full-service outlet, financial service providers have used innovative approaches to lower operational costs and still provide basic financial services to residents. Mobile service outlets are one important innovative approach. Some financial service providers provide mobile services in surrounding villages based on existing town-level outlets, thus expanding their service radius to nearby villages and expanding accessibility to village residents. For example, to address the “last mile” challenge, Shangyu Rural Cooperative Bank of Zhejiang began operating a “bank on wheels” in September 2014 to provide financial services to rural residents. The “bank on wheels” is a bus equipped with service counters and ATM machines that are connected to the host bank network via 3G. The bus itself is made of secure materials (i.e., bulletproof) to prevent theft. Customers can use the “bank on wheels” to open or close current and deposit accounts, deposit or withdraw money, make remittances and payments, pay bills, etc. In Xiapu county, the number of mobile banking clients has grown dramatically from 189,500 in 2014 to 339,330 in 2016.

Another example comes from mountainous Shouning county in Fujian province, where the Shouning Rural Credit Cooperative launched a “Backpack Bank” program. Members of the “Backpack Bank” team visit remote villages and provide onsite financial services to residents in their homes. Village residents can submit loan applications to the team, who review the application and make a decision. If the loan is approved, the applicant's account is credited within 20 minutes. As of the end of March 2017, the “Backpack Bank” service program covers more than 40 villages in Shouning county.

#### **4.1.2 Enhancing the Ease and Efficiency of Payments in Rural Areas**

The limited physical presence of bank outlets in rural and remote areas has historically constrained the supply of financial payments and settlement services for many Chinese individuals. Over the past fifteen years, PBOC has prioritized establishing a payment service system that can meet the demands of rural areas for payment and clearing services and facilitate the development of agriculture, rural areas, and farmers. Since 2004, PBOC has issued several guidelines with the objective of promoting and guiding the expansion and improvement of payment systems in remote and rural areas. These guidelines include the following:

- ***Guidelines on the Connection of Rural Credit Cooperatives to the Payment System*** (issued 2004) sought to leverage the expansion of PBOC's large-value payment system to support and guide RCCs in connecting to the PBOC's transbank payment system.
- ***Guidelines on Implementing Effective Payment and Settlement Activities in Rural Areas*** (issued 2006) aimed to accelerate development of rural payment systems, expand the reach of clearing systems in rural areas, and promote the use of noncash payment instruments.
- ***Guidelines on Improving Payment Service Environment in Rural Areas*** (issued 2009) emphasized the factors needed to transition to account-based payments for subsidy transfers and sought to further encourage the integration of rural financial service providers into payment and clearing systems.
- ***Guidelines on Comprehensively Promoting the Development of Rural Payment Service Environment*** (issued 2014), among other things, established basic principles to guide payment system development in rural areas, provided modifications and guidance on agent-based service point models, outlined policy support (e.g., tax incentives) for expanding payment systems, and emphasized risk management requirements for payment systems in rural areas.

PBOC has also established new payment and clearing systems over the past fifteen years to meet the needs of small and medium banks and rural areas for payment and clearing. Developing integrated urban and rural payment systems in China has reduced the gap between urban and rural payment environments. For example, to facilitate transbank, transregion, and transborder use of debit cards, China UnionPay (CUP) was established in March 2002 to provide an interbank transaction clearing system. The main shareholders of CUP are more than one hundred commercial banks, and it is currently the only domestic bank card association in China. CUP has more

than 400 domestic and overseas associate members, and its networks have been extended to both rural and urban areas in China. As a result, bank card holders can not only use cards via ATMs, POSs, and other devices, but also for consumption purposes, such as payment of utility bills, air ticket and hotel reservations, credit card repayments, and self-service transfers via emerging channels such as the Internet, mobile phones, landlines, self-service terminals, and smart TV terminals.

PBOC has also developed several interbank clearing systems, including the China National Advanced Payment System (CNAPS), China Domestic Foreign Currency Payment System, and local clearing systems, to support the application of negotiable instruments, payment cards, and other payment instruments. In addition, PBOC operates the Internet Banking Payment System (IBPS), which offers near real-time interbank direct credit and debit transfers for Internet banking initiated transactions.

To address difficulties in transregion clearing by city commercial banks in different regions, the Clearing Center for City Commercial Banks was set up in September 2002, which operates as a national payment and clearing services provider jointly sponsored by city commercial banks (CCBs) across China. To provide better funds clearing services to all rural small- and medium-sized financial service providers in China, the Rural Credit Banks Funds Clearing Center, jointly established by provincial Rural Credit Unions, RCOMBs, and RCOPBs in April 2006, operates as a national payment and clearing services provider of professional payment and clearing services to rural areas. PBOC encouraged the development of both clearing centers, and both centers are connected to PBOC's system, thereby enabling transactions among the providers in these centers and other nationwide banks.

As of the end of 2016, 382 member institutions have been connected to the Clearing Center for City Commercial Banks, including 127 CCBs and joint-stock banks, 248 VTBs, and seven other financial service providers (for example, private banks). As of the end of 2016, the Rural Credit Banks Funds Clearing Center covers about 80,000 outlets of small- and medium-sized rural financial service providers, such as RCCs, RCOPBs, RCOMBs, and VTBs. As such, an effective cross-province real-time payment and clearing network has taken shape, enabling many small and medium rural financial service providers to provide a broader range of services, such as issuance of bank drafts and universal cash deposit and withdrawal for individuals, particularly rural residents who previously lacked convenient access to such services. In addition, the Rural Credit Banks Funds Clearing Center has also actively developed innovative payment service products, expanded payment and settlement channels, and promoted the use of noncash payment tools in rural areas.

The Rural Credit Banks Funds Clearing Center has cooperated with nonbank digital payment providers represented by Alipay and TenPay to provide rural customers with access to more opportunities to make consumption payments and a more convenient consumption payment experience. Coordination of China's payment systems infrastructure has been strengthened through the establishment of the China Payment and Clearing Association in 2011.

#### 4.1.3 Increase in Ownership and Use of Bank Accounts and Debit Cards<sup>30</sup>

The aforementioned efforts to expand the physical reach of service networks and improve payments infrastructure have supported the dramatically expanded uptake of bank accounts and debit cards. Opening a bank account enables a consumer to access the broader range of financial services that a formal financial service provider offers, such as payment, credit, savings, and insurance products and services. Therefore, the ownership rate of bank accounts is an important indicator of financial inclusion. Chinese financial sector authorities pay close attention to this rate and to two indicators in particular: (1) the number of debit cards issued and (2) the number of bank accounts.

The first debit card in China was issued in 1985 by Bank of China. Initiated by the State Council in 1993, the "Jinka Gongcheng" program was used to encourage electronic payments via debit cards. Debit cards have since become the noncash payment tool most used by consumers in China. Thanks to the establishment of national payment and clearing systems and the continued expansion of commercial banks' networks in recent years, the foundation has been laid for opening a large number of bank accounts and for greater usage of debit cards. According to PBOC, the number of accounts issued by traditional providers grew from 2 billion to 8.3 billion between 2006 and 2016, and the number of debit cards issued grew from 1.1 billion to 5.7 billion over the same period (table 4.4).

As described in chapter 3, the proportion of adults in China with a bank account increased from 64 percent in 2011 to 79 percent in 2014, according to the Global Findex database, representing an increase in the number of adults with a bank account of 180 million.<sup>31</sup> In particular, significant gains were made among previously underserved segments of the population. The bank account penetration rate of adults from the bottom 40 percent of households increased by 26 percentage points (the rate for the top 60 percent of families grew by only 8 percentage points); the growth rate in rural areas was higher than in urban areas; and the rate among rural adults and seniors also saw a robust growth. That said, given the

**TABLE 4.4 Number of Bank Accounts and Debit Cards, by Institutional Category and over Time**

INSTITUTIONAL CATEGORY	BANK ACCOUNTS (MILLIONS)		DEBIT CARDS (MILLIONS)	
	2006	2016	2006	2016
State-owned commercial bank	1,635	5,937	816	3,817
Joint-stock commercial bank	164	804	173	462
City commercial bank	69	411	51	347
Village and township bank	—	—	—	13
Rural credit cooperatives	94	857	22	447
Rural cooperative bank	—	—	—	30
Rural commercial bank	14	262	19	542
Other	—	32	—	2
<b>Total</b>	<b>1,976</b>	<b>8,303</b>	<b>1,081</b>	<b>5,660</b>

Source: PBOC.

Note: "State-owned commercial bank" includes figures for Postal Savings Bank of China. "Other" includes figures for urban credit cooperatives, foreign banks, and others.

discrepancy between demand- and supply-side data on the penetration of bank accounts and debit cards, a need exists for better data and research to understand the degree to which adults are holding dormant and/or multiple accounts and cards. Anecdotal evidence suggests that while many consumers own multiple cards, they only use one or two of them and use the rest infrequently, if at all.

From a policy perspective, the Chinese government helps residents obtain bank accounts and debit cards by requiring commercial banks to provide bank accounts that are free of charge (for example, with no application fees or annual fees) and debit cards at no additional cost when such products are used to receive government subsidies, thus encouraging consumers to use their accounts and cards. The government has also been encouraging banks to introduce debit cards to facilitate the transfer of various subsidies on behalf of the government to increase disbursement efficiency and reduce costs. Between 2010 and the first half of 2015, a cumulative total of 9.77B non-cash payments of subsidies were made via bank accounts and debit cards, amounting to a total value of RMB 3.15T. These subsidies include new rural endowment insurance subsidies, new rural cooperative medical care subsidies, and fiscal subsidies supporting agriculture, farmers, and rural areas. The establishment of agent-based service points in rural areas has enabled farmers to withdraw their subsidies without leaving their villages. PBOC has also recently introduced a risk-based tiered account system to enable online banks to offer low-value transaction accounts (discussed further later in box 4.8).

In recent years, PBOC has directed financial service providers operating in rural and agricultural areas to pilot innovative approaches to enhance farmers' awareness of finance and payments and meet their payments needs

through issuing debit cards, deploying mobile phones for money transfers, expanding rural cash withdrawal services, strengthening public communications, and other approaches. Other factors that have contributed to increased bank account ownership include dynamic economic growth; stronger consumer demand; and more competition, providing incentives for financial service providers to compete for customers and hence driving greater numbers of debit cards issued and bank accounts opened.

#### 4.1.4 Innovations in Financial Products to Enhance Access, Use, and Quality

As discussed in chapter 2, financial inclusion is more than just physical access and ownership of basic accounts. Meaningful and long-term financial inclusion requires a range of financial products and services that are appropriately designed and fit the needs of consumers, particularly the unserved and underserved. While much attention has focused on financial service innovations by new entrants to the consumer financial market, such as Alibaba and Tencent, traditional financial service providers have also made concerted efforts to develop innovative products that are more appropriate for the underserved and leverage new technologies.

##### *Payment Products and Services*

In addition to expanding their physical reach, traditional financial service providers have substantially increased the availability of basic payment services through product design and delivery channels that leverage modern technologies. Financial service providers have actively promoted the development of noncash payment businesses, including promissory notes and debit cards. From 2012

to 2016, these noncash payment businesses grew rapidly. In 2016, noncash payment transactions by traditional financial service providers in China numbered 125.1 billion with a total transaction value of RMB 3,687.24 trillion (US\$553.09 trillion), reflecting growth of 304 percent and 287 percent, respectively, since 2012. The development of Internet-based and mobile payment businesses has enabled customers to make payments without traveling to a financial service provider or retail outlet, greatly improving the convenience and security of payments and reducing payment costs.

CUP has launched a trial payment service with CUP cards that allows procurement of agricultural products in grain-producing areas. With the support of the CUP non-cash clearing system, grain brokers and purchasers may pay farmers directly in real time through POS terminals, thereby not only increasing convenience to farmers but also reducing operational costs for purchasers. According to data from CUP, transaction turnover in 2015 across the country exceeded RMB 200 billion (US\$30 billion).

Some commercial banks and RCCs are also innovating using mobile encryption chips that can be integrated into a SIM card, which enables financial services to be carried out on mobile phones via near field communication (NFC). The chip provides customers with high-quality, secure, and portable mobile payment functionality through their phones rather than debit cards. This technology has been leveraged in multiple applications, including mobile phone credit, travel applications, credit services, and identification certification.

Section 4.3 discusses further payment innovations by new, digitally-driven fintech companies.

#### *Innovations in Deposit and Financial Management Products*

Many commercial banks are actively developing innovations in deposit and financial management products to increase customer loyalty, convenience, and profitability and to attract and retain new customers. Commercial banks are improving the design of deposit and financial management products and services to increase their appropriateness to attract the general public, rural residents in particular, to deposit their money in banks.

To compete with Internet-based, Yuebao-like financial management products (discussed further in section 4.3) and meet untapped market demand, commercial banks have launched products with flexible buying and selling terms that are more accessible and convenient to low-income consumers. Most of these products are linked with money market funds launched by fund companies and support instant selling and rapid transfer. Some commercial banks have upgraded former financial management products to enable instant selling. In terms of rates of return, the gains on such products are similar

to those of Internet-based financial management products. These innovations in Yuebao-like products are likely to help better satisfy the general public's needs for investment and financial management and have broad potential for expansion.

In addition, commercial banks such as Shanghai Pudong Development Bank have launched new business lines such as "agreed transfer between fixed and demand deposits" in debit cards, which can help customers increase their deposit income while improving convenience. For this business line, customers can determine the rules of transfer between fixed and demand deposits in advance, according to their own financial management arrangements, allowing for more flexible, tailored products to meet the specific needs of consumers.

Some banks have developed tools to help MSEs manage their accounts which span multiple banks. For example, the cross-bank funds management system, developed by Huaxia Bank, can link all of an MSE's various bank accounts. Through this system, the MSE can make transfers and inquiries in real time across its various accounts and use various other financial management tools, reducing overall transaction costs.

Section 4.3 discusses further deposit and financial management product innovations by new, digitally-driven fintech companies.

#### *Innovations in Credit Products*

In recent years, regulatory authorities have actively encouraged commercial banks and other financial service providers to expand lending to the agricultural sector, rural residents, and MSEs. In doing so, regulatory authorities have aimed not only to create a favorable lending environment, but have also set forth specific lending requirements for commercial banks. For example, authorities have implemented differentiated monetary and credit policies, agriculture-associated loan incentives, risk compensation funds, and government guarantee funds and tax incentives (see section 4.4). CBRC also issued *Guidelines on Financial Services for Micro and Small Enterprises* in 2015, which specifies the "Three No-less-thans Goal":

- Loan growth for MSEs is no less than the average growth of all loans,
- The number of MSEs receiving loans is no less than that over the same period of the previous year, and
- The approval rate of MSE loan applications is no less than the rate over the same period of the previous year.

To meet regulatory authorities' specific requirements and in response to growing market competition, commercial banks and other financial service providers have sought to develop innovative business models, including innova-

tive product design for loans, new types of collateral, innovative credit evaluation methods, and new loan repayment approaches. These efforts—some of which are discussed elsewhere in this report—have contributed to achieving the “Three No-less-thans Goal,” though their respective magnitudes and the targeted impact of these contributions are difficult to quantify. Overall, as of the end of March 2017, CBRC data show that the number of customers with an outstanding MSE loan reached 13.6 million, an increase of 1.2 million over the same period the previous year; the balance of loans from banks to MSEs represented 24.1 percent of the total balance of all types of loans, and the balance of loans to MSEs grew by 14.4 percent over the same period in the previous year, 1.9 percentage points higher than the average growth of all types of loans.

Traditional methods of risk assessment and a narrow range of acceptable collateral have often restricted farmers and MSEs from accessing loans. In recent years, regulatory authorities have actively encouraged commercial banks to innovate in this area and expand the scope of acceptable collateral. In 2010, PBOC, CBRC, and CIRC jointly issued *Guidelines on Comprehensively Advancing Innovations in Rural Financial Products and Services*, which requires financial service providers to improve operational procedures for loans related to agriculture, farmers, and rural areas; develop sound evaluation, management, and disposal of properties used as collateral for such loans; and leverage a broader range of information to assess customer creditworthiness. In response, financial service providers have explored ways to improve risk management of credit portfolios.

In the past fifteen years, PBOC and CBRC have encouraged commercial banks and other financial service providers to use movable assets—including receivables, inventory, equipment, and title documents—as the basis for lending or for issuing debt instruments (box 4.2). After a new property law was approved in 2007, PBOC established a unified system to register security interests in movable assets under the PBOC's Credit Reference Center (see section 4.4). For example, government transfers and subsidies (in effect, a form of receivable) have been leveraged in an innovative manner as collateral by ABC, RCOMBs, RCOPBs, RCCs, and other providers. Loans that use government transfers or subsidies as collateral typically equal 5–10 times the subsidy amount. These changes have expanded the scope of permissible collateral, improved the transparency of collateral interests, and allowed lenders to establish the priorities of their security interests, thus giving them confidence to develop movable asset finance products. Over the years, the two financial sector authorities have also organized or supported numerous outreach, training, and knowledge development activities on movables finance product

development, often together with the WBG's International Finance Corporation (IFC). Current products in the market range from simple receivables, inventory, or equipment loans to complex, structured, and heavily monitored movables credit.

Supply chain finance based on receivables and inventory has also grown rapidly. A diversified pool of lenders has provided services in this field. With the assistance of the IFC, at the end of 2013, PBOC established a supply chain finance platform based in Tianjin. Cumulatively, the platform has facilitated RMB 4.5 trillion (US\$675 billion) in credit for agricultural borrowers, MSMEs and large enterprises by April 2017.<sup>32</sup>

Section 4.3 discusses credit innovations by new, digitally-driven fintech companies.

#### 4.1.5 Reforming RCCs to Better Serve Sannong

Rural Credit Cooperatives have historically been the financial service providers with the most widely distributed outlets in China's rural areas and are thus a critical institution

##### BOX 4.2

#### Agricultural Bank of China: Developing Innovative Products and Services to Serve Sannong

Since 2007, the Agricultural Bank of China (ABC), one of China's largest state-owned commercial banks, has been a leader in implementing the government's three-pronged policy of serving the agricultural sector, rural communities, and farmers (*sannong*). Over the past few years, ABC has made strides in product and service innovation to better serve these three areas.

**Movable Asset Finance Innovation.** Given that the National People's Congress only authorizes a few select pilot areas to use contracted land management rights and farmer housing property rights as collateral for loans, ABC developed various nonland related collateral, such as farming equipment, agricultural inventory, and direct grain subsidies, to facilitate secured lending in rural areas.

**Sannong Product Innovation.** Jinyinong (gold that benefits farmers) is a composite brand that consolidates 149 *sannong*-targeted products ABC has developed in recent years and that offers many financial services to farmers, rural residents, and entrepreneurs. Special financial products, such as grain production loans and offseason commercial reserves of fertilizers, were developed to accommodate production seasonality of leading agricultural enterprises. Urbanization construction loans and new rural residence loans were also developed to facilitate urbanization.

Source: Agricultural Bank of China.

**BOX 4.3****Industrial and Commercial Bank of China's Approach to Digital Finance**

As China's largest state-owned commercial bank, the Industrial and Commercial Bank of China (ICBC) has developed various digital finance products and platforms to better serve MSEs and individuals.

Over the years, ICBC has developed e-Payment, an online tool for fast payment of small amounts; e-Link, the bank's online investment service and online financial management tool; and several online financing products targeted at MSEs. For example, "Corporate Easy Loan" is an unsecured microcredit product for MSEs that benefits from ICBC's proprietary database and big data analysis to assess creditworthiness. "Online Revolving Loan," another product targeted to MSEs, offers online, self-service revolving loans that allow borrowers to withdraw and repay the loan online by themselves. Since their launch, these two products have proven

to be popular with MSEs because they are tailored to meet MSEs' actual needs.

In addition to various digital finance products, ICBC also launched its e-ICBC business line in 2015, which consists of three platforms and one center. The mobile messaging application platform aims to provide a secure and convenient communications channel that allows customers to communicate with ICBC staff. The e-commerce platform offers various financial products with a high level of attention paid to vendor access, pricing, and dispute resolution procedures. An online direct banking platform and an Internet financing center have also been set up, with the latter leveraging a combination of ICBC's historical data, online platform data, and offline investigation information to better serve MSEs and individuals with facilitated access to financing.

Source: Industrial and Commercial Bank of China

for achieving China's financial inclusion goals. Since its economic reform and opening-up in 1978, China has gone through several RCC reform phases to improve operations and effectiveness. At the end of 2016, 1,125 RCCs were operating in China. In addition, 1,154 RCOMBs and RCOPBs had transformed from RCCs following the 2003 reforms.

RCCs were founded in the 1950s, yet prior to China's economic reform and opening-up, they failed to play an effective role in serving *sannong*, the government's broad three-pronged policy of serving the agricultural sector, rural development, and rural residents. In early 1979, the State Council shifted the management of RCCs to the Agricultural Bank of China. By 1984, constrained by poor governance and poor financial health, RCCs were still thought not to serve *sannong* effectively. The State Council implemented a comprehensive program to reform equity arrangements, organization, and management of RCCs to restore their cooperative financing function and enable them to better serve rural and county economies. Thereafter, RCCs existed mainly in the organizational form of a village- or town-level corporate body. The reforms during this phase helped to improve the financial strength of RCCs and effectively promoted their business development, but new problems also emerged, such as local interference in RCCs' rights for independent management and operation, impairing their ability to realize their financial inclusion potential.

In 1996, the State Council issued its *Decisions on the Reform of Rural Financial System*, which stated that RCCs would no longer be affiliated with ABC and would be regulated according to the cooperative principle. To enhance the risk management and operational capacity of RCCs, the General Office of the State Council forwarded the PBOC-issued *Guidelines on Further Reform of the Administration Mechanism of Rural Credit Cooperatives* in 1997, which again confirmed the cooperative principles according to which reforms of RCC's administration mechanisms were to be conducted. While these reforms improved the administration system of RCCs as a whole, the withdrawal of branches of state-owned commercial banks from county-level operations led RCCs to further take on the primary role of serving *sannong*. However, due to heavy historical financial burdens, poor quality assets, and poor operations, RCCs experienced widespread losses in the ensuing years. By the end of 1999, owners' equity had a negative value across the whole RCC industry, significantly affecting RCCs' capacity to serve *sannong*.

In June 2003, the Central Government initiated further RCC reforms. In this reform, RCCs no longer had to maintain the "cooperative" nature of their ownership structure, governance, or business operations. Two new institutional forms were created: Rural Commercial Banks (RCOMBs) and Rural Cooperative Banks (RCOPBs). Many RCCs have been transformed into these new forms to improve governance arrangements and to reorient

towards a commercially sustainable business model. Local governments were empowered to conduct further reforms and subsequently developed and implemented policies to help write off bad loans and contribute to RCCs' ownership reform. As of the end of 2016, 1,114 RCOMBs and 40 RCOPBs are operating in China.

To facilitate the goals of RCC reform, PBOC designed and implemented various policies and measures according to the principles set by the State Council.<sup>33</sup> PBOC developed and issued special notes and special loans to strengthen RCCs' capital base, with the amount approved of both special notes and special loans amounting to the equivalent of 50 percent of the actual insolvency amount of RCCs at the end of 2002. Various incentive mechanisms were also designed and implemented. Special notes were issued to those county/municipal rural credit unions that met certain prerequisites, with issuance and redemption linked to the process and effectiveness of RCC reforms. These special notes could be cashed in by PBOC conditional on RCC improvements, such as meeting requirements regarding increase in capital adequacy ratio (CAR) and reduction in NPL ratio. The disbursement of special loans in one province was also linked to the process and effectiveness of reforms of RCCs. In Q1 2004–Q1 2014, PBOC issued and paid special notes of RMB 169.9 billion (US\$25.5 billion) to RCCs from 2,408 counties and granted special loans of RMB 1.4 billion (US\$210 million) to Xinjiang, Jilin, and Heilongjiang provinces/autonomous regions.

