G20 High-Level Principles for Digital Financial Inclusion

GPFI Global Partnership for Financial Inclusion

G20 2016 CHINA

ACKNOWLEDGEMENTS

The GPFI Co-Chairs would like to acknowledge and thank the following contributors to this document:

The representatives from G20 countries, non-G20 countries, international organizations and private sector who provided inputs, advice and comments. The G20 Finance Ministers and Deputies, and Central Bank Governors and Deputies, provided important guidance through their meetings in Sanya, Shanghai, Washington, D.C., Xiamen, and Chengdu.

Patron of the GPFI: Her Majesty Queen Máxima of the Netherlands, United Nations Secretary-General's Special Advocate for Inclusive Finance for Development

Chair of the Technical Team: Dr. Tianqi Sun (People's Bank of China)

Co-Chair of the Technical Team: Douglas Pearce (World Bank Group)

Members of the GPFI Digital Financial Inclusion Technical Team, which drafted the High-Level Principles:

- Alliance for Financial Inclusion: *Norbert Mumba, Robin Newnham, Kennedy Komba*
- Better Than Cash Alliance: *Ruth Goodwin-Groen (core drafting team), Ros Grady (consultant, core drafting team)*
- Child and Youth Finance International: *Bianca Isaincu*
- Consultant Group to Assist the Poor: *Timothy Lyman, Ivo Jenik*
- International Fund for Agricultural Development: *Pedro de Vasconcelos, Michael Hamp*
- International Finance Corporation: *Martin Holtmann, Momina Aijazuddin (core drafting team), Loretta Michaels (consultant, core drafting team)*
- Organisation for Economic Co-operation and Development: *André Laboul, Flore-Anne Messy*
- People's Bank of China: *Tiandu Wang*
- SME Finance Forum: *Matthew Gamser*
- World Bank: *Douglas Pearce, Douglas Randall (core drafting team), Lois Quinn, Solvej Krause (consultant, analyst)*

GPFI Affiliated Partners and Industry Bodies:

- Bill and Melinda Gates Foundation
- GSMA
- Institute of International Finance

Tianqi Sun
GPFI Co-Chair (China)

Katharina Spiess
GPFI Co-Chair (Germany)

Aysen Kulakoglu
GPFI Co-Chair (Turkey)

Preamble

The Group of Twenty (G20) recognizes the key role of financial inclusion in helping to move towards an Innovative, Invigorated, Interconnected and Inclusive World Economy. In this decade, digital finance has already successfully improved access to finance by women, the poor, the young, the elderly, farmers, small and medium enterprises (SMEs) and other underserved customer segments in both G20 and non-G20 countries. Successful business models of digital financial inclusion and new regulation and supervision approaches have emerged worldwide.

Digital financial inclusion promotes efficient interconnection among participants in economic activities. Leveraging the opportunities that technology offers to reduce costs, expand scale, and deepen the reach of financial services will be critical to achieving universal financial inclusion. In 2016, the G20 has the opportunity to shape and accelerate the use of digital mechanisms for improving financial access and inclusion. The G20 can help catalyze and inform country-led actions, with significant potential for social and economic impacts at the household, community, national and international levels.

The G20 recognizes that it is crucial to take concrete and significant actions to advance digital financial inclusion under the guidance of the G20 High-Level Principles for Digital Financial Inclusion and of international standard-setting bodies' (SSBs) principles supporting financial inclusion. Based on the specific circumstance of each country, G20 members aim at taking concrete actions to promote digital financial inclusion at their own country level.

It is also very important to strengthen international cooperation and peer exchange and learning for digital financial inclusion. The G20 is committed to further help low income developing countries (LIDCs) to take action to advance digital financial inclusion in the spirit of the 2030 agenda.

"We endorse the G20 High-Level Principles for Digital Financial Inclusion, the updated version of the G20 Financial Inclusion Indicators, and the implementation frameworark of the G20 Action Plan on SME Financing, developed by the Global Partnership for Financial Inclusion (GPFI). We encourage countries to consider these principles in devising their broader financial inclusion plans, particularly in the area of digital financial inclusion."

—Communiqué of the G20 Finance Ministers and Central Bank Governors Meeting
23–24 July 2016, Chengdu, China

G20 High-Level Principles for Digital Financial Inclusion

The G20 stands at an unprecedented time when our leadership has the potential to drive the growth of inclusive economies by promoting digital financial services. Two billion adults globally do not have access to formal financial services and are excluded from opportunities to improve their lives. While tremendous gains in financial inclusion have already been achieved, digital financial services, together with effective supervision (which may be digitally enabled), are essential to close the remaining gaps in financial inclusion.

Digital technologies offer affordable ways for the financially excluded—the majority of whom are women—to save for school, make a payment, get a small business loan, send a remittance, or buy insurance. The 2010 G20 Principles for Innovative Financial Inclusion spurred initial efforts and policy actions. These 2016 High-Level Principles for Digital Financial Inclusion build on that success by providing a basis for country action plans reflecting country context and national circumstances to leverage the huge potential offered by digital technologies.

PRINCIPLE 1: Promote a Digital Approach to Financial Inclusion

Promote digital financial services as a priority to drive development of inclusive financial systems, including through coordinated, monitored, and evaluated national strategies and action plans.

PRINCIPLE 2: Balance Innovation and Risk to Achieve Digital Financial Inclusion

Balance promoting innovation to achieve digital financial inclusion with identifying, assessing, monitoring and managing new risks.

PRINCIPLE 3: Provide an Enabling and Proportionate Legal and Regulatory Framework for Digital Financial Inclusion

Provide an enabling and proportionate legal and regulatory framework for digital financial inclusion, taking into account relevant G20 and international standard setting body standards and guidance.

PRINCIPLE 4: Expand the Digital Financial Services Infrastructure Ecosystem

Expand the digital financial services ecosystem—including financial and information and communications technology infrastructure—for the safe, reliable and low-cost provision of digital financial services to all relevant geographical areas, especially underserved rural areas.

PRINCIPLE 5: Establish Responsible Digital Financial Practices to Protect Consumers

Establish a comprehensive approach to consumer and data protection that focuses on issues of specific relevance to digital financial services.

PRINCIPLE 6: Strengthen Digital and Financial Literacy and Awareness

Support and evaluate programs that enhance digital and financial literacy in light of the unique characteristics, advantages, and risks of digital financial services and channels.

PRINCIPLE 7: Facilitate Customer Identification for Digital Financial Services

Facilitate access to digital financial services by developing, or encouraging the development of, customer identity systems, products and services that are accessible, affordable, and verifiable and accommodate multiple needs and risk levels for a risk-based approach to customer due diligence.

PRINCIPLE 8: Track Digital Financial Inclusion Progress

Track progress on digital financial inclusion through a comprehensive and robust data measurement and evaluation system. This system should leverage new sources of digital data and enable stakeholders to analyze and monitor the supply of—and demand for—digital financial services, as well as assess the impact of key programs and reforms.

These eight principles are based on the rich experience reflected in G20 and international standard-setting bodies' standards and guidance. They also recognize the need to support innovation while managing risk and encouraging development of digital financial products and services.

Women agents of a microcredit institution show their daily collection which is recorded in an electronic device.
Photo by Sudipto Das

Rationale For G20 High-Level Principles for Digital Financial Inclusion

The *G20 High-Level Principles for Digital Financial Inclusion* (Principles) are a catalyst for action for the G20 to drive the adoption of digital approaches to achieve financial inclusion goals, as well as the related G20 goals of inclusive growth and increasing women's economic participation. The Principles recognize the urgency of providing the financially excluded and underserved with high-quality and appropriate financial products and services. The Principles also recognize the need to use digital technologies to achieve this goal, where possible. Underserved groups—which typically include poor people, women, youth, and people living in remote rural areas and sometimes ethnic minorities—require special attention. Vulnerable groups such as migrants, elderly people, and people with disabilities may also need a particular focus. Moreover, some excluded and vulnerable groups may not have access to digital financial services or may be reluctant to adopt them and this risk needs to be proactively managed and addressed.

