

# Global Future Council on Responsive Financial Systems

## Three ways to accelerate a digital-led recovery

WHITE PAPER  
OCTOBER 2021

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# Foreword

Digital payments and the shift online are reshaping the agenda for small businesses, financial inclusion and the future of money.



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The coronavirus pandemic is one of the most challenging crises the world has faced, significantly impacting public health, the economy and businesses at large. The pandemic has also brought to light the finance industry's understanding that climate change may upend the financial system. This underscores the urgency for the industry to facilitate the transition to a lower-carbon economy.

The World Economic Forum's Global Future Council on Responsive Financial Systems is exploring how the financial system can address the post-COVID recovery and ensure that stakeholders are rebuilding in a green and sustainable manner. **In particular, Council Members are focusing on six areas:**

## How we framed some of the big debates in the Responsive Financial System GFC

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De-globalization, divergence, inequality and scarring from the pandemic posing new challenges

Over the last year, the Council has contributed through a series of articles, debates and other fora to share perspectives. As is often the case, the overlap between the areas proved fertile ground for recommendations across this diverse group of thinkers; a selection of recent Council Member contributions can be found on the Forum's Agenda website.<sup>1</sup>

This white paper presents three essays speaking to the role of the financial system in enabling the digital-led recovery. In the first essay, Mohit Joshi, Xiaoyan Zhang, Santiago Fernández de Lis and Markos Zachariadis present their thinking on how the pandemic will transform financial systems and financial industry. They stress the importance of digital ID as an enabler for many of the opportunities that the digital delivery of financial services presents. Public-private collaboration will be key.

The second essay addresses the devastating impact the pandemic has had on many small

businesses and how digital tools can offer a path to recovery. Jim Magats expands on an Agenda blog that he and Claire Sunderland Hay published in June 2021, highlighting the need to make both capital and e-commerce solutions available to these struggling – but critically important – businesses.

In the third essay, Xiaoyan Zhang and two colleagues from the Tsinghua University PBC School of Finance present evidence from China – the country first affected by the coronavirus pandemic and the first to return to normalcy – on how digital services have transformed consumer habits and delivered tangible benefits. By examining the case of digital wealth management, they draw out lessons that they predict will over time play out in other economies as well.

We hope this paper presents helpful insights to policy-makers and industry leaders as they continue to shape the often fragile recovery from COVID-19. We welcome your comments as we prepare the next phase of the Council's work.

1

# Digital ID as the catalyst of our digital future

Digital identity will generate continued improvements across digital banking, digital payments and digital regulation.

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To get through COVID-19 and its aftermath successfully, business and government must work with a wider selection of stakeholders and put power in the hands of the populace so that each person can buy, trade and live a fruitful life. Catalysing this recovery means employing new technology systems and processes, accelerating digital penetration in emerging markets to create a level playing field.

This digital transformation – across societies, government and the private sector – will drive the recovery post-COVID-19. If done well, it will be

a blessing to people, profit and planet, creating enduring, sustainable value that benefits small businesses at large, the marginalized as well as the affluent. Further, with environmental, social and governance (ESG) values interwoven in long-term business strategy, employees, customers and citizens will transact in a world that is fairer and more equitable.

Digital identity will be the catalyst for this world transformation, and will generate continued improvements across digital banking, digital payments and digital regulation.

## 1.1 Digital identity

To ignite the spark of commercial and humanitarian progress, every person should have a unique digital identity so that they have full access to the digital world in the economic, social and political realm.

India does digital ID very well – the Aadhaar system, a 12-digit unique identifier based on biometric data, increases inclusion for over 1.2 billion Indians. World Bank Chief Economist Paul Romer calls it the most sophisticated ID system in the world, and in spite of its drawbacks it delivers high-velocity access to government and private sector services, with each unique ID linked to one of a billion bank accounts.

When COVID struck, the system enabled \$1.5 billion to be transferred digitally and at speed to the bank accounts of 30 million people.<sup>3</sup> Compare that with the US, where 90 million paper checks were laboriously sent through the mail in 2020, or in Asia, where many of the most vulnerable citizens

did not have access to income support, mainly because no one knew who they were.

One billion people globally are without access to a formal proof of identity, so governments should pay closer attention to systems such as Aadhaar if they are to enable people to transact in the digital economy. Such a system would streamline the delivery of services and payments, and massively increase financial inclusion. But getting the technology right is difficult. A system that can be used worldwide, with creaking IT infrastructures, would need an open-source foundational ID platform, not the complex set of APIs that the Aadhaar system works on. The system would also need to have the proper controls in place so that privacy, security and inclusion are baked into the design. Morocco and the Philippines are implementing national ID schemes using a platform with many of these features. Ethiopia, Guinea and Sri Lanka are following suit, running self-proclaimed “Aadhaar in a box” technologies.

### BOX 1/3 Digital ID in Morocco



Morocco’s new digital ID system, financed by the World Bank,<sup>4</sup> will facilitate citizen’s access to services, and provide real-time proof of identity to both public and private bodies. The system is built on a secure open-source infrastructure, providing marginalized Moroccan’s access to critical healthcare and social services, and enabling them to enrol in schools, open a bank account, vote, get a job and register a business. The ID system, which is “presence-less, paper-less and cash-less”, also facilitates new modes of service delivery and brings down governmental administrative costs.

## 1.2 Digital banking

With digital ID in place, digital banking can become ubiquitous. In this paradigm, payments, credit, savings and other banking services can be handled in far-flung corners of the planet, cheaply and at the swipe of a button. Having solid data-sharing mechanisms in place, and the proper regulations and governance, a digital banking ecosystem can flourish – one that cultivates stability, transparency, fairness, inclusion and interoperability.

But other infrastructure will need to be in place too. To catalyse global recovery in emerging markets, citizens must have instant access to high-value banking services, wherever they are in the world. This will mean more ubiquitous digital infrastructure and anytime, anywhere access to the internet, something sub-Saharan Africa and South Asia

are still struggling with. And even though many merchants in Africa and Asia now accept mobile payments, the majority of individuals and small and medium-sized businesses (SMBs) around the world are disconnected from the processes and infrastructure that make these payments possible. Digital IDs can help here too, allowing banks and smaller lenders to authorize identity and verify transactions in real time.

Further, using an organizational-level digital ID system would speed up inclusion of SMBs in digital banking. In fact, the Chinese government in Zhejiang Province has developed an “enterprise digital code” for firms to do digital banking easily, so that the government can respond to SMBs with easy-to-access financial resources.