The 2003 reforms have helped to stabilize RCCs. By March 2009, RCC portfolio quality and earnings had improved considerably and significant progress had been made in RCC business operations, ownership structure, and corporate governance. As a result, RCCs have entered into its fastest development period in history, with overall business conditions and capacity continuing to improve. In 2016, the net earnings of RCCs across the country reached RMB 51.9 billion (US\$7.8 billion); by the end of 2016, the NPL ratio of RCCs was 7.3 percent, capital adequacy ratio

was 8.4 percent, and the total balance of *sannong*-related loans was RMB 2.7 trillion (US\$405 billion; table 4.5).

In this latest reform and development period, the target has been to further transform RCCs into market-oriented financial enterprises with sufficient capital, strong compliance, and steady growth. A further objective was to leverage the advantages of RCCs' flexibility and encourage their timely adaptation to the new requirements of agricultural modernization and rural economic restructuring for financial services. As the reforms deepen, the hope is that RCCs will play an even greater role in serving *sannong* and in promoting financial inclusion.

Yet several challenges continue to constrain RCCs' role in financial inclusion. Poor governance, small customer bases, and excessive interference from local authorities continue to plague some RCCs. As a whole, RCCs have also demonstrated relatively limited capacity to innovate and, in particular, leverage digital technologies to improve product design and delivery models for underserved segments. They therefore face significant competition from new market entrants. Further strengthening is needed, otherwise whether RCCs can successfully compete for client segments that are drawn to digitally enabled financial products and services or fulfill their intended mandate to serve rural consumers on a sustainable, market-oriented basis remains to be seen.

#### 4.1.6 Innovations in the Insurance Industry to Contribute to Financial Inclusion

In recent years, insurance companies have broadened their target markets to include previously unserved and underserved market segments. This evolution has been pursued through innovations in delivery channels, products, procedures, and management, as well as through regulatory reforms and encouragement. The entrance of new providers that have demonstrated the viability of new technology-driven models and thereby increased competition in the sector has also impacted the insurance market.

**TABLE 4.5 Performance of the RCC System over Time**

YEAR	NET EARNINGS (BILLION RMB [BILLION US\$])	CAPITAL ADEQUACY RATIO (%)	NONPERFORMING LOANS RATIO (%)	BALANCE OF SANNONG-RELATED LOANS (BILLION RMB [BILLION US\$])	NUMBER OF RCCS	NUMBER OF RCOPBS AND RCOMBS
2002	-5.8 (-0.9)	-8.3	36.9	—	35,540	3
2005	18 (2.7)	8.45	14.8	—	27,036	70
2009	22.8 (3.4)	2.9	15.3	2,244 (337)	3,056	239
2012	65.4 (9.8)	9.1	7.2	3,129 (469)	1,927	484
2015	66.4 (10.0)	8	7.8	3,196 (479)	1,373	930
2016	51.9 (7.8)	8.4	7.3	2,679 (402)	1,125	1,154

Source: CBRC.

Digitalizing marketing and delivery channels in particular has increased the availability and uptake of insurance products and services. Indeed, the Internet is the fastest growing delivery channel for nonlife insurers, which the State Council and the CIRC actively encourage. Internet-based channels allow consumers to explore and purchase insurance products more conveniently and allow insurance companies to benefit from lower customer acquisition and policy management costs. Broadly speaking, four digital distribution models exist:

- 1) **A general insurer that sells through its own platform.** Given the increasing number of consumers accessing the Internet on their mobile phones and consumers' increasing familiarity with using their mobile devices for transactions and financial management, insurance companies' sales platforms have begun to extend to Internet-based and mobile devices.
- 2) **A general insurer that sells through a third-party broker platform.** Several third-party broker platforms, such as Ubaos or Zhongmin, have emerged in recent years allowing consumers to compare and obtain insurance products from a range of insurance companies, effectively providing "one-stop" shopping for consumers. Some platforms offer simple and standardized insurance products such as automobile insurance and accidental injury insurance.
- 3) **A general insurer that sells through social or e-commerce network platforms.** Insurers are increasingly tapping into social and e-commerce network platforms such as Taobao, Jingdong, and Ctrip (and their large, existing customer bases) to market insurance products.<sup>34</sup>
- 4) **An online-only insurer.** New, online-only insurance providers such as Zhong An Online P&C Insurance Co—which has both Ant Financial and Tencent as major shareholders—are discussed further in section 4.3.5.

In all cases, an important development is the "online-to-offline" business model, where an inquiry initiated through the Internet is closed by a call center operative or an agent.

According to the CIRC, income from insurance premiums exceeded RMB 3.1 trillion (US\$465 billion) in China in 2016, with year-on-year growth of 27.5 percent. Income from Internet-based insurance premiums was approximately RMB 234.8 billion (US\$35.2 billion), or 7.5 percent of the total annual premium income in China,<sup>35</sup> compared with approximately 15 percent in the United States. Though still a small share of the overall industry, online insurance is growing rapidly: nonlife premiums grew by 113.7 percent in 2014 to RMB 50.6 billion (US\$7.6 billion) and by a further 69 percent in the first six months of 2015. In 2016, Internet-based property insurance premium

income dipped 34.6 percent from the previous year, while Internet-based life insurance premium income increased 22.6 percent (reaching RMB 179.7 billion [US\$27 billion]).

Applying digital technologies has allowed for the creation of various innovative insurance products. For example, "returned cargo insurance" is a new insurance scheme arising from the development of e-commerce, reflecting a more targeted insurance product geared toward consumers' evolving consumption behaviors. Another area of product innovation is in insurance schemes that the traditional insurance sector has difficulty underwriting, for example, catastrophe insurance such as earthquake insurance. The traditional insurance sector often has trouble pooling homogenous risks to a sufficient scale to let the law of large numbers work. In contrast, Internet-based insurance can utilize digital channels to overcome physical constraints and quickly and easily reach a large number of consumers over wide geographic areas, allowing them to better address the issue of risk pool size and better evaluate and underwrite homogenous risks.

Insurance companies have also actively explored and applied new technologies to improve operational procedures, the precision of underwriting, and the speed of claims settlement. For example, PICC Property and Casualty Company Limited offers basic agricultural insurance products that employ novel technologies such as remote sensing technology, an integrated field information collection system and integrated management and information service platform, and a mobile investigation device building on the Beidou Navigation System (a satellite system) and a drone hardware platform. These efforts have resulted in the creation of an integrated, three-dimensional "air-space-ground" system to support insurance operations. Such application of new information and digital technologies offers more accurate spatial data for underwriting and claims settlement, addresses problems with difficult insurance verification and slow claims settlement, and enhances insurance companies' risk management capacity. Furthermore, such technologies allow insurance companies to accumulate a vast amount of data to price insurance more precisely.

The central and local governments have implemented measures that promote the development of agricultural insurance, leading to adaptations of agricultural insurance products so that they are more accessible to the underserved and more appropriate for their specific needs. These measures include premium subsidies to farmers. Insurance companies have developed innovative insurance products tailored to production cycles and livelihoods of underserved segments, such as weather index insurance, price index insurance, crop yield insurance, income insurance, and agricultural product quality insurance. For example, at the end of 2016, pilot pro-

grams existed across 33 provinces and municipalities, with a total of 50 pilot price index insurance products, 400,000 insured rural households/insurance policies, and a risk insurance portfolio value of RMB 16 billion (US\$2.5 billion). A coinsurance entity comprising several insurance companies jointly underwrites insurance in some pilot programs, with premiums primarily subsidized by local government, and smaller percentages subsidized by enterprises and paid for by farmers. However, the large-scale viability and commercial sustainability of these pilot programs remains to be seen.

While insurance innovations have contributed to increased access to more appropriate insurance products, there remains a need to accelerate the development of well-designed, accessible, and affordable insurance products. In 2014, the State Council issued *Guidelines on Speeding up the Development of Modern Insurance Service Industry*, encouraging reforms in insurance market access and exit mechanisms and product and service innovation with the aims of increasing competition and providing more personalized service in insurance markets. Expected increases in competition in the insurance market may be able to play a catalytic role in this regard. To grow their market share, small and medium insurance companies will need to develop their competitive advantage in understanding user needs, product innovation, and actuarial models to develop new products that are better tailored to the actual needs of consumers. Internet-based companies are also expected to increase activity in the Internet-based insurance sector and become an important driver of sector innovation. Traditional large insurance companies still have several advantages in large-scale underwriting, special insurance schemes, and application of spatial information technologies. With the gradual rise of quality small and medium insurance companies and Internet-based companies, the hope is that the insurance sector will exhibit a more diversified, competitive landscape that benefits the underserved in accessing better insurance services.

## 4.2 THE ROLE OF “NEW-TYPE” RURAL FINANCIAL SERVICE PROVIDERS IN FINANCIAL INCLUSION

Between 2006 and 2008, the Chinese government introduced regulations for establishing “new-type” rural financial service providers, including “new-type” rural financial institutions such as village and township banks (VTBs) and rural mutual credit cooperatives (RMCCs), as well as microcredit companies (MCCs), a new type of credit provider. The intended policy objective was to increase financial inclusion among traditionally unserved and under-

served customers. In some sense, establishing these new-type rural providers can be viewed as an extension of and complement to ongoing efforts to strengthen RCCs’ role in serving *sannong* and as a mechanism to promote competition in financial service provision at a rural level.

These providers share several common features, including an explicit target population and relatively light regulatory requirements for establishment (table 4.6). The target population includes rural residents and medium, small-, and micro-sized enterprises. The new-type rural financial service providers are characterized by differentiated and lighter requirements for registered capital, organizational structure, and ownership arrangements.<sup>36</sup> The flexible regulations of new-type rural financial service providers allow legally sanctioned individuals to invest in a provider as an independent enterprise within a limited geographic sphere of operation. VTBs and MCCs can establish branches, while branches are not allowed for RMCCs. This approach is intended to strengthen the management flexibility of these institutions and adaptability to the local target population. Since 2010, government authorities have offered subsidies (of no more than 2 percent of average loan balance) to VTBs and RMCCs that meet certain requirements, such as achieving a certain level of growth in total loan balance or reaching a certain percentage of *sannong* and MSE loans to total loans. The costs of such subsidies are shared between central and local finance departments, for example at ratios of 30/70 percent, 50/50 percent, and 70/30 percent in the eastern, central, and western regions, respectively.<sup>37</sup> In 2015, funds of RMB 2.9 billion (US\$435 million) were designated by the MoF as targeted subsidies to these efforts.

### 4.2.1 Village and Township Banks

The national pilot program for VTBs was officially initiated in December 2006, followed by the issuance of the *Provisional Rules for Management of Village/Town Banks* in January 2007. Pursuant to relevant national regulations, permitted activities for VTBs include accepting deposits; short-, medium-, and long-term loans; domestic settlements; bill acceptance and discount; interbank borrowing; bank card issuance; government bond underwriting; agent service of funds receipt/payment and insurance. In terms of governance structure, VTBs are independent enterprises and legal entities. However, a “sponsor system” applies, whereby commercial banks serve as principal sponsoring banks, provided they meet certain supervisory and regulatory requirements. Sponsoring banks must have at least a 15 percent ownership stake in their sponsored VTB,<sup>38</sup> and provide some level of oversight. As of the end of 2015, all “Big Five” banks<sup>39</sup> and approximately 40 percent of joint-stock banks had estab-

**TABLE 4.6 Comparison of Baseline Information of New-Type Rural Financial Service Providers**

	VILLAGE AND TOWNSHIP BANKS	MICROCREDIT COMPANIES	RURAL MUTUAL CREDIT COOPERATIVES
Number (as of 2016)	1,519	8,673	48
Pilot year	2006	2005	2006
Supervision	CBRC	Provincial governments, financial offices, or relevant departments	CBRC
Normative documents		CBRC and PBOC jointly issued <i>Guidelines on Pilot for Microcredit Companies</i> on May 4, 2008. Based on these guidelines, provinces also issued management methods of microcredit companies.	CBRC issued <i>Provisional Rules for Management of Rural Mutual Cooperatives</i> on January 22, 2007.
Key features	An independent enterprise and legal entity, wherein the largest shareholder, or the only shareholder, must be a banking financial institution with a shareholding ratio of no less than 15 percent of the total stock of a VTB.	An independent enterprise and legal entity that provides small loans, but does not absorb public savings. Capital includes capital paid by shareholders and capital endowment. The funds balance collected from banking financial institutions shall be no more than 50 percent of net capital.	An independent enterprise and legal entity that is composed of farmers from a town or village and rural small enterprises. A community mutual banking financial institution that provides deposit, loan, and settlement services. Services are limited to members.

Source: CBRC.

lished VTBs. Further, approximately 15 percent of RCOMBs and 76 percent of city commercial banks had established VTBs. For these latter institutions, VTBs present a valuable opportunity to reach new customer segments in rural areas.

Pursuant to relevant law, the outstanding loans issued by a VTB to the same borrower cannot exceed 10 percent of the VTB's capital balance (the same as for typical commercial banks). Given that VTBs' operational scale is generally small, under normal circumstances, the loan balances for individual customers are therefore typically not very large. Data from the CBRC illustrate this point. As of the end of 2016, the average loan balance of VTBs to a single borrower was RMB 410,000 (US\$61,500).

As of the end of 2016, 1,519 VTBs were operating in China, with 65 percent located in the central and western regions of the country. VTBs' total assets were RMB 1,238 billion (US\$186 billion), and their total loan balance was RMB 702 billion (US\$105 billion). The total balance of loans to sannong and MSEs amounted to RMB 653 billion (US\$98 billion), representing 93 percent of the total loan balance. Loans of less than RMB 5 million (US\$750,000) accounted for 80 percent of all VTB loans.

#### 4.2.2 Microcredit Companies

An MCC is a limited liability company or joint-stock company established by natural persons, corporations, or other social organizations, which offers microcredit services and does not accept public deposits. The PBOC initiated the pilot program for MCCs in 2005, and CBRC and PBOC jointly issued the *Guidelines on Pilot for Microcredit Companies* in May 2008.

An MCC that is established with private capital has independent corporate properties and bears civil liabilities to its debts with all its assets. MCC shareholders are entitled to asset returns, participation in major decisions, and selection of managers, and are responsible for the company relative to their shareholdings. The MCC corporate governance structure is relatively independent, with separation between ownership and management. MCCs operate in line with market-oriented principles. They face certain restrictions on borrowing.

MCCs do not engage in savings, only in loans. Therefore, they are not allowed to take public savings, and are encouraged to focus on serving farmers, agriculture, and rural areas and MSEs. Like VTBs, MCCs' focus on target underserved segments of the market is defined by regulation in some provinces; for example, 70 percent of an MCC's outstanding credit portfolio must be issued to

small-sum borrowers, defined as those with a loan balance of not more than RMB 0.5 million (US\$75,000). The remaining 30 percent must be lent to borrowers whose outstanding loans do not individually exceed 5 percent of net capital of the MCC.

By the end of 2016, 8,673 MCCs were operating throughout the country. Total paid-in capital of MCCs was RMB 823 billion (US\$123 billion), and total loan balances were RMB 927 billion (US\$139 billion). Seven provinces, including Jiangsu, Hebei, Inner Mongolia, Liaoning, Jilin, Anhui, and Guangdong had established more than 400 MCCs each, with Jiangsu having established 629 MCCs, the most among these provinces (box 4.4).

### 4.2.3 Rural Mutual Credit Cooperatives

In 2007, CBRC issued the *Provisional Rules for Management of Rural Mutual Cooperatives* to cultivate the development of RMCCs. RMCCs are established with links to villages or farmers' specialized cooperatives, handle members' deposits, loans and settlement, and buy and sell government debts and financial bonds. The establishment of RMCCs aims to unite farmers, fill gaps in financial services, address difficulties in access to finance in rural

areas (especially in poor, economically lagging areas), and achieve farmers' self-development through the mutual funding approach.

In 2007, the first RMCC to be voluntarily established in China by farmers was formed—Jilin Lishu Yanjiacun Village Baixin Rural Mutual Credit Cooperative. By the end of 2016, 48 RMCCs had been established throughout the country, distributed across 16 provinces although centralized in Zhejiang, Heilongjiang, and Shanxi. Membership of RMCCs reached 60,000, deposit balance reached RMB 2.7 billion (US\$405 million), and loan balance stood at nearly RMB 1.9 billion (US\$285 million), including RMB 1.8 billion (US\$270 million) of loan balance to farmers, accounting for 96.8 percent of total loans.

By 2012, it had become clear that the RMCC model was not achieving its objectives, and CBRC has stopped issuing new RMCC licenses in order to focus on other policy approaches. The main problems impeding the development of RMCCs include improper internal governance and their small size. In addition, there were several incidences of improper fund-raising or absorption of deposits from the general public by organizations using the guise of financial cooperatives, hurting the reputation of the sector as a whole.

#### BOX 4.4

### MicroCred Nanchong: A Microcredit Company Committed to Serving Smaller Customers

Established in September 2007, MicroCred Nanchong was among the first batch of microcredit pilot projects initiated by the PBOC. It was also the first foreign-funded MCC in China.<sup>a</sup> MicroCred Nanchong disbursed its first batch of loans in October 2007. It currently has three branches, 11 outlets, and 268 employees, 184 of whom are portfolio managers.

Since its establishment, Microcred Nanchong has been committed to serving underserved segments and smaller customers, such as farmers, individual business owners, and MSEs. The company demonstrates the following four operational principles: (1) *More focus on credit analysis as opposed to collateral.* Unlike traditional lending models that rely on collateral and guarantees, Microcred Nanchong's lending operations focus more on customer cash flow analysis and on customer's operational stability and business outlook. About 90 percent of Microcred Nanchong's loans are unsecured. (2) *Adherence to the principle of providing "small-amount (single loan), large-volume (total loans), dispersed and short-term loans."* As of the end of 2015, the cumulative number of loans had reached 81,158, but the average size of a single loan was only RMB 44,100 (US\$6,615). While the company now has 16,601 customers and a loan balance of RMB 615 million

(US\$92 million), single loans smaller than RMB 100,000 (US\$15,000) account for 90 percent of all loans. (3) *Adherence to the "quick decision-making and quick disbursement" principle.* Microcred Nanchong has standardized its lending decision-making process, adopted a streamlined credit review process, and developed information system-based management and remote approval of loans. It takes only 2.3 days on average from loan application to loan disbursement. Loan applications from frequent customers can be approved and disbursed within one day. (4) *Adherence to the twin goals of achieving commercial sustainability and generating social benefits.* Since 2011, Microcred Nanchong has conducted social performance management of enterprises and carried out customer protection activities. As a result, Microcred Nanchong was awarded the Smart Campaign's Customer Protection Certification and became the first MCC to get such certification in China.

<sup>a</sup> MicroCred Nanchong is a wholly owned subsidiary of MicroCred China, which is owned by Microcred S.A, International Finance Corporation, KfW, AXA Belgium S.A and Developing World Markets.

Source: MicroCred Nanchong.

#### 4.2.4 Contributions

Since their establishment, these three new-type rural financial service providers have leveraged their unique features and respective advantages to serve target underserved segments of the population and fill the gaps of traditional financial service providers. Specifically, their respective advantages include the following:

- 1) New-type rural financial service providers have locational advantages in reaching the underserved. Most VTBs are located in counties or towns, RMCCs are located in rural areas, and many MCCs are located in areas or communities where MSEs concentrate. The target groups that these providers serve are located or live close to each other.
- 2) They have a clear market position and key target customer groups. VTBs and MCCs mainly serve MSEs and farmers, while RMCCs mainly serve their members, partly due to regulatory requirements regarding target customers.
- 3) Their advantages in management and information enable them to better serve their target customers. Compared with traditional banks, new-type rural financial service providers have fewer management hierarchies and more accessible and faster loan approvals and are thus better able to meet the financing needs of farmers and MSEs for small, short-term loans on a frequent and rapid basis. To a large extent, new-type rural financial service providers operate within defined communities. As in the case of traditional microfinance, these providers know their customers well and have a lower degree of information asymmetry and thus lower transaction costs. The awareness of the reputation of farmers and MSEs in villages and communities also helps overcome risks resulting from the lack of collateral.

In addition, VTB sponsors play a critical role in providing hardware, training professionals, and managing and controlling risks at their sponsored VTBs.

As a result, new-type rural financial service providers have had many positive effects. They can provide easier access to rural finance, have filled gaps in financial services in rural areas, and have reduced the dependence of farmers and MSEs on civil society finance, thereby contributing to the improvement of the financial environment in rural areas.

#### 4.2.5 Remaining Challenges

The establishment of new-type rural financial service providers represents one of China's most important attempts to promote financial inclusion and has achieved positive

results. However, these new types of providers also face several challenges. Some of these problems are common across all three types of providers—such as limited innovation—while other problems are specific to a particular kind of new-type rural financial service provider.

The main problems confronting VTBs relate to management costs, operational flexibility, and the ability to innovate. VTB sponsors face high management costs. As specified by CBRC, VTB outlets must be established both in developed and underdeveloped areas. If a sponsoring bank does not have a branch office in a province, the VTB is usually managed by the head office of the sponsoring bank. This increases management costs and reduces the operating flexibility of the VTB. Due to its smaller scale, the capability of VTBs to innovate with respect to products and services can be weak. Given ownership requirements, VTBs may also be heavily influenced by their sponsoring banks (as opposed to the influence of other potential investors). As a result, the operational models of VTBs can end up closely resembling that of sponsoring banks and VTB products and services are often not differentiated from those of traditional banks, diminishing their ability to provide target market segments with more tailored, appropriate product offerings initially intended by policymakers. High management costs, limited operational flexibility, and homogenous products contribute to low margins and difficulties in scaling up to sustainably serve greater numbers of underserved consumers with innovative products.

The main challenges confronting MCCs include limited differentiation in market positioning from commercial banks, weak risk management, limited access to sources of funding, heavy tax burdens, and geographic restrictions on operations. First, some MCC operations have deviated from targeting underserved customers and thus failed to fill the gaps in financial inclusion. In practice, many MCCs also operate similarly to traditional financial service providers and do not target “micro” segments with small loans. The results of a survey of 279 MCCs in China conducted in 2015 show that the average loan amount for sampled MCCs is RMB 1.90 million (US\$285,000) and the median is RMB 1.27 million (US\$190,500). The number of loans less than or equal to RMB 50,000 (US\$7,500) account for only 11.7 percent of all loans, and the total amount of these loans accounts for 1.5 percent of the total portfolio. In contrast, the number of loans over RMB 1 million (US\$150,000) accounts for 38.3 percent of all loans, and the total amount of these loans accounts for 67.9 percent of the total portfolio.<sup>40</sup>

Second, risk prevention and control has become a core challenge impeding sustainable development of the MCC sector. Some MCC customers are from industries limited by regulatory policies or enterprises with high debt ratios and lacking in financial sustainability. Some MCCs have problems such as limited types of guaran-

tees, poor procedures, weak internal management, and low capacity in risk prevention and control, thereby increasing operational risks.

Third, under their lending-only regulatory framework, MCCs must issue loans that rely on the equity capital contributed by shareholders. The CBRC *Guidelines on Pilots for Microcredit Companies* issued in 2008 specifies that “the main sources of funds include capital funds paid by shareholders, capital endowment, and funds raised from no more than two banking financial institutions [...and] the balance of funds collected from the banking financial institutions shall not be more than 50 percent of the net capital.” These provisions have limited the availability of funds for MCCs, equating to corresponding constraints on their lending operations. Regulatory requirements are inconsistent across provinces, with some provinces imposing high entry barriers due to high initial minimum capital requirements. The tax burden of MCCs was also generally higher than those of typical financial service providers in the past, and MCCs did not enjoy preferential state-promulgated tax policies to support rural areas and MSEs. However, this situation was addressed in the beginning of 2017, when MCCs began to enjoy preferential tax policies as well.