"Digital financial inclusion" is an evolving phenomenon. The Principles rely on the explanation in the 2016 Global Partnership for Financial Inclusion (GPFI) report on *Global Standard-Setting Bodies Financial Inclusion: The Evolving Landscape* (GPFI White Paper). It states: "*'Digital financial inclusion' refers broadly to the use of digital financial services to advance financial inclusion. It involves the deployment of digital means to reach financially excluded and underserved populations with a range of formal financial services suited to their needs, delivered responsibly at a cost affordable to customers and sustainable for providers.*"[1]

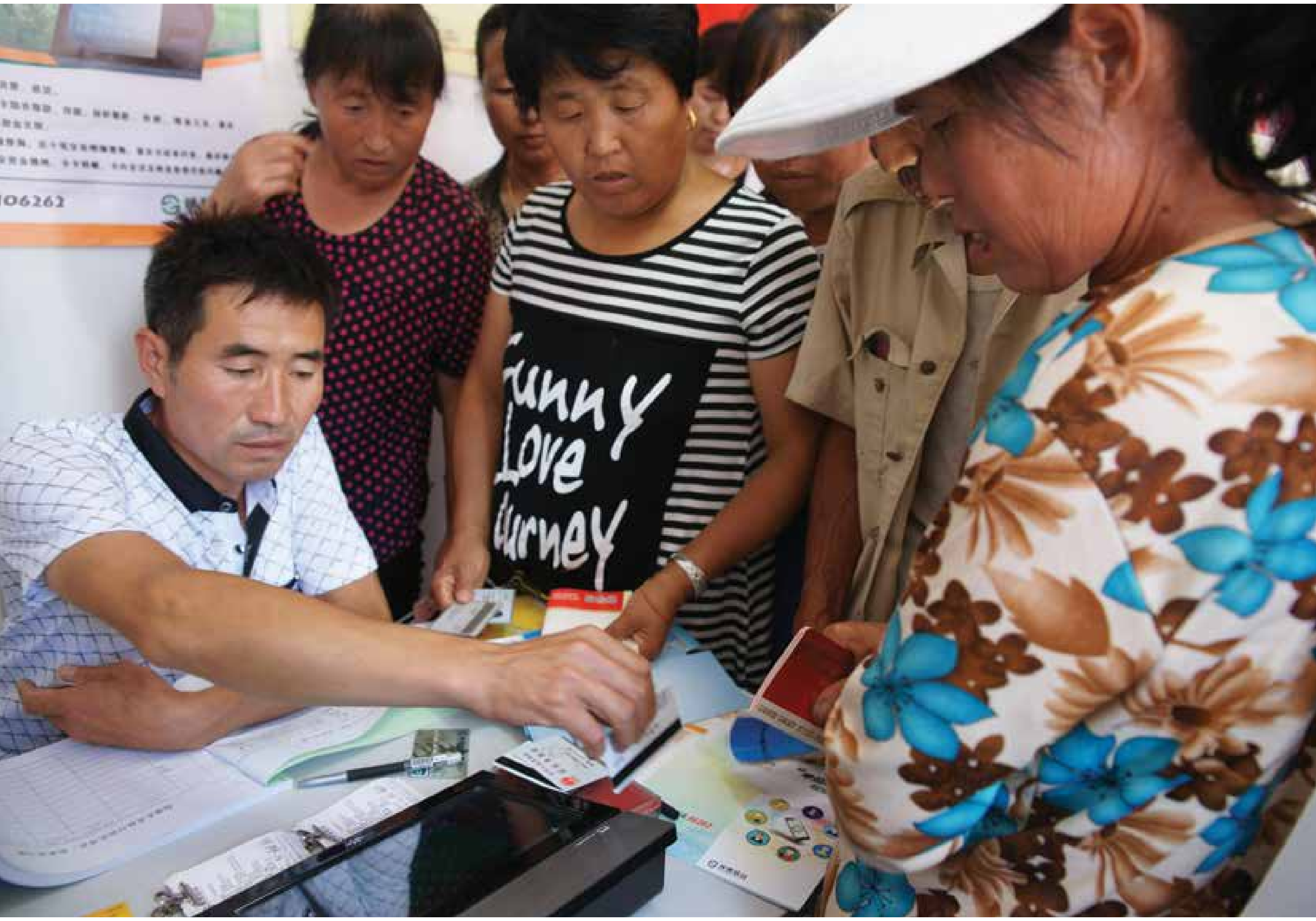
The term *"digital financial services"* covers financial products and services, including payments, transfers, savings, credit, insurance, securities, financial planning and account statements. They are delivered via digital/electronic technology such as e-money (initiated either online or on a mobile phone), payment cards and regular bank accounts.[2]

The Principles build on, and complement, the 2010 G20 Principles for Innovative Financial Inclusion.[3] They also reflect the ongoing rapid evolution in digital financial services and synthesize key aspects of the substantive guidance provided since 2010 by the G20, the GPFI, and international standard-setting bodies. Importantly, the Principles reflect the realization that access to financial services alone is insufficient. Rather, fostering widespread usage and understanding of responsible digital financial services is critical to individual, national and global welfare. The Principles also recognize the need to actively balance the promise of digital innovation with the new risks that rapidly evolving technology introduces.

An effective way to implement the Principles is through applicable national strategies and related country action plans, or other country level actions, which take into account country context and national circumstances.

A farmer uses a digital money transfer service in Qinghai Province, China.
Photo by Yunwen Li

G20 High-Level Principles for Digital Financial Inclusion—*In Action*



Women using a bank agent with a digital payment service in the rural area of Shaanxi Province, China.
Photo by Bo Wang

PRINCIPLE 1

PROMOTE A DIGITAL APPROACH TO FINANCIAL INCLUSION

Promote digital financial services as a priority to drive development of inclusive financial systems, including through coordinated, monitored, and evaluated national strategies and action plans.

Policy leadership and coordination across the public and private sectors are critical for expanding financial inclusion. It is important to lead by example and promote the use of innovative digital technologies to reach the financially excluded and underserved. Both steps are necessary to expand access, ownership and usage of a broad range of financial services and to reach financial inclusion targets.[4] This can be achieved through a national strategy with a clear vision and a concrete action plan that is developed in a consultative manner. It should be well coordinated, robustly monitored and evaluated, and reflect the roles of all relevant public and private-sector stakeholders. As noted in the Rationale, it is also important for stakeholders to recognize that excluded and vulnerable groups may not have access to digital financial services or may be reluctant to adopt them. This risk should be proactively managed and addressed.

"*Public and Private Sector Commitment*" is the first of the seven Guiding Principles in the 2016 *Payments Aspects of Financial Inclusion Report* from the joint task force of the Committee for Payments and Markets Infrastructure (CPMI) and the World Bank Group (PAFI Report and PAFI Guiding Principles).[5] It highlights the need for active, well-resourced, and well-coordinated actions to promote the transition from cash and checks to digital payments. The 2014 GPFI Report on "*The Opportunities of Digitizing Payments*[6]" and the 2015 GPFI Report on "*Digital Financial Solutions to Advance Women's Economic Participation*"[7] also emphasize the need for active government leadership and action in advancing digital financial services.