### BOX 2/3

#### Chinese enterprise digital ID code



The Chinese enterprise digital ID code is a convenient channel for SMBs to access government services and acts as a collaborative platform for industrial cooperation. It also provides a way for richer, larger third-party organizations to boost SMB activity. MyBank, a subsidiary of Ant Financial, the Chinese big tech firm, collaborates with the Chinese government through this scheme to provide cheap loans and other financial products to SMBs. Further out, this level of digitization helps fintech streamline credit evaluation and loans issuing using big data – and fosters a better data-sharing mechanism.



## 1.3 Digital payments

For digital banking to become ubiquitous, stable and interoperable, innovative new payment infrastructure should be given a helping hand so that consumer-to-merchant payment solutions can successfully vie with debit and credit transactions. The holy grail of payments would be an omni-channel system that helps merchants accept any kind of payment through any channel, at a checkout counter or on a mobile device.

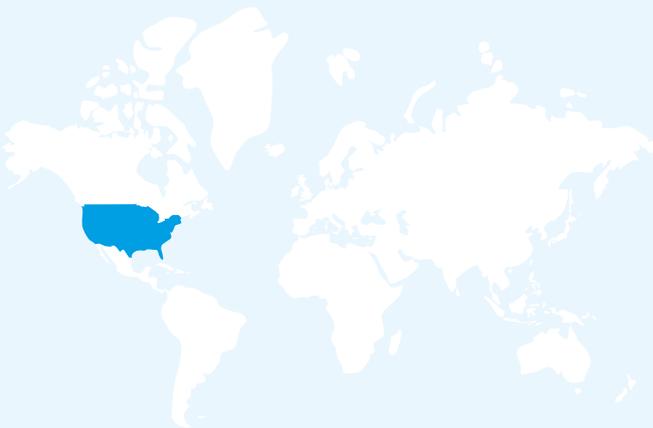
This is extraordinarily difficult, although PayPal is getting close by bringing together Braintree, its iZettle acquisition, and its online checkout button. Visa and Mastercard still own the network on which most global transactions take place, though new fintech upstarts in the US have technology that allows companies to connect directly to customers' bank accounts, facilitating the growth of new digital financial services. In this scenario, debit and credit

cards make up a smaller proportion of transactions, and new economies such as Nigeria and the Philippines can pivot directly to a network of multi-rail payments services.

This is exactly what is happening in China, with big tech firms such as Alibaba and Tencent leapfrogging traditional payment processes and selling financial services directly to customers, increasing stickiness and reducing costs. However, this is creating new regulatory challenges to ensure a level playing field across the new financial ecosystem. The deputy governor of the People's Bank of China recently wrote that China is striking a balance between encouraging fintech development and preventing big tech monopolies through prudent regulation, insisting on good supervision, equal access and fair competition.<sup>5</sup>

### BOX 3/3

#### PayPal and online mobile payments



PayPal, a US company, encourages users to pay via bank accounts rather than financial cards. Its Chicago-based Braintree platform, bought in 2013, offers online mobile payments through APIs, giving the company's clients customer data regardless of whether they are shopping online, on mobile or in store. PayPal bought Swedish mobile payments company iZettle in 2018 to move into traditional retail. This acquisition helps SMBs to use point of sales systems, mobile card readers, and with the latest QR code feature introduced in December 2020, manage sales through a touch-less QR code at check-out.

As emerging markets catch up to Europe and the US, cross-border payments will also flourish, with vendors able to offer global businesses compelling cost propositions and better services. However, for this to take place, automation must be used

to ensure instant payments are compliant with cross-border anti-money laundering regulations. Get it right, and some studies show that B2B cross-border payments alone could grow by 30% over the next year, to reach \$35 trillion by 2022.<sup>6</sup>

## 1.4 Digital regulation – international data diplomacy

With these digital innovations connecting economies and supply chains so that money and value flows transparently and without friction or restrictions, new digital regulation must make inroads, giving consumers and small businesses more power over the data they produce. This means creating new laws for data sharing,<sup>7</sup> with appropriate safeguards for privacy and security at an industrial scale, especially prescient in developed economies as more and more physical businesses get wired to the internet through

new 5G networks, and companies mine big data for insights and competitive advantage.

The financial crisis of 2008 led to the creation of a global panel of regulators, now called the Financial Stability Board. With the onset of COVID-19 and the emergence of new ways of transacting and doing business, a similar outfit should be built for global digital assets.<sup>8,9</sup> This outfit would develop data model standards, regulations and policies, and build on

the General Data Protection Regulation in Europe by fostering better data-sharing legislation across the world (something European regulators are still struggling to achieve).

This “digital stability board” would give members the platform to share best practices and monitor risks in digital commerce and health care, for instance. With this board in place, data trusts could be built to manage individuals’ and SMBs’ data, making the sharing of vital information easier and more fluid. Healthcare administration would get a boost, for example, if data was stewarded in this top-down fashion. Further, a body could be formed to generate regular

reports on risks and vulnerabilities in the global data infrastructure.

All of this would be made possible by digital IDs (for individuals) and legal entity identifiers (LEIs), which were created in the aftermath of the 2008 financial crisis. LEIs are subject to a yearly audit and monthly quality tests, providing a wide array of stakeholders with global access to company data, and good visibility over accounting relationships between connected organizations. Use cases for such identifiers could go beyond financial transaction assurance, enabling digital contracts to be signed securely (at speed) and allow individuals to be tied to fail-safe legal entities.

