Preface

The concept of financial health stems from the rise of financial inclusion. Financial inclusion emphasizes indicators such as the accessibility and usage of financial services by micro-, small- and medium-sized enterprises (MSMEs) and vulnerable groups, such as access to payment and credit services. Nevertheless, if credit provisions go too far to the extent that people are put into loans that they do not understand, cannot afford, and cannot get out of, promoting financial inclusion may deteriorate people's financial well-being. In another case, an imbalanced structure of household portfolio aroused by financial illiteracy or other reasons also belongs to an issue of financial health, usually characterized as over-allocation to high-risk financial products or lacking insurance products against potentially significant risks. Arguably, failure to achieve financial health contradicts the goal of developing inclusive finance.

A few years ago in Washington, DC, I attended a seminar organized by the Center for Financial Inclusion (CFI). In this seminar, some argued that financial inclusion is on the ascendant and that addressing financial accessibility in developing countries should be a priority. Others pointed out that financial health issues have emerged in the development of inclusive finance and deserve timely attention. At the time, each side held its own view and the debate ended in a draw. However, the situation afterwards evolved beyond people's expectations. As the COVID-19 pandemic swept the world, with vulnerable groups hit hardest, the generally deteriorating state of financial health naturally drew widespread attention. In consequence, financial health has increasingly become a mainstream topic worldwide. The Global Findex Database 2021, published by the World Bank not long ago, also introduced financial health as a subsection for the first time.

Interestingly, two indicators from the Global Findex 2021 particularly intrigued me. One reflects financial resilience, i.e. whether adults could raise a certain amount of money within 30 days when an unexpected expense occurs. There are several ways to raise emergency money, including savings, money from family and friends, earnings from working, credit or loans, and selling assets. People in high-income countries tend to dip

into their savings; comparatively, those in developing countries mainly raise money from relatives and friends, and 55% of adults report experiencing difficulties to varying degrees. As a standout contrast, the prioritized way to raise funds in China is to work for more earnings, that is, to take on an additional job. Another indicator in the Global Findex 2021 measures potential risks, i.e., people's utmost financial worries. In sub-Saharan countries, the most significant distress is the cost of tuition fees, while in the vast majority of other countries, including China, the most critical concern is the cost of medical care resulting from severe illness or accidents. Hence, in the framework of financial health, savings and insurance for ordinary people should be the two essential components. Inclusive finance would progress more smoothly and solidly if we had a clear and balanced framework and quantitative guidelines for financial health, which is also our primary objective in promoting financial health.

Another critical objective of advocating financial health is focusing on financial service providers rather than financial consumers alone. As widely known, the target customers of inclusive finance are mainly MSMEs and vulnerable groups. The general characteristics of this group include relatively poorer financial literacy and weaker financial capability, which is why we always emphasize strengthening financial consumer protection while providing inclusive financial services. Although we know how important it is for each micro entity to build its own capability and protect itself, we still have to acknowledge that the crucial actors in financial consumer protection are the financial service providers. Customer protection would become a necessary guarantee for suppliers' sustainable development if they could realize its significant value and embed customer protection principles into their products, business, and corporate strategies. Suppliers must abandon short-sighted business conduct, such as killing geese that lay golden eggs or draining the pond to get all the fish. In this sense, customer protection is integral to the nation's cause of inclusive finance. Financial consumer or customer protection aims to achieve a state of financial health. It is foreseeable that the competitiveness of financial service providers will depend on whether they can effectively integrate the concepts of customer protection and financial health into their products, business and corporate strategies.

For macro-finance defenders, the financial health of MSMEs and vulnerable groups bears on the overall financial stability. When financial sub-health or financial ill-health becomes a widespread problem, financial stability as a whole will be significantly diminished and even endangers the peace and tranquility of society.

In China, the concept of financial health is of vital relevance. The impact of the COVID-19 pandemic on domestic micro- and small-sized enterprises (MSEs) and vulnerable groups has been considerable. As suggested by the rule of thumb, the debt-to-income ratio of a household shall not exceed 40%, which lies on the premise that income is largely stable or even has an optimistic vision of future income. However, when there is a dramatic contraction in current income (the denominator), the burden of debt, which had been on a smooth track of easy repayment previously, would become a disaster. Such a situation is evident in the recent unfinished building incident, which resulted in homeowners' refusal to repay mortgages. This is what happened during the 2007 subprime crisis in the US. Thus, financial health is both a static indicator and a dynamic alarm. A three-year-long pandemic has relentlessly sounded the alarm on the financial health of countless MSEs and households.

From a broader timeframe, the changing trends in China's household structure deserve the attention of researchers. Aging, new citizenship, and new family trends (smaller size, single, fewer children, and single-generation households) may have structural implications on overall financial health.