Examples of actions to promote digital financial inclusion include, but are not limited to, the following:

- Ensure that relevant national strategies and action plans reflect new digital models for achieving digital financial inclusion policy goals and encourage their use. They should be evidence-based and have specific objectives, measurable outcomes and clear lines of accountability, while taking account of country context and national circumstances.

- Commit to effective coordination between policymakers, central banks, financial supervisors, relevant regulatory authorities, financial ombudsmen, and others with responsibilities related to digital financial services, including telecommunications, competition, and consumer protection agencies.

- Maintain active dialogue and coordination among all key stakeholders in the digital financial ecosystem, including government, the private sector and civil society, to ensure shared understanding of digital financial inclusion goals and market conduct expectations.

- Digitize, where feasible, large-volume, recurrent payments from government agencies to consumers and small businesses. Further, provide facilities and incentives for payments to and from governments to be made digitally rather than in cash (for example, through lower fees).[8]

- Encourage and facilitate both the for-profit and the non-profit private sector to make large-volume, recurrent payments digitally rather than in cash (for example, payrolls, social benefit transfers and humanitarian aid, as well as remittances).[9]

- Encourage industry: (i) to adopt customer-centric product design approaches that focus on customer needs, preferences, and behaviors and facilitate the uptake and usage of digital financial services among the financially excluded and underserved; (ii) to make available low-cost, basic transaction accounts for the financially excluded and underserved that can enable digital payments and provide a safe place to store value.[10] Such encouragement should include clear guidance on the legal flexibility and applicability of such accounts for underserved groups, such as youth.

- Eliminate barriers to development and uptake of digital financial services—including easier access and usage of the Internet and mobile devices—as well as reform tax regimes and import restrictions that hinder the widespread uptake of new technologies.

- Work with other national authorities to remove barriers to, and promote, the smooth provision of cross-border financial services to promote digital financial inclusion.

PRINCIPLE 2

BALANCE INNOVATION AND RISK TO ACHIEVE DIGITAL FINANCIAL INCLUSION

Balance promoting innovation to achieve digital financial inclusion with identifying, assessing, monitoring and managing new risks.

The speed of innovation in digital financial services (including financial technology innovations known as "*FinTech*"[11]) over the last several years is breathtaking and holds the promise of vastly expanding the scope, reach, and sophistication of financial service design and delivery. It also offers the potential of dramatically lowering costs. Policymakers should encourage and nurture such innovation to harness the many benefits it enables, particularly for financially excluded and underserved groups. They also should recognize that rapid digital innovation introduces new risks—both individual and systemic—that need to be identified and addressed effectively and in a timely fashion. This recognition is necessary to build cyber resilience into financial markets and safeguard the financial system from illicit activities.[12]

The PAFI Report, the GPFI White Paper, and other international standard setter guidance all acknowledge that key risks may develop, or increase, through the use of digital technologies and that they need to be effectively assessed and managed.[13] Digital financial risks come in many forms. They may arise from a combination of existing and new providers, new digital technologies, reliance on agent networks, the bundling of new products across multiple service providers, and low levels of financial literacy among consumers. Digital technology risks can appear across the entire digital financial services and markets value chain, including at the operational, settlement, liquidity, credit, consumer, and anti-money laundering and combating the financing of terrorism (AML/CFT) levels. Digital technology also enables the generation and analysis of vast amounts of customer and transaction data ("Big Data"), which introduces its own set of benefits and risks that should be managed.

Examples of key actions to balance innovation and risk around digital financial inclusion include, but are not limited to, the following:

- Encourage digital innovation through market-based incentives and public-private partnerships to reach financially excluded and underserved groups in particular.
- Encourage industry to develop secure and simple user interfaces for digital financial services that make them easier to use and minimize the risk of mistaken transactions and unauthorized or illegal use—especially in relation to the needs of vulnerable groups.
- Work with industry and risk-management experts to research, identify, and assess the risks arising from the use of new digital technologies, and ensure they are effectively monitored and managed.[14]

- Establish regular knowledge-sharing mechanisms between regulators and service providers along with clear communications channels.
- Encourage regulators and industry to establish risk-management strategies that reflect the specific conditions and legal frameworks of the relevant jurisdictions. For example, this might include local Know Your Customer rules to effectively manage and mitigate identified risks rather than de-risk entire categories of customers or accounts. Regulatory guidance should also stress the importance of financial inclusion as a factor in supporting AML/CFT controls. This guidance should include clear advice about the flexibility of relevant regulations, including for the purposes of applying a risk-based approach.
- Encourage service providers to use multiple sources of digital data for evaluating consumer and small and medium enterprise (SME) creditworthiness. This approach should include appropriate safeguards while facilitating development of such data and ensuring a fair, non-discriminatory approach to its use. Examples of such alternative data sources include mobile phone use, utility payments, data enterprise registration information, and other information that can complement traditional loan repayment or insurance-related data.
- Collaborate with industry to explore the benefits that digital fiat currencies may offer to financial inclusion.
- Explore new methods for determining emerging technology risks, such as stress tests for potential cyber-related crime.

PRINCIPLE 3

PROVIDE AN ENABLING AND PROPORTIONATE LEGAL AND REGULATORY FRAMEWORK FOR DIGITAL FINANCIAL INCLUSION

Provide an enabling and proportionate legal and regulatory framework for digital financial inclusion, taking into account relevant G20 and international standard setting body standards and guidance.

If digital financial inclusion is to develop and expand in a sustainable way, providers and other market participants need a legal and regulatory framework that is: predictable, risk-based and fair; allows for new entrants; and does not impose excessive, non-risk-based compliance costs. In particular, the framework should reflect a careful assessment of the relevant risks from market, provider and consumer perspectives; provide clear market participation rules; establish a fair, and open, level playing field for market participants; and ensure a framework that can be effectively and efficiently supervised with the requisite supervisory capacity and resources.[15] The willingness to innovate and invest will be undermined without such a legal and regulatory approach, as will be the potential opportunities for financially excluded and underserved groups to access financial services. In addition, risks may not be adequately addressed.

The overall policy environment and regulatory framework should reflect a proportionate and enabling approach to regulation. This is necessary for countries to fully realize their digital financial inclusion goals, as well as the associated economic growth.[16] The recent GPFI White Paper describes the proportionality approach as involving "*. . . the balancing of risks and benefits against costs of regulation and supervision to the regulator, the supervisor and to the regulated and supervised institutions*."[17] However, as noted in the GPFI White Paper, international standard setters have developed the concept of "*proportionality*" in varying ways.[18]

The legal and regulatory framework also needs to reflect the "*widespread understanding that financial inclusion, stability and integrity and consumer protection are not just compatible, but mutually reinforcing*" (G20 Financial Inclusion Action Plan 2014). The alignment between these objectives is particularly important in connection to digital financial inclusion given the rapid development of new business models, products, distribution channels, and digital technologies.[19]

It is equally important that supervisors of the legal and regulatory framework relevant to digital financial inclusion have the skills, capacity, and resources to effectively supervise relevant entities and the market generally. This should include the ability to understand the digital technologies involved, innovations in digital financial services markets, evolving risks, and markets. Supervisors should also be able to leverage new technologies to conduct their supervisory activities in an efficient and effective manner.[20] A risk-based approach to compliance and oversight is also needed for a proportionate approach to supervision.