## 1.5 Moving ahead

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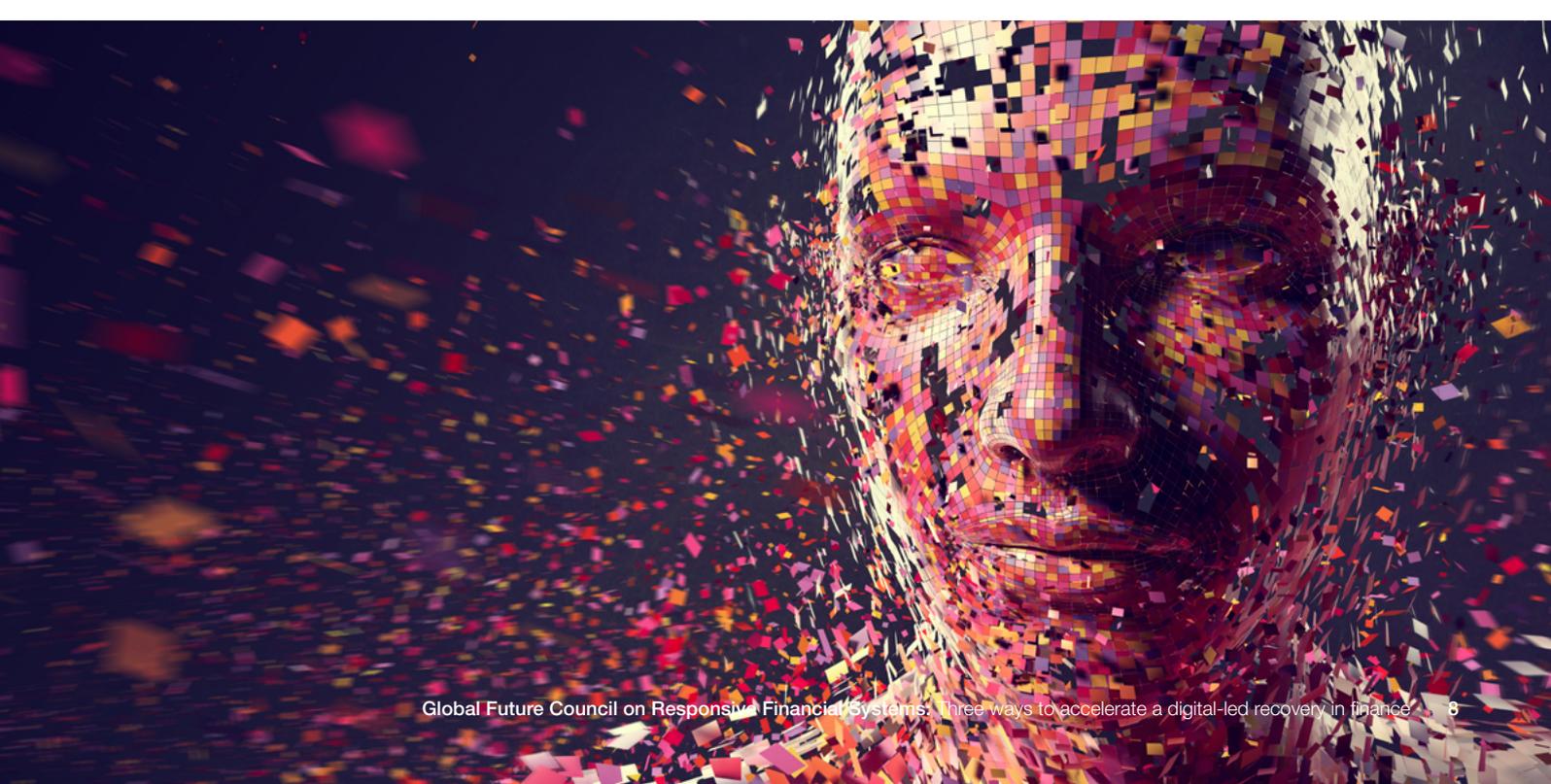
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None of this will be easy. Both good and ill practices will flourish in this new future, making global prosperity difficult. Get it right, however, and initiatives like digital identity may raise global gross domestic product by as much as 13% by 2030.<sup>10</sup> Further, effective digital infrastructure and payment processes will not only benefit poor communities, but also ensure e-commerce and trade finance is not stuck in the 20th century. If done well, the digital revival will happen faster, with the right communication and governance structures in place to ensure all people have easy access to data and the knowledge of how to use it across different processes and services.

Business and government must act now and make digital IDs a focus for their digital transformation – a catalyst that will spawn entirely new industries and ways of working. Here, the sharing of data becomes the norm and citizens have access to their own data, using it not only to survive, but

also to thrive. Best practices should be drawn up for digital IDs, including which open-source technologies should be used, and how privacy and design thinking can work together to create an architecture built around, and for, the citizen. Such a system should also ensure that it cannot be used perversely for political purposes.

The debate on digital payments should also focus on how best to facilitate real-time, cross-border transactions, an area where most efficiency gains are found. Again, digital IDs will make this possible, and working out how this system works with existing payment rails will be crucial. All of this will be possible only if the right global governance for data sharing is in place, something that can be solved by creating a digital stability board, with oversight from both industry and government. This will take time, but will do a lot to catalyze a post-COVID recovery and usher in a prosperous future for all.



## 2 The role of financial services providers in supporting the recovery of SMEs

Financial services providers, in partnership with the public sector, are especially well positioned to help lead recovery efforts for SMEs.

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Gettyimages



Small and medium-sized enterprises (SMEs) are the foundation of the global economy and the backbone of local communities. They are job creators, community builders, enablers of opportunity and drivers of innovation, competition and diversity. When these businesses flourish, so do local communities and economies, but when they struggle, the impact is widespread. Financial services providers have the ability and responsibility to help these engines of innovation and progress recover from the impacts of the COVID-19 pandemic.

SMEs make up the majority of businesses worldwide, representing around 90% of businesses and more than half of employment globally.<sup>11</sup> According to World Bank estimates, within a decade, the global economy will need to create 600 million jobs<sup>12</sup> to absorb the expanding workforce, and SMEs will play a critical role in creating needed jobs. Importantly, SMEs, as compared to

larger enterprises, are also more likely to employ underserved populations, helping support and lift up those communities.

It is clear that these businesses are critical to the health of the economy and communities, but the pandemic has had a major impact on small businesses – helping many digital-first businesses grow, while causing many in-person only businesses to close their doors.

As economies reopen, SMEs are looking to the public and private sectors to help speed up the recovery process. Financial services providers, in partnership with the public sector, are especially well positioned to help lead recovery efforts for SMEs by enabling access to needed capital and financing, helping SMEs connect with new prospects and customers, and democratizing access to technology and digital tools as consumers move online.

## 2.1 Extend access to financing

As many businesses are starting to open back up, they need access to capital and financing so they can hire and train new employees, acquire inventory – much of which has increased in price since the pandemic began – and ensure their physical stores are properly reorganized and equipped with digital payment and commerce tools that consumers now expect, such as digital point-of-sale (POS) solutions or QR codes, which enable contactless checkout.

Financing, however, is typically much more difficult for SMEs to access than larger businesses. According to the World Bank, SMEs across emerging and developing countries cite access to capital<sup>13</sup> is one of the top obstacles to their growth. The International Finance Corporation (IFC) estimates that 65 million businesses in developing countries have an unmet financing need totalling \$5.2 trillion annually.<sup>14</sup>

In addition to needing access to capital, the PayPal-Morning Consult Small Business Confidence Index<sup>15</sup> found that around 25% of small business respondents said having enough money to keep the business running was a top challenge. According to the study, which was released in December 2020, 60% of SMEs said they only had \$25,000 or less cash on hand and 41% said they had less than \$10,000 of cash on hand, only enough cash to operate for four

months if revenue dried up and they did not get immediate access to capital. Respondents from underrepresented communities were twice as likely to list access to capital as a key challenge.