Fourth, MCCs' operations are typically limited to within a single county's boundaries. Expanding operations to a neighboring county requires reapplication and setting up a new, independent entity, limiting scalability and efficient expansion of operations.

As a result of these various risk management, financial, and geographic challenges, MCCs have difficulty achieving scale and commercial sustainability. Many MCCs are undergoing financial difficulties. Such challenges in the legal and regulatory environment must be addressed to enable MCCs to play a greater role in contributing to financial inclusion.

Finally, following the temporary suspension of new licenses for RMCCs, CBRC faces a challenge to determine the future role of these providers (or similar providers) in facilitating cooperative-based finance for agricultural households in rural areas.

## 4.3 DEVELOPMENT AND REGULATION OF FINTECH

In recent years, China has emerged as a global fintech leader. New entrants to the Chinese financial sector have innovated with new models, delivery channels, and products, many of which leverage the massive scale and network effects of online e-commerce and social media platforms. The rapid growth of fintech companies in China can also be partly explained by their ability to tap into unmet demand from consumers and MSEs that were often neglected by traditional financial service providers

focused on serving state-owned enterprises. Yet assessing the contribution of fintech companies to financial inclusion is not straightforward. While many customers have been able to access new products that are well tailored to their needs, not all products offered by fintech companies are necessarily appropriate for the needs of underserved populations, and many last-mile customers have not benefited from the fintech revolution. Different types of fintech models also represent new risks to financial stability and consumer protection.<sup>41</sup>

Due to these various factors and considerations, Chinese regulatory authorities have sought to maintain a balanced policy approach toward the entrance and scaling of fintech companies. The objective of this approach has been to encourage innovation while introducing moderate and proportionate levels of supervision. This balanced approach is referenced in the 2015 *Guidelines on Promoting Sound Development of Internet Finance*, which notes the need to “give ample room for innovations in internet finance” while also highlighting the need for “ensuring the healthy development of internet finance so that internet finance can better serve the real economy, via mutually supporting enhancing supervision and regulation as well as encouraging innovation.” The *Guidelines* clearly references “law-based, moderate, differentiated, coordinated, and innovative supervision and regulation” as the principles for regulating and supervising internet finance—including fintech—in China. To what degree authorities have successfully adhered to these principles has varied by provider and product and is discussed in more detail in subsequent sections.

The following subsections cover seven main types of fintech companies in China: (4.3.1) nonbank digital payment providers, (4.3.2) peer-to-peer lending, (4.3.3) Internet-based microlending, (4.3.4) Internet banks, (4.3.5) Internet-based insurance, (4.3.6) Internet-based fund management, and (4.3.7) Internet equity-based crowdfunding. Finally, subsection 4.3.8 summarizes the contributions of fintech—and digital finance more broadly—to financial inclusion and remaining challenges.

### 4.3.1 Nonbank Digital Payment Providers

Nonbank network payment has emerged in China with the explosive growth of online e-commerce and social network platforms. Nonbank network payment refers to payments a payer makes through a nonbank payment<sup>42</sup> platform, such as Alipay, developed by the Alibaba Group's affiliate Ant Financial, or Tenpay, developed by Tencent, which operates the social media platforms WeChat and QQ.

Alipay launched in 2004 as a means to facilitate payments (and thus, commercial transactions) on the e-commerce platforms owned by Alibaba (e.g., Taobao, Tmall).

Alipay provided a mechanism through which funds provided by the buyer could be stored in “escrow” until the buyer received the purchased product and confirmed that it was satisfactory, at which point the funds would be released to the seller. This arrangement addressed a fundamental issue that hampered e-commerce in China in its early days: a lack of trust between buyers and sellers. The following year, Tencent introduced a payment platform called Tenpay on its messaging platform QQ, allowing its users to pay for online gaming and music purchases. Beginning in 2009, these Internet-based payment products were adapted to mobile applications to facilitate mobile payments.<sup>43</sup> For example, Tenpay was integrated into the WeChat app in the form of an e-wallet linked to an existing bank account or credit card, allowing for a greater range of payment uses including person-to-person transfers, bill payments, and travel reservations, QR codes facilitate some of these transactions. Other nonbank payment providers also entered the digital payments space, including China UnionPay and China Telecom. By 2010, Alipay and Tenpay had cumulatively reached hundreds of millions of users.

Despite the rapid initial growth, Chinese regulatory authorities initially took a “wait and see” approach, allowing the emerging industry to innovate and grow with relatively few restrictions. Not until 2010—six years after the launch of Alipay—did PBOC issue regulations addressing nonbank digital payment providers, setting out licensing requirements and procedures covering topics such as minimum capital requirements and investor requirements.<sup>44</sup> Five years later, in December 2015, the PBOC issued the *Administrative Rules for Network Payment of Nonbank Payment Institutions*, setting forth requirements related to customer identification and anti-money laundering/combatting the financing of terrorism (AML/CFT) compliance, capping monthly payment activity for individual users, and establishing data privacy requirements.

The “wait and see” approach appears to have had certain benefits. As of the end of 2016, more than 260 licensed payment institutions were operating under these

regulations, with a combined reach of hundreds of millions of customers (table 4.7).<sup>45,46</sup> The top two nonbank digital payment providers with the largest payment volume in 2016 were Alipay (China) Internet Technology Co., Ltd. and Shenzhen TenPay Co., Ltd (table 4.8). For many Chinese consumers—particularly those in urban areas—payments on these platforms have effectively replaced cash and bank cards for many day-to-day transactions.

The rapid growth in use of nonbank digital payment platforms can be attributed to their common, core features:

- 1) **Reliability and recourse.** Nonbank digital payment providers such as Alipay were established to facilitate an escrow system in which payment to the retailer is not made until the customer reports that he or she has received the product and is satisfied.
- 2) **Use of existing platforms.** The largest nonbank digital payment providers (e.g., Alipay and Tenpay) integrate a payment functionality into existing e-commerce and social media platforms with large user networks, which enables economies of scale. 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 WeChat during Chinese New Year in 2016.<sup>47</sup>
- 3) **Affordability.** Customers of many nonbank digital payment providers (including Alipay and Tenpay) can transfer money into their e-wallets and make payments at no cost. This relates to the integration of payment tools into existing e-commerce and social media platforms; the adjacent revenue streams of these social and e-commerce platforms effectively subsidize the payment services, which are offered at low cost to customers. Most nonbank digital payment platforms allow a certain free withdrawal amount, and charge their customers a withdrawal fee e.g., 0.1 percent of the amount withdrawn exceeding the free amount. The cost structure is also enticing for merchants and has led

**TABLE 4.7 Industry Development of Nonbank Digital Payment Providers**

	2013	2014	2015	2016
Number of providers	250	269	268	266
Number of transactions per year (100 million)	371.34	538.97	917.91	1,854.76
Volume of transactions per year (trillion RMB (trillion US\$))	17.57 (2.64)	35.30 (5.30)	63.71 (9.56)	119.51 (17.93)

Source: PBOC.

**TABLE 4.8 Overview of Key Nonbank Digital Payment Products**

	ALIPAY	TENPAY
Year launched	2004	2005
Affiliated company	Ant Financial	Tencent
Number of customers (million)	450	n/a
Market share (%)	54	37

Source: Company disclosures (number of customers with identity verified), Analysys (2016; market share values).

to a shift toward using nonbank digital payment platforms (instead of credit or debit cards) for various retail transactions.

- 4) **Convenience and interoperability.** Mobile applications by nonbank digital payment institutions provide consumers with convenient and fast payment services. Currently, use cases include online shopping payments, prepaid (mobile phone) recharge, transfers, air travel ticket payment, catering, and credit card repayment. Most nonbank digital payment providers integrate the internal payment platforms of several banks, which allows customers to use their existing accounts and enables more convenient and faster transactions.
- 5) **Cost savings for retail firms.** Retail firms can use nonbank digital payment providers to accept electronic payments—including via a simple printout of a QR code—thus avoiding costs associated with cash and fees typically associated with card-based payment instruments.

Ant Financial is a good illustration of leveraging an integrated online financial service platform, building off the core Alipay platform. Launched in October 2014, Ant Financial consolidates several Alibaba-affiliated business units, including Alipay, Alipay Wallet, Yuebao, Zhaocai-bao, Ant Micro, and MYbank (further described in section 4.3.4), to provide a range of financial services that span payment, investment and financial management, micro lending, and insurance. The associated data resources across business units allow Ant Financial to better understand customers' financial behaviors and needs, enabling Ant Financial to better manage risks and develop innovative, appropriately tailored products.

However, nonbank digital payment platforms also pose potential risks, including fraud and money laundering—one of the potential drawbacks of the “wait and see” approach if pursued for too long and without proper monitoring. The China Internet Finance Report of 2016 cites an example of fraud wherein buyers who ordered

products on an e-commerce platform such as Taobao would subsequently receive a fraudulent link (closely resembling a real payment link) asking the buyer to make a direct payment. In reality, the link would send the buyer to a phishing site simulating the real webpage. If the buyer filled out his or her information on the phishing site, the fraudster would then have access to the buyer's account and password.

With the aim of addressing fraud and money laundering issues while not stifling the development of digital payments, PBOC introduced a tiered account system for nonbank digital payment providers in 2015 (see box 4.5).

#### 4.3.2 Peer-to-Peer Lending

P2P loans refer to a direct peer-to-peer loan transacted on an Internet platform. A P2P online platform typically undertakes detailed due diligence on borrowers' qualifications and credit status, selects borrowers with low default risks, and refers them to individual investors who are expected to lend (invest) money. Pursuant to relevant regulations, online P2P platforms are information intermediaries by nature rather than credit intermediaries, as they provide information collection, disclosure, credit evaluation, information exchange, matching of borrowers and lenders, and other services for direct transactions between borrowers and lenders. As a result, they cannot absorb deposits from the general public, gather funds or set up pools of funds, or provide guarantees in any form to lenders.<sup>48</sup> Some P2P platforms utilize an online-to-offline model, with offline teams performing assessments of potential borrowers and risk control activities due to a lack of comprehensive credit information. Paipaidai is a typical online model, while Creditease and Renren Dai represent an online-to-offline model.

In recent years, online lending via P2P platforms has been increasing rapidly in China. Many online P2P lending platforms have been launched, including PPDAL, Renren Dai, Lufax, CreditEase, and Hongling Capital (table 4.9). Unlike in other countries, P2P platforms primarily obtain

**TABLE 4.9 Overview of Key P2P Lending Platforms**

KEY INDICATORS	PPDAI	RENREN DAI	CREDITEASE	LUFAX
Year launched	2007	2010	2012	2011
Affiliated company	PPDAI	Renren Ucredit	CreditEase	Ping An
Number of investors	240,000	319,925	420,584	546,767
Number of borrowers	3,380,000	333,965	386,634	903,836
Number of loans	7,110,000	133,687	462,453	—
Volume of loans (billion RMB [billion US\$])	19.9 (3.0)	11.2 (1.7)	33.8 (5.1)	87.3 (13.1)

Source: Respective companies' data, 2016.

## BOX 4.5

## Tiered Account System for Nonbank Digital Payment Providers

In December 2015, PBOC released the *Administrative Rules for Network Payment of Nonbank Payment Institutions* (the “Administrative Rules”).

The objective of the Administrative Rules was to establish distinct tiers or categories of payment accounts provided by nonbank digital payment providers to balance financial inclusion objectives with the integrity, safety, and efficiency of the

payments system. The tiered system clearly separates nonbank payment accounts from bank accounts. The Administrative Rules established three types of nonbank payment accounts that are differentiated by their respective know-your-customer requirements and the type and size of transactions that can be made using the account.

NONBANK 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 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 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 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 applicant must be opening a payment account with the provider for the first time	Identity verified in person or remotely via at least 3 legal and secure external databases, with aim of multiple validation of identity by payment institution itself or cooperating institutions	Identity verified in person or remotely via at least 5 legal and secure external databases, with aim of multiple validation of identity by payment institution itself or cooperating institutions
Functionality	Consumption purchases and transfers	Consumption purchases and transfers	Consumption purchases, transfers, financial product purchases (e.g., investment or wealth management)

These account-level restrictions can be adjusted depending on provider-level ratings from PBOC. For example, platforms with an “A” rating from PBOC and more than 95 percent of Type II and III accounts having verified identification would be allowed to use alternative methods for ID verification, subject

to PBOC approval and filing in PBOC branches. Around the same time as it released the Administrative Rules, PBOC also issued separate regulations to establish a tiered account system for banks, further discussed later in box 4.7.

Source: PBOC.

funding from retail investors, rather than institutional investors. By the end of 2016, 2,448 online P2P lending platforms were in operation, decreasing slightly compared with the number at the end of 2015 (table 4.10). As of the end of 2016, the total outstanding loan balance of online P2P lending had reached RMB 816.2 billion (US\$122.4 billion),<sup>49</sup> equivalent to 4.3 percent of the balance of household loans issued by deposit-taking financial service providers in China. The total transaction volume of online P2P lending reached RMB 2,063.9 billion (US\$309.6 billion) in 2016, an increase of 110 percent over 2015. The overall rate of return on online P2P lending in 2016 was 10.5 percent, which decreased by 284 base points over 2015. In 2016, the average maturity of online P2P loans was 7.9 months and the number of investors and borrowers in the online P2P lending sector reached 13.8 million and 8.8 million, respectively, up by 135 percent and 207 percent, respectively, over 2015.<sup>50</sup>

Several factors account for the rapid development of online P2P loans in China. First, the previous climate of financial repression (e.g., interest rate caps) limited investment channels for idle funds, making obtaining loans from formal financial service providers difficult for potential loan seekers and limiting options for retail investors. In this context, P2P platforms emerged as a much needed alternative source of credit for individuals and firms that were otherwise not served by the financial system and provided higher rates of return to retail investors. Second, regulatory policies provided the opportunity for easy entry of P2P platforms into the market and their subsequent growth. Financial sector authorities initially adopted a “wait-and-see” approach with close observation and timely interventions that created the conditions for a rapid increase in P2P platforms. Third, advances in and the application of information technology significantly reduced information asymmetry between debtors and creditors and the cost of matching

investors and borrowers, thereby significantly lowering P2P loan transaction costs.

As the P2P industry evolves, Chinese financial sector authorities have determined that changing the regulatory strategy from the “wait-and-see” approach to an active regulatory approach is more appropriate (further discussed in sections 5.4 and 6.4). The first Chinese online P2P company, PPDAL, was launched in 2007 and, as in other countries, regulation lagged behind industry development in its initial stages. By 2010, the size of China's P2P market was estimated at RMB 1.4 billion (US\$206 million), with about 15 platforms linking investors and borrowers, yet no specific regulation on P2P had been issued.<sup>51</sup> In August of 2011, CBRC issued the *Circular on Risks Associated with Peer-to-Peer Lending*, which identified risks such as money laundering and fraud, but did not yet provide any specific rules governing P2P platforms. In practice, many online P2P platforms had by then deviated from their initial function as information intermediaries and become credit intermediaries by providing guarantees and setting up pools of funds, an activity in conflict with existing financial sector regulations. Other P2P platforms were engaged in outright fraud. In one high-profile case, the company Ezubao was shut down in 2015 after authorities discovered it had been operating a Ponzi scheme in which it sold fraudulent investment products to nearly one million investors.<sup>52</sup> These activities created financial risks, undermined the legitimate rights and interests of investors, and significantly harmed financial security and social stability.

Therefore, CBRC, the Ministry of Industry and Information Technology, the Ministry of Public Security, and the State Internet Information Office jointly issued the *Interim Rules for the Administration of the Business Activities of Internet-Based Lending Information Intermediary Institutions* in August 2016 (“Interim Rules”), with the objective of reforming and standardizing the industry to ensure

**TABLE 4.10 Industry Development of P2P Lending**

KEY INDICATORS	2011	2012	2013	2014	2015	2016
Number of providers	50	200	800	1,575	2,595	2,448
Number of investors (tens of thousands)	—	—	25	116	586	1,375
Number of borrowers (tens of thousands)	—	—	15	63	285	876
Volume of transactions per year (billion RMB [billion US\$])	3.1 (0.5)	21.2 (3.2)	105.8 (15.9)	252.8 (37.9)	982.3 (147.3)	2,063.9 (309.6)
Average rate of return (%)	—	19.1	21.3	17.9	13.3	10.5
Average maturity (months)	—	6.0	4.7	6.1	6.8	7.9

Source: Wangdai Zhijia, (2014, 2015, and 2016).

healthy and sustainable development. The Interim Rules clarified that P2P lending platforms were information intermediaries, specified activities that P2P lending platforms were prohibited from engaging in,<sup>53</sup> established business rules and risk management requirements for P2P lending and obligations of borrowers and lenders, and determined the joint and coordinated supervisory responsibilities of various authorities overseeing the industry. The Interim Rules also included procedures designed to protect consumers, such as requirements related to information disclosure, third-party custody of consumer funds, and limits on loan concentration risk. By the end of 2015, 1,171 P2P service providers had closed due to fraudulent business practices, with 804 providers doing so in 2015 alone.<sup>54</sup> How the industry will evolve remains to be seen, though the financial sector authority approach of shifting from “wait and see” to taking concrete action appears to have been timely and impactful (box 4.6).

#### 4.3.3 Internet-Based Microlending

Internet-based microlending refers to the practice of Internet companies providing small loans to their customers through an MCC under their control. Internet-based

microlending can be roughly divided into the following three types:

- 1) *Financing for online store operators.* An example is loans provided by Ant Financial for Taobao store owners, which were piloted beginning in 2010. Given that many Taobao store owners are typically underserved segments with unmet needs for financial services, Ant Financial launched Taobao credit-based loans. Taobao determines the credit scores of store owners based on the comments of shoppers on Alipay and Taobao. Qualified owners can get loans released directly via Alipay. This lending approach enables convenience and speed. These loans were an important enabler of the escrow model used to facilitate online payments, allowing merchants to cover their short-term financing needs while waiting for payments to arrive.
- 2) *Consumer lending for online shoppers.* An example is “Ant Check Later”, a financing product for e-commerce shoppers. Shoppers can apply directly for financing online in the payment link for online shopping, and Ant Financial assesses the creditworthiness of applicants through big data, resulting in rapid loan disbursement.

#### BOX 4.6

#### Special Campaign to Address the Risks of Internet Finance

Beginning in April 2016, PBOC and 16 other agencies jointly began carrying out a special campaign approved by the State Council to address the risks of Internet finance to promote the healthy and orderly development of Internet finance. The objectives of the campaign are to reverse and rectify improper behaviors in some types of Internet finance, exclude those institutions that violate laws and regulations in the name of innovation and set clear standards for the industry, support and protect institutions that engage in useful innovation and operate in accordance with laws and regulations, guide Internet finance toward the right track of innovation, clarify the division of labor among relevant government authorities and strengthen collaboration, and balance short- and long-term objectives.

The *Implementation Plan for the Special Campaign to Address Risks of Internet-Based Finance* (“Plan”) notes that the potential risks of Internet

finance are mainly in P2P online lending, Internet-based financial asset management, and advertising of Internet finance. The Plan notes that the campaign should work to tighten standards for market entry for new participants, strengthen fund monitoring, establish whistle-blowing and “ample reward and severe punishment” systems, intensify efforts to rectify unfair competition, enhance internal controls, and leverage technology to increase the campaign’s effectiveness.

A working mechanism has been established for the campaign, stressing the need to improve organization and coordination and increase relevant authorities’ accountability. The campaign aims to identify and address problems, regulate collaboratively, treat both symptoms and root causes, and eventually promote the establishment of a mechanism to support the long-term development of a healthy and responsible Internet finance sector.

3) *Small loans to agricultural households.* These loans occur through Internet and mobile platforms to help agricultural households solve financing problems during production. Examples of providers include Ant Financial (via Ant MCC) and Jingdong (via JD MCC), two Internet-based companies that also serve rural areas. In this model, loans to farmers can usually be used for seeds, fertilizer, and other inputs used for production. Goods are then required to be sold on e-commerce platforms such as Taobao and JD.com, and the revenue generated goes to the lender as repayment for the loan.

The rapid development of Internet-based microlending in China can be attributed to the following factors. First, the Internet has developed quickly in China, enabling people to use Internet technology to perform operations related to small loans, thus lowering the cost of origination. Second, the development of e-commerce has led to the emergence of new types of consumers who demand Internet-based microlending, including online shoppers and online store owners. Third, the development of e-commerce and advances in information technology have enabled institutions to capture and leverage new data sources to assess repayment capacities of potential borrowers. For example, lenders associated with an e-commerce platform can use an online merchant's transaction history to assess his or her creditworthiness. These factors have lowered costs, improved the efficiency of small loan origination, and made small loans more convenient and accessible for consumers.

However, companies engaging in Internet-based microlending operations for small loans are still limited in number and only target individuals and MSEs on their respective e-commerce platforms. Meanwhile, their online lending operations rely on information technologies and transaction data that have only been in use for a short period of time and still need to be tested.

#### 4.3.4 Internet Banks

With advances in information technology, many Internet-based enterprises have achieved success in e-commerce and digital payments and developed large customer bases, transactional data, and experience with online businesses. These enterprises have recognized the competitive advantages of these attributes and have entered into Internet banking. At present, three established "Internet banks" exist in China. WeBank and MYbank were granted commercial banking licenses by CBRC in 2014, and XW Bank was granted a license in 2016 (table 4.11). These Internet banks have no outlets or counter services. Their current focus is to leverage technology and data rather than offline resources and to target

**TABLE 4.11 Overview of Internet Banks**

KEY INDICATORS	WEBANK	MYBANK	XW BANK
Year launched	2015	2015	2016
Major shareholder	Tencent Group	Ant Financial	New Hope Group
Total assets (RMB billion [US\$ billion])	52 (7.8)	61.5 (9.2)	5 (0.8)
Deposit balance (RMB billion [US\$ billion])	23.1 (3.5)	23.2 (3.5)	0.6 (0.1)
Outstanding loan balance (RMB billion [US\$ billion])	30.8 (4.6)	34 (5.1)	4 (0.6)
Number of outstanding loans (million)	7	n/a	1
Average size of loans (RMB [US\$])	4,368 (655)	n/a	2,550 (383)

Source: Respective companies' data. Data for WeBank and MYbank is as of December 2016, data for XW Bank is as of June 2017.

individuals and MSEs with credit products. MYbank, for example, has a customer base mainly composed of online stores on the e-commerce platform of its parent company Alibaba. MYbank can leverage big data on such consumers for creditworthiness assessments and loan-granting decisions. WeBank, for its part, launched its own unsecured microloan (Weilidai) and auto microloan (Weichedai) products in September 2015. For Weilidai, consumers can borrow up to RMB 200,000 (US\$30,000) without guarantee or collateral.

While their banking licenses allow them to accept deposits, the 2015 tiered-account regulations (see box 4.7) thus far limits the degree to which remote identification can be used to open accounts with full functionality (such as accepting cash deposits). Internet banks can open Type II and Type III accounts, but such accounts must be linked to an existing Type I bank account (presumably at a traditional bank).