The development of the digital economy and digital finance further exacerbate the urgency of financial health issues. Through the evolution of global digital financial inclusion over the past decade, fintech has added wings for financial inclusion to take off. Digital financial inclusion has achieved the scale of a customer base that used to take decades to build up in just a few years. Many observers optimistically predict that a digitally inclusive financial services network would fully cover the world's billion or so excluded bottom of the pyramid. However, just as every coin has two sides, the rapid growth of digital finance brings unexpected new problems, such as online fraud and the digital divide.

On the one hand, scammers take advantage of the Internet to make fraudulent

transfers of large sums of money instantly. On the other hand, the digitally disadvantaged cannot get along because they are not good at using the Internet and mobile phones. Financial health issues such as online consumer overdrafts, privacy leakage, and scams in the name of wealth management are even more alarming. As regulatory measures strengthen and the requirements for financial consumer protection become entrenched, digital financial service providers increasingly recognize that financial services and customer protection are as important as customers' financial health and are taking initiatives to integrate financial health into their business strategies. This is a direction worth encouraging.

In addition, there is a particular disagreement in the industry about the financial health of MSEs. Are they more akin to businesses or households? If they are identical to well-developed enterprises, there is a wealth of academic research in corporate finance, making the question of how to maintain the financial health of a micro business lose its novelty. If they are more like households, why bother to devote a separate topic to the financial health of MSEs?

In China's context, there are three types of MSEs. First, self-employed households, family workshops and farms with the household as a unit. Second, micro-enterprises that employ some workers but still have a small income and expenditure scale, such as restaurants or start-up businesses. Third, enterprises that have a certain economic scale and are officially included in the category of MSEs, with the size of bank credit reaching millions or even tens of millions of yuan. The meaning of financial health may be different for these three levels of MSEs. The first two levels are more like households but have characteristics that set them apart because they are business owners rather than mere consumers. The third level is more like enterprises, which can be analyzed with corporate finance methods but still have differences.

In the scope of "MSMEs and vulnerable groups," the terms "micro" and "vulnerable" are often indistinguishable. Therefore, we refer to them collectively as micro-businesses and vulnerable groups (MBVGs). This is particularly obvious in rural areas, where peasant households are generally both consumers and business owners. Our study indeed focuses on MBVGs. In other words, when discussing the financial health of MSEs, we focus on

the first two levels.

Because of the close linkage to their households, the first two levels of MSEs often mix household and business income and expenditure, which complicates their state of financial health. A central issue here is that when households engage in business, they must recognize in advance that in addition to the various risks such as illness and accidents that they may face as ordinary households, they will also encounter risks arising from their businesses, which will, in turn, have a direct impact on their daily household consumption.

Can DuPont analysis from corporate finance be applied to study MSEs? The answer is no. Firstly, MSEs in MBVGs often do not keep financial books in the modern business sense, and the indicators required for DuPont analysis are not yet available. Secondly, these MSEs are likely to engage in borrowing activities, but most originate from informal financial sources, such as friends and family, and the borrowing conditions, such as interest rates and repayment period, may be uncertain. Lastly and most critically, their operating costs are often immeasurable. For example, when the business is busy, family members such as school children also come to help.

From a macroeconomic perspective, MSEs bear on employment, entrepreneurship, and market confidence, and financial health should also be a concern for macroeconomic policy authorities. It is noteworthy whether small and micro enterprises are financially resilient enough to cope with periods of economic volatility. In this sense, financial consumer protection should be regarded as a crucial issue in defending macroeconomic stability and preventing systemic financial risks.

In the next five to ten years, the cause of inclusive finance in China will enter a phase of high-quality development. In the *Report of Financial Inclusion Development in China* released last year, we proposed to lay out a long-term mechanism for capability building. This year's study demonstrates that the goal of financial health is a critical symbol of the high-quality development of inclusive finance and that financial health is an essential element related to capability building in achieving an inclusive financial ecosystem. In this regard, this year's study deepens previous years' work.

Just as improving one's immunity is more effective than injections and medication for every individual in fighting against the virus, financial health is also an effective

means for every economy to protect itself against risks. As financial inclusion advocators, we are committed to promoting financial health from the perspective of improving the "immunity" of MBVGs. Intrinsically, financial health is about enhancing financial literacy and capabilities.

In the current economic situation, promoting financial health will not only boost the high-quality development of inclusive finance but also enhance the capabilities of consumers, especially MSEs, to strive through the business difficulties brought about by the pandemic, thus playing a role in protecting consumers and stabilizing the financial situation. In other words, whether MSEs can withstand the shock of the pandemic and tide over the difficulties and whether they can resume production and realize sustainable development after the pandemic rely largely on whether they are financially healthy.

At the end of 2021, Liu, Guiping, then the Deputy Governor of the People's Bank of China, wrote that financial health is an advanced form of financial inclusion and should be developed intensively for rural revitalization and shared prosperity. This year's *Report of Financial Inclusion Development in China* tries to answer the following questions: How to promote financial health in several aspects such as definition, connotation, indicators, and evaluation criteria; how to safeguard financial health for financial consumers, especially for MSEs or MBVGs; what role financial health can play in the integral development of financial literacy education, consumer protection and financial stability.