These underserved entrepreneurs are often restricted by outdated methods of assessing creditworthiness, or a lack of relationship/access to traditional financial services. Traditional financial institutions and newer digital-first fintechs, which have access to a wealth of merchant cash flow history and transaction data, are not only well equipped to extend access to this type of working capital, but as members of their local communities, they have a responsibility to do so. By using alternative data and machine learning, while eliminating outdated measurements such as credit score and collateral requirements, financial services providers can open up access to more small businesses around the world.

Finally, while financial services providers can independently play a critical role in getting much needed capital into the hands of SMEs, partnerships between digital-first financial services providers and the public sector can enable a more efficient and equitable facilitation of capital to aid an inclusive recovery, as witnessed during the pandemic. Prioritizing this public-private partnership can help to close the finance gap and modernize the facilitation of capital.

## 2.2 Enable access to customers

“ Given the important role SMEs play, it is important to celebrate and promote small businesses more regularly. As an industry, members across the financial ecosystem can do more.

Access to customers is frequently cited as one of the top challenges for SMEs, especially as they compete with larger ecommerce platforms and more digital-savvy brands. These digital platforms and brands can reach customers across channels and borders, leverage their robust data to create specialized incentives and targeted offers, and use their scale to enable faster and cheaper shipping and delivery options.

This is another area where financial services providers can and should help. Many financial services providers have relationships with both consumers and businesses, and can play an important role in helping connect their small business customers with the millions of consumer customers they have within their own ecosystem.

This can be especially impactful to underserved merchants in rural areas that do not have access to a broad consumer base in their local area. A recent PayPal study of EU SMEs<sup>16</sup> found that while digital SMEs experienced growth everywhere, those that were located in rural areas experienced 1.5 times higher growth rates than their urban counterparts.

Digital tools open the door to the global marketplace for small businesses and financial services providers can help facilitate that connection.

For example, many leading banks and card issuers offer rewards programs, such as cash-back programmes, which incentivize their customers to make purchases at one of the businesses they partner with. Oftentimes, however, the businesses promoted are larger enterprises.

Financial services providers could engage in more hyper-local and targeted marketing for their customers; for example, connecting their customers with local businesses in their areas by offering incentives and deals for their customers shopping at local SMEs. Some financial services companies have specific days or weeks within the year where they promote shopping locally within their communities to their customer base. These efforts are a positive initial step, but given the important role SMEs play, it is important to celebrate and promote small businesses more regularly. As an industry, members across the financial ecosystem can do more.

## 2.3 Democratize access to digital and omni-commerce tools

Small businesses are increasingly interested in, and in need of, assistance that would further their online capabilities, including help with connectivity, online payments, online marketing and logistics.

Traditional and more digital-focused financial services companies have access to a variety of tools that can help SMEs with everything from money management and bill payments to cross border payments, risk management and fraud detection and prevention tools. These tools enable greater resilience for SMEs as they face tough economic conditions, such as the past year. A survey from MasterCard found 74% of SMEs feel that cross-border channels enabled their business to survive.<sup>17</sup>

Financial services companies also have tools to help drive more choice and flexibility for consumers – including digital payment options like pay with rewards and buy now pay later solutions – which can help increase consumer spending power, encourage responsible spending, and help drive sales and revenue for businesses.

Fintech players also have an important role to play and can help SMEs meet changing consumer expectations by helping them digitize and meet their customers everywhere – online, in-person and in between. As the world moves digital, and towards omni-channel commerce, SMEs need access to the tools that will help them meet new prospects and seamlessly connect with customers everywhere, while helping to drive authorization and conversion rates. They also need access to tools to help them detect and prevent against the rising threat from fraud. These are tools that exist today, that if put into the hands of SMEs, can help them not only recover, but thrive.

As the economy slowly begins to recover from the ongoing pandemic and economic recession, SMEs are looking for support across the public and private sectors to help fuel recovery efforts. Financial services providers, oftentimes in partnership with the public sector, have a critical role to play in helping enable recovery for these businesses. It is not only the right thing to do, but it is crucial for helping the communities and economies that they are a part of grow. That growth will eventually come back to benefit members of the financial ecosystem as well.

By Jim Magats, Senior Vice-President, Omni Payments, PayPal, USA

3

## How digital wealth management contributes to economic recovery – the China experience

The evolution of digital wealth management in China provides a model for how other economies can strengthen their inclusive finance efforts.

Below: @olaser/  
Gettyimages



“ Traditional financial institutions can benefit from the technological innovation advantages of internet enterprises and inject fresh vitality into enterprises.

In 2020, many offline wealth management businesses were forced to open digital transformation areas, and the digital wealth management industry began to undergo tremendous changes. An increasing number of traditional financial institutions began to seek cooperation with financial technology companies to help them build modern, scalable and customer-centric digital platforms. Such cooperation is mutually beneficial for traditional financial institutions and financial technology companies.

Traditional financial institutions can benefit from the technological innovation advantages of internet enterprises and inject fresh vitality into enterprises. New financial technology companies can also rely on traditional financial institutions to obtain a large number of customers. Cooperation between the two sides has brought more diversified and convenient financial services to consumers. This has led to the rapid development of China's digital wealth management industry.

A recent study conducted on the macro-asset management industry and micro-digital wealth management users in China before and after the COVID-19 pandemic<sup>18</sup> provides an opportunity to understand how:

- Chinese asset management institutions chose to embrace internet technology in the digital economy to expand their participant and strengthen their services.
- Chinese individual investors' participation in digital wealth management services has significantly increased after the COVID-19 outbreak.
- Such participation in digital wealth management has improved the returns and risk-adjusted returns of their accounts, which is conducive to the wealth accumulation of Chinese individual investors.
- The Chinese digital wealth management example provides important lessons applicable to other global jurisdictions emerging from the pandemic.

The study found that the proportion of digital financial management has increased by 10% after the COVID-19 outbreak. More importantly, results suggest that for every 10 percentage point increase in the proportion of digital financial management, the individual investors' yield increases by 17% of the average level.