By the end of 2016, the loan balance managed by WeBank had reached RMB 57.2 billion (US\$8.6 billion), including its own loan balance of RMB 30.8 billion (US\$4.6 billion; representing 697 percent year-on-year growth) and loan balance of RMB 26.4 billion (US\$4.0 billion) from banks operating via its intermediary platform. All of these loans were extended to individual consumers. The consumer lending balance of unsecured microloans (Weilidai) amounted to RMB 25.2 billion (US\$3.8 billion, an 82 percent share of its own loan balance), while the lending balance of auto microloans (Weichedai) amounted to RMB 5.5 billion (US\$0.8 billion, an 18 percent share). MYbank opened in June 2015, and by the end of 2016, its balance of loans to MSEs (including personal businesses) had reached RMB 28.7 billion (US\$4.3 billion).

**BOX 4.7**

**Tiered Account System for Banks**

In December 2015, PBOC released the *Notice on Improving Services of Personal Bank Accounts and Strengthening Account Management*, which was later supplemented in November 2016 by the *Notice on Implementing the Rules for the Categorized Management of Individual Bank Accounts*. The objective of these notices was to establish distinct tiers or categories of bank accounts provided by banks to balance financial inclusion objectives with integrity, safety, and efficiency. The first notice established three types of bank accounts that are differentiated

by their respective know-your-customer requirements and the type and size of transactions that can be made using the account. The second notice require each bank account to have a unique individual identification number and be associated with a unique phone number to prevent fraud.

Around the same time, PBOC also issued separate regulations to establish a tiered account system for nonbank digital payment providers, further discussed in box 4.5.

**Categorized Management of Personal Bank Accounts**

FEATURES	TYPE III	TYPE II	TYPE I (FULLY FUNCTIONAL)
Daily transaction and balance limits	Account balance limit of RMB 1,000 (US\$150).  Daily transaction limit on funds transfers from non-linked accounts of RMB 5,000 (US\$750), and annual transaction limit of RMB 100,000 (US\$15,000).  Daily transaction limit on consumption purchases, bill payment, and fund transfers to non-linked accounts of RMB 5,000 (US\$750), and annual transaction limit of RMB 100,000 (US\$15,000).	No account balance limit  Daily transaction limit on funds transfers from non-linked accounts of RMB 10,000 (US\$1,500), and annual transaction limit of RMB 200,000 (US\$30,000).  Daily transaction limit on consumption purchases, bill payment, and fund transfers to non-linked accounts of RMB 10,000 (US\$1,500), and annual transaction limit of RMB 200,000 (US\$30,000).	None
Identification verification requirement to open account	<ul style="list-style-type: none"> <li>In-person via bank counter or self-service machine</li> <li>Remote via electronic channel (need to activate account by transferring any amount from existing bank account and verifying that the applicant is the bank account owner)</li> </ul>	<ul style="list-style-type: none"> <li>In-person via bank counter or self-service machine</li> <li>Remote via electronic channel (need to link to the applicant's type I account or credit card account)</li> </ul>	<ul style="list-style-type: none"> <li>In-person via bank counter or self-service machine (if the latter, needs to verify applicant's identification in person)</li> </ul>
Functionality	Consumption purchases (with limits), bill payments (with limits), transfers to/from non-linked bank accounts (with limits)	Deposits, consumption purchases (with limits), bill payment (with limits), financial product purchases (e.g., investment or wealth management), transfers to/from non-linked bank accounts (with limits)	Cash deposit/withdrawal, transfers, consumption purchases, bill payment, financial product purchases (e.g., investment or wealth management)

Source: PBOC.

The business models of Internet banks are still evolving, yet current players demonstrate some common characteristics. Internet banks must have a powerful Internet service provider that can handle high amounts of traffic and online transactions. The online-only model allows Internet banks to minimize transaction costs and use big data to analyze customer behaviors, including creditworthiness. Due to their wealth of data, sophisticated analytical tools, and their own funding constraints (i.e., lack of deposits), Internet banks have incorporated partnerships with traditional banks into their business model. Through these partnerships, Internet banks link traditional banks to potential borrowers, providing traditional banks with basic personal information and basic profiles about the credit limits and borrowing of potential borrowers. The customer resources and revenues from loans disbursed through this type of partnership arrangement are then shared between the Internet bank and the traditional bank.<sup>55</sup>

Important differences exist between Internet banks as they currently operate and traditional banks. First, they have different operating philosophies. Traditional banks mainly depend on their own resources for business development, whereas Internet banks integrate and leverage various resources for business development from their parent companies, including data and information acquired from e-commerce platforms and generated in operational processes, including logistics, and industrial and commercial activities.

Second, they have different customer bases. Internet banks' target customers are MSEs, entrepreneurs, and individual consumers who are often familiar with and active in e-commerce.

Third, Internet banks have different operating channels. Traditional banks still depend on physical counter services; their existing e-banking business is an affiliated service with traditional products, adapted for delivery via the Internet. Internet banks have adopted the Internet model from the outset; for example, the whole process of lending is conducted digitally.

Fourth, Internet banks have different measures to identify and assess customers. Traditional banks mostly identify customers and assess their creditworthiness based on financial statements and face-to-face communications. However, Internet banks depend on Internet technologies and draw from data from their parent companies to conduct customer identification and creditworthiness assessments through a combined approach of data models for automatic assessment and video or telephone credit investigations.

Fifth, Internet banks have different risk management means and technologies. Traditional banks to some extent rely on their staff to undertake risk management

activities, while Internet banks rely on big data and data models for risk management.

To date, Internet bank operations remain limited, and their business models are still evolving, as are regulatory approaches. At present, Internet banks mainly focus on small loans and lending to certain types of customers. These banks face challenges in expanding their business beyond credit products or leveraging retail deposits, because Type II and III accounts (the only types of bank accounts that can be opened remotely) have certain restrictions on deposit taking, and Internet banks have no offline (physical) access points. As mentioned previously, remote identification technology has not yet been deemed sufficiently robust to facilitate remote account opening for fully functional bank accounts, and financial sector authorities require customers to be physically present when first opening a fully functional account. Although not yet approved, banks are exploring the use of remote identification technology in the hopes of using such technology in the future to open higher-tier accounts and expand to a more diversified product offering.

#### 4.3.5 Internet-Based Insurance

The development of Internet-based insurance represents a significant milestone in China's insurance industry. These new, Internet-only fintech insurance companies leverage new business models and platforms to design and deliver new types of Internet-based insurance products and services to consumers. Traditional insurance companies and other providers have subsequently followed suit and have pursued partnerships with Internet companies, as previously discussed in section 4.1.6. In November 2013, the first online-only insurance company in China, Zhong An Online P&C Insurance Co., Ltd. was founded. Major shareholders in Zhong An Online include Ant Financial, Tencent, and Ping An. Following the establishment of Zhong An Online, other Internet-based insurance companies have been approved and established.

Internet-only insurance companies leverage digital technologies to conduct transaction processing and data storage, analyzing faster and on a much larger scale than traditional insurance companies. Such companies can utilize big data analytics to develop a wider variety of discrete insurance products and use online processing and digital channels to serve customers more efficiently and conveniently. Their products are mainly low value, short term, and standardized, with simple contract terms and easy operational processes. For example, Zhong An Online launched products mainly related to e-commerce and Internet transactions, including household property insurance, returned cargo insurance, liability

insurance, credit and guarantee insurance, high temperature insurance, and flight delay insurance. That said, not all “innovative” insurance products that Internet-only insurance companies offer contribute to financial inclusion, because many products are targeted to high-income customers and do not offer meaningful risk mitigation for the underserved.

The Chinese government has provided policy support to promote the development of the Internet-based insurance sector, including the *Law of the People’s Republic of China on Electronic Signature*, issued in August 2004 and revised in 2015, which stipulated the legal force of electronic signatures and safeguarded the legal rights of all parties, helping to facilitate the delivery of online services and electronic policies. The *Guidelines on Promoting Sound Development of Internet Finance* established operating principles and business requirements and prohibited certain Internet finance behaviors (such as misleading descriptions or misrepresentations), which benefit the healthy development of Internet-based insurance. The *Provisional Rules for Supervision and Administration of Internet Insurance*, issued by CIRC in July 2015, clearly sets out the provisions for business entity, business scope, and access criteria to develop Internet-based insurance, establishing the supervision system for Internet-based insurance services in China and paving the way for the entry of such companies.

#### 4.3.6 Internet-Based Fund Management

Before Yuebao emerged in 2013, Chinese fund companies achieved moderate levels of online sales of fund products via official websites and third-party sales platforms. However, such companies did not focus on serving underserved segments of the population. Typically, the minimum subscription of public funds to fund companies was RMB 1,000 (US\$150), while various service charges would be levied for subscription, redemption, and conversion of funds.

Yuebao introduced a very different product to the market in June 2013. Yuebao is an Internet-based fund management product provided by the Ant Financial Services Group (an affiliate of Alibaba) in partnership with Tianhong Asset Management. Yuebao is accessed via Alipay, which enables individual users to make payments and transfers easily at any time without service charges.<sup>56</sup> The Yuebao product was developed to mobilize the dormant funds sitting in millions of Alipay accounts, with customers earning returns on their investment (Yuebao means “leftover treasure”). The following product design and operational features were critical to Yuebao’s success:

- **Low investment threshold.** Alipay users can open a Yuebao account with just RMB 1 (US\$0.15), allowing a new “investor class” into the market.
- **Withdrawal at any time.** Yuebao customers can withdraw their money virtually immediately, an attractive advantage over traditional time-bound financial management products that typically have penalties for early withdrawal.
- **Daily interest.** Interest on Yuebao accounts accrues daily, can be tracked in real time, and can be used for direct consumption by the customer via Alipay, providing easy accessibility for consumers (and synergies for Alipay and Alibaba).
- **Relatively high investment returns.** The accumulated funds across Yuebao customers’ accounts are used to purchase money market funds, a portion of which are then placed in a bank as a deposit of a financial institution. Due to the large amount of funds, the higher interest rate received on this deposit (compared with an ordinary deposit), and tight liquidity on the market in the early stage of Yuebao’s creation, the interest rate on such deposits was relatively high. Therefore, Yuebao could pay relatively high returns to investors, while still earning profits due to its low cost of operations and large pool of customers. Shortly after launching, Yuebao’s maximum annualized rate of return was nearly 7 percent. Since 2015, the rate has declined to below 3-4 percent. Rates of return have decreased in the money market sector in general. In addition, for commercial banks, reserve requirements are now applied to the deposits of Yuebao funds in banks (although reserve requirements are temporarily zero at the moment).
- **Simple interface.** Yuebao is a simple financial management product, and its interface is easy to use and intuitive for customers, particularly those without any previous investment experience.

Due to these features, Yuebao rapidly accumulated a large number of users and a large amount of funds soon after it was officially launched. As of the end of 2014, the number of existing customers had reached 185 million and the size of the fund totaled RMB 579 billion (US\$87 billion). As of the end of 2016, the number of customers had grown to 324.6 million and the fund size had reached RMB 808 billion (US\$121 billion).

By providing a feasible and convenient channel for engagement in financial management, Yuebao’s success revealed the significant untapped opportunities in profitably providing financial services to middle- and low-income groups in the Internet era. Yuebao has become an important driving force pushing Internet-based financial

**TABLE 4.12 Key Products of Internet-Based Fund Management**

KEY INDICATORS	YUEBAO	LICAITONG	JINGDONG XIAOJINKU	SUNING LINGQIANBAO
Year launched	2013	2014	2014	2014
Affiliated company	Ant Financial	Tencent	Jingdong (JD)	Suning
Number of users (millions)	324.6	n/a	n/a	n/a
Assets under management (billion RMB [billion US\$])	808 (121)	n/a	n/a	n/a

Source: Company disclosures, as of end of 2016.

asset management to a stage of rapid development (table 4.12). Indeed, less than a year after Yuebao hit the market, Tencent launched a similar product called Licaitong, which quickly grew to more than 10 million users. Jingdong (JD) also launched the “JD private coffer” product linked to the JD e-commerce platforms and digital payment tool. In all cases, such products are provided online at low cost and easily scalability to providers, and they are easily accessed and used by consumers, including low- and middle-income consumers. More broadly, Yuebao’s success has encouraged the entire financial management sector to review its products, services, and target markets and to begin thinking about how to attract middle- and low-income groups that were previously excluded and how to serve them sustainably and profitably using similar digital business models, technologies, and channels.

#### 4.3.7 Internet Equity-Based Crowdfunding

Internet equity-based crowdfunding was established in China with the objective of offering equity in small businesses to the general public via online platforms. Specifically, it refers to small public equity-raising activities that are carried out by MSEs via platforms of equity-based crowdfunding financing intermediaries (Internet websites or similar electronic media). Internet equity-based crowdfunding in China was initially characterized by openness to the general public, the small size of investments, and the large numbers of investors. Entrepreneurs and MSEs disclose their real information such as business form, operation and management models, financial situation, and fund utilization to investors via the digital platforms of equity-based crowdfunding financing intermediaries. Internet equity-based crowdfunding financing typically involves innovative technical projects with high risk and high return, in early stages of development and seeking seed and angel rounds of financing. Investors can choose to provide small equity investments based on the risks posed by the financing activities and their own risk tolerance. Platforms may include lead and following investors and may

specify qualifications for investors. Platforms utilize different fee arrangements, including commission based on a percentage of financing, equity, or fees for value-added services.

Equity-based crowdfunding developed rapidly in China in recent years, with various equity-based crowdfunding financing platforms established. More recently, to protect investors and consumers, regulation and guidelines have been issued to regulate the market more formally. The *Administrative Rules on Private Equity-based Crowd-Funding Financing (Trial)* (draft for comments) issued by the Securities Association of China (SAC) at the end of 2014 and the *Circular on Conducting Special Supervision on Institutions Engaging in Equity Financing via Internet* issued by CSRC in August 2015 require that all internet equity-based crowdfunding platforms in China be restricted to qualified investors and not open to the general public, with a cap on the total number of investors.

Internet equity-based crowdfunding has significant growth potential in China and can help to address MSEs’ financing needs. China’s underdeveloped capital markets lead to a lack of suitable products and insufficient financing channels for MSEs, as well as high financing costs. The problem is particularly stark for enterprises in the early stages of development. However, with the increase of private wealth in China, consumers are increasingly willing to participate in equity investment to achieve higher investment returns than they can from savings products. Driven and enabled by the progress in information technology, private equity-based crowdfunding has developed to a certain extent in China.

However, obstacles still hinder internet equity-based crowdfunding from playing a larger role in financial inclusion, such as the high investment threshold (which was established for financial consumer protection purposes) and the limited total number of investors. Internet equity-based crowdfunding has also yet to achieve widespread appeal among investors partly due to a lack of regulatory clarity regarding such financing platforms. According to the division of responsibilities for regula-

tion of Internet finance specified in the 2015 Guidelines, CSRC is responsible for formulating regulatory rules for internet equity-based crowdfunding. Future regulatory rules for internet equity-based crowdfunding financing are anticipated to help make the operations of such platforms more secure for investors and accessible for enterprises seeking financing.

#### 4.3.8 Contributions of Digital Finance and Fintech Companies to Financial Inclusion and Remaining Challenges

The rapid rise of digital finance—including fintech companies—in China, its impact on financial inclusion, as well as remaining challenges can all usefully be considered from the perspective of the four elements of financial inclusion discussed in chapter 2: accessibility, diverse and appropriate products, commercial viability and sustainability, and safety and responsibility.

##### *Accessibility*

Chapter 2 explains that the emergence of digital finance has lessened consumers' reliance on physical access points, enabling them to use mobile phones, computers, and other personal devices to take up and use various financial products and services. In this way, digital finance has contributed to groups who were previously not well served by traditional financial service providers, such as small farmers and MSEs, low-income individuals, and those living in remote and rural areas. For example, non-bank digital payment providers not only provide payment services to stores and MSEs on e-commerce platforms, but also provide convenient payment channels to consumers in rural and remote areas who otherwise have limited access to such services. As of the end of March 2017, Alipay users in rural markets numbered 163 million. Farmers can likewise access small loans via e-commerce platforms—rather than in brick-and-mortar branches—to address their daily production and consumption financing needs.

That said, many adults who make up the last mile are elderly or live in areas with poor information and communication technology (ICT) infrastructure and thus remain excluded from the reach of digital finance. Digital models can contribute to, but may not be able to fully close, the “accessibility gap” in China, and alternative methods (including rural financial service providers and agents) will still need to be employed. Further improvements to ICT infrastructure to reach the last-mile are also needed.

##### *Diverse and Appropriate Products*

Digital finance has contributed to increased convenience, greater affordability, and better designed products for underserved segments. The digitization of

payments in China demonstrates how technology-driven product design can contribute to financial inclusion. With the proliferation of reliable and efficient digital payment products, consumers can now enjoy the convenience of making payments anytime and anywhere. Mobile payments offer a new approach for shopping, utility bill payments, bank account inquiries, transport fee payments, cash transfers, investment-oriented financial management, and other transactions. Digital payments have changed people's financial transaction behaviors; for many consumers, digital payments have replaced cash. Furthermore, as a result of digital payments, millions of transactions are now recorded, allowing fintech companies to use information technologies such as big data and cloud computing to design and deliver low-cost, accessible financial products and services to consumers more precisely.

Thanks to online sources of credit such as “Ant Check Later,” underserved groups can access more convenient financing channels for consumption loans. Some online store owners and MSEs can access loans urgently needed in their business operations via online borrowing and Internet-based supply chain finance—critical services to help grow their businesses that are often not easily accessible from other sources.

The emergence of P2P and equity-based crowdfunding platforms has not only provided asset-based income generation opportunities to individuals with idle funds, but also addressed financing challenges faced by individuals and MSEs starting up their businesses. Digitally enabled business models have also allowed providers to offer a wider range of low-cost, innovative, and tailored products, such as Internet-based insurance products and fund-based financial management products.

These innovations in product design and operational processes have generated extensive positive impacts, lowering operational costs for providers, increasing the ability to serve more customers efficiently, and expanding the available range of appropriate products.

However, not all digital finance products are beneficial to consumer welfare or appropriate for the underserved. For example, products such as digital credit that target unsolicited offers directly to consumers via mobile phones pose potential risks of overindebtedness. Financial consumer protection frameworks need to be strengthened to address the risks raised by digital finance related to product appropriateness and other broader issues (further discussed below).

##### *Commercial Viability and Sustainability*

Fintech companies' business models are market based and, for the most part, operate without subsidies or influence from government authorities. Not only are fintech companies succeeding via market-based and com-

mercially viable approaches, but such providers have also served as a “demonstration effect” for the rest of the financial ecosystem. The rise of fintech companies has created shocks to China's traditional financial service providers and prompted them to innovate, adopt digital finance approaches, and compete for previously underserved market segments. As a result, digital finance in China is increasingly not limited to fintech companies providing direct products and services to consumers, but traditional providers are now also serving new customer segments with innovative products in a more efficient, digitally enabled manner. In addition, an increasing number of other types of fintech service companies have emerged in China, leveraging advanced ICT as described previously to provide credit scoring, risk management, and other valuable services to traditional financial service providers, with the same positive impacts previously noted. Partnerships between fintech companies and traditional financial service providers hold much promise, as both sides bring different comparative advantages to the table: technological and analytical efficiencies on the one hand and reputation, risk management and controls, and financial product knowledge on the other hand.

### *Safety and Responsibility*

It is important to recognize that digital finance also poses risks. Given the new types of risks posed by digital finance, the business practices of some new fintech companies, and the still-nascent regulatory and supervisory framework, consumers face risks ranging from loss of funds and violations of data privacy to false promotion and outright fraud, and money laundering risks also exist. Indeed, the nature of digital finance is still finance, including the essential attributes of financial risk management. In addition, compared with traditional finance, the risks posed by digital finance are potentially more implicit, contagious, and extensive. In general, fintech companies have infringed upon the rights and interests of consumers in more cases than formal, traditional financial service providers have, and the nature of such infringements has been more serious, illustrating the drawbacks of the “wait and see” approach. Unlike traditional financial service providers, the threshold for fintech companies to enter the market is low, which allows in providers with both good and bad intentions. The results are many potential risks and many recent cases of actual harm to consumers.

For example, customer funds may not be properly entrusted to a third party, or customers' personal information may be leaked, stolen, or sold, infringing upon their privacy. Some P2P platforms have stepped beyond the mandate of information intermediaries, illegally establishing a pool of funds, providing guarantees for

lenders, and even making loans. Other fintech companies have intentionally exaggerated returns from investment products or concealed product risks. Some fintech companies have conducted fraud, resulting in huge economic losses to investors and harm to vulnerable consumers.

Fintech, and digital finance more broadly, require new approaches for consumer protection and education. An effective consumer protection framework is required to address the features of digital financial transactions that pose potential threats to consumers. Consumer education urgently needs to be strengthened to enhance consumers' skills to better understand and use digital technologies to obtain appropriate products and services.

In addition, relevant laws, regulations, and supervisory practices for digital finance providers need further improvement. Digital finance is relatively new, and there is little precedent to follow. In order to facilitate its development, the Chinese government has chosen to remain relatively open to the integration of digital technologies and finance and the market entry of fintech companies. However, to ensure that fintech continues to develop sustainably in a way that benefits consumers, authorities have increasingly recognized the need to take action and establish comprehensive, proportionate legal frameworks and clear standards for emerging models. At this stage, China's fintech rules are still under development with significant gaps remaining, though progress has recently been made as Chinese financial sector authorities consciously shift away from the “wait and see” approach to a stage of more active regulation and supervision (see box 4.8).<sup>57</sup>

In sum, digital finance—including fintech providers—has played a role in improving financial inclusion in China and enriched digital financial inclusion practices for the world as a whole. Chinese fintech companies have leveraged opportunities created by the advancement of information technologies to target populations neglected by traditional financial service providers or sectors without financial services, expanded the accessibility of financial service channels, developed innovative and low-cost products and services, and diversified the financial ecosystem, thereby playing a multifaceted role in contributing to the “democratization” of finance in China. However, significant challenges remain for market players and government authorities to ensure that fintech companies can effectively and safely contribute to China's financial inclusion objectives (further discussed in chapter 5).

**BOX 4.8****Guidelines on Promoting Sound Development of Internet Finance**

The Chinese government issued the *Guidelines on Promoting Sound Development of Internet Finance* ("Guidelines") in July 2015. Jointly issued by PBOC and nine other ministries and commissions, the Guidelines is the first guiding document on Internet finance regulation and supervision since 2013, when Internet finance first saw rapid growth.

The Guidelines defines major Internet finance business models and proposes a series of measures and objectives, which include (1) promoting innovation of Internet finance platforms, products, and services; (2) encouraging cooperation between financial institutions and Internet finance companies; (3) improving access to capital for Internet finance companies; (4) streamlining administrative approvals and other procedures to better service the industry; (5) implementing appropriate favorable fiscal and tax policies; and (6) fostering the development of credit infrastructure and the cultivation of supporting intermediary services.

The Guidelines clarifies the regulatory mandates of different financial sector authorities with respect to Internet finance. PBOC is responsible for the regulatory oversight of Internet-based payments; CBRC is responsible for oversight of Internet-based lending, Internet-based trusts, and Internet-based consumer finance; CSRC is responsible for oversight of Internet equity-based crowdfunding and Internet-based fund sales; and CIRC is responsible for oversight of Internet-based insurance.

The Guidelines notes areas where additional regulation is required, including: safeguarding of customer funds, information disclosure and transparency, consumer protection, and information security, as well as anti-money laundering and preventing financial crimes. The Guidelines also calls for the strengthening of the industry's self-regulatory capacity, regulatory and supervisory coordination among financial sector authorities, and data and statistical monitoring.