Examples of key actions to develop an enabling and proportionate legal and regulatory framework include, but are not limited to, the following: [21]

- Implement a framework for digital financial inclusion that provides for market participation (including entrance requirements), prudential requirements where appropriate (e.g., for capital and liquidity), market conduct and integrity, consumer protection, AML/CFT safeguards, and insolvency. Such a framework should be technology-neutral and flexible enough to cover both new and existing service providers and product innovations (for example, through a broad definition of regulated digital financial providers and services which can be amended over time).
- This framework should also allow for piloting innovative new delivery channels, products and services, and business models, without having to immediately comply with all regulatory requirements. At the same time, such a framework should ensure fair and balanced oversight, maintaining obligations to meet AML/CFT requirements consistently with international standards, while ensuring that no participant in the pilot obtains an undue advantage. And the framework should balance the risks of digital financial inclusion with the costs of supervision and compliance.
- Promote competition and a fair, and open, level playing field for digital financial inclusion by ensuring that providers of similar digital financial services have similar rights and responsibilities regardless of their institutional type and the technology used. There should also be clear and consistent criteria for market participation (including for new and foreign entrants) and for offering specific types of digital financial services. This framework also should ensure that similar risks are regulated in a similar manner and that an appropriate risk-based approach to supervision is developed.
- Assess all areas of national and local law relevant to digital financial inclusion to identify and address areas of overlap or contradiction as well as any gaps, barriers to access, or other obstacles. These areas may include: financial services, payments systems, telecommunications, competition, discrimination, identity, barriers to excluded and underserved groups accessing digital financial services, and responsibility for agents and employees.
- Ensure a clear delineation of responsibilities among regulators for the legal and regulatory framework relevant to digital financial services and for digital financial inclusion in general.
- Build the capacity of supervisors of the legal and regulatory framework for digital financial inclusion to understand digital technologies (for example through local and international training and peer learning programs) and encourage the use of digital technologies, as appropriate, to improve their processes and capacity for supervision.
- Draft laws, regulations, and guidance relevant to digital financial inclusion in a plain and easy to understand manner, and make them easily available to industry and consumers (for example, through a publicly accessible website and other accessible channels of communication).
- Establish a sustainable mechanism among G20 members for regular communication and information exchange on digital financial inclusion legal and regulatory frameworks and related supervisory approaches, including risk management strategies and experiences.

PRINCIPLE 4

EXPAND THE DIGITAL FINANCIAL SERVICES INFRASTRUCTURE ECOSYSTEM

Expand the digital financial services ecosystem—including financial and information and communications technology infrastructure—for the safe, reliable and low-cost provision of digital financial services to all relevant geographical areas, especially underserved rural areas.

Policymakers, in partnership with the private sector, should prioritize the development of digital infrastructure as one of the foundations of their economic and social development plans.[22] Both public and private sectors increasingly rely on digital networks for the delivery of important public and private services, from health and education to communications and financial services. Particularly important to the establishment of a digital financial services ecosystem is the expansion of robust, safe, efficient and widely accessible retail payments and ICT infrastructure that provides all users with convenient, reliable points of service for sending and receiving payments and conducting other digital financial services. To the extent feasible, such infrastructure should reach the "last mile" of rural areas as well as serve major urban areas and key transit corridors. PAFI Guiding Principle 3 discusses the need for such infrastructure (including the mobile/data connectivity and power underpinning such systems).[23]

The use of digital platforms that are instantaneous and accessible to all service providers has the potential to significantly reduce the cost of digital transactions for both service providers and consumers. Such platforms potentially can sustainably process the small transaction sizes that dominate the bulk of the world's financial transactions. As such, they can change the business case dynamic in ways that encourage innovation and new players to enter the market. Open digital platforms can also improve interoperability and widen consumer choice by expanding the network of available access points for consumers and service providers to conduct transactions and provide cash-in/cash-out services. Such access points would include not just branches and agents, but also ATMs, points of service (POS) devices, mobile phones and Internet applications.

Examples of key actions to expand a country's digital financial ecosystem include, but are not limited to, the following:

- Collaborate across government agencies to ensure the basic infrastructure that supports digital financial inclusion, including telecommunications and power, is in place where needed.
- Expand broadband network/data coverage into underserved areas, using policy mechanisms such as innovative public-private partnerships, incentives for shared infrastructure programs, and targeted procurement policies.

- Modernize and expand the retail payments system infrastructure and establish open payments platforms linked to countries' clearing and settlement systems and that provide safe and efficient access to banks, non-bank financial institutions, and emerging service providers.[24]
- Encourage service providers to enable interoperability of access points and channels, further expanding the reach of consumer service access points and the overall convenience to holders of transaction accounts.
- Leverage widespread government channels—such as post offices, where applicable—for distributing digital financial services.
- Collaborate with industry to explore the potential of distributed ledger technology to improve the transparency, efficiency, security, and reach of wholesale and retail financial infrastructure, allowing for appropriate risk mitigation and safeguards.[25]
- Support the development of moveable collateral registry systems that take into account multiple forms of collateral, better reflecting the daily lives of users and broadening the base for a robust SME finance sector.[26]
- Promote the establishment and responsible use of flexible, dynamic credit reporting systems modeled on best practices as outlined by the *International Committee on Credit Reporting* (ICCR). These include relevant, accurate, timely and sufficient data, collected on a systematic basis from all reliable, appropriate and available sources, and retained for a sufficient time period.[27] The overall legal and regulatory framework for credit reporting should be clear, predictable, nondiscriminatory, proportionate, and supportive of consumer data protection and privacy rules.
- Encourage the use of innovative data sources in credit reporting systems such as data on utility payments, mobile airtime purchases, as well as use of data on digital wallet or e-money accounts and e-commerce transactions. This should be done while recognizing consumer data protection and privacy rules, and could be assisted by the customer identification systems referred to in HLP 7.

PRINCIPLE 5

ESTABLISH RESPONSIBLE DIGITAL FINANCIAL PRACTICES TO PROTECT CONSUMERS

Establish a comprehensive approach to consumer and data protection that focuses on issues of specific relevance to digital financial services.

The need for responsible digital financial practices has been widely acknowledged.[28] A sound consumer and data protection framework is essential to building trust and confidence in the acquisition and ongoing use of digital financial services, especially for consumers with limited financial literacy or the resources to absorb losses. It is especially important in a digital financial inclusion environment with rapid innovation in technology, services, providers, and distribution channels and where the volume, velocity, and variety of personal data processed increases both consumer access and risks.

Financially excluded and underserved groups, in particular, face diverse consumer risks specific to digital financial services. They include: a lack of safeguards for funds held by non-prudentially regulated providers; limited disclosure of fees, terms and conditions (for example, on a mobile phone); insufficient agent liquidity and agent fraud; confusing user interfaces that raise the risk of mistaken transactions; inadequate security of systems; irresponsible lending through digital channels; system downtime that prevents access to funds; unclear or limited recourse systems; and failure to keep personal data confidential and secure. Underserved groups also face a significant risk of discrimination.

A consumer protection framework must also take into account the volume, variety, and velocity of personal data used and processed for digital financial inclusion purposes, as well as the data's value. This includes identification, transaction, account, mobile airtime purchases, and social media data. This data can improve access, products and customer service and provide public information about financial inclusion levels. However, its use can also harm consumers (including if data is used to exclude them from the financial system).

Examples of key actions to support responsible digital financial practices to protect consumers and address related regulatory and industry self-regulatory issues include, but are not limited to, the following:

- Design a digital financial services consumer protection framework that addresses risks specific to the digital environment and reflects statistical and behavioral evidence and direct input from consumers gathered, for example, from toll-free consumer hotlines, online forums, and complaints data.

- Establish a consistent legal framework for safeguarding client funds held by non-prudentially regulated service providers (for example, though trust accounts, pass-through deposit insurance schemes, and supplemental insurance requirements). Further, rigorously enforce rules relating to fraud affecting digital financial services and provide appropriate recourse mechanisms through targeted programs for vulnerable groups.