### 3.1 Wealth management and digital infrastructure in China

The growing wealth of individual Chinese investors has brought strong financial demand, leading to the rapid growth potential of China's wealth management industry. The total wealth of China's household sector has risen from 179 trillion yuan (\$27.7 trillion) in 2011 to 574.9 trillion yuan (\$89 trillion) in 2020,<sup>19</sup> with a compound annual growth rate (CAGR) of about 12.38%. The average financial assets of Chinese households reached 649,000 yuan in 2020, accounting for 20.4% of the total household assets and 22.1 percentage points lower than that of the United States.

Traditionally, individual Chinese investors focus on deposits, and their allocations are not diversified. In the current asset allocation of individual investors, financial assets such as cash and deposits still account for as high as 65.7%, while risk assets account for less than 10%.<sup>20</sup> Due to the complexity of wealth management and financial investment activities, individual investors need professional financial intermediaries to provide financial management and asset allocation services.

To meet the investment and wealth management needs of individual investors, various types of wealth management and financial intermediaries have emerged. The main wealth management institutions in China include banks, trusts, insurance, public

(private) funds, securities and futures institutions. Since the issuance of guidance on regulating the asset management business of financial institutions in April 2018, the China Securities Regulatory Commission (CSRC) and the China Banking and Insurance Regulatory Commission (CBIRC) have issued supporting regulations applicable to banks, trusts, insurance, public (private) funds, securities and futures institutions. The development of China's asset management industry has been comprehensively standardized. By the end of 2020, the wealth assets of individual investors managed by the above institutions were approximately 128.8 trillion yuan (\$20 trillion).

The emergence of digital technology has had a profound influence in variegated fields due to its high efficiency and low cost. The development process of digital wealth management in China has been continuously advancing. Traditional financial institutions embrace technology and utilize network technology for online banking, while technology companies provide technical support and better financial services. In 2010, China Merchants Bank put forward an internet-based retail banking business by launching version 1.0 of the handheld life app on the mobile terminal. These mobile innovations have effectively improved the efficiency of China Merchants Bank and diverted the pressure of

business outlets through e-banking channels such as online banking and remote banking. In 2011, the comprehensive counter replacement rate of retail e-channels reached 86.57% and that of the company's e-channels reached 49.63%.<sup>21</sup>

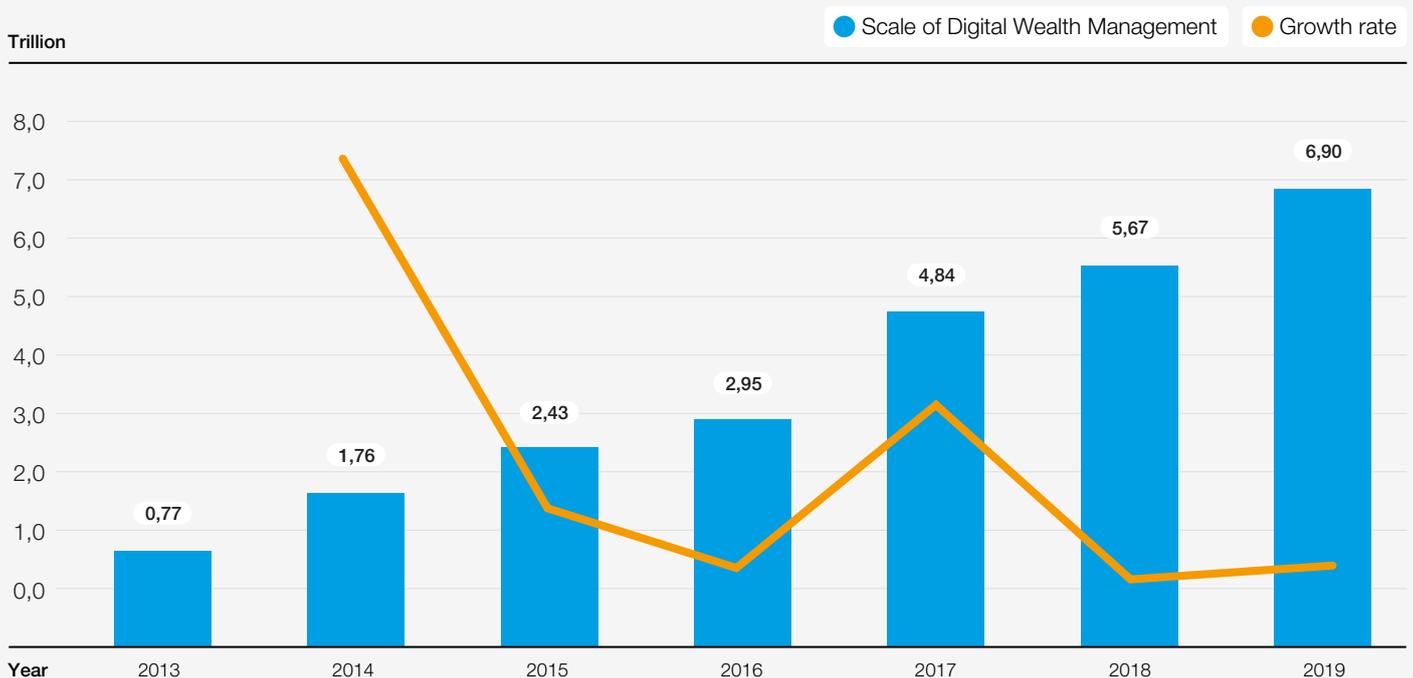
With the birth of third-party payment platforms, some technology companies have gradually shifted from the technical field to the business field with both their advantages in technology and excellent customer resources, and have turned to fintech companies engaging in the wealth management industry. In December 2012, the China Securities Regulatory Commission issued regulations announcing that technology companies independent of fund families, banks and securities companies can distribute public funds. Tiantian Fund Sales Co., Ltd. obtained the first batch of fund distribution licenses. In June 2013, Alipay launched the Yu Ebao service jointly with the Celestica Fund. This action promoted the spread of the internet fund mode and started the era of rapid development of digital wealth management in China. In the same year, internet giants launched digital financial services one after another. Sina, Tencent, JD and NetEase all engaged in wealth management.