Following the issuance of the Guidelines, PBOC issued new rules for the nonbank digital payment sector (*Administrative Rules on Network Payment of Nonbank Payment Institutions*). CBRC took the lead in drafting rules on Internet lending (*Interim Rules for the Administration of the Business Activities of Internet-Based Lending Information Intermediary Institutions*). CIRC also issued *Provisional Rules for Supervision and Administration of Internet-Based Insurance*. CSRC is in the midst of formulating relevant rules within its mandate. In addition, the National Internet Finance Association of China (NIFA), an organization committed to enhancing self-discipline of Internet finance, was established in March 2016. NIFA has more than 400 members, including many key fintech companies. The Association is currently developing various self-regulatory standards, beginning with disclosure guidelines for Internet-based lending.

#### **4.4 THE ROLE OF THE CHINESE GOVERNMENT IN PROMOTING FINANCIAL INCLUSION**

The Chinese government has actively pursued a range of measures over the past 15 years to increase financial inclusion. This section describes key efforts to improve the policy, legal, regulatory, and supervisory environment for financial inclusion, as well as the underlying financial infrastructure.

##### **4.4.1 Policy and Regulatory Environment for Financial Inclusion**

The Chinese government has actively taken a broad range of policy measures to promote financial inclusion, including through monetary and credit policies, tax policies, and supervision policies. The objectives of these policies have been to encourage marketization, reduce operational

costs of financial service providers serving target underserved populations, encourage financial service providers to leverage technology and financial infrastructure to reach new consumer segments, and promote the development of well-designed financial products for target underserved populations.

##### *Monetary and Credit Policies to Support Financial Inclusion*

In recent years, PBOC has incentivized financial service providers to expand credit services to sannong and MSEs through various policies, including differentiated reserve ratios, loan refinancing, and rediscounted loans. As of the end of 2016, the reserve ratio for rural commercial banks registered in county areas was 12 percent, and the reserve ratio for RCOPBs, RCCs, and VTBs was 9 percent. These ratios are 5 percentage points and 8 percentage points lower, respectively, than the reserve ratio for large commercial banks. If any of the aforementioned

**BOX 4.9****China's Plan for Advancing the Development of Financial Inclusion (2016–2020)**

On December 31, 2015, the State Council issued China's Plan for Advancing the Development of Financial Inclusion (2016–2020) ("FIP"). The FIP defines financial inclusion as "providing appropriate and valid financial services to all social strata and groups with demands for financial services, at affordable costs, based on the principles of opportunity, equality, and commercial sustainability." It further notes that "MSEs, farmers, urban low-income groups, impoverished groups, the disabled, the aged, and other special groups are the targeted customers of financial inclusion in China."

The FIP notes that financial inclusion in China still faces several issues and challenges, including "imbalanced" financial services (i.e., a lack of appropriate products for the underserved, while less suitable products exist in the market), and more work remains to be done to further develop financial infrastructure and to strengthen the commercial sustainability of financial services provision.

The FIP establishes the following financial inclusion policy objectives for China:

- Establish a servicing and supporting system of financial inclusion that corresponds to completing a moderately prosperous society in all respects;
- Effectively improve the availability of financial services, significantly increase the sense of fulfillment of the people for financial services;

- Significantly improve the people's satisfaction with financial services; and
- Satisfy the people's increasing demands for financial services, especially enabling MSEs, farmers, urban low-income groups, impoverished groups, the disabled, the aged, and other special groups to obtain financial services at a reasonable price in a convenient and safe manner.

The FIP outlines pathways to achieve these objectives, including through increasing the diversity and coverage of financial service providers within the financial system, innovating in the design of financial products and services, accelerating construction of financial infrastructure, improving laws and regulations related to financial inclusion, enabling the role of policy guidance and encouragement, and bolstering financial education and financial consumer protection.

The FIP also notes that the relationship between the government and the market should be correctly arranged, and market principles should be fully respected, with the aim to ensure that the market plays a decisive role in the allocation of financial resources. The government is expected to better play its role in guiding overall planning, organization and coordination, and balanced distribution, as well as in providing policy support.

rural financial service providers in county areas used a certain portion of its newly-taken deposits to disburse loans in the local area, its reserve ratio is 1 percentage point lower than that of a similar financial service provider. In addition, any commercial banks that meet certain prudent operation requirements and whose loans to *sannong* and MSEs have reached a certain percentage may be granted a lower reserve ratio than that of similar institutions. To encourage financial institutions to better develop financial inclusion, the PBOC decided in September of 2017 to make targeted reductions, effective from 2018, to the deposit reserve ratio for commercial banks that have complied with prudential requirements and have reached the required ratios in their lending to underserved market segments, including loans to micro-enterprises (credit limit less than RMB 5 million to a sin-

gle microenterprise) and seven other types of loans to underserved segments.

PBOC has also used lending and discounting facilities to encourage financial service providers to expand credit to underserved segments, including *sannong*, MSEs, and the poor. Financial service providers that demonstrate higher outreach to these groups receive better access to these facilities. For the purpose of supporting the aforementioned groups in getting more loans from financial service providers, the total amount of loans issued in 2016 under the PBOC lending facility was RMB 439 billion (US\$66 billion), and the outstanding balance of loans as of the end of 2016 was RMB 375 billion (US\$56 billion). The total amount of loans issued in 2016 under the PBOC discounting facility was RMB 381 billion (US\$57 billion), and the outstanding balance

of loans as of the end of 2016 was RMB 117 billion (US\$18 billion).

PBOC has also prudently advanced pilots of mortgage loans in rural areas with “two rights” as collateral (i.e., management rights to contracted rural land and farmers’ housing property rights); encouraged SMEs to utilize debt financing instruments from nonfinancial institutions; supported qualified financial service providers to raise funds through issuing financial bonds to be used exclusively for loans to MSEs; and urged financial service providers to provide livelihood-oriented financial services to rural migrants, university graduates, minorities, the disabled, and other groups. These efforts have improved financial services to sannong, MSEs, and other key targeted underserved segments.

#### *Fiscal and Tax Policies*

The following are select examples of fiscal and tax policies used by Chinese financial sector authorities to incentivize financial inclusion efforts via market-based approaches, across various financial products and services.

#### **1) Risk compensation funds for agriculture-related lending and lending to MSEs**

The central government has encouraged local governments to establish risk compensation funds to encourage financial service providers to increase agriculture-related lending and lending to MSEs. For example, in 2009, with local government support, China Construction Bank (CCB) launched an innovative product through which local governments and CCB jointly select a group of MSEs. Funds provided by local governments and by member MSEs are pooled into a guarantee assistance fund. CCB releases loans equivalent to 10 times the amount of the fund to member MSEs, with flexible disbursement and repayment schedules. PSBC launched a similar product in October 2014.

#### **2) Earmarked funds for local governments to support financial inclusion**

Government authorities have actively promoted the implementation of guidelines to improve access to credit for poor households. In 2014, PBOC and six other ministries and commissions jointly released the *Guidelines on Comprehensively Delivering Financial Services for Poverty Alleviation and Development*. Later in 2014, the State Council Leading Group Office of Poverty Alleviation and Development (CPAD), the MoF, PBOC, CBRC, and CIRC jointly released *Guidelines on the Innovation and Development of Microcredit for Poverty Alleviation*. These two guidelines encouraged the increased provision of unsecured loans by financial service providers, the establishment of risk compensa-

tion funds and support to the poor with interest subsidies by local governments, as well as the provision and purchasing of micro-credit insurance to diversify the related risks.

To provide additional financial support to local government efforts to expand financial inclusion, in September 2016, the MoF issued *Administrative Rules for the Administration of Earmarked Funds for Financial Inclusion*. These funds are earmarked transfers of central finance to support and guide local governments at all levels, financial service providers, and private capital in support of financial inclusion in China. The funds include the following uses: (1) awards for incremental increases in sannong-related loans by county-level financial service providers; (2) special subsidies for the expenses of rural financial service providers; and (3) interest subsidies for guaranteed loans to business startups, as well as allowances to related banks or other financial service providers.

Since 2009, the government has implemented a pilot award program for incremental sannong-related loans specifically to county-level financial service providers. In recent years, with continual expansion of its scope, the pilot program now covers 25 provinces in China, including major grain production areas and most of the central and western areas. In 2016, the central government granted RMB 16.7 billion (US\$2.5 billion) in “financial inclusion special funds” to local governments, and local governments could use these funds to facilitate financial inclusion by awarding financial service providers at the county level and below that increase their sannong-related loans, among other measures.

In addition, some local governments have established business startup loan guarantee funds through which financial service providers issue guaranteed loans to qualified entrepreneurs to support individuals to startup businesses or to expand employment. The interest on such loans is subsidized by fiscal funds.

#### **3) Encouraging and supporting the development of government-owned guarantee companies**

The Chinese government has actively encouraged and supported the development of guarantee companies with the objective of improving financial inclusion for underserved market segments. Many local governments have established government-owned guarantee companies to share the credit risk with financial service providers. For example, in Zhejiang Province, government-owned guarantee companies can provide a guarantee that is 50 percent of total investment and does not exceed RMB 10 million (US\$1.5 million) for financing technology firms at their initial and growth stages.

#### 4) Agricultural insurance

To encourage uptake of agricultural insurance, CIRC, the MoF, the Ministry of Agriculture, and local governments have actively promoted agricultural insurance. Building on the market-oriented operations of insurance companies, the central government, provincial governments, and municipal and county governments provide premium subsidies for agricultural insurance for economic losses caused by natural disasters, major plant diseases and pests, and accidents. In 2007, a pilot program of premium subsidies began in six provinces. The pilot program provided approximately RMB 2 billion (US\$300 million) in premium subsidies covering five types of agricultural insurance. In 2015, CIRC, the MoF, and the Ministry of Agriculture jointly issued the *Circular on Further Improving the Drafting of Terms and Conditions for Agricultural Insurance Products with Premium Subsidized by Central Government*. As a result, the average coverage of new agricultural insurance products increased by 15–20 percent; insured liability was further expanded, covering the main risks in relevant insured areas; premium rates were reduced; claim criteria were improved; and the average rate of indemnity for total losses increased by 10 percent. As of the end of 2016, the regional scope of the central government's agricultural insurance premium subsidies had expanded to the whole country covering 15 types of agricultural insurance products, including crop farming, livestock breeding, and forestry. Agricultural households normally pay 15–30 percent of the premium, depending on their income level and the types of insured products. In 2016, the central government allocated RMB 15.8 billion (US\$2.4 billion) in premium subsidies (a 7.5 percent year-on-year growth), representing 38 percent of total agricultural insurance premiums in the whole country.

#### 5) Tax policies

As mentioned in section 4.1, tax policies are a tool that government authorities in China have leveraged to promote financial inclusion. By reducing overall operational and transaction costs, these policies aim to encourage financial service providers to expand their physical reach and serve targeted underserved groups, including MSEs and *sannong*.

Several specific tax exemptions have been established to achieve these objectives. Past and current examples include:

- The value-added tax (VAT) is exempted for the interest income of financial institutions and MCCs on small loans to farmers;
- The taxable income was calculated on only 90 percent of financial institutions' interest income on small loans to farmers; and

- The stamp tax is exempted for loan contracts signed between financial institutions and MSEs.

#### *Additional Regulatory and Supervisory Approaches to Advance Financial Inclusion*

Chinese authorities have actively leveraged supervisory tools to promote financial inclusion, mainly focusing on differentiated supervision, preferential policies, support to priority sectors, cultivation of new market players, and institution building.

In recent years, PBOC and CBRC have issued various measures to improve access to finance for *sannong* and MSEs, including promoting the use of financial bonds by commercial banks exclusively for MSE loans and the use of differentiated calculation and assessment of loan-to-deposit (LTD) ratios and NPL ratios for MSE loans. For example, commercial banks are allowed to issue financial bonds specifically for MSE loans, increasing banks' available funding sources for MSE lending. When calculating LTD ratios for MSE business lines, the MSE loans that correspond to such bonds can be deducted from the numerator. As of the end of 2015, 66 commercial banks nationwide had issued RMB 549 billion (US\$83 billion) in financial bonds specifically for MSE lending. CBRC also allows NPL ratios for MSE loans to be up to 2 percent higher than industry-wide targets, with no adverse consequences on the financial service provider. Commercial banks are also allowed to issue special *sannong* financial bonds to raise funds for lending to *sannong* clients, with similar preferential treatment in the calculation and assessment of LTD and NPL ratios for the *sannong* loans that correspond to the special bonds.

In recent years, CSRC has supported the financing needs of small and medium enterprises (SMEs) and promoted the more formal operation and healthy development of these enterprises with various measures, including improving the SME board's institutional measures, lowering the financial standards for including innovative and growth-oriented enterprises into the Growth Enterprise Board, expanding the pilot program of the National Equities Exchange and Quotations (NEEQ) to the entire country, clearly defining regional equity markets as private equity markets for serving MSMEs in the region, further expanding the scope of pilots for private bond issuance by SMEs, and guiding private equity investment funds and venture capital funds to focus their support on MSEs in the initial stage or growth stage.

In 2012, aiming to establish a more comprehensive legal and regulatory framework to encourage the healthy development of the agricultural insurance sector, the State Council issued *Regulation on Agriculture Insurance*, which stipulates the operational principles, contract provisions, and operational regulations of agricultural insurance. In 2015, CIRC also developed *Provisional Rules for*

*the Administration of Agricultural Insurance Underwriting and Claims Settlement* to further specify the operational procedures of agricultural insurance. In 2014, CIRC supported the establishment of China Reinsurance Community for Agricultural Insurance, jointly sponsored by the China Property & Casualty Reinsurance Company Ltd. and 23 insurance companies (such as PICC P&C) qualified for agricultural insurance. By the end of 2016, the Community had 32 members and its total insuring capacity reaches RMB 360 billion (US\$54 billion). Establishing the Community has improved agricultural insurance risk diversification mechanisms for insurance companies and lays the foundation for insurance companies to provide agricultural insurance. The CIRC also established a national agricultural insurance information management platform, which helps to pool nationwide insurance data for crop farming and enhance real-time monitoring and dynamic management of agricultural insurance, and has greatly improved agricultural insurance information management.

CIRC has supported and encouraged insurance companies to develop innovative price insurance products for agricultural goods. For such insurance products, if the price for an agricultural good is lower than the contractually agreed-upon price due to factors beyond the exemption of insurance contract liabilities, the insurance company shall provide appropriate compensation. As a result, agricultural households can take advantage of insurance products that cover not only natural risks, but market risks as well. By the end of 2016, 33 provinces or municipalities launched or formulated their pilot programs for price insurance for agricultural goods. These pilots cover 50 agricultural goods, such as wheat, rice, pigs, and vegetables and with 400,000 insured farmer households/insurance policies.

In recent years, agricultural insurance coverage has significantly expanded in China. From 2007 to 2016, the area of main crops insured by China's agricultural insurance companies increased from 230 million mu<sup>58</sup> to 1.72 billion mu, and more than 210 types of agricultural products were insured, covering almost all sectors including planting, forestry, herding, and fishery. The insurance coverage of corn, rice, and wheat exceeded 70 percent of total planting areas. Around 353,700 basic agricultural insurance service branches or agents were established in town or village areas, 95 percent of towns had access to agricultural insurance providers, and the number of insured farmer households/insurance policies increased from 49.8 million to 204 million. From 2007 to 2016, risk coverage provided by agricultural insurance increased from RMB 172 billion (US\$26 billion) to RMB 2.16 trillion (US\$324 billion), insurance indemnities of RMB 154.4 billion (US\$23.2 billion) were paid to 240 million farmer households/insurance policies, and the catastrophe risk

reserve fund of nearly RMB 10 billion (US\$1.5 billion) was accumulated and became an important source of financing for post-disaster production restoration and reconstruction of affected areas.

#### 4.4.2 Financial Infrastructure

Credit infrastructure and payments infrastructure are the foundational elements of a country's financial infrastructure and critical to addressing the informational asymmetry and transaction cost challenges that often hinder financial inclusion. A significant portion of China's progress in advancing financial inclusion can be attributed to efforts taken in recent years to strengthen the country's financial infrastructure, though more work still needs to be done.

In collaboration with other stakeholders, the PBOC has established a comprehensive and robust national payments system infrastructure in China. Government authorities have prioritized the development and maintenance of a sound payment settlement infrastructure in rural areas, which has facilitated growth in physical access networks, improved diversity and efficiency of payment products, and allowed for the digitization of government-to-person (G2P) transfers. Section 4.1.2 discusses these developments in greater detail.

In recent years, PBOC has been actively developing the credit reporting system to reduce information asymmetries between lenders and borrowers and increase the responsible provision of credit to households and firms. This effort has been undertaken mainly through the Credit Reference Center of PBOC (CCRC), a public credit registry established in 2006. The CCRC collects data from more than 3,000 financial service providers, including banks, RCCs, MCCs, insurance companies, and other nonbank financial service providers. The CCRC distributes information to these institutions in response to inquiries. As of end June 2017, the registry covered 930 million individuals, including 450 million with a borrowing history. It also covers 24 million legal entities, including 6.6 million with a borrowing history. During the first half of 2017, the CCRC handled an average of 3.4 million inquiries per day relating to individuals, and 220,000 relating to legal entities. However, the PBOC registry does not currently collect credit records from P2P lenders.

PBOC has also acknowledged the role that the private sector—and new fintech companies in particular—can play in improving China's credit infrastructure. In early 2015, PBOC granted permission to eight companies (including companies affiliated with Alibaba, Tencent, and Ping An) to apply for licenses for credit bureaus for individuals within a six-month provisional period. However, as of mid-2017, no licenses had been issued to

these new companies due to policymaker concerns regarding corporate governance, independence, and conflicts of interest. More work is needed to clarify the licensing requirements for credit bureaus and to more clearly distinguish between credit bureaus and credit scoring and data analytics companies, as each type of company provides useful supplemental data for providers to overcome information asymmetries.

In addition, greater access to public information could benefit financial inclusion. Government agencies such as tax, commerce, and judicial authorities hold vast amounts of valuable data on both individuals and MSEs, but such information is difficult to access. As a starting point, a comprehensive legal framework for data protection and privacy is needed in China to address data issues, including with respect to public information and the use of big data and alternative data.

Several other developments have contributed to expanding the scope and improving the quality of China's broader credit infrastructure. A basic legal framework and a registry system for secured transactions were established in the mid-2000s, spurring the development of a movable asset finance market and a collateral management industry. The IFC estimates that, as of the end of 2016, loans involving movable assets represent approxi-

mately 40 percent of outstanding commercial loans in China, up from 12 percent in 2004.<sup>59</sup> Other notable developments that have strengthened China's credit infrastructure include the 2006 Enterprise Bankruptcy Law, which allows flexibility for distressed SME borrowers and their lenders to support long-term and sustainable SME lending, and the 2007 Property Law.

#### 4.4.3 Digitization of Government-to-Person Transfers

In recent years, China has launched numerous subsidy programs supporting agriculture, rural social endowment insurance, and rural cooperative medical insurance. According to the 2013 China Household Finance Survey (CHFS), approximately 40 percent of all households and 68 percent of rural households receive some form of subsidy or grant payment from the government.<sup>60</sup> Such subsidies often comprise small amounts delivered in large frequencies, involving multiple logistical links and high costs when distributed in cash. The Chinese government therefore began to shift to distributing subsidies to recipients via debit cards linked to accounts to increase account ownership and usage (as discussed in section 4.1.3). A key function of the payments infrastructure as discussed in

#### BOX 4.10

### Integrated Movables Financing Registration System

As mandated by the 2007 Property Law, PBOC established a modern collateral registry, the *Integrated Movables Financing Registration System*, under the CCRC in 2013. The system began as an Internet-based filing system for security interests on accounts receivables and has now expanded to cover most interests on most movable assets, including finance lease, lien, title retention, hire-purchase, security deposit pledge, inventory, warehouse receipts, etc. Two notable exceptions are (1) security interests on movable assets with an existing registered title (which are registered together with their title registrations) and (2) mortgages (i.e., nonpossessionary security interests) of equipment and inventory (which are still under the State Administration of Industry and Commerce).

In recent years, with the support of the IFC, CCRC has continued to improve its registry services and promote movable asset finance more generally. This has provided transparency to the market, stimulated

capacity building, and increased lender confidence. The second-generation registry information technology (IT) system is expected to launch soon. A robust registry along with a series of complementary initiatives by the authorities (e.g., extensive training of financial sector authorities and lenders, development of the collateral management industry, creation of a digital supply chain finance platform under CCRC, and the recent joint action plan issued by the seven ministries on accounts receivable finance) has helped to develop a large movable assets-based debt finance market in China. By end June 2017, the CCRC registration system alone had about 230,000 users and had recorded 2.7 million registrations and 12.6 million inquiries, cumulatively. Seventy percent of the borrowers and lessees in the system are SMEs. The next challenge for the CCRC will be to achieve a truly integrated registration system; the related new content of the Civil Code offers a promising opportunity to do just that.

Source: IFC.

sections 4.1.1 (agent-based service points) and 4.1.2 (settlement systems) is to support the electronic disbursement of G2P transfers, which has the potential to advance financial inclusion via links to accounts. Various government departments that distribute these subsidies can now do so more efficiently and cost-effectively. Given their own cost savings over the long term, relevant departments have therefore been open to providing subsidies to acquirers for installing POS terminals to facilitate such electronic disbursement.

In 2016, more than two billion transfer payments totaling RMB 499 billion (US\$75 billion) were disbursed to recipients' bank accounts and debit cards from rural pension insurance and rural medical insurance schemes and subsidies for rural households.<sup>61</sup> Rural residents can conveniently and efficiently withdraw their subsidies without leaving their villages through such rural debit card withdrawal services.

#### 4.4.4 Role of Policy Banks and the China Development Bank

China Agricultural Development Bank (CADB) and China Export and Import Bank (EximBank), China's two policy banks, and China Development Bank (CDB), a development-oriented financial service provider, help support the implementation of national financial inclusion priorities and policies. These institutions are viewed as a useful complement to the commercial banking system and have been leveraged to expand access to finance for university students and to support MSE and *sannong* development.

In late 2014 and early 2015, a series of reforms were approved, which helped to further clarify and define the role of CADB, EximBank, and CDB, modernize their enterprise systems, and improve their capacity to support priorities and weak areas, with the aim of developing society and the economy in a sustainable manner.

##### *Educational Loans for Students*

The Chinese government has actively carried out activities to improve access to education-oriented credit for students to enable children from poor families to access quality education and prevent intergenerational transmission of poverty. Since 2004, CDB has created a national model of providing student loans through collaboration with local government or education authorities. In recent years, CDB has reformed its lending processes and simplified its lending procedures. It has launched a pre-application mechanism for loans under which an applicant's qualifications can be verified in advance; introduced online repayment and repayment via CUP POS terminals, allowing students to repay loans online and offline in many convenient locations with no surcharge; and imple-

mented pilots digitizing student loan contracts in Henan, Hebei, Shanxi, and other provinces. As of the end of November 2016, CDB has issued 18.6 million loans totaling RMB 110.8 billion (US\$16.6 billion) to 9 million students from families with financial difficulties.<sup>62</sup>

##### *MSE Development*

CDB, EximBank, and CADB have played active roles in carrying out the government's MSE finance policies, mainly by providing low-cost financing to institutions that then on-lend funds to MSEs. CDB has also provided loans for emergency revolving funds for SMEs, lowering their financing costs and allowing them to rapidly meet their financing needs. As of the end of September 2016, CDB's SME loan balance amounted to RMB 3.31 trillion (US\$497 billion), which includes RMB 1.2 trillion (US\$180 billion) in outstanding loans to MSEs, benefiting MSEs, the self-employed, farmers, young people starting up a business, urban laid-off workers, and other civil society groups, and covering about 20 sectors, including manufacturing, agriculture, forestry, animal husbandry, fisheries, and wholesale and retail.