To summarize, financial health as a policy paradigm contains at least three elements. Firstly, financial health implies a consumer-centered philosophy. Policy measures such as financial inclusion and financial education are means rather than goals, and the real goal is to help residents achieve a healthy financial state and enhance their well-being. Secondly, financial health is an observable and measurable indicator system that can act as an analytical tool for policymakers. Third, financial health is also a policy framework with clear targets. Although policy initiatives such as financial inclusion, financial education and consumer protection focus on different perspectives, they all serve the same goal - financial health.

The Chinese Academy of Financial Inclusion (CAFI) is committed to building "good finance" and "good society," and an inclusive financial ecosystem embodies

"good finance." Of course, all the above concepts shall be rooted in the trust of financial consumers in the inclusive financial ecosystem. If many financial consumers lack confidence in the ecosystem, they will not be willing to participate in financial activities or accept financial services. In that case, there will be no basis for developing inclusive, healthy, responsible, and good finance. Farmers who think insurance is a scam will not insure themselves even when needed. The general public who regard capital markets as unreliable will not invest in pension products, leaving the planned personal pension system on paper and fantasy. In this respect, financial health is the underpinning logic of overall financial stability and even social stability.

We have been dedicated to the advocacy and promotion of financial inclusion for over eight years, and each year we publish our research findings through the *Report of Financial Inclusion Development in China*. As the saying goes, the knowledgeable are more articulate, and the ambitious are more profound in observing the world. Our research team has constantly been overcoming difficulties and striving for excellence. Although we know that achieving financial inclusion is a long-term historical task with a challenging and long journey, we are confident that we can achieve our goals with Commitment, Action, Focus, and Impact (CAFI).

I want to express gratitude to all the colleagues who participated in the research and writing of this report. My appreciation also goes to our partner sponsors.

Bei Duoguang

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Xidan, Beijing

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Summary

It has been nearly three years since the outbreak of the COVID-19 pandemic, and the financial health of Micro Businesses and Vulnerable Groups (MBVGs) has experienced unprecedented challenges, especially that of gig workers, pay-for-performance employees, self-employed households (also known as individual-run industrial and commercial households), and micro- and small-sized enterprises (MSEs).

Since 2019, CAFI has conducted an ongoing "Financial Diary" survey over more than 190 households and micro-, small-, and medium-sized enterprises (MSMEs) in Yijun, Shaanxi and Pingjiang, Hunan. The data show that the majority of the sample enterprises failed to make ends meet in the first four months after the pandemic outbreak and maintained a high level of fluctuation in the follow-up months until July 2021, when they generally achieved sustained profitability.

In 2021, CAFI launched another "Financial Diary" survey of 60 Shanghai households, which recorded the financial stresses the low- and middle-income groups in this international metropolis have endured during this one-in-a-century pandemic: decreasing income was accompanied by increasing expenses, continued depletion of savings, and a significant increase in debt risk.

This global crisis has exposed the vulnerability of financially excluded groups and sounded an alarm that financial inclusion is not the end, and the MBVGs need to benefit effectively from financial services.

Over the past decade, inclusive finance globally has reached prominent achievements. The world average account ownership rate has increased from 51% in 2011 to 74% in 2021; the credit card penetration rate has risen from 15% in 2011 to 24% in 2021; the debit card penetration rate has increased from 31% in 2011 to 53% in 2021; the proportion of adults who borrow from formal financial institutions has increased from 9% in 2011 to 28% in 2021; digital technology has gained wide acknowledgment in promoting the

availability and usage of financial products and services.

However, has financial inclusion positively impacted low-income and vulnerable groups? The academic community is still inconclusive on this question. Evidence from many developing countries suggests that significantly positive, insignificant, and even adverse effects exist. This means that increasing the availability of financial services is necessary but may not be sufficient. Consumers may not know how to use financial services because they lack financial knowledge and literacy. Institutions may sell inappropriate services to consumers under the name of financial inclusion, taking advantage of consumers' weaknesses in awareness, capabilities and information disadvantages. For finance to work, there are other determinants than accessibility and usage.

At the same time, we also see that even in countries where financial services are already widely accessible, many residents still struggle with their financial situation. For example, the World Bank's 2021 Global Findex found that 40% of adults surveyed in high-income countries still worried about not having money to pay their monthly expenses, 59% were concerned about not having money for retirement pensions, and 53% worried about not having money to pay for unexpected medical expenses. In fact, many people worldwide have difficulty coping with financial shocks that are not significant in amount. Assuming a financial shock that requires raising 5% of national income per capita to meet emergency expenses within one month, the World Bank data mentioned above shows that 12% of the residents around the world still considered it not possible at all, 29% might be able to do so but with great difficulty, and 27% claimed some difficulty doing so.

These data shall lead to reflection- isn't improving lives and enhancing well-being the original purpose of developing inclusive finance? If our policy orientation remains at the early stage of development, with the main emphasis on the availability of financial services, especially loans, it may be incompatible with present needs. We must always bear in mind that enhancing financial inclusion is only a means to an end, not an end in itself, and that the ultimate goal of inclusive finance is to promote the well-being of MSMEs and vulnerable groups.