- Ensure consumers have convenient access to easy to understand, efficient, and free complaint resolution mechanisms that can be accessed, and operate, remotely (such as via a call center, a website or social media). They should be available from service providers and, for disputes, a third party such as a financial ombudsman.
- Develop proportionate service provider requirements for digital financial services, including: (i) clear, simple, and comparable disclosures of terms, fees and commissions; (ii) periodic account statements showing transactions and fees; (iii) toll-free customer hotlines; (iv) procedures and responsibility for unauthorized or mistaken transactions and system outages; (v) responsible and fair lending and debt collection practices; (vi) consumer guidance about how to use a digital financial service as well as security safeguards to protect against unauthorized use, disclosure, modification, and destruction of personal data; (vii) government contact details for consumer queries (such as phone numbers and websites). All consumer information should be able to be provided digitally (including over a mobile phone) and be able to be retained.
- Require digital financial service providers to train agents and employees about: product features; regulatory responsibilities; fair treatment of underserved and vulnerable groups; and recourse procedures. Training also should cover explaining disclosure documents on request, especially if the wording is in a language the consumer does not understand.
- Encourage service providers to submit periodic reports on data covering digital financial services complaints broken down by key target groups.
- Encourage providers of digital financial services to self-regulate to a higher standard than required under prevailing law (for example, through an enforceable, industry-based code of conduct).
- Develop a clear definition of the meaning of "personal data," taking account of the ability to combine different categories of information to identify a person.
- Ensure consumers of digital financial services have meaningful choice and control over their personal data—including through informed consent based on clear, simple, comprehensive, age-appropriate and brief privacy policy disclosures in relevant languages. Consumers also need to have transparent, affordable and convenient access and correction rights which can be exercised via remote and Internet-enabled access, including mobile phones and websites—or via a 24-hour call center.
- Require that data not be used in an unfair discriminatory manner in relation to digital financial services (e.g., to discriminate against women in relation to access to credit or insurance).
- Develop guidance to ensure the accuracy and security of all data related to: accounts and transactions; digital financial services marketing; and the development of credit scores for financially excluded and underserved consumers. This guidance should cover both traditional and innovative forms of data (such as data on utility payments, mobile airtime purchases, use of digital wallet or e-money accounts,[29] social media and e-commerce transactions).

PRINCIPLE 6

STRENGTHEN DIGITAL AND FINANCIAL LITERACY AND AWARENESS

Support and evaluate programs that enhance digital and financial literacy in light of the unique characteristics, advantages, and risks of digital financial services and channels.

Shortcomings in financial literacy continue to pose challenges for policymakers and service providers as they seek to expand financial services to previously excluded and underserved groups.[30] The evolution to digital delivery of financial services adds another layer of complexity for new users who may have little or no experience with digital tools, whether mobile or online. Policymakers, regulators, and service providers must all work together to ensure that such users have: access to, and awareness of, digital financial tools; simple instruction on how they work; and clear understanding of how to obtain more information as well as recourse on mistakes that may occur in this new environment of instantaneous, non-face-to-face[31] transactions. Understanding of how to use specific financial tools is complemented and enhanced by broader and deeper financial knowledge. Otherwise, there may be a further widening of inequities in access to, and use of, financial services. It is similarly important that merchants, and especially small businesses, are aware of the benefits of accepting payments and conducting transfers by digital means.

It is generally accepted that there is an urgent need to build digital and financial literacy and awareness among both consumers and merchants. This is especially the case for financially excluded and underserved groups, including people in vulnerable groups. Examples include Guiding Principle 6 *Financial Literacy* of the PAFI Report, Recommendation 5 in the 2014 Opportunities of Digitizing Payments Report entitled *Guide digital financial service providers to educate consumers and small businesses about their options to increase confidence, competence, and adoption,*[32] and the key finding concerning financial skills for women in the 2015 *Advancing Digital Financial Solutions for Women Report*.[33] The OECD/*INFE High-Level Principles on National Strategies for Financial Education*, which were endorsed by G20 Leaders in 2012, provide international guidance and policy options to develop efficient national strategies for financial education.[34]

Examples of key actions to enhance digital and financial literacy and awareness include, but are not limited to, the following:

- Identify emerging financial competency requirements arising from the digitization and bundling of financial services (for example micro credit or micro insurance made available through mobile phone offers, use of innovative data sources for credit scoring, and bundled insurance and credit products).
- Encourage development and evaluation of practical, accessible, and digitally focused financial literacy and awareness programs, particularly for underserved and vulnerable groups, to help consumers understand the

features, benefits, risks and costs of digital financial services and the need to safeguard account and security information. Further, encourage industry to share the details and results of such programs with regulators together with applicable data.

- Harness emerging high-quality digital tools to develop financial literacy and digital literacy programs that build knowledge, understanding and confidence in using digital financial services. Examples include the use of SMS questions and messages timed to inform specific consumer decisions or to remind users about their savings goals; online tools such as games to help parents teach their children about financial management; digital toolkits for tracking income and spending; online small business financial management programs; and interactive educational programs. Consumers can be particularly open to information and advice at "teachable moments" when they are making decisions with financial implications, including at 'life events' such as starting a new job, retirement, or birth of a child.
- Raise awareness among small businesses about the advantages of processing payments and transfers digitally and the features of available digital financial services.
- Promote employer and service provider-sponsored unbiased digital financial capability measures targeting currently excluded and underserved groups who may become first-time users of financial services as a result of digitization.
- Encourage informed choices by consumers by supporting the development of tools allowing consumers to compare similar digital financial products and services (such as price comparison websites).

PRINCIPLE 7

FACILITATE CUSTOMER IDENTIFICATION FOR DIGITAL FINANCIAL SERVICES

Facilitate access to digital financial services by developing, or encouraging the development of, customer identity systems, products and services that are accessible, affordable, and verifiable and accommodate multiple needs and risk levels for a risk-based approach to customer due diligence.

Governments worldwide acknowledge the importance of identity as a fundamental necessity for daily life. For approximately 1.5 billion people, the majority of them living in Asia and Africa, the inability to prove their official identity cuts them off from basic services and enjoying their full rights. It also marginalizes their participation in the economy. Evidence shows that individuals who lack official forms of identification are typically the most vulnerable people in the poorest countries.[35] As countries increasingly rely on digital networks for delivering important public and private services, the ability of consumers to remotely access those services through identification becomes acutely important.

Access to reliable identity data is critical for achieving financial inclusion goals.[36] Easier verification of customer identity supports the efforts of regulators and service providers to facilitate more efficient customer registration while meeting AML/CFT requirements. Providing online access and verification of such identity information also helps service providers streamline the customer acquisition process and reduce costs. Digital technologies, including biometrics and other forms, provide a unique opportunity to leapfrog traditional, paper-based forms of identification to build a robust and efficient identification system at a scale previously unachievable. The safety and security of such digital identification systems must also be paramount.

Examples of key actions to facilitate customer identification include, but are not limited to, the following:

- Ensure birth registration and other foundational identity systems are universal and affordable. Amend laws and regulations that inhibit or deny digital identification registration to underserved groups such as married women.

- Ensure that government identity databases—birth registration and tax IDs, for example—are made appropriately and securely available to other parts of government, subject to client consent when required by data protection laws.

- Establish an interoperable, technology-neutral national database system, where appropriate, that links relevant civil registration and identity systems and is appropriately and securely accessible to authorized parties, such as financial service providers, subject to client consent where required by data protection laws.