Since 2006, EximBank has implemented pilots of loans for MSEs and explored viable and sustainable models for credit services supporting MSE development. As of the end of June 2017, the credit balance under this model totaled RMB 28 billion (US\$4.1 billion), supporting 80,890 MSEs.<sup>63</sup>

##### *Supporting Sannong Development*

Development-oriented financial institutions and policy banks have actively leveraged their respective comparative advantages to support key sectors or weak components via financing, such as modern agriculture and the construction of water conservancy projects. In collaboration with the MoF, CDB has combined fiscal funds with private funds, via both loan interest subsidies and allowances, to support state and family farms and other agricultural operators to build high-standard farmland (covering a total area of more than 100 million mu). CDB has also explored innovative agricultural financing models in modern agriculture demonstration zones.

EximBank has also worked to support *sannong* development and poverty alleviation. In collaboration with the State Council Leading Group Office of Poverty Alleviation and Development, EximBank has developed 347 key projects to develop export-oriented economies in poor areas by supporting local unique and competitive industries and local enterprises across the value chain that benefit poverty alleviation.

CADB has developed a model to provide funds for grain purchases, ensuring that farmers receive payments from selling their grain and addressing problems farmers previously faced, such as having difficulties in selling grain

or having to receive IOUs. In addition, CADB has played a role in supporting unique agricultural subsectors and strengthening construction of agricultural infrastructure.

#### 4.4.5 Financial Consumer Protection and Financial Capability

The Chinese government recognizes that encouraging the uptake and active use of financial services and products by underserved segments of the population must be accompanied by robust financial consumer protection and efforts to improve consumers' financial capability. Financial consumer protection and education can help build awareness of and trust in the financial sector and thereby encourage the uptake and use of products and services. It can also help authorities manage risks associated with changes in the types of providers, products, and consumers in the market and encourage fair competition in the market. Recent developments in China—including the rapid emergence of P2P lending platforms, widely accessible digital investment products, and nonbank digital payment institutions—highlight the need for robust consumer protections and greater financial capability.

In recent years, China's four financial sector regulatory authorities have respectively established internal financial consumer protection departments. The PBOC's Financial Consumer Protection Bureau is responsible for protecting consumers as part of the PBOC's mandate (i.e., for payments and credit reporting) and for comprehensively studying major issues related to financial consumer protection in China and coordinating financial consumer protection for cross-sector financial products (e.g., bank-sold insurance). The Banking Sector Consumer Protection Bureau of CBRC, the Investor Protection Bureau of CSRC, and the Insurance Consumer Protection Bureau of CIRC are responsible for protecting consumers and investors in the banking sector, securities sector, and insurance sector, respectively.

In 2014, the revised *Law of the PRC on the Protection of Consumer Rights and Interests* came into force. For the first time, the revised law explicitly mentions the obligations of financial service providers in the banking, securities, and insurance sectors relating to disclosure of charges, safeguards, and warnings regarding risks. The revised law also adds provisions on personal data protection, standard contract terms, and other aspects that are closely related to the financial sector.

In 2015, the General Office of the State Council issued the *Guidelines on Strengthening the Protection of Rights and Interests of Financial Consumers*, which includes the following:

- Outlines in detail financial consumers' rights to safeguarding of funds, product information disclosure, free

choice, fair treatment, redress and compensation, education, respect, and information security;

- Defines requirements for activities of government departments, financial service providers, and social organizations in the field of financial consumer protection;
- Proposes building six mechanisms to strengthen financial consumer protection, including a long-term and effective program for financial literacy and the establishment of comprehensive dispute resolution mechanisms; and
- Proposes the activities and tasks that require attention from government departments and financial service providers in promoting the development of financial inclusion.

In 2016, PBOC issued the *Implementation Rules on the Protection of Rights and Interests of Financial Consumers*, which was the first general regulation focusing on financial consumer protection issued by the PBOC. It consisted of the following main elements: (1) the conduct of financial service providers, (2) specific requirements regarding the protection of personal information, (3) the complaints-handling regime of financial service providers and PBOC, (4) the redress mechanism of financial service providers, and (5) supervision and enforcement mechanisms. The measures apply to all providers regulated by PBOC, including commercial banks and nonbank digital payment providers.

In addition, in 2015, PBOC published the *Administrative Rules for Network Payment of Nonbank Payment Institutions* (which went into effect on July 1, 2016). These rules contained various provisions related to online payments and consumer protection, including data protection and data security, disclosure and transparency in service agreements, and dispute resolution mechanisms.

In 2014, CIRC published the *Guidelines on Strengthening the Protection of Rights and Interests of Insurance Consumers*. These guidelines highlighted the responsibilities of insurance companies, disclosure requirements, redress mechanisms, insurance literacy and risk awareness for consumers, coordination with civil society, supervision and monitoring, etc.

#### *Financial Consumer Protection Supervision*

Over the past several years, Chinese authorities have gradually developed mechanisms for financial consumer protection supervision. Financial consumer protection departments have carried out in-depth on-site inspections, including targeted, thematic inspections related to debit cards and protection of personal information, bank-sold insurance, deposit disputes, protection of small and medium investors in the capital markets, misleading insur-

ance sales, and difficulties in insurance claims settlement. Actions resulting from these supervisory activities have included “soft” measures, such as consultations with senior management of financial service providers with poor practices to improve their services.

Financial consumer protection departments have also conducted off-site supervision. PBOC has initiated institutional and environmental assessments focused on financial consumer protection and further explored methods of “soft” supervision. CBRC has guided banking sector financial service providers to fully integrate consumer protection requirements into their operational management and performance assessment systems, ensuring that all operational management activities reflect the objective of protecting consumers’ rights and interests, similar to the concept of “treating customers fairly.” CIRC has initiated the establishment of an insurance company service evaluation system and created a basic framework and indicator system for it.

To raise awareness among the general populace and among market participants, PBOC has established a database of typical cases and a regulatory information disclosure system and selects representative financial consumer protection cases for publication each year. CIRC has also established a system for publicly disclosing typical cases of harm to the legitimate rights and interest of consumers. Nine such cases have been publicly disclosed, involving insurance sales underwriting and insurance claims and payment.

#### **Dispute Resolution**

PBOC, CSRC, and CIRC have respectively opened the “12363” financial consumer complaint and inquiry hotline; the “12386” securities, futures, and funds investor protection hotline; and the “12378” insurance complaint and rights safeguarding hotline for handling complaints and inquiries from financial consumers. These authorities have also reinforced the primary responsibility of financial service providers in dealing with consumers’ complaints. PBOC has established a PBOC-based complaint information platform that is linked with financial service providers. PBOC receives complaints directly from consumers and forwards them to the responsible financial service provider. The PBOC system then tracks resolution processes. PBOC has also initiated a pilot in five provinces to develop a unified standard for how providers classify complaints from consumers.

Financial consumer protection departments are also promoting the establishment of an external and alternative dispute resolution to ensure financial consumer disputes can be brought to various neutral, objective, and easily accessible entities (such as financial regulatory authorities, industry associations, government departments, courts, etc.) and be settled in a fair, timely, and

effective manner. Third-party mediation of financial consumer disputes has been carried out in a few regions in China on a pilot basis, allowing financial consumers to access convenient mediation services. Financial consumer protection departments are strengthening cooperation with justice departments and arbitration agencies, promoting the establishment of a litigation and mediation docking mechanism for financial consumer disputes and enhancing the legal effect of the results of mediation.

#### **Financial Capability and Consumer Education**

The consumer protection departments of financial regulatory authorities have prioritized financial education efforts, most often through large-scale awareness campaigns. Various regulatory authorities participate in the National Consumer Protection Day on March 15. PBOC declares every September to be the national “Month for Popularizing Financial Knowledge” and regularly launches activities such as expanding financial knowledge in rural areas, military camps, schools, and communities to help financial consumers accurately understand their legal rights and avoid illegal financial activities. PBOC also organizes the compilation, publication, and distribution of the *Book of Financial Knowledge Dissemination* and explores how to evaluate the financial capability and literacy of consumers (box 4.11).

Each year, CBRC organizes banking sector institutions across the nation to conduct a month-long thematic financial knowledge dissemination awareness campaign, “Financial knowledge reaching every household.” During these activities, banks accept inquiries from consumers; introduce financial knowledge dissemination tools such as books, cartoons, and apps targeting various groups; and disseminate financial knowledge through different channels.

CSRC has organized successive thematic activities such as “Advocating Value Investing,” “Actively Rewarding Investors,” “Securities Industry Rights Protection in Action on March 15th,” and the special investor protection campaign “Fairness on Your Side.” CSRC also supports establishing investor education bases as one-stop education and service places where investors can receive fair and high-quality education and services in a concentrated, systematic, and convenient manner.

CIRC has designated July 8 of each year as the “National Insurance Publicity Day,” during which publicity campaigns for insurance services are conducted for the public. CIRC also publishes education columns on online education platforms, official microblogs, WeChat, and general media; produces literacy books; and organizes educational activities to disseminate insurance knowledge and advocate for sound and rational insurance consumption. In addition, CIRC requires a “risk warning” column be placed on the homepages of offi-

**BOX 4.11****PBOC Report on China Financial Consumers' Capability Survey, 2017**

Since 2013, PBOC's Financial Consumer Protection Bureau (FCPB) has conducted the Financial Consumers' Capability Survey every other year. For the third round of the survey in 2017, the survey questionnaire gauged financial consumers' attitudes, behaviors, knowledge, and skills to comprehensively reflect the financial capability and literacy of Chinese consumers.

Results of the 2017 survey show that Chinese consumers view financial consumer education positively and tend to be rational about consumption, savings, and credit, but still need to enhance their risk awareness. Families often have a budget but sometimes fail to stick to it. Consumers have limited understanding of contracts and statements of financial products and services. Consumers generally

know how to access financial education and how to resolve financial disputes with providers. Consumers' overall level of financial knowledge is relatively low, and a significant financial knowledge imbalance exists between rural and urban areas and among different regions. Consumers pay most attention to financial knowledge that is closely related to the preservation and appreciation of their wealth.

The survey suggests that (1) financial literacy should be linked with the enhancement of financial skills, as well as the risk awareness of financial consumers, (2) low income individuals should be a target group for financial education, and (3) financial knowledge should be included into the national education system to educate consumers at an early age.

Source: PBOC.

cial websites of insurance companies to disclose the risks associated with insurance consumption and to disseminate risk prevention knowledge.

**Remaining Challenges**

Several challenges remain in the areas of financial consumer protection and financial capability in China. The legal and regulatory framework for financial consumer protection requires further adaptation to ensure that consumer protection risks with respect to fintech and digital finance are comprehensively covered. In particular, a critical need exists for a comprehensive legal framework for data protection and privacy, as noted in section 4.4.2. Rules regarding disclosure and transparency, sales and

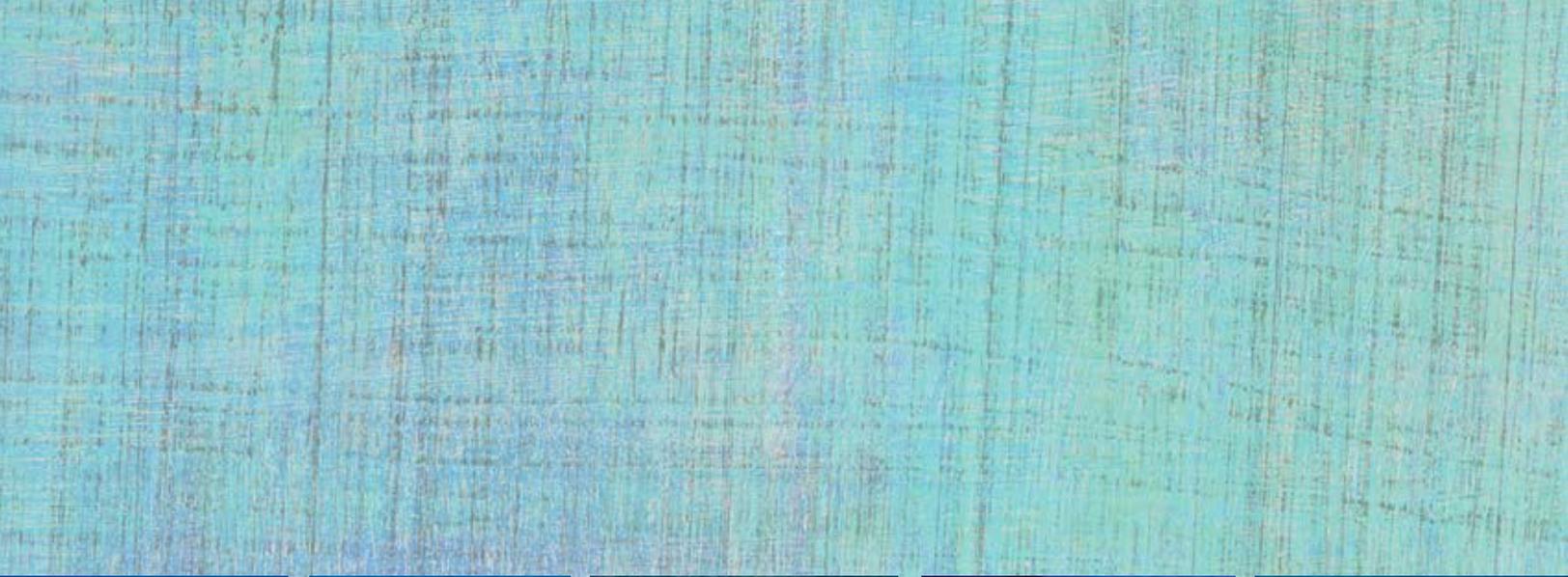
marketing, safety of funds, and dispute resolution should be expanded to include new fintech companies and adapted as necessary to digital finance business models. Supervision efforts require further strengthening, as does coordination across PBOC, CBRC, CSRC, and CIRC, particularly as many financial consumer protection issues are cross market and cross product. Enforcement of violations is currently weak. Regarding financial capability, improvement in the effectiveness of financial education efforts is required. Special groups such as the elderly require more tailored efforts. Finally, how to better leverage digital technologies to efficiently and effectively deliver financial education that meets consumers' needs should be further explored.

**NOTES**

19. Sparreboom and Duflos (2012) provide a useful overview of the development of China's financial sector since 1949, including the relevance for financial inclusion.
20. Zhang and others (2010).
21. Administrative units in China from largest to smallest include province, city, county, town, and village. According to the 2016 China Statistical Yearbook, China comprises 334 prefectures/cities, 2,850 counties, and 39,789 towns. According to PBOC's *Overall Developments of Payment Services in Rural Areas* (2015), in China's rural areas, the average population per county is approximately 420,000; the average population per town is approximately 28,700; and the average population per village is approximately 900.
22. According to Tsai (2006), less than 1 percent of bank loans in 2005–2006 went to private enterprises.
23. The financial sector is overseen by one central bank (the People's Bank of China [PBOC]) and three specialized regulatory and supervisory authorities: China Banking Regulatory Commission (CBRC), China Securities Regulatory Commission (CSRC), and China Insurance Regulatory Commission (CIRC). The Ministry of Finance (MoF) is also actively involved in various fiscal policies to support financial inclusion.

24. The relevant survey questions refer to “cash subsidies for agricultural production” (reported by 28 percent of all households and 56 percent of rural households), “welfare grants” (4 and 6 percent), “one child incentives” (3 and 2 percent), “five guarantee grants” (1 and 2 percent), “pensions” (1 and 1 percent), “relief subsidies” (1 and 1 percent), “food subsidies” (2 and 4 percent), and “afforestation grant” (3 and 5 percent).
25. PBOC (2016).
26. Source: Ningbo Central Sub-branch, PBOC.
27. The payment service providers with business licenses that facilitate bank card transaction services to designated entities (and network) merchants and complete the fund settlement.
28. PBOC (2011); PBOC (2014).
29. Shangyitong refers to a kind of upgraded and transformed telephone-based device into which the card reader and related equipment are integrated, and to which PSBC customers’ debit cards are linked, allowing customers to bank easily and conveniently, including making balance inquiries, real-time transfers and bill payments and so on. It is extensively used in the agent-based service points of PSBC.
30. In this report, bank cards refer to both credit cards and debit cards. This section focuses specifically on debit cards.
31. As noted in chapter 3, estimates of account ownership in China vary. PBOC estimates that over 90 percent of adults own an account. Regardless, it is clear that significant increases in account ownership have been achieved over the past few years.
32. PBOC.
33. These principles included (1) tailoring measures to local conditions, (2) preventing moral hazard, and (3) creating positive incentives.
34. The Internet’s extraordinary potential for selling conventional insurance is illustrated by one second-tier insurer that recently opened a virtual shop in WeChat. After only three months in operation, the shop was selling RMB 3 million (US\$450,000) in new motor premiums a day.
35. Source: CIRC.
36. The minimum registered capital for a VTB (established and operates at the town level), RMCC (established and operates at the administrative village level), and MCC is RMB 1 million, RMB 100,000, and RMB 5 million (US\$150,000, US\$1+5,000, and US\$750,000), respectively. In comparison, the minimum registered capital of a nationwide commercial bank is no less than RMB 1 billion (US\$150 million) and the minimum registered capital of a municipal commercial bank is no less than RMB 100 million (US\$15 million).
37. *The Administrative Rules for the Earmarked Funding for Financial Inclusion* (MoF, 2016).
38. See Implementation Rules of CBRC for Administrative Licensing Items for Rural Small and Medium Financial Institutions, CBRC (2016) [Regulation 3].
39. The “Big Five” banks refer to the Agricultural Bank of China, the Bank of Communications, the China Construction Bank, the Industrial and Commercial Bank of China, and Bank of China.
40. Zhang Rui and others (2015).
41. Definitions for digital finance, Internet finance, and fintech, and how these terms relate to one another, are discussed in section 1.2.
42. According to the *Administrative Rules for Network Payment of Nonbank Payment Institutions* released by PBOC in 2015, “network payment” refers a payee or drawee initiating payment instructions remotely through the public network information system by utilizing computer, mobile terminals, or other electronic equipment with payment institutions providing money transfer services between them, and there is no interaction between the electronic equipment of the payee and the exclusive equipment of the drawee.
43. Traditional financial service providers also provide mobile payments (as discussed in section 4.1.4.1) and, to a lesser extent, so do the three major telecom operators (China Telecom, China Mobile, and China Unicom).
44. *Administration Rules on Payment Services of Non-Financial Institutions* (PBOC, 2010 [Regulation 2]) and *Implementation Measures of the Administration Rules on Payment Services of Non-Financial Institutions* (PBOC, 2010 [Regulation 17]).
45. PBOC.
46. Worth noting is a key difference between the innovative payment products previously described and those that have developed in some other countries. Alipay and similar products operate via traditional bank accounts rather than by creating new accounts and e-money issuance, as mobile network operators have done in other economies. As such, an Alipay transaction remains integrated with a prudentially licensed and supervised financial institution, which may have facilitated the ability to have a relatively long “wait and see” period.
47. <https://qz.com/613384/over-8-billion-red-envelopes-were-sent-over-wechat-during-chinese-new-year/>.
48. CBRC and others (2016).
49. Wangdai Zhijia ([www.wdzj.com/news/yanjiu/51827.html](http://www.wdzj.com/news/yanjiu/51827.html)) operates a Chinese P2P online lending portal.
50. Wangdai Zhijia (<http://www.wdzj.com/news/baogao/25555.html>).
51. Wangdai Zhijia.
52. “26 on trial over China P2P fraud” [http://www.chinadaily.com.cn/business/2017-04/28/content\\_29125729.htm](http://www.chinadaily.com.cn/business/2017-04/28/content_29125729.htm)

53. These include absorbing public savings, establishing capital pools, providing guarantees and commitments for guaranteed principal and interest, selling financial products, and carrying out credit assignment in such forms as asset securitization.
54. NIFA.
55. Similar types of partnerships and service arrangements are also emerging between fintech companies and traditional financial service providers, such as fintech companies working with traditional banks to provide credit scores (e.g., Ant Financial's Sesame Credit) or to improve creditworthiness assessments and risk management systems (e.g., Netease Financial).
56. At present, Alipay's customers are asked to pay fees for transferring funds from a payment account to any bank accounts, but with a free annual limit of RMB 20,000 (US\$300), provided the transfers do not exceed the annual limit, in which case the customer would have to pay fees for the transfer. However, Alipay's customers do not have to pay fees for transfers from a payment account to another payment account via smartphone.
57. For further discussion on the principles that should be carefully considered and balanced with respect to digital finance, see the G-20's High-Level Principles on Digital Financial Inclusion, described in box 6.1.
58. 1 mu = 0.06667 hectares.
59. IFC, China.
60. The relevant survey questions refers to "cash subsidies for agricultural production" (reported by 28 percent of all households and 56 percent of rural households), "welfare grants" (4 and 6 percent), "one child incentives" (3 and 2 percent), "five guarantee grants" (1 and 2 percent), "pensions" (1 and 1 percent), "relief subsidies" (1 and 1 percent), "food subsidies" (2 and 4 percent), and "afforestation grant" (3 and 5 percent).
61. PBOC.
62. [http://news.xinhuanet.com/money/2016-12/29/c\\_1120215186.htm](http://news.xinhuanet.com/money/2016-12/29/c_1120215186.htm).
63. [http://www.zzg.org.cn/zhtbd5658/cydzjxs/shgg/201709/t20170930\\_667541.html](http://www.zzg.org.cn/zhtbd5658/cydzjxs/shgg/201709/t20170930_667541.html).



# REMAINING FINANCIAL INCLUSION CHALLENGES IN CHINA AND THE WAY FORWARD

Despite China's impressive progress in expanding financial inclusion in recent years, significant challenges remain. These challenges must be addressed for China to achieve its financial inclusion objectives and to leverage financial inclusion to support complementary economic and social development goals. This chapter summarizes six key remaining challenges for financial inclusion in China. China's *Plan for Advancing the Development of Financial Inclusion (2016–2020)* addresses many of these challenges.

## 5.1 ACHIEVING AN EVOLVED AND WIDELY ACCEPTED CONCEPTUALIZATION OF FINANCIAL INCLUSION

Although the concept of financial inclusion has become increasingly popularized in China, significant variations remain in its definition and practice across and within Chinese government agencies, local and national authorities, financial service providers, and nongovernmental organizations, often with counterproductive results. Misunderstandings about financial inclusion have negatively influenced the strategies deployed to promote financial inclusion to date and have played a role in compromising the innovative capacity and incentives of financial service providers and the overall dynamism of the financial sector.

For many in China, financial inclusion remains synonymous with credit subsidies, directed lending, and charitable activities. Many stakeholders also believe that only a narrow range of financial products are relevant to financial inclusion (e.g., credit) and fail to consider the diverse set of products underserved segments need or the appropriate design of available products. Furthermore, some believe that no demand for financial services exists in underserved

areas and that financial service providers operating in these areas must be heavily subsidized. The reality is more nuanced. Yet in China, numerous stakeholders still maintain a simplistic view of financial inclusion and do not fully comprehend the nuances of financial inclusion as described in chapter 2, or as outlined in China's *Plan for Advancing the Development of Financial Inclusion*.

Going forward, government authorities who drive and coordinate China's financial inclusion agenda must ensure that a comprehensive conceptualization of financial inclusion is understood and practiced at all levels of government and across all public and private stakeholders. This may be particularly true with respect to subnational authorities who do not benefit from access and exposure to global forums and resources. A broad shift in the conceptualization of financial inclusion is necessary to outline a vision for achieving full financial inclusion in China and to evolve government practices and policies to address the remaining challenges to achieve such a vision. This vision should clearly articulate what pursuing market-based, commercially sustainable approaches to financial inclusion means in practice, and it should ensure that this common understanding is implemented across all levels of government, with improved coordination and communication to allow harmonized, consistent approaches.