Therefore, the international regulatory community proposed to go beyond financial

inclusion by using a more comprehensive concept encompassing other policies (e.g., financial education and consumer protection). Under the new framework, the development of inclusive finance shall have intermediate and measurable targets closely related to financial activities; otherwise, the impacts of efforts could end up in an unmeasured situation, due to other confounding variables of the well-being of MSMEs and vulnerable groups. As a measurement tool, financial health shall be a directly expected outcome of inclusive finance development, financial capability building, and financial consumer protection. Accordingly, it can act as a critical intermediate target and policy evaluation tool.

Financial health is emerging as a global issue, which has been recognized as more than a wealth management concern and is closely linked to the sustainable development agenda. Against the backdrop of the significant impact of the COVID-19 pandemic on the global economy and financial system, the need to enhance the financial health of MBVGs has become more prominent. Meanwhile, the development of digital technologies has created unprecedented conditions for financial health monitoring and intervention. The demand, supply, and regulatory sides of financial services all have the opportunity to incorporate awareness of financial health indicators into everyday life, businesses, and regulatory frameworks. (Introduction)

Part I Financial Health of Micro Businesses and Vulnerable Groups

Just as finance is supposed to serve the real economy, household finance is supposed to serve the micro-economic activities rooted in household structures and relationships. Different household sizes, structures and relationships usually imply divergent economic activities and financial needs. Accordingly, understanding household finance must closely follow the characteristics of households themselves.

In recent years, households in China are becoming smaller and elder, similar to the general trend in other countries worldwide, but with more dramatic changes. The decline in household size is directly reflected in the decreasing number of household members, but behind it lies the evolution of household structures and relationships, as more people choose to be single, have fewer or no children, and no longer live with other generations.

The trend of more singleness is reflected in the postponement of the first marriage and the increasing divorce rate. The tendency to have fewer or no children is highlighted by the significant decline in China's total female fertility rate, birth rate, and child dependency ratio, from a level higher than the world average to a level comparable to that of high-income countries. The decline in multigenerational cohabitation has also been more observable in China. Aging is reflected in the continued increase in the age median and old-age dependency ratio.

Smaller households indicate that mutual support from family members is likely to be significantly reduced, and the mutual support in economic resources and risk buffers formed through family relationships will continue to erode. People choosing to be single will lack support from their partners; people choosing to have fewer children will have less help from future generations; more people choosing to live in single-generation households will have significantly weaker immediate support from close relatives. In the meantime, an increasingly aging population may have a resonating effect on household miniaturization, posing a severe challenge to social dependency relationships.

The evolving characteristics of households mean that more individuals and small households in China must rely on themselves to manage their financial affairs and properly use financial instruments to achieve their developmental goals. Being in a country traditionally known for its high savings rate, will we be able to adapt successfully to the changes in sociocultural and family relationships? This year (2022), with substantial support from multiple partners, the CAFI research team surveyed more than 200,000 fixed-wage earners, gig workers, and individual-run industrial and commercial households, most of whom are low- and middle-income MBVGs. Our analysis of a sample of 67,316 fixed-wage earners and 72,895 gig workers shows an urgent need for more adequate preparation of household finance in China.

First, there is intensified imbalance between income and expenditure. The proportion of respondents who choose "The household's daily expense exceeds its income in the past three months" (Cannot make ends meet) reaches 35.9% among the people with fixed wages and hits up to 44.4% with gig workers. Meanwhile, the phrase "living paycheck to paycheck" is no longer an appropriate label for some young people between 20 and

30 who have few family burdens. On the contrary, for the middle-aged from 30 to 50 years old, who are more likely to have elders and children to support, the proportion of respondents who cannot make ends meet is among the highest among regular-wage earners and gig workers. In addition, people with fixed wages can better balance their income with expenditure than gig workers, even when they are in the same income groups; for all age cohorts, the proportion of people who cannot cover daily spending is lower in the fixed-wage group than that in gig workers. These phenomena reveal the significance of cash flow predictability for income and expenditure management and gig workers' common financial challenges.

Second, financial budgeting is far from everyday practice. On average, merely 20% of respondents in either group engage in financial budgeting regularly in their daily lives. Even among those with graduate degrees and above, only 30% engage in financial budgeting on a regular basis.

Third, the debt management of the low-income group and gig workers faces more significant challenges. Since the pandemic outbreak, household debt has increased significantly in both absolute and relative terms; there are still many unaccounted private borrowing data, which, if taken into account, would make the household debt size even larger. Our survey data show that the proportion of households with a debt-to-asset ratio of 50% or more is one-quarter for both the fixed-wage and gig-worker samples.