- Establish and promote, as necessary, new and innovative forms of identity registration and verification such as digital biometric identification products and online identity verification services, particularly for those currently lacking any form of identification. Establish acceptable open standards to manage identity, transaction and account risks.
- Implement risk–based customer identification and verification requirements to facilitate uptake of low-risk digital financial services for financial inclusion purposes, for example through tiered frameworks for customer due diligence. Such requirements should authorize identification from one or multiple state-validated sources and clearly specify the data sources that can be used for identity verification while meeting the requirements of the Financial Action Task Force for *"reliable, independent source documents, data or information."*[37]
- Establish a legal framework that protects the privacy and security of identity data and requires informed consent to use and disclose such data. This framework should also require robust recourse frameworks to allow individuals to seek redress when consent, rights or privacy have been violated.
- Collaborate with stakeholders outside government that can facilitate identification programs for excluded groups for financial inclusion and other purposes. One example would be humanitarian relief organizations and other relevant nongovernmental organizations.
- Establish clear accountability and transparency around the roles and responsibility of the public and private agencies in charge of identity management.
- Encourage development of safe and secure digital signature systems that can help facilitate authentication and validation, especially for underserved consumers.

PRINCIPLE 8

TRACK DIGITAL FINANCIAL INCLUSION PROGRESS

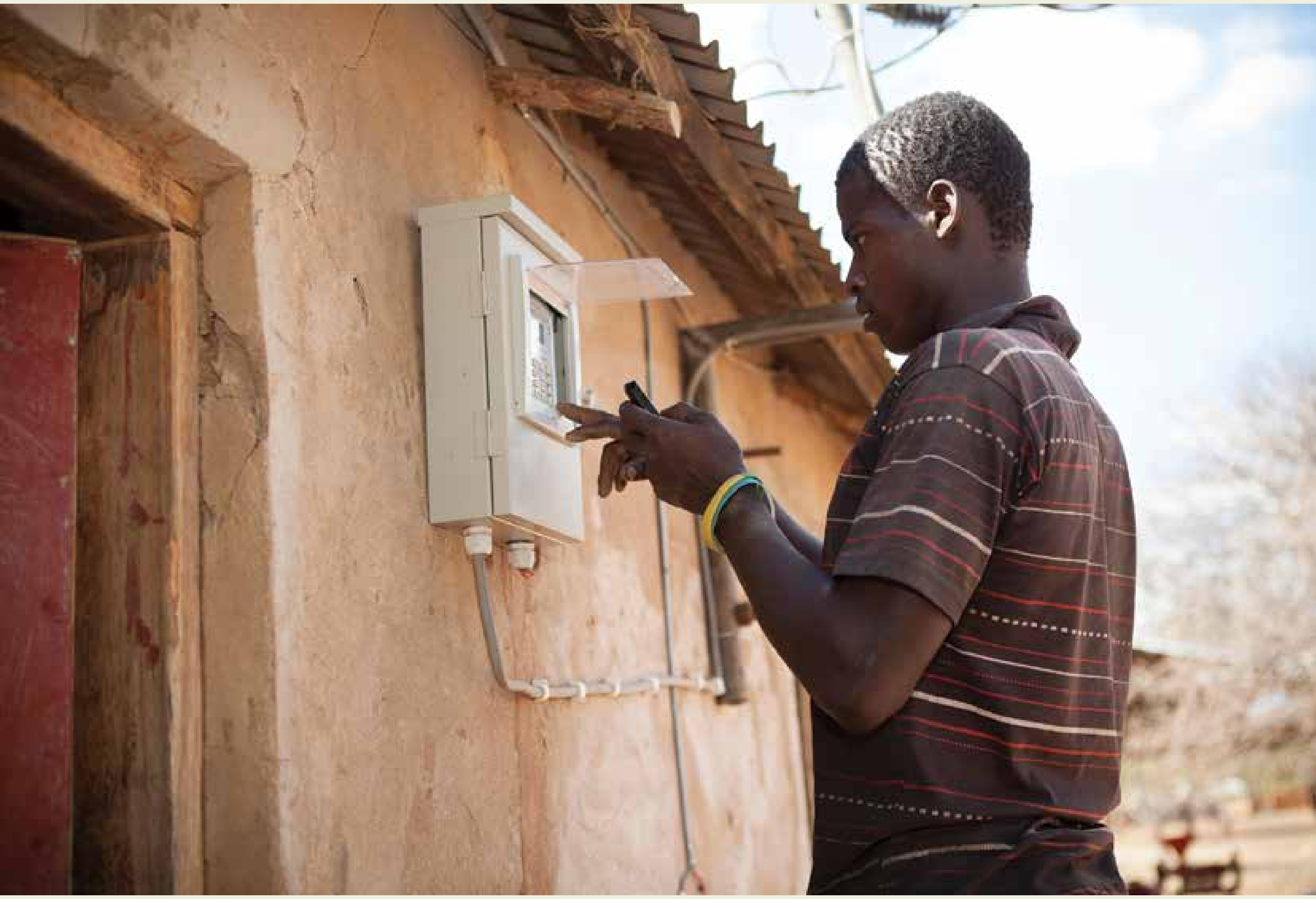
Track progress on digital financial inclusion through a comprehensive and robust data measurement and evaluation system. This system should leverage new sources of digital data and enable stakeholders to analyze and monitor the supply of—and demand for—digital financial services, as well as assess the impact of key programs and reforms.

Effective leveraging of digital technologies to achieve financial inclusion goals requires a comprehensive monitoring and evaluation system to track progress, identify obstacles (including gaps), and demonstrate success at both the national and program levels. Three key elements of a national monitoring and evaluation system should be adapted to reflect emerging digital models: a national results framework with key indicators and targets; the underlying data infrastructure that collects both supply- and demand-side data; and evaluation activities of key programs and reforms. Together, these elements serve to quantify and measure progress towards digital financial inclusion priorities, support in-depth analysis of financial inclusion trends and obstacles (particularly among target populations[38]), and provide reliable insights about the efficiency, effectiveness, and impact of reforms and programs. Section 5 of the PAFI report notes the importance of tracking progress towards financial inclusion goals, and provides relevant guidance.

Examples of key actions to track progress on digital financial inclusion include, but are not limited to, the following:

- Establish national key performance indicators and, where appropriate, targets for the uptake and usage of digital financial products and services. This should be done in consultation with key stakeholders, including the private sector.
- Establish or adapt financial inclusion data collection systems to cover new digital financial providers and products. For example, this should be done using demand-side surveys of individuals and firms, supply-side reporting (e.g., via offsite supervision reporting templates), and new digitally-enabled sources of data.
- Work with digital financial service providers to adapt data collection systems to provide data broken down by key priority demographic criteria, including gender, income, age and geographic location.
- Establish a memorandum of understanding among the regulatory authorities that collect data on digital financial service providers to ensure the efficient and open exchange of information.

- Establish an online data portal and/or publish regular reports to provide publicly available data on the adoption and use of digital financial services. Further, provide reports on the adoption and use of digital financial services to international agencies monitoring financial inclusion data to the extent reasonably practicable and agreed.
- Fund and encourage impact assessments of key programs and reforms relevant to digital financial inclusion.
- Monitor progress on implementation of all aspects of these High-Level Principles.



A man purchases electricity credits using his mobile phone in the village of Hogoro, Dodoma Region, Tanzania.
Photo by Jake Lyell/Alamy

ENDNOTES

1. See March 2016 Global Partnership on Financial Inclusion (GPFI) paper entitled *Global Standard-Setting Bodies and Financial Inclusion The Evolving Landscape* (page 46) (http://www.gpfi.org/publications/global-standard-setting-bodies-and-financial-inclusion-evolving-landscape). See also the Key Elements of a Digital Financial Inclusion Model in Box 8 (page 46) (http://www.gpfi.org/sites/default/files/documents/GPFI_WhitePaper_Mar2016.pdf).
2. This description of "*digital financial services*" is drawn from the 2014 GPFI Issues Paper on *Digital Financial Inclusion and the Implications for Customers, Regulators, Supervisors and Standard-Setting Bodies* (pages 1 and 2) (http://www.gpfi.org/sites/default/files/documents/Issues%20Paper%20for%20GPFI%20BIS%20Conference%20on%20Digital%20Financial%20Inclusion.pdf). See also the 2016 *Payments Aspects of Financial Inclusion Report* from the joint task force of the Committee for Payments and Markets Infrastructure (CPMI) and the World Bank Group (PAFI Report) (page 13, para. 47) (http://www.bis.org/cpmi/publ/d144.htm).
3.