Financial inclusion and digital finance must also be recognized as separate concepts. Digital finance—including as practiced by fintech companies—is not the automatic equivalent of financial inclusion. Rather, digital finance is the combination of innovative technologies applied to the financial sector, while financial inclusion combines specific business models and design of financial products and services intended to serve underserved population segments. Digital technologies can be used to further financial inclu-

sion, but they are an approach and not the objective itself. However, many fintech companies in China currently advertise themselves as “financial inclusion” institutions, a notion that many in the general public consequently share. In reality, several fintech companies operate businesses that have little to do with financial inclusion. While many financial products offered by fintech companies may serve a legitimate consumer need, such products do not meaningfully expand access for unserved and underserved consumer segments. As discussed in chapter 4, some fintech companies also infringe upon the interests of consumers through fraud and questionable business practices. This not only undermines the industry’s reputation, but also negatively affects the general understanding of financial inclusion.

## 5.2 RECALIBRATING THE ROLE OF GOVERNMENT

As this report clearly shows, extensive and active government support for financial inclusion has been a hallmark of the Chinese experience. National and local governments have used a mixture of direct and indirect interventions to spur financial inclusion, including a wide range of policies, regulations, and promotional measures. These government efforts have achieved considerable levels of success along certain metrics. As noted in chapter 3, high levels of account ownership have been obtained in China. Absolute numbers of access points have increased in rural areas, and greater numbers of SME units are present within banks.

After the broad economic reforms of the late 1970s and early 1980s, China has continued to promote the process of marketization, including in the financial sector. However, China’s economy and financial sector still retain many features of emerging and public sector–dominated economies. Sustainability of the business models many financial service providers use to advance financial inclusion efforts has been a perennial concern, limiting the potential for ongoing viability and further expansion. For example, as noted previously, a nontrivial share of agent-based service points are dormant or have limited traffic. Similarly, the extent to which SME units in banks have translated into greater access to finance for underserved SMEs is unclear. High levels of state intervention in state-owned commercial banks or state-influenced financial service providers also discourage competition and innovation, as these providers are often inefficiently run and do not operate on market-based principles, while having a distortive effect on the market. Highly subsidized products such as credit or insurance products can have a similarly distortive and chilling effect over the long term. Finally, administrative intervention by some local governments in the routine operations of financial service provid-

ers raises questions of interference and issues of mismanagement. Overall, this approach fails to lay the groundwork for long-term, sustainable financial inclusion.

Therefore, one key challenge for Chinese authorities going forward is the need to think clearly and strategically about the appropriate role of government, the appropriate mix of direct and indirect public sector measures, and the interplay between the public and private sectors. The public sector alone cannot drive financial inclusion, at least not beyond a certain point and not on a long-term, sustainable basis. The private sector must play a critical role and do so based on market principles and via viable business models for positive impacts of financial inclusion to be sustainable. This new thinking is reflected in *Plan for Advancing the Development of Financial Inclusion (2016–2020)*, which highlights commercial sustainability as one of its core guiding principles. As basic metrics of financial inclusion such as access to transaction accounts are achieved and Chinese markets evolve, a shift in focus is required toward more market-based approaches and private sector–driven efforts, particularly to encourage innovation and competition in providing a broader range of appropriate financial products and services and to ensure scalability. The entry and subsequent successes of fintech companies—in China and elsewhere—show the potential impact of this approach. Continuing down the path toward marketization is critical to fostering a dynamic and innovative financial sector, which in turn is a key enabler of financial inclusion.

The public sector still has a critical, meaningful role to play. However, the role of government should not (and cannot) be to “mandate” commercial sustainability. Rather, the appropriate role of government is to develop an enabling environment for financial inclusion—including the overall policy and coordination framework, legal and regulatory environment, and supporting financial and information and communication technology (ICT) infrastructure—and to correct market failures where they exist, so that providers can serve the underserved in a commercially viable manner. A legal and regulatory framework that provides clear market participation rules and establishes a fair, open, and level playing field for market participants, considering relevant risks and supervisory capacity, is a critical function of the government, as noted in the *G-20 High-Level Principles for Digital Financial Inclusion*. Chinese authorities should also continue to prioritize the development of credit infrastructure, payments infrastructure, ICT infrastructure, and data infrastructure to support financial inclusion. The government must also continue to play a key role in protecting and educating consumers and ensuring the soundness and integrity of the financial system as a whole. Finally, government efforts to strengthen the rule of law by improving law enforcement efficiency, cracking down on improper and illegal financial

activities, and protecting the legitimate rights and interests of creditors and debtors can contribute meaningfully to long-term and sustainable financial inclusion.

Careful thought should be given to those particular circumstances where a more direct public sector role is warranted. In such cases, the public sector role should be clearly articulated and delimited, with an exit strategy where appropriate. For example, expanding financial inclusion to reach the final stretches of the last mile is one instance that may require more direct government involvement. But in such cases, sophistication is required to direct government assistance in a productive and minimally distortive manner (such as integrating with social safety net payments) to target appropriate individuals and clearly articulate the gap in needs and the intended impact.

### 5.3 EVOLVING BUSINESS MODELS AND PRACTICES TO ACHIEVE COMMERCIAL SUSTAINABILITY

Commercial sustainability is not only a foundation for sustainable financial inclusion but also a basic condition for maintaining the overall financial system's efficiency and soundness. However, significant barriers remain in achieving commercial sustainability for many providers in China. In remote or rural areas with small populations, low per-capita income, undiversified economies, and underdeveloped infrastructure, financial service providers may struggle to operate profitably. In urban areas, financial service providers also face such problems as information asymmetry, lack of pledges or mortgages, incomplete credit data, and high transaction costs.

Improving commercial sustainability requires a cultural and business model shift by some financial service providers toward market-driven innovation and customer centrality. Financial service providers' corporate governance, internal management systems, and product design and delivery approaches must adapt and innovate to achieve commercial sustainability and compete with new market entrants. Chapter 4 includes several examples of traditional financial service providers leveraging new technologies and adapting to a more dynamic and competitive marketplace, to the benefit of financial inclusion. More of this trend is required to achieve operational efficiency, improved customer service, better product and service offerings for the underserved, and more conducive delivery channels to a broader range of customers. The success of various financial products and services now offered via digital means by new market entrants clearly illustrates that traditionally underserved segments can be served profitably. Indeed, the *Plan for Advancing the Development of Financial Inclusion* attaches great importance to the use of technology for expanding the breadth and

depth of financial services for the underserved. To this end, the plan proposes to carry out explorations in the following three areas: (1) encouraging financial service providers to innovate with respect to financial products and services, (2) enhancing the capacity of financial service providers to use technology, and (3) leveraging the useful role of the Internet in promoting the development of financial inclusion.

The experience of establishing broad agent networks in China provides an instructive example. As described in section 4.1.1, due to high prioritization and strong support from financial sector authorities (including subsidizing set-up costs in some provinces), initial successes have been achieved on a significant scale in terms of expanding the network of agents in rural areas across China utilizing POS terminals for transactional services. The next stage to achieving long-term financial inclusion is now determining how these agent-based service points can be reoriented to operate in a more sustainable manner and be more fully leveraged for financial inclusion purposes (i.e., moving from rural cash withdrawal points to fully fledged, multifunctional agents). Such a shift in thinking requires reconsidering the business models of agent operations and analyzing the actual needs, demands, and behaviors of rural consumers to ensure that market-driven, sustainable models are developed. For example, reforms could allow for a broader range of services to be provided by certain agent-based service points, encourage greater optimization in the placement of agents, integrate the other payment needs of merchants and users into digital payment products, and loosen caps on agent fees and daily transaction limits.

For its part, the government should reconsider practices that disincentivize the achievement of commercial sustainability, such as excessive, poorly targeted, and/or open-ended subsidies and tax reductions/exemptions, targets for directed lending, and interference in governance and management. As discussed previously, the government must also reorient its focus to developing the overall enabling environment for financial inclusion. Aspects of the legal and regulatory framework that hinder the achievement of commercial sustainability should also be reformed, for example with respect to ownership and geographic restrictions imposed on microcredit companies (MCCs) and village and township banks (VTBs).

### 5.4 MANAGING RISKS ASSOCIATED WITH DIGITAL FINANCE

Achieving long-term and sustainable financial inclusion requires innovation, particularly to fully leverage digital technologies. Yet digital finance models carry significant risks. The 2016 Global Partnership for Financial Inclusion

(GPII) white paper<sup>64</sup> points out that the evolving risk landscape for financial inclusion reflects characteristics that are inherent to digital finance: (1) new providers and new combinations of providers, (2) digital technology, (3) use of agents as a primary interface with customers, (4) new products and services and their bundling, and (5) the profile of financially excluded and underserved customers.

The implications of these risk characteristics are wide and varied. Operational risk is heightened due to the use of digital technologies, mass scale, and the possibility of large system failures. Consumer risk is heightened due to concerns such as possible loss or abuse of client information or lack of disclosure regarding the practices of new business models. All such risks are further heightened when regulation lags significantly behind and does not constrain irresponsible market practices—factors that are particularly relevant for new fintech companies, which often operate under still-evolving legal and regulatory frameworks. Indeed, at their core, fintech companies perform the basic functions of finance and therefore have risks common to traditional providers, including liquidity risk, settlement risk, operational risk, money laundering and terrorist financing risks, and consumer protection risks. However, many fintech companies have distinct characteristics that heighten or expand these common risks and in some instances generate new risks. China's experience with the peer-to-peer (P2P) industry highlights these risks and the consequences if such risks are not well understood and actively managed (the Ezubao case is a notable example, as discussed in section 4.3). The implications of these risks of course extend beyond financial inclusion. They affect the overall safety, soundness, and integrity of the financial system and the degree to which consumers are protected. Of course, providers can also use digital technologies to reduce risks, for example to reduce information asymmetries in lending decisions.

Regulatory authorities in China, as elsewhere, therefore confront the challenge of balancing the dual objectives of creating an enabling environment for innovation while monitoring and managing risks. Indeed, China's own *Plan for Advancing the Development of Financial Inclusion* emphasizes the need to effectively manage risks in the financial system. Addressing this challenge requires evolution in supervisory approaches and capacities. The clarification of regulatory and supervisory responsibilities in the 2015 *Guidelines on Promoting Sound Development of Internet Finance* was an important first step in this regard. The 2016 *Implementation Plan for the Special Campaign to Address Risks of Internet-based Finance* was another critical development toward managing risks associated with financial sector innovation (see box 4.6). More work remains to establish a comprehensive legal and regulatory framework that reflects the new or heightened risks posed by digital finance. In addition, supervisors

must be equipped with expertise and knowledge about new providers, products, and business models, and sufficient staffing and resources will be required, including leveraging digital tools for supervision. In this regard, supervisors can also leverage digital technologies to monitor and manage risks via "regtech," which Chinese authorities are already exploring. For example, modern reporting platforms can improve the scope, frequency, accuracy, and granularity of data provided to financial sector supervisors, allowing them to monitor the market in near real time. Strong and active coordination among supervisory bodies, including outside the financial sector, will also be necessary to reduce overlaps, gaps, and inefficiencies—the value of coordination in balancing innovation and risk is highlighted in the *G-20 High-Level Principles for Digital Financial Inclusion*. Learning from other countries and international bodies that are dealing with similar issues in this fast-moving space will be critical.

## 5.5 STRENGTHENING NEW-TYPE RURAL FINANCIAL SERVICE PROVIDERS

VTBs and MCCs were established in China as new-type rural financial service providers with the specific objective of improving financial inclusion in rural areas. As described in section 4.2, though these providers have achieved a certain degree of success—within each provider type, high-performing providers can be found—significant improvements are needed in the operations, governance, and regulatory environment for such providers to better realize their potential to contribute to financial inclusion. For example, major problems VTBs face include high operational and management costs and limited innovation. Major problems MCCs face include a narrow range of funding sources, high costs, and heavy tax burdens. An urgent need also exists to enhance MCCs' risk management capacity. Recent years' practices suggest a severe neglect of risk controls by MCCs seeking to achieve short-term profits. For example, MCCs have lent large amounts in loans to steel and iron, trade, and coal enterprises, all of whose operations are heavily subject to impacts of the economic cycle. Both VTBs and MCCs face other regulatory constraints to their operations, resulting in low margins and challenges to sustainable growth.

Various reforms would be beneficial to improve the development of VTBs. Fostering more independent governance by reducing excessive intervention and control by sponsoring banks is necessary and will allow VTBs to more fully leverage their comparative advantages of operational efficiency and flexibility. More flexible capital sources for VTBs should also be permitted. For example, where certain conditions are met, private capital should be allowed to establish VTBs as the main investors. Multiple VTBs

could also form linkages in the same geographic areas to achieve efficiencies of scale in management costs. Regulatory reforms may be needed to enable such actions.

With regard to MCCs, the following reform options should be considered: (1) define the role and purpose of MCCs more clearly and incorporate this purpose into high-level institutional documents; (2) review the legal and regulatory framework to remove barriers to MCC operations, such as increasing the permitted percentage of external financing, providing more flexible leverage ratios for qualified MCCs, and allowing for expanded operations beyond a single county's boundaries; (3) establish greater consistency across provinces with regard to the regulatory and supervisory framework for MCCs, in particular addressing those localities where high entry barriers are imposed; (4) undertake efforts to enhance MCCs' risk control capacities; (5) leverage tax policies to incentivize MCCs to serve target sectors and populations; and (6) conduct ratings of MCCs for financial inclusion objectives and allow those MCCs that obtain higher ratings to transform into VTBs. These reforms can help to increase MCC's commercial sustainability and allow them to further contribute to reaching the underserved.

In addition, new-type rural financial service providers should better leverage digital technologies. With the development of telecom infrastructure, improvements in rural financial infrastructure, and rapid dissemination of smartphones in rural areas, digital technologies have penetrated into all economic and social sectors. Such expansion in ICT infrastructure should be better utilized by new-type rural financial service providers to reach customers via new models and faster, lower-cost channels. To achieve further development, new-type rural financial service providers should also leverage digital technologies in management, product research and development, marketing, customer service, and other fields.

## 5.6 IMPROVING THE FINANCIAL CAPABILITY OF CONSUMERS

The financial literacy and financial capability of consumers is a critical supporting element of financial inclusion. It is particularly important given the increasingly digital nature of finance, which requires additional capabilities for consumers to successfully identify, take up, and use appropriate financial products and services. Principle 6 of the *G-20 High-Level Principles for Digital Financial Inclusion* empha-

sizes the need to “support and evaluate programs that enhance digital and financial literacy in light of the unique characteristics, advantages, and risks of digital financial services and channels.”

A 2017 PBOC survey revealed that Chinese consumers perform well in some aspects.<sup>65</sup> For example, they view financial consumer education positively and tend to be rational in consumption, savings, and credit; families often have expenditure plans; consumer behavior on loan applications and credit card repayment is reasonable; and consumers usually know how to get financial knowledge and how to resolve financial disputes.

However, the 2017 survey revealed less satisfactory aspects, including relatively low risk awareness among consumers, lack of execution on family expenditure plans, and insufficient understanding and usage of contracts and statements of financial products. The overall level of financial knowledge is relatively low, and a significant imbalance exists between rural and urban areas and among different regions. Relatedly, in some regions, a poor credit culture exists among enterprises, individuals, and even local governments, with some parties having a low regard for commercial credit or the financial obligation that it entails. In addition, financial consumers' lack of knowledge about digital technologies discourages them from using digital financial services or leaves them vulnerable to inappropriate products and services, undermining their self-interest and leading to problems and risks in the development of digital finance.

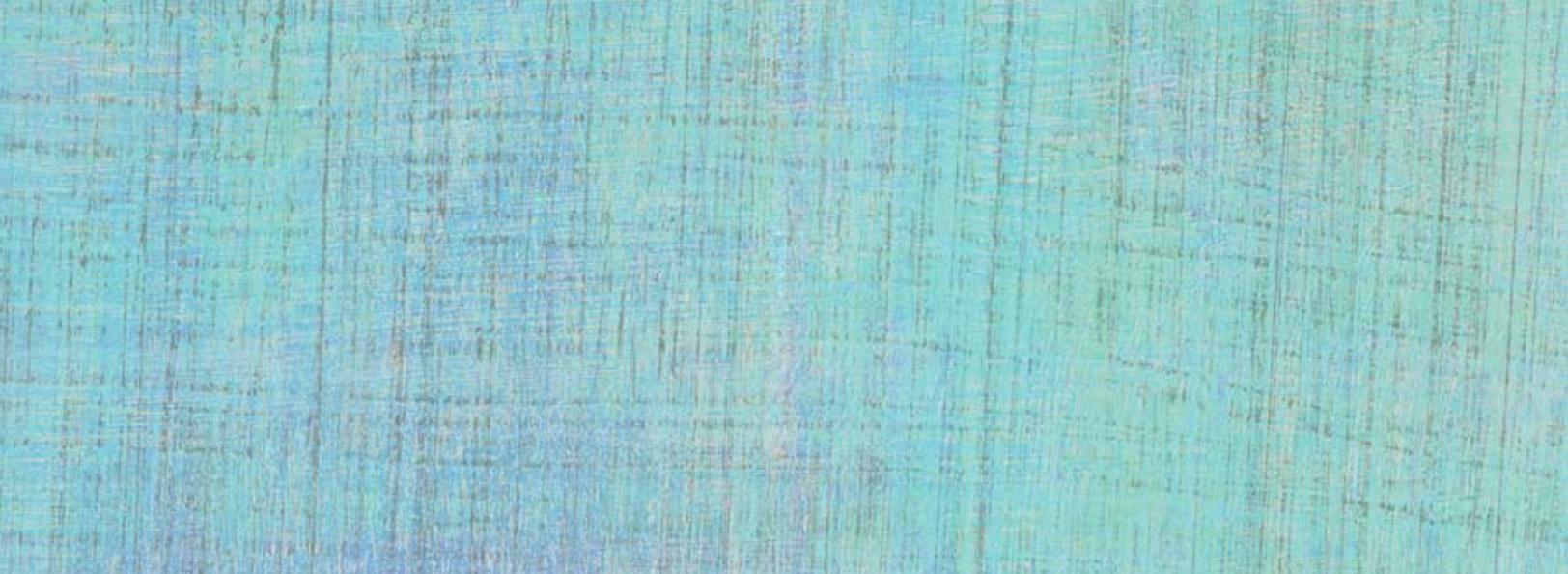
Effective financial consumer education can facilitate the development of financial inclusion. To achieve this objective, financial literacy surveys conducted on a regular and long-term basis can help establish and monitor the knowledge level of consumers and their behavioral changes. By identifying the weaknesses in financial knowledge and behaviors of consumers, these surveys can also help to inform the design and improve the effectiveness of financial education activities. Such activities should focus on conveying the basic financial knowledge needed in daily life, tailored for various types of consumers, to ensure that consumers obtain financial knowledge compatible with their needs, behavioral characteristics, and existing knowledge levels. Educational efforts should also help guide consumers in how to correctly use financial knowledge and how to conduct self-appraisal of risks and select suitable financial products according to their own risk-bearing capacity and the risk characteristics of relevant products.

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## NOTES

64. GPF (2016).

65. This survey comprehensively reflects the financial literacy status of existing Chinese consumers from multiple angles such as attitudes, behaviors, financial knowledge, and financial skills (PBOC, 2017).



## GLOBAL LESSONS AND IMPLICATIONS FOR POLICYMAKERS

The preceding chapters of this report have traced China's path to financial inclusion and highlighted remaining challenges. This chapter aims to distill six significant and globally relevant lessons from China's financial inclusion experience to guide other countries in meeting their own financial inclusion objectives. China's multifaceted experience with financial inclusion provides a wealth of lessons concerning such globally relevant issues as reaching the last mile, allowing regulatory space for digital innovation, moving toward a market-based and sustainable approach, leveraging financial infrastructure, and determining the appropriate role of government in enabling financial inclusion.

A caveat to keep in mind regarding the following lessons: progress and successes achieved in reaching full financial inclusion necessarily reflect each country's unique culture, political economy, and development context. Lessons from any one country's experience must therefore be considered in the context of these factors. For example, China's savings culture has been an important driver of high account penetration. Similarly, the success of nontraditional financial service providers in China is closely linked to the structure of China's financial markets in the early 2000s, which created significant "pent-up" demand for financial products and services among the general population. China's progress in reaching the last mile also cannot be separated from the active role and function of the government in Chinese society. And finally, China's impressive track record of economic growth and poverty alleviation in recent decades is important context for analyzing the latest gains in financial inclusion.

Therefore, just as China has pursued its own path to financial inclusion through a mix of global and domestic

approaches, policymakers in other countries that seek to emulate China's successes should assess the degree to which the cultural, political, and economic factors in their own countries facilitate the models that have proven successful in China; adapt these lessons from China appropriately for their own context; and seek to uncover where other opportunities may lie within the unique characteristics of their own environments.

### 6.1 REACHING THE LAST MILE

*Large-scale, policy-driven initiatives, including improving financial infrastructure, expanding rural branch networks and access points, and digitalizing large-scale recurrent payment streams, can enable and drive substantial and meaningful progress toward reaching last-mile segments with basic transaction accounts and access points, but further efforts are needed to achieve sustainable and long-term financial inclusion.*

As noted in previous chapters, one of China's most prominent and undeniable success stories has been the high levels of financial access achieved, both in terms of physical access to financial services and in terms of uptake of transaction accounts. As of 2014, account penetration in China stood at 79 percent, higher than most developing countries and even higher than the G-20 average of 76 percent.<sup>66</sup> This high level of financial access to underserved population segments can be attributed to a combination of various factors, in particular complementary and sustained government policies that together have enabled and driven significant increases in physical access and uptake of transaction accounts.

The Chinese government has invested substantially in expanding and improving China's financial infrastructure, particularly the retail payment systems (further discussed in section 6.2). In addition, the People's Bank of China (PBOC) has encouraged and facilitated the establishment of one of the widest point-of-sale (POS)-enabled interoperable agent networks in the world in absolute numbers, significantly increasing the number of physical access points for rural and underserved populations in villages across China. Legal reforms have allowed the establishment of new-type rural financial service providers such as microcredit companies (MCCs) and village and township banks (VTBs), and banks have been encouraged to establish special sub-branches in rural areas. Preferential prudential rules have been used to encourage lending by financial service providers to rural areas. Government transfers have also been consciously leveraged as a driver for financial inclusion.<sup>67</sup> Social transfers for programs benefiting rural and agricultural households (i.e., agricultural subsidies, rural pension insurance, rural medical insurance, etc.) must typically be received via cards linked to free bank accounts. Such efforts to digitize social transfers from cash to payment cards have been deliberate and large scale in nature, with the policy objectives of incentivizing account opening for providers and encouraging account ownership for all subsidy recipients. In 2016, more than two billion transfer payments (totaling RMB 499 billion [US\$75 billion]) were disbursed to recipients' bank accounts and debit cards from rural pension insurance and rural medical insurance schemes and subsidies for rural households.<sup>68</sup>

The Chinese experience demonstrates that the cumulative and synergistic effect of these various government policies can enable the growth of extensive physical branch networks and access points in rural and underserved areas and incentivize and facilitate account opening on a large scale. A multipronged approach such as the one taken in China is clearly necessary to tackle such a fundamental issue as reaching the last mile. Chinese policies have successfully harnessed the power of the various roles government can play (e.g., via infrastructure, incentives, regulation, direct intervention, and moral suasion) to increase financial inclusion via account ownership in rural and remote areas.