Fourth, low- and middle-income groups tend to be disproportionately exposed to risks, and gig workers with higher income volatility are significantly less likely to have ample risk coverage. For both fixed-wage and gig workers, less than 20% of those earning less than 200,000 yuan per year have household insurance that protects them against most risks or are fully insured. At the same time, insurance coverage for higher-income gig workers with annual incomes of 300,000 yuan and above is much lower than that for the corresponding income groups with fixed wages. These groups urgently need a more comprehensive, suitable, affordable supply of inclusive insurance products.

Fifth, less-educated, low-income, middle- and young-aged groups are under the most financial stress. We calculated the proportion of "always feeling financial stress" or "often feeling financial stress" for the two sample groups and separated sub-groups

whose proportion of "always feeling financial stress" is higher than the average. The most stressed sub-groups can be summarized as less-educated, low-income, middle- and young-aged groups for both gig workers and fixed-wage groups.

Sixth, relying on saved or borrowed money for 3-month daily expenses during an emergency is difficult for half of the gig workers. Due to their relative disadvantage in income predictability and credit capacity, gig workers are significantly less able to save or borrow money for emergencies than their fixed-wage counterparts, with half finding it difficult to save or borrow money to support daily household expenses for three months or more. This also implies that job market activation and accessibility are critical to the financial resilience of gig workers. (Chapter 1 A Portrait of Household Finance)

In recent years, the world has seemed to be in a troubled time with heightened uncertainty. Besides the one-in-a-century pandemic, news of severe droughts and floods, extreme cold and heat, and raging wildfires have been heard from around the globe. In such a context, analyzing vulnerable households' risk characteristics, insurance demands, and supply status are of particular significance.

As a matter of fact, the resilience of households deserves special attention in both developed and developing countries. Research shows that more than 2 million adults in Australia once experienced significant financial vulnerability problems. A UK Financial Conduct Authority survey in February 2020 showed that 20% of adults were in a state of low financial resilience. Statistics Canada's survey in June 2021 showed that only 31.1% of households are financially resilient, with 16.5%, 22.8%, and 29.6% of extreme vulnerability, vulnerability, and near-resilience, respectively. When faced with risk, low- and middle-income households tend to suffer more in their means of living due to the lower availability of social resources, relatively less education, and lack of risk buffers.

Based on the different behaviors that lead to risks, we classify the risks into seven categories: healthcare, loss of life, loss of income, family relationships, legal disputes, financial losses, and other accidents. On this basis, we calculated the probability of occurrence of each type of risk, the sub-average potential payoff, and the expected value of a risk through data from the "Financial Diary" survey and summarized the following risk characteristics faced by the sample households. First, the overall probability of healthcare

risks is the highest, and the expected loss value of hospitalization is the highest. Second, the sub-average potential payoff of losing the primary source of income is the highest. Third, the high-frequency low-loss risks are the risk category taking up the greatest proportion of total expected loss value. Fourth, the distribution of household risks shows significant regional disparities. In accordance, the strategy to establish a risk protection system and improve insurance ecology also must consider geographical differences.

The risk-protection means of low- and middle-income households are minimal, due to their inadequate social security support and considerably high level of subjective financial exclusion that often hampers them from seeking help from formal financial institutions. Their resilience under risks is disproportionally insufficient, demonstrating a noticeable "Matthew effect" in the shock and defence of risks. Thus, building a risk protection system for low- and middle-income households must be regarded as a requirement for inclusive growth.

Currently, there are three major gaps in the insurance sector: the horizontal, the vertical, and the gap between supply and demand. The horizontal gap manifests as standout differences in horizontal comparisons, which include three aspects: between China and developed economies, among domestic regions, and between low- and middle-income families and the whole society.

The vertical gap is the significant difference between willingness to pay and actual losses. The vertical gap is most evident for two types of risks: health care and loss of major income sources, leaving the financial health of low-and-middle-income households vulnerable to shocks which they mostly deal with through limited household wealth and resources.

The gaps between supply and demand in the insurance sector for low-and-middle-income households are manifested in three aspects: first, the channel gap, i.e., the mismatch between households' risk protection means and supply capability of insurance companies; second, the information gap, i.e., the information and the cognitive gap between households and the insurance supply side; and third, the product gap, i.e., the apparent misalignment between product design and households' actual demand. (Chapter 2 Risks and Insurance of Households)

In the face of the evolution toward smaller and elder households, the situation of under-prepared household finance, and the uncovered risk exposure and insurance gaps, what framework should we adopt to look at household financial health? How can we measure it? Our data and case studies reveal that a household's income and expenditure, debt, insurance, and planning for the future are often intertwined to shape their financial situation. To better understand the financial status of households, we need a framework to examine and assess the overall level of the household's financial well-being and find the aspects that deserve to be noticed and improved.

Financial health refers to the state of the financial well-being of an individual or a household. It embodies that household resorts to financial instruments and appropriate financial methods to better manage its income and expenditure, debt, contingencies, risks, and assets, to meet daily and long-term financial needs, cope with financial shocks, and seize development opportunities. The concept of financial health enables us to systematically expand our understanding of inclusive finance, to quantitatively assess the effectiveness of inclusive finance development in terms of the outcomes of household finance, and to provide a basis for the high-quality development of inclusive finance.