G20 High-Level Principles for Digital Financial Inclusion (HLPs)	2010 G20 Principles for Innovative Financial Inclusion (2010 G20 Principles)
1. Promote a Digital Approach to Financial Inclusion	HLP 1 builds on Principle 1 "Leadership" and Principle 6 "Cooperation" of the 2010 G20 Principles.
2. Balance Innovation and Risk to Achieve Digital Financial Inclusion	HLP 2 builds on Principles 1 "Leadership," 3 "Innovation," and 4 "Protection" of the 2010 G20 Principles.
3. Provide an Enabling and Proportionate Legal and Regulatory Framework	HLP 3 builds on Principle 4 "Protection," Principle 8 "Proportionality" and Principle 9 "Framework" of the 2010 G20 Principles.
4. Expand the Digital Financial Services Infrastructure Ecosystem	HLP 4 builds on Principle 9 "Framework" of the 2010 G20 Principles.
5. Establish Responsible Digital Financial Practices to Protect Consumers	HLP 5 builds on Principle 4 "Protection" and Principle 5 "Empowerment" of the 2010 G20 Principles.
6. Strengthen Digital and Financial Literacy and Awareness	HLP 6 builds on Principle 5 "Empowerment" of the 2010 G20 Principles.
7. Facilitate Customer Identification for Digital Financial Services	HLP 7 builds on Principle 1 "Leadership" and Principle 6 "Cooperation" of the 2010 G20 Principles.
8. Track Digital Financial Inclusion Progress	HLP 8 builds on Principle 7 "Knowledge" of the 2010 G20 Principles.

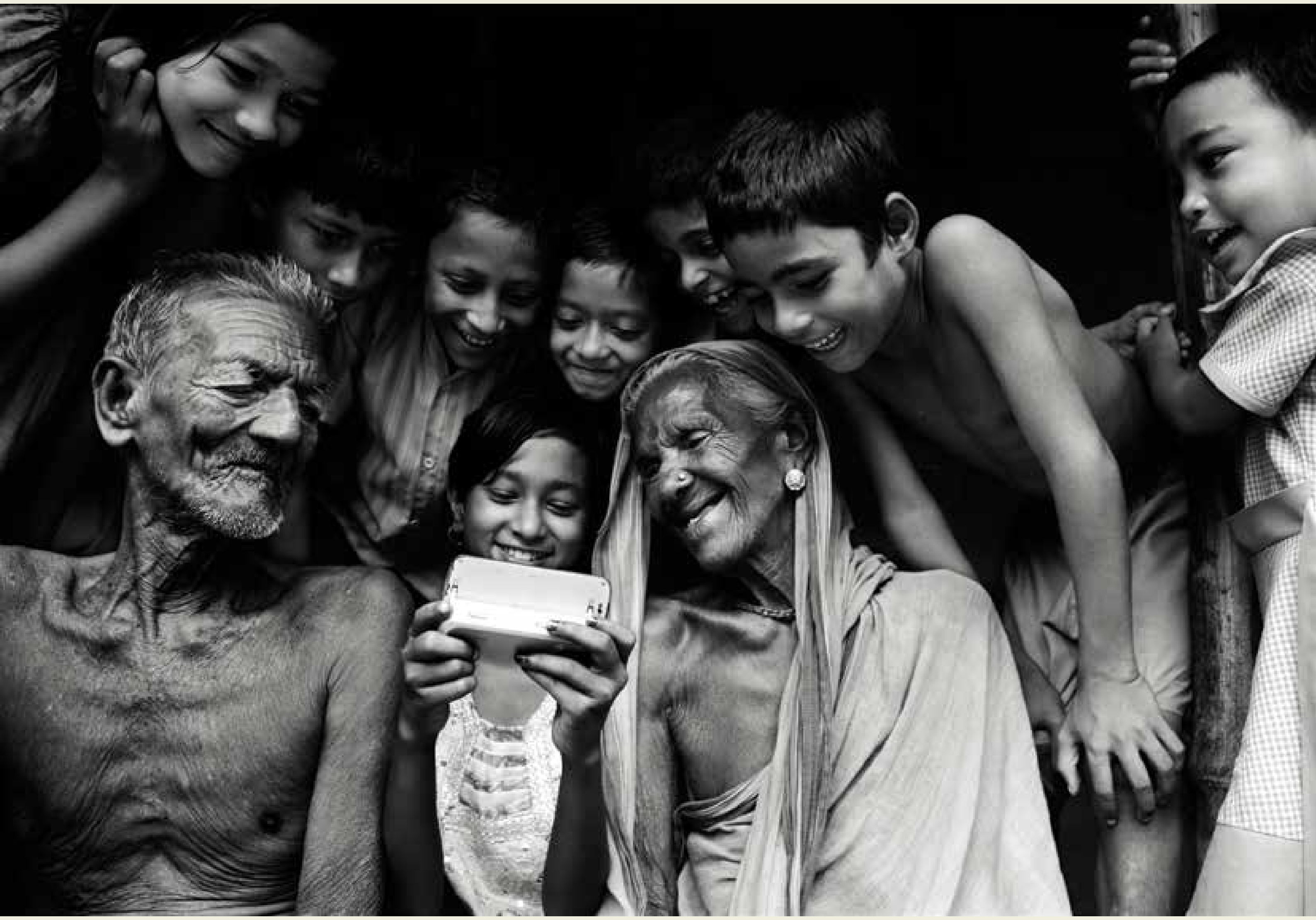
4. The individual ownership of accounts is particularly important to expanding women's financial inclusion and is addressed throughout the 2015 G20/GPFI Report on *Digital Financial Solutions to Advance Women's Economic Participation* (see, for example, section 1.1) (http://gpfi.org/sites/default/files/documents/03-Digital%20Financial%20Solution%20to%20Advance%20Women....pdf).
5. http://www.bis.org/cpmi/publ/d133.pdf
6. http://gpfi.org/sites/default/files/documents/FINAL_The%20Opportunities%20of%20Digitizing%20Payments.pdf
7. http://gpfi.org/sites/default/files/documents/03-Digital%20Financial%20Solution%20to%20Advance%20Women....pdf
8. PAFI Guiding Principle 7: Large-volume, Recurrent Payment Streams
9. PAFI Guiding Principle 7: Large-volume, Recurrent Payment Streams
10. The key actions proposed for PAFI Guiding Principle 1 *Public and Private Sector Commitment* suggest that "*an explicit strategy with measureable milestones to that end*" be developed for transaction accounts for all. See also section *3.2.1.2 Transaction Account and Payment Product Features* of the PAFI Report.