However, the Chinese experience also highlights certain intractable challenges common to policymakers across the world when trying to reach the so-called "last mile." One key challenge relates to sustainability and commercial viability (also discussed in chapter 5). Whether the model of agent-based service points can become a more fully fledged, commercially viable operation is an open question. Similarly, many rural credit cooperatives (RCCs) are constrained by governance issues, while new-

type rural financial service providers have not reached significant scale. It is also questionable whether commercial banks' current efforts to operate in rural areas, including via special sub-branches, are commercially viable, and hence sustainable over the long term. Therefore, while impressive physical access has been achieved via policy-driven efforts, it is less clear how fully sustainable such results are and how far financial inclusion can evolve moving forward.

The Chinese experience suggests that achieving sustainable, long-term levels of financial inclusion for the last mile requires a carefully strategic and nuanced approach, in addition to multipronged efforts that fully leverage various government roles. In some ways, the last mile can be considered a heterogeneous group with different sets of needs and obstacles. What does reaching the last mile mean? Some underserved segments in remote and rural areas are commercially active, whether formally or informally, and have unmet needs for various financial products and services. They therefore need appropriately designed and tailored financial products and services, beyond simple physical access and basic transaction accounts, and can presumably be served sustainably via low-cost, innovative methods. Achieving financial inclusion for such consumers will require moving beyond account ownership and access points that provide transactional services to achieving similar results in meeting the needs for financial products such as credit and insurance. However, other segments of the last mile may be so remote and excluded that serving them may not be commercially viable without targeted government intervention, or they may have other basic livelihood needs that supersede the need for financial products and services. Better understanding the nuances within the last mile and designing appropriate policy initiatives for these nuances will be important.

## 6.2 INVESTING IN FINANCIAL INFRASTRUCTURE

*Efforts to expand and improve financial infrastructure—particularly for credit and payments—can significantly improve access, usage, and quality of financial services by individuals and micro and small enterprises (MSEs).*

While the products and services nontraditional financial service providers offer have garnered significant attention in China in recent years, the role of traditional financial infrastructure development in expanding access, usage, and quality of financial services in China cannot be understated. Financial infrastructure—the set of institutions that enable financial intermediation—covers credit infrastructure (including credit reporting, secured

transactions, and insolvency systems) and payment systems infrastructure.<sup>69,70</sup>

Several developments have contributed to strengthening the scope and quality of China's credit infrastructure, including a core legal framework and registry system for secured transactions that was established in the mid-2000s, credit reporting regulation and guidelines issued since 2000, the 2006 Enterprise Bankruptcy Law, and the 2007 Property Law (see section 4.4). Recent empirical studies have validated China's investment in credit infrastructure, finding a clear relationship between financial infrastructure and financial inclusion. In one 2010 study, researchers collaborated with a large domestic bank to study how the introduction of credit information sharing via a public credit registry system affects bank lending decisions. The researchers found that borrowers whose creditworthiness assessment included information from other institutions via the registry received higher levels of credit as compared with borrowers with information derived only from the lending bank itself.<sup>71</sup>

China has also made significant progress toward the development of a comprehensive and robust national payments system infrastructure. These efforts to improve the reach, efficiency, and safety of China's national payments system have enabled improvements in interoperability and competition and are also a key factor in the significant expansion and diversification of physical access points throughout China, including commercial bank branches, sub-branches, agents, new-type rural financial service provider branches (e.g., VTBs and MCCs), ATMs, and retail POS terminals. From the consumer perspective, the result is a wider range of available products (e.g., debit cards and digital payments) with increasingly diverse applications and a steady reduction in direct and indirect costs (e.g., cost of transportation) associated with the uptake and use of payment products, particularly noncash payment instruments. From the provider perspective, expanding the national payments system into rural areas has provided a more viable business case for supporting new business models and products to service such areas, including nonbank digital payment providers, online-to-offline linkages, and adjacent financial products and services built off of payment services. The underlying payment systems infrastructure has also enabled the large-scale shift of government-to-person (G2P) payments to electronic instruments, bringing millions of Chinese adults into the formal financial system.

The development of information and communication technology (ICT) infrastructure has also helped improve access, usage, and quality of financial services in China. Specifically, the national ID system has reduced the costs of customer due diligence efforts and, with a national ID sufficient to open a basic savings account, has significantly

reduced barriers to access for basic financial products for all adults. Relatively widespread Internet and mobile networks have allowed hundreds of millions of consumers to use Internet-based digital financial services.

China's experiences demonstrate that establishing a robust and comprehensive financial infrastructure ecosystem is an effective and critical role of government in enabling financial inclusion. Indeed, China's experience in this area was key to informing Principle 4 of the *G-20 High Level Principles for Digital Financial Inclusion* (see box 6.1). While efforts to intervene directly in financial markets can generate distortions and fiscal stress, investments in financial infrastructure that enable competition, innovation, and overall financial sector efficiency provide widespread positive benefits across providers and products and are arguably a more efficient, appropriate, and

#### BOX 6.1

### The G20 High-Level Principles for Digital Financial Inclusion

In 2016, the Global Partnership for Financial Inclusion (GPFI), under the presidency of PBOC, proposed digital financial inclusion as the key topic for the year. The GPFI subsequently established the Digital Financial Inclusion Technical Team comprising experts from nine international organizations to draft the *G20 High-Level Principles for Digital Financial Inclusion* (referred to hereafter as HLPs). In September 2016, G20 leaders at the Hangzhou Summit officially approved the HLPs, which serve as the first international high-level guidelines in the field of digital financial inclusion. The HLPs include 66 actions spanning eight principles to guide and advise national authorities and relevant stakeholders in the development of digital financial inclusion. The principles are as follows:

- 1) Promote a digital approach to financial inclusion,
- 2) Balance innovation and risk to achieve digital financial inclusion,
- 3) Provide an enabling and proportionate legal and regulatory framework for digital financial inclusion,
- 4) Expand the digital financial services infrastructure ecosystem,
- 5) Establish responsible digital financial practices to protect consumers,
- 6) Strengthen digital financial literacy and awareness,
- 7) Facilitate customer identification for digital financial services, and
- 8) Track digital financial inclusion progress.

A complete description of these principles and related actions are available at <http://www.gpfi.org/publications/g20-high-level-principles-digital-financial-inclusion>.

impactful use of government resources for supporting sustainable, long-term financial inclusion.

### 6.3 LEVERAGING ONLINE NETWORKS

*Online, network-based business models (e.g., e-commerce and social networks) can facilitate the design and delivery of innovative financial services by leveraging network effects, technology, economies of scale, big data, and cross-subsidization opportunities.*

Most financial service providers are established with the explicit objective of offering payments, savings, credit, or insurance products to individuals and/or firms. Yet as Internet-based companies enhance the breadth and depth of commercial and social networks, a new model has emerged that integrates financial service provision within existing online ecosystems. China's path to digital financial inclusion exemplifies this model. Alibaba and Tencent—established as an e-commerce platform and social network platform, respectively—now both operate as major players in the financial services market in China.<sup>72</sup> These online, network-based companies have several comparative advantages to other financial service providers, including:

- Ability to access large, existing customer networks and existing customer relationships instantly;
- Ability to leverage big data produced via commercial or social interactions to inform product design and delivery and reduce information asymmetries (e.g., for creditworthiness assessments);
- Ability to realize low transaction costs and efficient delivery by leveraging existing digital infrastructure (e.g., cloud computing services and databases) and digital delivery channels; and
- Ability to take advantage of synergies between core commercial/social interactions and financial services (e.g., facilitation of commercial interactions and “gifting” culture).

For example, Ant Financial's suite of financial products—including Alipay, Yuebao, Ant Check Later, and MYbank—arose from the Alibaba e-commerce platforms. Alibaba's first foray into financial products was Alipay, developed to facilitate transactions between buyers and sellers on Taobao. In essence, Alipay integrates a financial service into a commercial network, taking advantage of the convenience (for the consumer) and economies of scale (for the provider and the consumer) of housing both services within the same platform. Yuebao, Ant Check Later, and MYbank similarly leverage the comparative advantage of having access to a huge supply of digital transaction data,

user ratings, and revenue growth to better understand customers' financial behaviors and needs, enabling Ant Financial to better manage risks and provide targeted products, and to access Alipay balances in the case of late payment or default for consumers within the Alipay ecosystem. Such advantages allow these fintech companies to provide their financial products at greater convenience and speed, at lower cost, and at a larger scale due to the aforementioned factors.

Tencent's WeChat is China's largest social networking platform with more than 800 million users. In 2013, WeChat users gained direct access to Tenpay, Tencent's digital payment product, which allows users to send and receive payments, withdraw money to bank accounts, etc. The integration of a payments tool into a social media platform has proved to be a massively successful model that allows users to blend social and financial interactions, including sending “gifts” or remittances. For example, more than eight billion “red envelopes” were sent via Tenpay during the 2016 Spring Festival, up from 20 million in 2014.<sup>73</sup>

While these models have demonstrated the significant opportunity to offer complementary financial products and services to consumers within existing Internet-based commercial and social ecosystems, consumers outside such networks—often disproportionately the poor, rural, and elderly—may gain limited or no financial inclusion benefits from such models. Thus it is worth noting that the primary role of these particular business models may be to deepen levels of financial inclusion by providing additional and/or improved financial products and services to those with some existing degree of financial access, rather than broaden levels of financial inclusion by reaching last-mile consumers. In addition, such complementary services may not necessarily address all the unmet needs of consumers. The policy implication is that this model is not a silver bullet to achieve comprehensive financial inclusion for all and must be complemented with other business models and deliberate policy and regulatory efforts to reach last-mile consumer segments.

### 6.4 ENABLING MARKET ENTRY AND INNOVATION

*A “wait and see” regulatory approach can help foster initial development of new digital finance models, but must be accompanied by active monitoring that leads to the timely development of a regulatory framework that addresses the attendant risks of digital finance.*

Most policymakers and regulators seek to achieve a balance between fostering innovation and financial inclusion and providing the necessary regulation and supervision to

ensure financial stability, financial integrity, and responsible market conduct by providers. In practice, this may mean permitting new providers, products, services, or business models to enter the market in the absence of a well-defined regulatory framework, thereby allowing innovations to achieve scale and granting national authorities time to develop a regulatory approach that achieves these multiple policy objectives and reflects actual market dynamics and risks.

The Chinese experience demonstrates both the merits of this approach and the associated risks. Recent growth in China's fintech industry has been driven by nontraditional providers (e.g., e-commerce companies, social network companies, crowd-sourcing platforms, Internet-only banks, and credit scoring services) that, largely operating in the absence of a specific and relevant regulatory framework, were able to more easily enter the market with innovative products and delivery models and, in some cases, achieve massive scale.<sup>74</sup> By contrast, traditional providers were somewhat more constrained by the parameters of existing regulatory frameworks and the incentive (or disincentive) structure of existing market dynamics. The outcome of this "wait and see" approach—a large, dynamic, and competitive fintech industry—suggests that this approach can be beneficial in achieving the policy objective of enabling financial innovation, although it raises potential concerns and considerations for other policymakers considering a similar approach given noted incidences of fraud and misconduct among certain players in the fintech industry.

As a result, policymakers in China have now moved from the "wait and see" approach toward establishing a more comprehensive regulatory framework for new providers and products to ensure the long-term integrity and stability of the financial system and adequate protections for consumers. The Government of China's 2015 *Guidelines on Promoting Sound Development of Internet Finance*—coming after several fintech companies had already reached massive scale—represents a significant step in the development of a comprehensive regulatory framework for fintech and an important evolution past the piecemeal, "wait and see" approach taken up to that point.<sup>75</sup> The Guidelines specifically encourages the development of existing and new types of digital financial services, but emphasizes that these services should be limited to small-value transactions. It also encourages more partnerships between fintech companies and traditional financial service providers, as such innovative partnerships also pose significant opportunities to achieve greater financial inclusion by combining the power and efficiencies of fintech and digital finance with the existing operational and compliance structure, client relationships, and physical networks of traditional service providers. Importantly, the Guidelines clarifies the regulatory man-

dates of different financial sector authorities and notes several areas where additional regulation is required, including related to reserve fund management, information security, anti-money laundering, and disclosure and transparency.<sup>76</sup> Similarly, a special multiagency campaign was launched in April 2016 to address the risks of fintech and to promote the healthy and orderly development of fintech, with clear standards established.

Of course, the monitoring and management of risks that emerge with new providers, products, and technology merit significant consideration. The "wait and see" approach taken with the peer-to-peer (P2P) industry, for example, was not without costs. It has been reported that at least one million investors have lost money through fraudulent P2P service providers in China. This experience serves as a useful reminder that the risks of digital finance (particularly related to financial security, fraud, and consumer protection) must be closely monitored. The challenges of risk monitoring and management are constant and remain a significant challenge for China, as discussed in chapter 5.

Other countries seeking to achieve China's level of success in fostering a thriving fintech industry that is conducive to greater financial inclusion may benefit from pursuing a more deliberate "test and learn" approach to nontraditional providers and products, as opposed to a "wait and see" approach. China's experience suggests a possible segmentation into three phases: (1) active monitoring of new, unregulated providers, including along dimensions of scale, stability risks, integrity risks, and consumer protection risks; (2) issuance of high-level principles or risk warnings to guide market development; and (3) issuance of a specific regulatory framework, covering responsible authorities and licensing procedures, prudential requirements, regulations for financial consumer protection, and supervisory powers, responsibilities, and functions. Key considerations will be the active monitoring of risks and appropriate timing of the issuance of high-level principles and/or regulation, as moving to these stages should not be unduly delayed if risks are observed in the market.

Financial sector authorities may also wish to consider a "regulatory sandbox" approach, which provides more structure than the "test and learn" approach while still providing the flexibility for innovation. The "regulatory sandbox" approach allows for the launch and testing of new technologies into a market under waived or modified regulations but with clear guidelines in place, including specific parameters on number of customers or the balance or value of products and services being tested and specialized monitoring and reporting requirements. The testing may continue for a certain period of time (e.g., six to 12 months), at which time financial sector authorities may develop rules based on assessed risks.<sup>77</sup>

Regardless of approach, the specific regulatory framework that ultimately develops should directly address risks identified with new innovations, while accounting for the heterogeneity of digital finance models. China's experience demonstrates the value of a regulatory approach that promotes innovation, while also highlighting the need to actively monitor and promptly address risks. The ultimate aim is to create an environment that is fair and balanced for all stakeholders and proportional to the distinct stability, integrity, and consumer protection risks that fintech companies and digital finance pose.

## 6.5 INNOVATING WITH POLICY PILOTS

*Pilots can be a useful tool for governments to test and scale policies and initiatives for financial inclusion, as long as the promotion of such pilot programs aligns with the principles of long-term fiscal and commercial sustainability.*

As noted throughout this report, various Chinese government authorities, including PBOC, CBRC, China Insurance Regulatory Commission (CIRC), Ministry of Finance (MoF), and local governments, have employed policy pilots—government-initiated small-scale explorative pilot programs—to introduce new practices and models to advance financial inclusion. The Chinese experience is characterized by many policy pilot programs, initially shepherded by a set of provisional policies with stated objectives and regulatory parameters. As pilots were rolled out, the provisional policies were reviewed and adjusted, and where pilot programs were successful, the provisional measures were formalized as official policy and rolled out nationally. The 2005 MCC pilot program is one example. Drawing lessons from previous bank-based poverty alleviation and nongovernmental organization (NGO)-led microcredit programs, national authorities piloted a new institutional structure (MCCs) as a strategy to develop the microfinance market and increase competition in the financial sector, given the obstacles posed by the existing banking legal and regulatory framework. This model was later adapted and embedded into the national regulatory framework. The development and subsequent scale-up of agent networks for rural cash withdrawal services and G2P digitization also followed the pilot approach, launching first in a few provinces and later being further adapted and implemented nationwide.

The Chinese experience shows that policy pilots can offer unique opportunities for financial sector authorities to “learn by doing” and balance risk management with policy entrepreneurship. Further, policy pilots can be politically appealing. The small scale and the trial nature of policy pilots can lower perceived risks and further encourage

experimentation and innovation at local levels, which are specifically needed for areas that experience significant market failures (such as more remote and rural areas). In many cases, the “pilot” status grants programs a certain degree of policy or regulatory expediency and flexibility. Therefore, policy pilots can be useful instruments to test remedies that address constraints in policy and regulatory frameworks.

However, the top-down approach to certain policy pilots that involve new business models (i.e., agent-based models) or institutional types (i.e., MCCs) also highlights the need for authorities to ensure that promoting such initiatives does not ignore the need for long-term commercial sustainability. Preferably, pilots should prove their potential for long-term viability before mass expansion. In this regard, authorities should have in mind an exit strategy for policy pilots and anticipate that further experimentation and adjustment may be needed in the post-pilot stage to enable long-term success.

## 6.6 PROTECTING CONSUMERS

*Ensuring that consumers are treated fairly and have access to transparently provided products and services and redress mechanisms is a critical policymaker function that must accompany increased financial inclusion and keep pace with both financial innovation and financial deepening.*

Financial consumer protection is a critical complement to increased financial inclusion. Consumers often face imbalances of power, information, and resources in comparison to financial service providers. Such imbalances are further exacerbated in the case of previously underserved or unserved customers entering the formal financial sector for the first time. Financial consumer protection frameworks are intended to address these imbalances and protect consumers, ensuring that the benefits of financial inclusion are realized while also contributing to the broader safety and soundness of the financial system.

Since the global financial crisis, policymakers around the world have focused much greater attention on financial consumer protection, and China is no exception. In recent years, Chinese policymakers have taken important steps to lay the groundwork for a strengthened financial consumer protection framework. Regulations and directives have been issued covering key aspects of consumer protection, such as disclosure, business conduct, and dispute resolution, and financial consumer protection divisions have been established within various financial sector authorities.

The China experience illustrates the critical need for such efforts to continually evolve to keep pace with financial deepening and financial innovation. Gaps remain in

establishing a comprehensive framework for financial consumer protection in China, including the absence of a financial sector-specific consumer protection law; the need to improve proactive supervisory activities, such as increased market monitoring and data analyses; the lack of strong enforcement measures; and the need for improved coordination across financial consumer protection supervisors, particularly with respect to cross-product and cross-market issues.

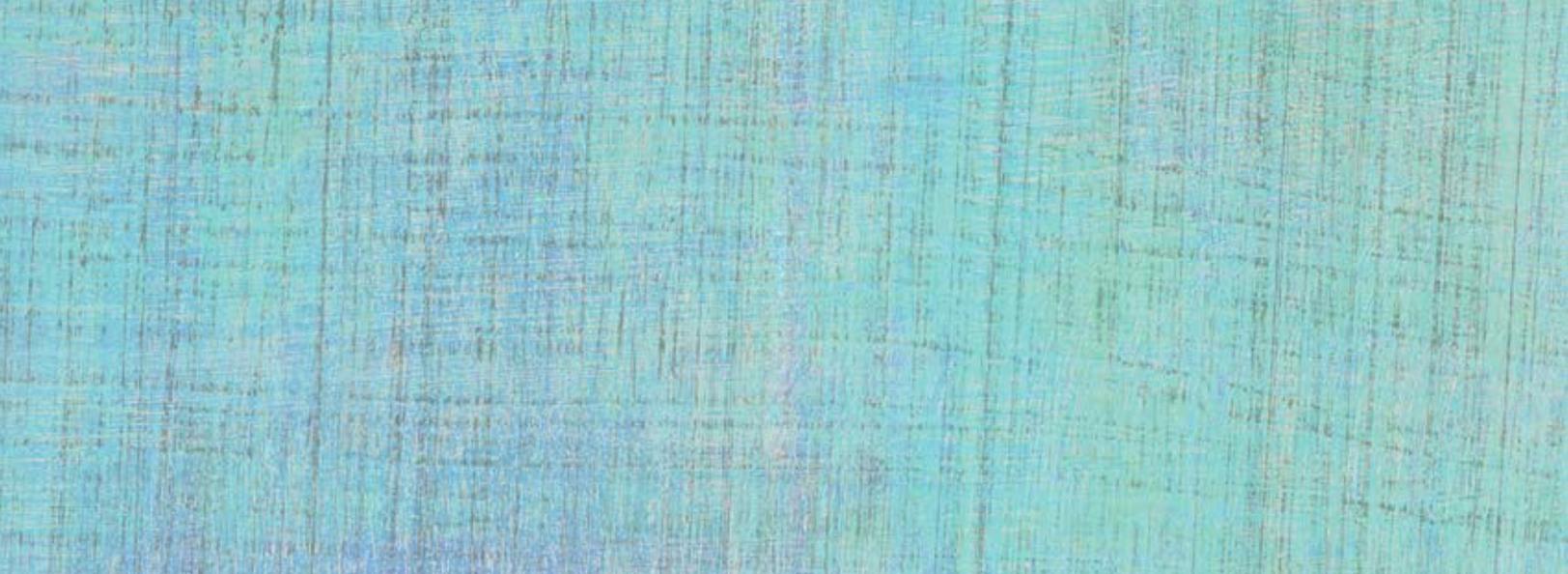
The potential vulnerabilities that arise from these gaps are magnified by the speed and scale with which everyday consumers are entering the formal financial sector in China and engaging with innovative new digital financial products and providers—all good things from a financial inclusion perspective, but accompanied by new or height-

ened consumer protection risks. These risks are illustrated by the problems experienced with P2P lenders running away with investors' funds, or everyday retail investors losing their savings in financial management products due to not fully understanding these products and/or having such products mis-sold to them. The Chinese experience serves as a useful reminder that existing frameworks must be fleshed out and strengthened to ensure that they properly cover the risks associated with digital finance, whether relating to digital delivery, data protection and privacy, limited digital financial capability from the consumer side, tailored disclosure requirements for innovative products and associated risks, or new types of providers or partnership arrangements that may not fit neatly within existing regulatory ambits.

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## NOTES

66. Percent of adults (age 15+) reporting ownership of a transaction account, as indicated by Global Findex. See previous discussion in chapters 3 and 4 regarding other estimates of account ownership in China.
67. CPMI (2016) provides further description of the drivers and enablers of financial inclusion from a payments and transactions account perspective.
68. PBOC.
69. Key elements of a robust credit infrastructure include credit reporting systems, a secured transactions framework, and the insolvency regime. On the payments side, interbank systems for retail electronic fund transfers, a payment card processing platform, and a large-value interbank settlement system are critical.
70. China's approach to expanding financial inclusion through investments in financial infrastructure broadly aligns with a major finding from the *Global Financial Development Report 2014: Financial Inclusion* (World Bank, 2014), which notes, "Policy recommendations to support a more financial diverse landscape encompass . . . strengthening financial and lending infrastructure, including commercial laws, bankruptcy laws, and contract enforcement."
71. Cheng and Degryse (2010).
72. This model is related to but distinct from fintech companies, which are generally founded as start-ups with the objective of using technology to disrupt incumbent financial service providers. The model discussed here relates to the integration of financial service business lines into already established Internet-based social and commercial network companies.
73. "Over 8 billion "red envelopes" were sent over WeChat during Chinese New Year", <https://qz.com/613384/over-8-billion-red-envelopes-were-sent-over-wechat-during-chinese-new-year/>.
74. Much of the explicit regulatory actions relevant to digital finance prior to 2014 was directed at traditional providers of financial services, including the 2006 *Rules on the Administration of Electronic Banking and Guidelines on E-banking Security Evaluation* issued by the China Banking Regulatory Commission (CBRC).
75. PBOC and nine other ministries and commissions (2015).
76. For example, PBOC is responsible for the regulation and supervision of Internet payment services, while CBRC is responsible for the regulation and supervision of online lending services, and China Securities Regulatory Commission is responsible for regulating and supervising equity crowd-funding activities and online fund sales services.
77. Such an approach has been used in Malaysia, Singapore, and the United Kingdom, among others.





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