The increasing internet penetration rate (70.4% by 2020) combined with suitable financial products promote the adoption of digital wealth management for Chinese investors. The digital wealth management market size was only 772.6 billion yuan (\$120 billion) in 2013 and reached 6.9 trillion yuan (\$1 trillion) by 2019, accounting for 13.2% of the total size of China's asset management business.<sup>22</sup> According to the statistical data on the sales holding scale of public funds of sales institutions published by the China Securities Investment Fund Industry Association in the first quarter of 2021, the purchase

of public funds through third-party online financial management accounts for more than 26.86% of the overall scale of public funds in China<sup>23</sup>. The rise of third-party sales institutions has accelerated the diversification of fund sales channels. In terms of user size, according to the statistics of the China Internet Network Information Center (CNNIC), by the end of 2019, the number of internet users purchasing internet financial products in China had reached 170 million, accounting for 15% of the country's adult people, and the annual growth rate remained above 10%.<sup>24</sup>

When it comes to industry structure, the banking industry occupies a dominant position in China's wealth management industry. Thus, the digital transformation of traditional banks is of far-reaching significance. According to the scale of mutual funds held by the top 100 financial institutions in the second quarter of 2021 disclosed by the Asset Management Association of China, the market share of banks, securities companies and independent sales institutions in stock and mixed public funds is 61%, 16% and 23%, respectively, and the market share of non-monetary public funds is 58%, 15% and 27%, respectively. Banks with channel advantages still occupy the vast majority of market share, and bank securities companies are better than independent sales institutions in the sales capacity of complex products such as stocks and hybrid funds, but independent fund sales institutions are developing rapidly. Although the digital wealth management service platform represented by Ant Group and Tiantian Fund Sales Co., Ltd. is only a small part in China's wealth management industry, it has been driving the digital transformation of wealth management business of traditional banks.

FIGURE 1 The number of users of internet financial services in China



Source: China Internet Network Information Center

Compared with traditional wealth management, the digital wealth management model has many advantages.

- **Customer acquisition:** It acquires customers online with convenient operation as the transaction threshold of digital wealth management is much lower than that of traditional management, which expands the base of wealth management.
- **Efficient service provision:** Digital wealth management services break physical barriers lower transportation and are more time efficient.
- **Low transaction fees:** The transaction fee for some financial products, such as funds charged by the platform, is much lower than that of traditional institutions due to the low operating cost of the platform.

- **Information transparency:** More important is the cost of information acquisition. Digital wealth management changes not only the investment form of individual investors, but also provides comprehensive information and wealth management services. The reduction in cost prompts increasing numbers of people to turn to digital wealth management.
- **Personalizing the customer experience through big data:** With the advantage that internet companies own big data for individual investors' consumption, investment and credit as well as the corresponding analysis technology, they could help users find their real risks and investment preferences and recommend financial products that better meet resident needs.

Overall, digital wealth management has attracted more customers and has greatly broadened the prospects of the financial management market.

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## 3.2 Digital wealth management during COVID-19

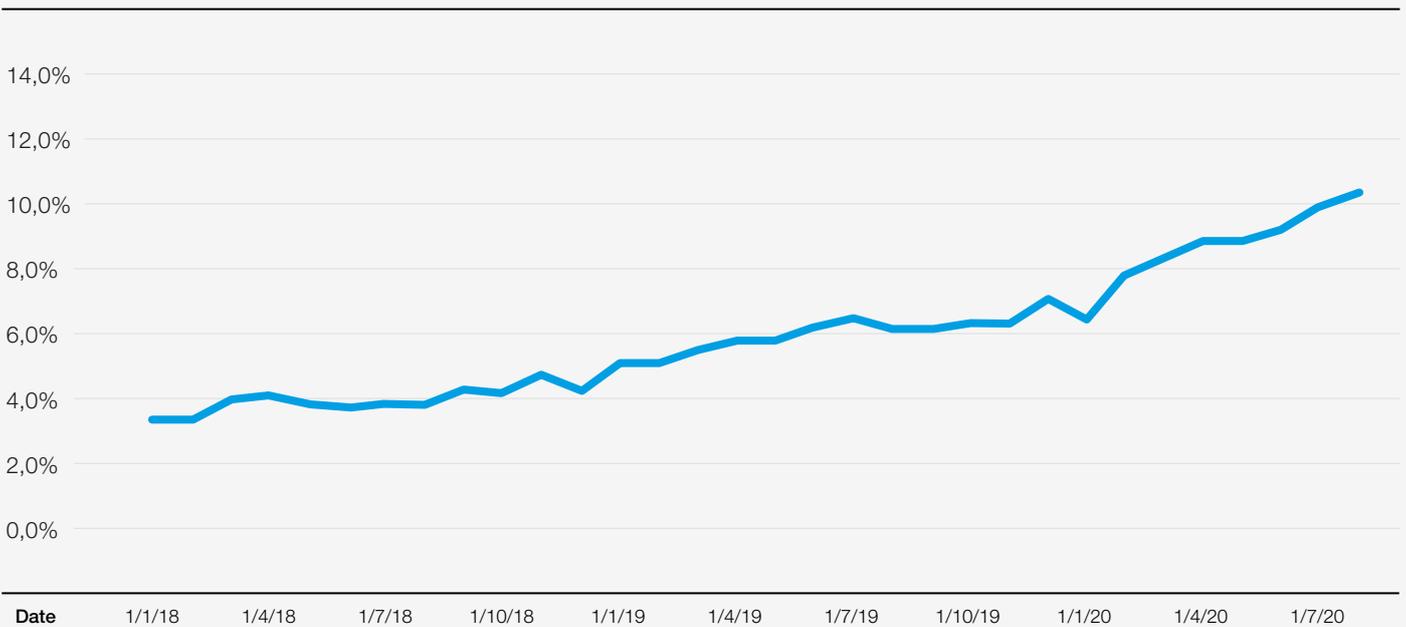
Individual investors are more involved in digital wealth management due to the physical restriction of offline wealth management services and the maturation of digital wealth management. The anonymous desensitized user data from Ant Financial, an internet financial platform with the leading fund distribution in the industry, show the details of how the involvement of individual Chinese investors' digital wealth management changes in time series and especially during the outbreak period of COVID-19. The dataset includes the randomly selected sample from January 2018 to September 2020 consisting of approximately 100,000 users. For Alipay users, the total assets in the account are composed of three parts. They are balance, Yu Ebao and Financial management. The proportion of financial management accounts in total assets

is taken as a measure of users' participation in digital wealth management.

Generally, the users' proportion of financial management accounts is relatively low and less than 20% on average. Fund products account for a large proportion of the financial products invested in by users; meanwhile, the asset structure of users is constantly changing over time. From the perspective of financial management, the proportion of financial management in user accounts has been rising. From the beginning of 2018, the average proportion of users' financial management was approximately 3%. Figure 2 illustrates how the average proportion of users' financial management increased to nearly 13% in September 2020. The increase in the proportion of large financial products can be explained by the increase in the proportion of fund products.