The financial health measure was first proposed by international pioneers, including the US Financial Health Network (FHN), the US Center for Financial Inclusion (CFI) and the Consumer Financial Protection Bureau (CFPB). In recent years, this measurement framework has been continuously improved and refined through ongoing discussions among global partners and within the industry.

The framework widely adopted internationally consists of four dimensions: Day-to-day management (D) reflects a household's ability to break even within an income cycle; Opportunities (O) embody a household's ability to plan and act for the future based on life-cycle considerations; Resilience (R) represents a household's resilience to risks and ability to recover from shocks; Agency (A) is about a household's understanding of its current financial situation and confidence in its future financial situation. This framework is referred to as the DORA framework.

With the support of survey data, CAFI selected indicators with significant individual differences from nearly 20 questions from a previous indicator system, combined indicators

with multicollinearity, and finally proposed ten indicators that can effectively measure the respondents' financial health. The ten questions can reflect the specific measurement levels of the four dimensions under the DORA framework and better describe the financial health of the respondents. On this basis, CAFI proposes the CAFIFH Index, an index for measuring the financial health of households.

With this framework, CAFI's survey and analysis of a group of blue-collar workers show that they generally have lower financial health, fewer assets and poorer liquidity, weaker resilience, but a relatively better balance of payments and debt management and stronger confidence in the future. In another study focusing on women, they generally have higher overall financial health scores than men, better daily income and expenditure management and financial resilience, while men slightly outperform women in investing in the future and financial capability. (Chapter 3 Measuring Household Financial Health)

In addition to households, financial health has become prominently crucial for market entities with production and operation functions, especially for micro- and small business entities, including self-employed households (also known as individual-run industrial and commercial households), SMEs and other small-scale market players.

The financial health of micro- and small business entities is of great significance at this very moment. This large group creates "more than 80% of urban and town jobs" in China's economy, has grown in importance in the nation's economy over the past decade and has become vital for maintaining healthy economic growth. For the government, besides ensuring employment security, promoting financial health among micro- and small business entities aims to prevent the spillover effects and proliferation risks of loan defaults from dealing a blow to the asset quality of the financial sector and hence threatening systemic financial stability. For financial service providers, tracking the financial health status of this large group of customers (micro- and small business entities) and empowering them will help them repay their loans on time, purchase other products and services, and eventually activate a virtuous cycle featuring co-existence and shared prosperity through service costs reduction by extending their primary customers' life expectancy. Meanwhile, financial institutions could thus consolidate their asset quality and prevent possible adverse shocks caused by industry-level reputational risks to "prevent and

resolve financial risks while strengthening the financial safety net."

The similarity between the financial health of micro- and small business entities and that of households is that they both include concerns on daily operation and management, preparation against shocks, and future growth from a financial perspective. The difference is that, due to its large base supporting the national economy and the inclusion of many non-enterprise market entities requiring no bookkeeping by law (e.g., self-employed households), micro- and small business entities fall into the 'gap' between household and business sectors. They have a more profound influence on the overall economy than households and require a different perspective on financial health estimates from enterprises. Hence, quantifying financial health for certain micro- and small-business cohorts will involve dimensional breakdowns distinguished from enterprises.

We believe that the capabilities to manage day-to-day finance, plan ahead, and get access to capital are three essential qualities for the owner of a financially healthy entity. These capabilities also cover awareness, knowledge, attitude, behavior, and behavioral transformation environment. This means that capability is not merely endogenous existence but also embeds the difficulty of realizing behavior transformation within a certain social and economic environment.

From the perspective of incentive compatibility, the financial sector shall assume responsibility for undertaking their micro- and small-business clients' financial capability building. In contrast, the regulators' role is to provide a well-designed supervisory framework that includes incentives to motivate finance providers to engage in capacity-building. Furthermore, the government should provide free financial literacy programs for adults in remote locations who have not forged long-lasting connections with any financial institution to narrow the gap in financial capability among individuals caused by the differences in inherent or acquired endowments.

To enhance the stability and profitability of clients' businesses, Ping An Puhui ("Puhui") empowered micro- and small-business owners through a combination of online courses (e.g., "Business Tips") and offline counseling, which further strengthened the financial resilience of the latter. A survey conducted by its research institute during mid-2022 interviewing 2,072 micro- and small-business owners shows that experience with

Puhui's offline integrated empowerment coaching is associated with higher business-level profitability and solvency (Chapter 4 Financial Health of Micro- and Small Business Entities)

Part II. Mechanisms, Environment and Development Principles for Safeguarding Financial Health

How can financial health be safeguarded? From Chapter Five onwards, this report looks at the mechanisms, environment and development principles for safeguarding financial health. The following analysis shows that safeguarding financial health is not just a matter of survival for every microeconomic entity but also a question to be answered by all stakeholders.