11. In a letter from the Chairman of The Financial Stability Board to the G20 Finance Ministers and Central Bank Governors dated 22 February 2016, the Chairman advised that the FSB would support the objectives of the Chinese G20 Presidency in 2016 by "*assessing the systemic implications of financial technology innovations, and the systemic risks that may arise from operational disruptions*." (page 1) (http://www.fsb.org/wp-content/uploads/FSB-Chair-letter-to-G20-Ministers-and-Governors-February-2016.pdf).
12. See June 2016 *Guidance on Cyber Resilience for Financial Markets Resilience* issued by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO): http://www.bis.org/cpmi/publ/d146.htm and the related *Principles on Financial Market Infrastructures* issued in 2012 by the then Committee on Payment and Settlement Systems (now CPMI) and the IOSCO Technical Committee: http://www.bis.org/cpmi/publ/d101.htm.
13. See, for example, PAFI Guiding Principle 2 and GPFI White Paper Part IVA *Digital Financial Inclusion—Opportunities and Risks*.
14. See Recommendation 15 concerning New Technologies in the revised 2012 Financial Action Task Force Recommendations: http://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF_Recommendations.pdf.
15. See, for example, Principles 2, 8, 9 and 25 of the Consultative Document issued by the Bank of International Settlements' Basel Committee on Banking Supervision *Guidance on the Application of the Core Principles for Effective Banking Supervision to the Regulation and Supervision of Institutions relevant to Financial Inclusion*, 2015.
16. See GPFI White Paper Recommendations 12 -18 and Parts VIA and VIB and PAFI Guiding Principle 2 Legal and Regulatory Framework.
17. GPFI White Paper, Part II, Section D, footnote 16. See also Recommendations 6 and 7.
18. Examples of the different ways the proportionality approach has been used by international standard setters include the reference in the revised 2012 *Basel Core Principles for Effective Banking Supervision* to the proportionate approach allowing assessments of compliance with the Core Principles that are commensurate with the risk profile and systemic importance of a broad spectrum of banks. The 2012 *Financial Action Task Force Recommendations* (FATF Recommendations) also refer to: enhanced due diligence measures being proportionate to the relevant risks; to effective, proportionate, and dissuasive sanctions; and to the exchange of information between supervisors being proportionate to their needs. The Financial Stability Board has also called for a proportionate approach to the regulation of shadow banking which recognizes both the relevant risks and the benefits of completion for banks (see *Transforming Shadow Banking into Resilient Market-based Financing: An Overview of Progress and a Roadmap for 2015*: http://www.fsb.org/wp-content/uploads/Progress-Report-on-Transforming-Shadow-Banking-into-Resilient-Market-Based-Financing.pdf).
19. Financial Stability Board *Global Shadow Banking Monitoring Report*, Basel, 2014 and *Thematic peer review on the implementation of the FSB policy framework for other shadow banking entities: Summarized Terms of Reference*, Basel, 2015. Basel Core Banking Principle 1 emphasizes the primary importance of the safety and soundness of the financial system, while recognizing that financial supervisors may have additional, nonconflicting responsibilities (such as financial inclusion and consumer protection).
20. GPFI White Paper Recommendations 31 to 35 and Part VIB.
21. Many of these factors are covered in the GPFI White Paper Recommendations in Part VI, or in the PAFI Report.
22. For a discussion of Financial and ICT Infrastructures see PAFI Report section 3.1.3 and for a discussion of service points and access channel networks see PAFI Report section 3.2.2.
23. See in particular PAFI Guiding Principle 3: Financial and ICT Infrastructures.
24. See PAFI Guiding Principle 3: *Financial and ICT infrastructures* for further guidance.
25. The Financial Stability Board has considered distributed ledger technology as part of its review of major areas of financial technology innovation (http://www.fsb.org/2016/03/meeting-of-the-financial-stability-board-in-tokyo-on-30-31-march/). The CPMI Committee of the Bank for International Settlements has also considered distributed ledger technology in its 2015 Report on Digital Currencies (https://www.bis.org/cpmi/publ/d137.pdf).

26. See PAFI Guiding Principle 3: *Financial and ICT infrastructures* for further guidance.
27. For background see *The World Bank Principles for Effective Insolvency and Creditor/Debtor Rights, 2016 (Principles A4 and A5)* at (http://documents.worldbank.org/curated/en/518861467086038847/Principles-for-effective-insolvency-and-creditor-and-debtor-regimes).
28. Leading examples include PAFI Guiding Principle 2: Legal and Regulatory Framework and PAFI Guiding Principle 6: Awareness and Financial Literacy; GPFI White Paper Recommendations 19 to 24 and Part IVB; and the G20 High-Level Principles on Financial Consumer Protection (http://www.oecd.org/daf/fin/financial-markets/48892010.pdf).
29. See definition of "e-money" in 2004 Committee on Payment and Settlement Systems Bank for International Settlements *Survey of Developments in Electronic Money and Internet and Mobile Payments* (section 2.1) (http://www.bis.org/cpmi/publ/d62.pdf).
30. The term "*financial literacy*" is defined as follows in the OECD/*INFE High-level Principles on National Strategies for Financial Education*, which were endorsed by G20 Leaders in 2012: "*a combination of financial awareness, knowledge, skills, attitude and behaviours necessary to make sound financial decisions and ultimately achieve individual financial wellbeing." See Atkinson and Messy (2012)*" (Footnote 4). (http://www.oecd.org/daf/fin/financial-education/OECD-INFE-Principles-National-Strategies-Financial-Education.pdf).

    The potentially broader term *"financial capability*" is defined as follows in the 2016 Basel Committee on Banking Supervision Consultative Document entitled "*Guidance on the application of the Core principles for effective banking supervision to the regulation and supervision of institutions relevant to financial inclusion*": "*World Bank (2013) defines financial capability as the internal capacity to act in one's best financial interest, given socioeconomic environmental conditions. It encompasses the knowledge, attitudes, skills and behaviours of consumers with respect to understanding, selecting and using financial services, and the ability to access financial services that fit their needs."* (Footnote 79)

    Financial capability is mentioned as part of the quality of products and service delivery named as a key component of financial inclusion in responses to the survey the subject of the Bank of International Settlements report on *Range of Practice in the Regulation and Supervision of Institutions relevant to Financial Inclusion* (section 3.2) (http://www.bis.org/bcbs/publ/d310.pdf).
31. The 2015 G20 report on *Digital Financial Solutions to Advance Women's Economic Participation* prepared by the Better Than Cash Alliance.
32. The 2014 G20 report on *The Opportunities of Digitizing Payments* prepared by the World Bank Development Research Group, the Better Than Cash Alliance (BTCA), and the Bill & Melinda Gates Foundation.
33. https://www.betterthancash.org/tools-research/reports/digital-financial-solutions-to-advance-women-s-economic-participation
34. http://www.oecd.org/daf/fin/financial-education/OECD-INFE-Principles-National-Strategies-Financial-Education.pdf. See Principle IV**:** *Roadmap of the National Strategy: Key Priorities, Target Audiences, Impact Assessment And Resources*.
35. Target 16.9 under the Sustainable Development Goals provides: "By 2030, provide legal identity for all, including birth registration."
36. PAFI Report paragraphs 115 -117, Guiding Principle 3 Financial and ICT Infrastructures and GPFI White Paper Part IVD and Recommendation 26. See also the Key Finding in the 2015 GPFI Report on Digital Financial Solutions to Advance Women's Economic Participation concerning Government action and creation of a digital identification system.
37. The revised 2012 Financial Action Task Force (FATF) Recommendations mandate the use of risk-based customer identification requirements. See FATF Recommendation 10 and the related Interpretative Notes (http://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF_Recommendations.pdf).
38. See, for example, Priority Action 5 in the 2013 Women and Finance Progress Report to the G20 (http://www.g20australia.org/sites/default/files/g20_resources/library/G20_Women_and_Finance_Progress_report_WB_and_OECD.pdf).


A family learns how to use a mobile device to access financial services in a village in West Bengal, India.
Photo by Sudipto Das

GPFI Global Partnership for Financial Inclusion

G20 2016 CHINA