FIGURE 2 Involvement in digital wealth management for individual Chinese investors

● Proportion of wealth management in total asset



Source: Ant Financial Research Institute

When focusing on the outbreak period of COVID-19, the users' proportion of digital financial management accounts increased by 4.02% on average, and the monthly growth rate of financial management involvement also increased 0.296% on average level after January 2020. Figure 3 shows the average increments of proportion of digital wealth management in individual investors' asset accounts in following several months after the breakout of COVID-19 compared with December 2019. This increasing pattern of users' digital wealth management persists in the sample period. It is generally shown that from January to September

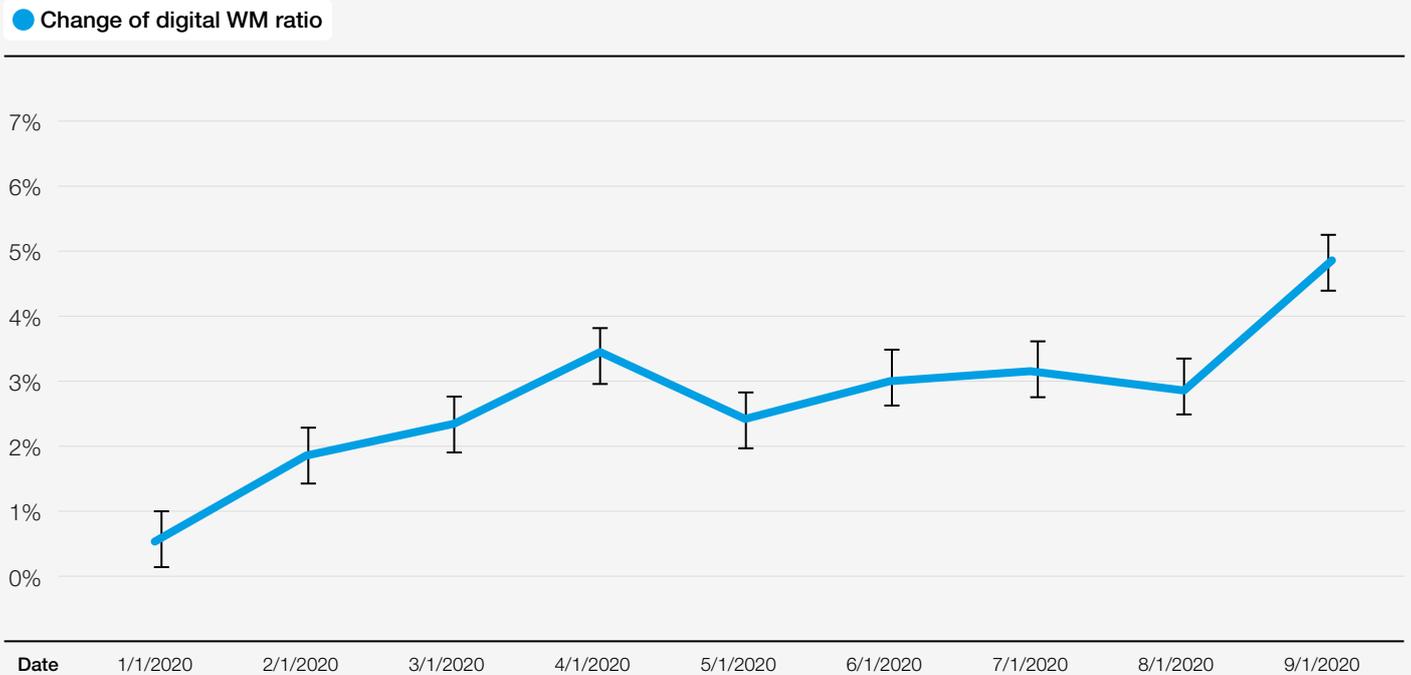
2020, the average users' proportion of financial management accounts increased month by month.

In addition, due to different epidemic severities in different regions, the degree of control in different regions is not similar. In areas where the epidemic is serious, individual investors' daily activities will be more restricted and affected by the epidemic. Since digital wealth management could replenish restricted traditional wealth management activity, individual investors' digital wealth management involvement in regions where the epidemic is serious increases more than that in other regions.

The data show that compared with the low-risk area (derived from the increased number of patients detected and the regulations of China's Ministry of Health), individual investors in middle-risk and high-risk regions were 1% and 2.82% more involved in digital asset management, respectively. After controlling the city level of these regions, the

difference in digital wealth management involvement is still significant among the regions with different epidemic severities. Given this obvious growth pattern related to the epidemic, whether the digital wealth management contributes to the individual investors' wealth accumulation and economic recovery is quite vital and widely concerned.

FIGURE 3 Average change in digital wealth management in individual investors' accounts during COVID-19



Source: Ant Financial Research Institute

### 3.3 Contribution to individual investors' wealth growth

The latest research shows that on average, retail investors cannot effectively accumulate wealth by participating in the Chinese stock market. Digital wealth management not only serves as the substitution and supplement of traditional wealth management, but also provides accessional value-added service to clients. The account data of anonymous users on the Ant Financial platform show that the higher the involvement of users in digital financial management, the higher the return obtained by investors. From January 2018 to September 2020, the average proportion of users' digital financial management over total assets increased by 10%. After controlling for other influencing factors, for every 10% increase in the proportion of individual investors' digital

wealth management, the annualized rate of return of the account increases by 17% relative to the average return of the sample (the average is 1.69%).

When investors choose more risky assets, they bear higher risks. So, they may receive higher risk compensation. Considering risk adjustment, the higher the risk-adjusted return, the sharper the ratio and information gained by investors. For every 10% increase in the proportion of individual investors' digital wealth management, the risk-adjusted yield increases by 23% of the average (-0.258%), the sharp ratio increases by 2.2% of the average (-1.837), and the information ratio increases by 8.5% of the average (-0.822).