The essence of guarding financial health remains an issue of financial Capability Building. However, it is not the same old story: financial capability building in the context of inclusive finance aims to reduce the financial exclusion of traditional financial institutions and address the issue of access to financial products and services, which is to treat the existing "diseases". In contrast, capability building under the concept of financial health focuses on the efficacy of "immunity," which is to prevent potential "diseases" with a focus on preparing for day-to-day operations, unexpected shocks, and long-term growth.

Financial capability building under the concept of financial health lies in shaping a three-level system of capabilities. The first is the liquid asset allocation capability, a basic level to maintain day-to-day operation; the second is the risk management capability, focusing on immune effectiveness; and the third is future planning and development capability, which strives to maximize financial well-being and sustainability.

Enhancing financial capability is complex and arduous. In the four-stage closed-loop process of awareness building, capability development, exploration in practice and evaluation and feedback, every microeconomic entity is the first responsible subject that generates the main endogenous driving force. In contrast, all interveners from policymakers, the financial supply side and other social groups offer external impetus. Internal factors are the root cause of changes, while external factors are the conditions for change. The fundamental reason financial capability building is in a predicament is the

lack of the endogenous drive, while the function of the external interventions must also be improved and strengthened.

Establishing a multi-player mechanism of collaboration among governments at all levels, financial service providers, social organizations, and MBVGs themselves is tantamount to setting up a "list of actions" for each. As a result, they can effectively play their roles and functions after their responsibilities have been clarified, and form a cooperative pattern featured by joint participation, positive interaction, complementary strengths and risk sharing.

In such a mechanism, the government and regulatory authorities ensure the institutional provision and play a guiding role; financial service providers conduct resource allocation and play the role of a market; social organizations offer professional services and play a supporting role; MBVGs themselves seek endogenous development and play an active role. (Chapter 5 The Importance and Mechanisms of Capability Building)

The financial health of economic entities is not just a financial issue; it occurs in everyday lives, in the process of making a living, and in their interaction with financial service providers, employers, and government departments. Once financial health goes wrong, economic entities usually face a series of chain reactions, with the reasons for their occurrence and corresponding solutions interlinked. Supporting consumers' financial health requires specific and diverse resources to address both their urgency and root causes.

Internationally, the business models integrating customer financial health outcomes have moved from the stage of concept advocacy to application and promotion, which are embedded with suppliers' visions, capabilities, products, and outcomes, exploring working mechanisms that help customers achieve financial health.

Why must financial service providers pay attention to this kind of business model? The reasons are divided into four levels as follows.

Firstly, from the perspective of socially responsible investment, we can view a financial service provider's action to enhance the financial health of its customers as the realization of its social (S) values. While any business can have its social objectives and values, the social values of financial service providers are exceptional - whether and how financial products and services are used are directly related to the allocation of financial

resources and the well-being of consumers.

Secondly, suppliers have the potential to generate immediate business value when helping customers maintain and enhance their financial well-being. Research shows that improving customers' financial well-being is tantamount to increasing an institution's return on investment (ROI), which does not have to be a long-term project. It is noteworthy that loan-related projects can yield benefits shortly after implementation. In addition, a survey targeting bank customers reveals that guarding customers' financial well-being boosts their satisfaction and loyalty and leads more customers to recommend the bank to their friends and family or purchase additional products and services.

Thirdly, the focus should be placed on the business models that incorporate customer financial health outcomes because financial services providers are true professionals in business and technology. On the one hand, financial service providers should leverage their comparative advantages; on the other hand, the alignment of financial service providers' vision, culture and operations with the customers' financial health will help reduce crises brought by interest conflicts among institutions, practitioners, and customers.

Last but not least, financial health depends not only on the interaction between customers and financial service providers in traditional financial business but also, to a large extent, on the social welfare system - including social security, insurance and support resources from governments and employers. Financial service providers, as the actual frontier players in the business and technology sectors, can offer solutions to government departments and employers and have the potential to enhance the breadth, depth, and efficiency of the whole system.

Case studies on social enterprises, giant banks and FinTechs show that consumers' financial health is not merely a financial or behavioural-psychological issue for themselves, their families or their businesses, but also directly related to the business outcomes and growth potential of financial service providers. Financial service providers can fully use digital technology and behavioural research findings to integrate consumers' financial health outcomes into their business models through self-built systems or outsourced services.

As financial business models increasingly incorporate customers' financial health

outcomes and effectively connect employers and government welfare systems, the financial ecosystem is expected to become a "reinforced net" for socio-economic security. (Chapter 6 Financial Health and Supplier Empowerment - Cost or Opportunity?)

The inclusiveness of the financial system depends not only on whether there is an under-supply or a high threshold, but also on how the financial system protects consumers and provides them with the confidence and means to make informed decisions without having to be financial experts. The goal of inclusive financial and economic development will be difficult to achieve if some of MBVGs' legitimate financial needs cannot be met due to the absence of consumer protection and the channels for them to remain resilient and pursue growth being blocked.

Financial activities have always been in the historical process of constant technological and cultural changes. The financial sector must embrace technological advancements and incorporate cutting-edge psychological and behavioral research development. Exploring better methods and pathways for financial consumer protection with only the efforts of financial professionals will not be enough. Financial consumer protection departments, constrained by regulatory resources, could devote more of their limited resources to more defined matters, such as the research on the expected outcomes in financial consumer protection, and let financial service providers, who are better equipped with business and innovative technological capabilities, explore and achieve the expected outcomes. This solution of beginning with the end coincides with the outcome-based paradigm of financial consumer protection.

The outcome-based financial consumer protection paradigm refers to measuring regulated entities' financial consumer protection performance based on outcomes rather than their behaviors or implementation. Internationally, the outcome-based financial consumer protection paradigm is sometimes referred to as the performance-based financial consumer protection paradigm.

Financial health is a desired "outcome" of financial consumer protection, particularly for households and micro and small businesses that are limited by economic resources and show vulnerability. Both domestic and international financial consumer protection practices have begun to pay attention to financial health.

As seen in international experience, the key advantages of outcome-based financial consumer protection are the concept of "beginning with the end" solution, which derivates needed regulatory and industry practices from desirable outcomes such as financial health and enables full play of the comparative advantages of market players. However, the report also introduces challenges that should not be underestimated. Accordingly, the choice and shift in regulatory paradigm can be gradual or partial, and the various fields of the industry can take different paces of action.

As the development of inclusive finance enters a phase of high-quality development in pursuit of financial health and shared prosperity, it is opportune to include financial health outcomes in the financial regulatory framework. Regulators responsible for financial consumer protection must pay particular attention to the positioning of priority tasks and the efficient allocation of regulatory resources and guide innovative industry practices that improve the financial health of their customers. (Chapter 7 Financial Consumer Protection Based on Financial Health Outcomes)

Based on the analysis and discussion throughout the book, Chapter Eight proposes development principles for safeguarding financial health, intending to provide some reference for relevant policy, regulation, and industry development.

First, establish measurement indicators and monitoring systems and conduct ongoing research on financial health. For practices to be effective, measurement indicators and monitoring systems on financial health are essential to provide diagnostic tools for all relevant market players, including individuals, households, businesses, financial service providers, governments, and regulators. On this basis, research questions such as what factors affect the financial health of different groups and what can be done to improve financial health more effectively can be further explored by businesses and academia in detail.

Second, integrate financial health into the policy framework of inclusive finance. This can be achieved in three ways. Firstly, financial health should be included as an intermediate target for developing inclusive finance. Clarifying the importance of financial health in inclusive financial policy objectives will remind governments at all levels, regulators, and industry practitioners that financial inclusion is not the end of financial

development. Both the starting and ending points are to enhance the level of well-being of our micro-economic entities. The second way is to monitor financial health outcomes in financial consumer protection. Regulators responsible for financial consumer protection can dynamically define a framework of financial health outcomes in different fields according to the context of the times and needs of the stakeholders, pay particular attention to the efficient allocation of regulatory resources and the corresponding positioning of critical tasks, and make full use of digital technology and behavioral science findings for assessment and supervision. They shall guide financial service providers to include positive consumer outcomes such as financial health in governance as development strategies and corporate culture, encourage innovative business practices that boost customers' financial health, enhance dialogue and exchange between stakeholders such as regulators, suppliers, demanders and service providers or technical support institutions, so as to develop industry initiatives to promote financial health and jointly address the unknown challenges in financial development and financial consumer protection. The third way is to embed structures, contents and methods that enhance financial health into financial education. By clarifying the importance of financial health in financial education, governments, regulators, financial institutions, employers, schools, and communities can jointly raise public awareness of financial health and continuously develop learning resources and support tools to improve financial health.

Third, promote the integration of customer financial health outcomes into financial business models. Compared to the long history of human civilization, the modern financial system is in its infancy but has so far stormed through several global or regional crises. Promoting the integration of customer financial health outcomes into financial business models not only helps realize the social responsibility of financial service providers and reduce market failures resulting from interest conflicts between institutions and their customers but also is an effective way for providers to improve their competitiveness and differentiation.

Fourth, incorporate financial health holistically in constructing a socio-economic safety net. The factors affecting the financial health of economic entities go far beyond the scope of the financial sector. Thus, the financial industry must cooperate with other sectors

to integrate and align social resources to promote the MBVGs' financial health and build a more comprehensive and resilient socio-economic safety net with improved resource efficiency.

Fifth, continually participate in international dialogues. Active participation in the global discussions on financial health will not only help China learn from others' strengths, shore up their stretches, and refine policy tools and methods but also enhance understanding of the dynamics in the microeconomic and financial development of various countries, and incur reflections on the innovation dynamics and risk signals behind phenomena. These actions could help policymakers grasp opportunities, spot potential risks for China's economic and financial development in a timely manner, and continually strengthen the financial sector's resilience and even the economy and society. (Chapter 8 Development Principles for Safeguarding Financial Health)