FIGURE 4 Average portfolio performance change associated 1% increasing in digital wealth management in individual investors' accounts



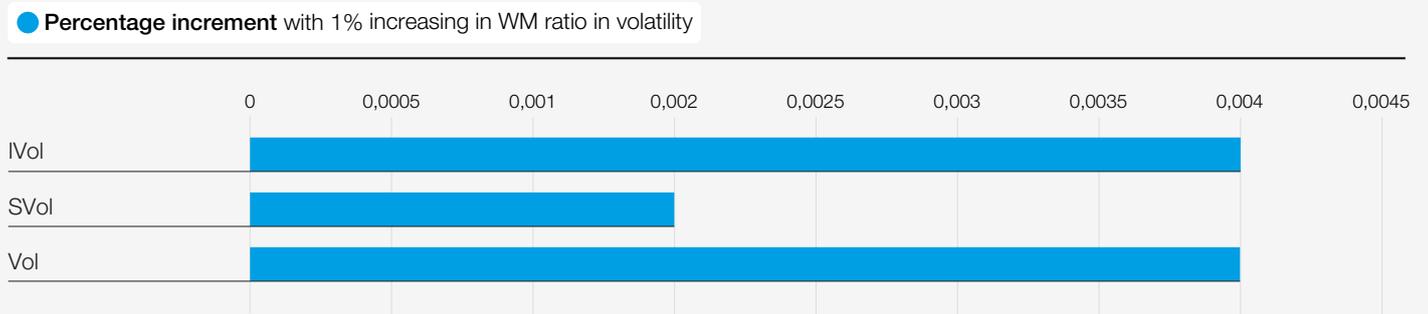
Source: Ant Financial Research Institute

Regarding risk management, the higher the participation of digital wealth management is, the higher the investment risk borne by investors. After controlling the influence of other factors, for every 10% increase in the proportion of individual investors' financial management, the volatility of user account income increases by 0.04%, which is only 2.9% higher than the average volatility of the sample (the average is 1.396%). It shows that its impact on risk has little change.

Furthermore, when decomposing the return volatility and studying the systematic and

heterogeneous risks for user accounts, for every 10% increase in the proportion of individual investors' financial management, the systematic volatility of user account income increased by 10.8% relative to the average systematic volatility of the sample (the average value was 0.37%). The heterogeneity volatility of user account earnings increased by 1.5% relative to the average heterogeneity volatility of the sample (the average is 1.31%). It shows that the main source of increased investment risk when users participate in digital wealth management is systematic risk.

FIGURE 5 Average portfolio volatility change associated 1% increasing in digital wealth management in individual investors' accounts



Source: Ant Financial Research Institute

The overall analysis of the benefits and risks of users participating in digital wealth management shows that digital wealth management helps individual investors improve their account performance. This kind of improvement is robust to risk adjustment. While the risk does not change much with deeper involvement in digital wealth

management, the increase mainly comes from the increase in systematic volatility. Users with different asset levels have different effects on their account performance and risk. For users with a high net worth, the total account risk and heterogeneity risk decrease with the increase in online financial management participation.

### 3.4 Driving force of rapid development of digital wealth management in China and its implications

The startup of digital wealth management in China is inspired by the advanced development of digital technology as well as other developed economies. However, there is a unique boom phenomenon in China. This is due to the innovation of financial products and the strong growth of the platform. Take Yu Ebao as an example. Many Chinese individual investors tend to have much in the way of precautionary savings and are more likely to be risk averse with traditional wealth management perceptions. They do allocate a large part of assets in deposit accounts. Yu Ebao and other “baby” financial products took advantage of the fact that the market interest rate was higher than the deposit interest rate and that compensation was made to occupy the market share during the period platform expansion.

In addition, they are coupled with the T + 0 trading mode, which meets the needs of Chinese resident investors for low-risk and high-liquidity financial assets and provides higher income. Thus, at the initial stage of launch, they are welcomed compared with other typical financial products. The sharp increase in Tianhong funds helped expand digital wealth management and made it easier for individual investors to accept this wealth management mode. Meanwhile, the third payment platform brings a large customer basis and makes this trust coordination easier and more successful.

The flourishing digital wealth management in China is supported and regulated by regulatory authorities. In July 2015, the guiding opinions on promoting the healthy development of internet finance issued by the People’s Bank of China and 10 other ministries and commissions clearly proposed supporting the steady development of internet finance and encouraging the innovation of internet financial platforms, products and services. In the development process, the regulatory authorities found that some technology platforms did not meet the qualification and thus increased the market risk. Therefore, in August 2020, the measures for the supervision and administration of sales institutions of publicly offered securities investment funds issued by the China Securities Regulatory Commission clearly defined the boundary of fund sales business, the responsibility orientation of internet information technology service institutions and prohibited the introduction of internet traffic, system embedding and other disguised acts involved in fund sales business.

Further clarification of the overall market positioning will accelerate the formation of a healthy and standardized ecology of the internet financial industry. The overall positioning of the internet financial market is becoming increasingly clear. This market has entered a new stage of development from rapid expansion to quality improvement and upgrading.

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## 3.5 Future of digital wealth management in China

At present, the advantages of Chinese digital wealth management over traditional wealth management services have emerged in many aspects, but there is still a lot of room for improvement in Chinese digital wealth management services in the future.

- **Provide value-added services of robot advisers**

The digital wealth management industry is currently in the stage of transition to intelligence. In the past, digital wealth management mainly focused on shelf fund consignment. However, behind the single shelf consignment and price war is the problem of development homogenization. In the early days of the digital wealth management industry, digital wealth management did more to transport financial products from traditional channels to the online platform. In the future, intelligence will be the main trend of the development of digital wealth management platform.

- **Construct the financial community by strengthening investor education and accompanying services in wealth management**

Individual investors tend to act driven by sentiment especially during the bust of the market and this pattern usually hurts the wealth management. Digital wealth management institutions could make use of the advantages of their own platform to build a financial management ecological community in which fund managers and investors can interact. The fund company conducts investor education and training for investors through a refined operation and financial management community. When the fund company's products face withdrawal,

the fund manager can take the initiative to communicate with investors, re-establish investment confidence for investors and provide investment companion services.

- **Provide differentiated financial services to meet the needs of different investors**

In the past few years, the rapid development of digital wealth management has benefited from the release of the financial needs of a large number of young users. With the continuous accumulation of wealth of young customers, the digital wealth management platform will face a group of new rich customers with medium and high net wealth in the future. At this time, the platform needs to upgrade from long tail service capability to high-end service capability to meet customers' more personalized financial needs. In addition, there may be professional asset allocation services specifically for the financial needs of special groups such as women, the elderly and parents in the future. Digital wealth management begins to shift from product sales orientation to user demand orientation. The main theme of future development will be differentiated competition.

Overall, digital wealth management in China helps the construction and expansion of the inclusive finance system. An increasing number of individual investors in China began to involve themselves in wealth management, which contributes to their wealth accumulation. During COVID-19, these investors have engaged in digital wealth management to cope with the public wealth emergency, which favours individual and economic recovery. It is truly a good example of Chinese digital wealth management for other economies to lead to inclusive finance and stabilize economic development.

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# Endnotes

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